COMMODITY RESEARCH

Scaling up inclusive business – Insights from different commodities

Findings from Case Studies and Interviews

Working Document

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The views expressed in this document are those of CDI, and do not necessarily reflect the views of the partner organizations.

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Introduction

The overarching objective of the Seas of Change Learning initiative is to understand how to build on the explosion of sustainable value chain initiatives which took place over the past decade to achieve the scale of change needed. Where are efforts remaining 'islands of success' and where are they adding up to a 'sea of change'? What inspirational examples are emerging? What ideas could be adapted?

In this framework, we have carried out a review of the main trends, strengths and challenges of selected agri-food commodities chains and highlighted efforts made so far to set up inclusive business models and to scale them up. Starting from an understanding of the rationale and incentive behind investing in inclusive markets, for each commodity analysed (cocoa, coffee, horticulture, dairy, aquaculture, rice) we tried to answer the following questions:

Which are the trend and challenges of the sector/who are the players?
Which are the Incentives for inclusiveness?
Which success factors made your business model inclusive?
Which is the scale of inclusiveness achieved so far? Which are the goals?
Which are the mechanisms for scaling up?

The present review summarises the findings of the stand alone commodities fact sheets[1]. This analysis of the drivers, results, and key elements these inclusive business models share allows to identify cross-cutting mechanisms which can be used to scale up inclusive business practices. The review builds on successful experiences in the literature, on case studies received by Seas of Change partners and companies and on insights emerged from interviews with experts and key players in the sector, including: Africa Enterprise Challenge Fund (AECF), africaJUICE (Ethiopia), Ahold Coffee Company, Armajaro, Consultative Group on International Agricultural Research (CGIAR), Cargill, Cooperativa Cuatro Pinos (Guatemala), Eosta, Fairfields, Hillside Green (Kenya), International Center for Tropical Agriculture (CIAT), International Institute for Environment and Development (IIED), KIVU Arabica Coffee Company (Rwanda), Mars, Nestlé, Oxfam Novib, Rabobank, Sara Lee, Sustainable Food Lab (SFL), Sustainable Trade Initiative(IDH), Technoserve, Unilever, UTZ Certified.

1. Introduction: Inclusive business models: what do we mean?

How business can align profitable business ventures with the needs of poor societies, how is it possible to find synergies between development goals and a company's core business operations?

An answer to this question lies in the development of business models which are both inclusive of small-scale producers and also address the need for processors and retailers to manage costs and risks.[2] The need for investment in technology, infrastructure, market access and institutions suggests that

[1] For a more in depth analysis on coffee, cocoa, horticulture, dairy and aquaculture see http://seasofchangeinitiative.net/research/commodities/fact-sheets/.
[2] Bill Vorley (IIED), Mark Lundy (CIAT), and James MacGregor (IIED), (2008) Business models that are inclusive of small farmers- Paper prepared for FAO and UNIDO as background to the Global Agro-Industries Forum, New Delhi, 8 - 11 April 2008.

private investment could contribute in many ways. According to recent value chain analysis for the foreseeable future rather than in production, greater opportunities and important economies of scale for private domestic or foreign investors can be achieved in output processing, packaging and marketing. These include a wide range of more collaborative arrangements between large-scale investors and local small-scale farmers and communities.[3] Here we define inclusive business models as those which seek to contribute towards poverty alleviation by including lower-income communities within its value chain while not losing sight of the ultimate goal of business, which is to generate profits. More specifically, as indicated by the World Business Council for Sustainable Development, a business model is inclusive when large investors tackle yields, quality, skills development, and supply-chain linkages simultaneously.

There are a range of business models for inclusive market development within the context of agri-food restructuring and modernisation which can build on comparative advantages and complementarities of smallholders and large scale investors, such as diverse types of contract farming schemes (out-grower schemes[4]), joint ventures, and management contracts. Case studies show that outgrower schemes – carefully designed, well managed and based on a rigorous understanding of the underlying product economics and market arrangements – can benefit both buyers and small farmers.

As stated by the director of africaJUICE (a tropical juice company in Ethiopia) "*Inclusiveness is not a cost but is part of our business value. A successful business model (e.g. inclusive outgrower schemes) depends on cultivating good relationships, transparency and a commitment to share equally the risks and rewards of the market*"[5]. Inclusiveness builds on mutual trust between actors, proper incentives for long-term engagement in the value chain, transfer of skills, and a balancing of power in decision making within the value chain. Indeed, an important aspect is the capacity and negotiating power of smallholders in their relations with large investors. Strong **farmers' organisations are crucial in this respect, as is the security of local land rights**. Only a level playing field between different actors can build trust. In addition, long-term relations and trust can reduce the problems of side selling (selling to firms other than the original input provider) common in many commodities and motivated by farmers' need for an immediate income.

Box 1: Definition of inclusiveness

"An inclusive business is one which seeks to contribute towards poverty alleviation by including lower-income communities either directly or through companies' value chains as suppliers, distributors, retailers and service providers. while not losing sight of the ultimate goal of business, which is to generate profits." WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT	"Inclusive business models include the poor on the demand side as clients and customers, and on the supply side as employees, producers and business owners at various points in the value chain. They build bridges between business and the poor for mutual benefit." UNITED NATIONS DEVELOPMENT PROGRAMME

Source: B. Jenkins and E. Ishikawa (2010) SCALING UP INCLUSIVE BUSINESS: ADVANCING THE KNOWLEDGE AND ACTION AGENDA

[3] Oxfam International (2011), Who Will Feed the World?, Research Report.

[4] Outgrowing means that the commercial farmer facilitates access to inputs (such as bank loans, seed, and advisory services) for the smallholders, in return for the right to market their output.

[5] Interview to Harry Van Neer, Director of africaJUICE.

We are in a period of supply constraints and therefore there are tremendous opportunities for smallholders. "*There are strong incentives for companies to move closer to farmers. Companies are increasingly interested to build inclusive business to increase productivity, attract future generations in farming and react to consumers' pressure*"[6]. "*Securing consistent supply is especially critical in supply-constrained and volatile conditions, such as those currently characterising global agri-food markets. A shift from a buyer's to a seller's market implies that suppliers will need to ensure that they can meet their obligations to retailer or processor customers in the face of considerable uncertainty. A diversified supplier base, including small-scale producers, can contribute to improved security of supply. In addition, small-scale producers can also have a comparative advantage in terms of produce quality, innovation, costs and farm management. Indeed, in exports of fresh vegetables from Africa to the UK and from Central America to the US, it is the premium quality products such as French beans and peas that are sourced from smallholders*."[7] However, the biggest challenge for modern agri-food business to work with small-scale farmers lies in costs and risks of organising supply, economies of scale, traceability and private sector standards. See in table 1 a summary of the arguments for and against sourcing strategies for the inclusion of small-scale producers.

Table 1: Is inclusiveness a necessity for business? Which are the pros and cons and challenges?

Pros	**Cons**
• Smallholders' comparative advantages • (premium quality, access to land, local knowledge, higher production efficiency with labour-intensive technologies) • Securing supply in volatile markets, spreading portfolio geographically, reducing risk of undersupply. • New business, clients for other products and services (Base of Pyramid)/brand differentiation • New technologies available (efficient low scale processing equipment, information technologies for coordination and lower cost traceability) • Capacity to ramp up or ramp down production without incurring fixed costs (contract farming) • React to consumer preassure - Corporate Responsibility • Community goodwill • Access to donor assistance	Costs and risks in organising supply from dispersed producers: • quantity • quality • consistency • safety • traceability • compliance with rising standards • packaging • loyalty and fulfilment of commitments by farmers • negotiation time and costs • political opposition to commercialisation of peasant agriculture **Firm level challenges to start inclusive business:** • Shortage of market information • Lack of access to appropriate financing (especially long-term) • Mispricing of risk • Finding staff with the right mix of business an development expertise • Unrealistic expectations of return, time to break-even, and time to generate development impact • Low tolerance for failure

Source: Adapted from Vorley et al.(2008) Business models that are inclusive of small farmers, IIED and from IFC (2010) SCALING UP INCLUSIVE BUSINESS: Advancing the Knowledge and Action Agenda.

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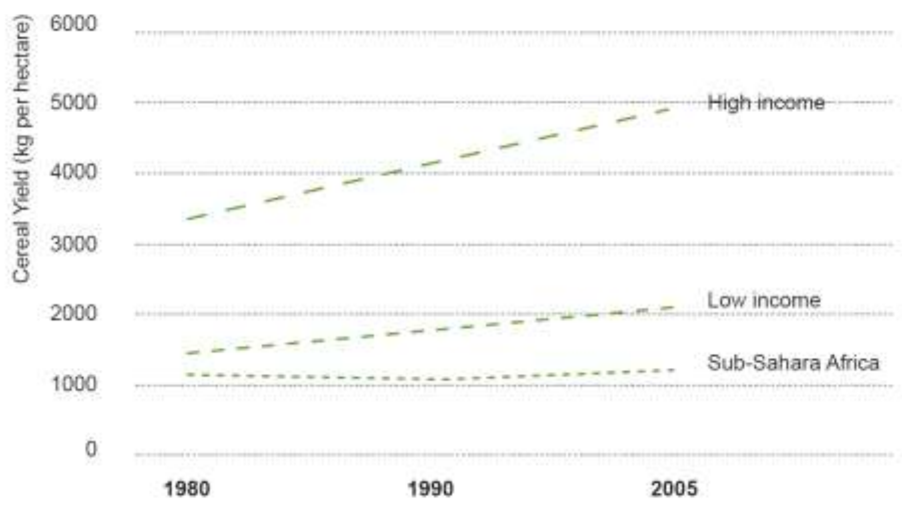
[6] Interview to Stefanie Miltenburg, Director International Corporate Social Responsibility Sara Lee International.

[7] Bill Vorley (IIED), Mark Lundy (CIAT), and James MacGregor (IIED), (2008) Business models that are inclusive of small farmers- Paper prepared for FAO and UNIDO as background to the Global Agro-Industries Forum, New Delhi, 8 - 11 April 2008.

However, the supply side is facing major limitations. Despite current high international commodity prices, farmers face weak price signals and productivity gains have stalled. The main issue for small farmers now is to increase productivity (in a sustainable manner). At present, sub-Saharan Africa's agricultural productivity is the lowest in the world (see Figure 1), it has stagnated over the past 30 years while it has increased in most high-income countries. Farmers in Mozambique and Madagascar achieve less than 25 per cent of potential yields, and area cultivated per rural inhabitant remains well below 1 ha, due to deficiencies in technology, capital markets, infrastructure, and public institutions, including property rights, in turn all reflecting long-standing under-investment in agriculture. The continent's yields of major crops are well below world averages. **If Africa could raise yields on key crops to 80 per cent of the world average (like other areas that experienced green revolutions), the value of its agricultural production would rise by $235 billion a year over the next two decades.** [8]

Figure 1: Agricultural productivity



[8] McKinsey quarterly (April 2011), Four lessons for transforming African agriculture.

2. What is the scale of change in different commodities: Insights from interviews and cases

In our review we focus on inclusive business models in smallholder-dominated cash crops and in particular on: cocoa, coffee, horticulture, dairy, rice and aquaculture. As emerged from the literature, inclusive models have been implemented successfully with perishable commodities such as fresh vegetables, dairy and meat, which require traceability and have higher food safety risk profiles. The same applies to the growing number of certified products, such as Fairtrade and organics. Our commodity review includes also other smallholder-dominated export crops such as cocoa and coffee which have not so far experienced the big changes in market governance that have occurred in fresh produce but exhibit high potential in terms of further inclusion, especially in light of the current surge in demand which is bringing chocolate and cocoa manufacturers to work directly with farmers to ensure future supply (see box 2). Indeed, as analysed later, the promotion of sustainable farming practices by chocolate manufacturers and other key players in the cocoa supply chain is an innovative approach towards securing their long-term supply of high quality cocoa.

Box 2: New sourcing strategies by big Agri-food companies: setting the farmer first

In present times the questions highest on CEOs of Food and Agribusiness companies' agendas are how to secure a sustainable supply of agri-commodities and how to deal with increased price risk. According to Rabobank analysis, some agribusiness companies are currently pursuing sourcing strategies which aim at increasing control over physical sourcing. These strategies can involve:

- **Investing in land**: companies or governments are increasingly buying the prime production asset of any crop — land. Buying up land makes it possible to exercise direct control over crops and commodity output.
- **Implementing backward integration**: This strategy involves buying or setting up (greenfield) production, logistical or storage assets along the chain. This can currently be seen in the sugar industry, where some manufacturers have sought to vertically integrate upstream in order to secure supply.
- **Adopting a regional diversification approach**: One way to ensure supply is to use multiple suppliers in one region, or establish a presence in relevant production regions in order to better match demand/supply and keep closer track of crop conditions to be able to reduce risks in case of supply shocks. This strategy involves building and maintaining many relationships which of course comes at a cost. Diversification has become increasingly important for grains and oilseeds companies.
- **Setting the 'farmer first'**: In some sectors, such as cocoa and beer, companies are actively assisting in the production process by working directly with farmers. For these players, ensuring quality of supply is a key motive. For this strategy to work, investments in infrastructure (physical ,technological) are usually required. Other companies are trading farm input raw materials against physical delivery of agri-commodities. Other examples include agribusiness companies providing working-capital financing for farmers in return for agri-commodities or creating farmer loyalty by providing services such as training.

Source: Rabobank (2011) Rethinking the F&A Supply Chain: Impact of Agricultural Price Volatility on Sourcing Strategies

Across these sectors, companies and their inclusive business models vary greatly in terms of size, industry, how exclusively they focus on low-income populations, the financial and social returns they are expecting or targeting, whether they are local or international in origin, and where they operate. They follow different trajectories toward – and may have different capacities for – commercial success, scale, and development impact.[9] The objective of the commodities fact sheets is to understand specific strengths, weaknesses, challenges and opportunities for scaling up of inclusive business models in these different sectors.

The tables below sketch the main findings emerged from selected commodities fact sheets by pointing as some key trends and drawing from insights emerged from the interviews with key players and from case studies' information[10].

The case studies and experiences provided by the literature, by business players and Seas of Change partners have been analysed with the purpose of setting the stage for more in-depth research going forward. It is important to note that the cases analysed are neither large enough nor representative enough to be statistically significant. This is a preliminary review of the drivers, results, and key elements these inclusive business models share and a first attempt to identify cross-cutting mechanisms which can be used to scale up inclusive business practices.

[9] IFC (2010) SCALING UP INCLUSIVE BUSINESS: Advancing the Knowledge and Action Agenda.

[10] For a more in depth analysis on coffee, cocoa, horticulture, dairy and aquaculture see http://seasofchangeinitiative.net/research/commodities/fact-sheets/.

2.1. Coffee Table

Which are the trend and challenges of the sector? Who are the growers?	25 million coffee producers are smallholder farmers	Demand outstrips supply	Challenges: Under-investment, poor production practices, adverse climatic conditions, lack of interest from the next generation of coffee growers, and aging coffee trees.
Which are the Incentives for inclusiveness?	**ECOM**: "Increasing Market demand for high-quality, certified coffee"	**Sara Lee**: "React to consumer pressure security of coffee supply **"**	For farmers: Improved yields, certification related sales premiums, higher revenue
Which success factors made your business model inclusive?	**Sara Lee** : "Moving from CRS to a pro-market focus: there was a commercial interest of Sara Lee in supporting coffee cooperative in Peru"	**Technoserve** (Coffee Initiative in East Africa) : "you need competition among farmers/ownership and transparency"	**NIB Bank/IFC Ethiopia:** "the Bank's inclusive business model hinges upon partnerships for financial risk-sharing and farmer capacity-building"
Which is the scale of inclusiveness achieved so far? Proxy: certification	The production of sustainable coffee account for 16 per cent of the global production in 2010/11. The sales of sustainable coffee are 9 per cent of total consumption.	**Tropical Commodity Coalition Barometer:** Not clear impact of certification on farmers' livelihood	**Sara Lee**: "not yet a strategic thinking at industry level"
Which are the future targets? Top coffee roasters certified and verified coffees purchased commitments (for 2015)	**Nestlé:** "from 5 per cent to 36 per cent in 2015", doubling the amount of directly procured Nescafé coffee bought from around 170 000 farmers every year"	**Kraft Food** : "from 7 per cent to 30 per cent**"**	**Sara Lee:** "from 9 per cent to 20 per cent in 2015. Income to coffee farmers' income will increase by to $100 million."
Which mechanisms can work to scale up sustainable production of coffee?	Harmonize standards and make them more inclusive. **UTZ certified**: "Make intrinsic benefits more visible to farmers/Joint auditing for multi-certified farmers".	Innovative financial mechanism (e.g. Rabobank and National Microfinance Bank in Tanzania warehouse receipt financing and put options)	Climate change adaptation techniques (e.g. Sangana Commodities Ltd, GIZ, World Bank and the 4C Association in Kenya)
	AHcoffee company: "Pull in more African countries' producers of high quality certified coffee"		Embedding strategies/platforms at producing countries' level

2.2. Cocoa Table

Which are the growers/ which are the trend and challenges of the sector?	Over 90 per cent of the world's cocoa is grown on 5.5 million small farms. Côte d'Ivoire alone provides one-third of global supply. 80 per cent of cocoa farmers are not organised in cooperatives.	It is a fight for the source. An additional 100-120k tons of cocoa will be needed each year to meet 2020 global demand.	**Challenges:** Underinvestment, low productivity (30 to 50 per cent lower than potential) and low farm gate prices (40 per cent of the international cocoa price) Lack of interest of future generations Poor access to inputs and credit
Which are the Incentives for inclusiveness ?	**Cargill:** "increase cocoa quality and productivity, attract future generations in farming and have more formal partner to source from and to support".	**MARS**: "To achieve meaningful change, we believe that farmer productivity needs to be the first priority. By supporting farmers, we can help them produce better crops and make more money for their families".	For small farmers: sustainability and quality premiums , through verification and Trainings, quality may improve resulting in higher prices.
Which success factors made your business model inclusive?	**MARS**: "a simple, affordable and high impact method of revitalizing existing cocoa plantations through a network of Cocoa Development Centers (CDC) and Cocoa Village Clinics (CVC)"	**Cargill:** "Our support to cocoa cooperatives builds on transparency... farmers have gained trust in the social and empowerment role of the cooperatives and enjoy much larger benefits in terms of training, pre-financing of crops, warehouse facilities, and schooling."	**Starbucks:** "Training is a critical component in our cocoa practices process and often results in higher scores and access to price premiums."
Which is the scale of inclusiveneness achieved so far? Proxy: certification	In 2009, 104,000 tons of certified cocoa, equal to 3 per cent of world market was produced. (47000 farmers trained). Since then the world market share of certified cocoa has grown substantially. Nestle: " In 2010, about 6 per cent of total cocoa sourced by Nestlé was sourced through the cocoa plan, in 2011 the share increased to 11 per cent."	**KPMG**: "There is a business case for farmers and traders to invest in certification of cocoa production but only for farmers who already have a basic level of organization and education".	**Armajaro**: "Differing existing standards confuse producers, they are not aligned, are sometimes inefficient and very costly to comply with

Which are the future commitments?	Demand for sustainable produced cocoa is expected to reach 50% of total world demand by 2020. By 2015, 816,000 tons of certified cocoa and by 2020 more than 43 per cent of cocoa will be certified and about 1,777,000 farmers will be trained.	**MARS:** "our commitment is to purchase 100 per cent sustainable cocoa by 2020. For this objective to be achieved it is crucial to reach the large number of unorganised cocoa farmers."	**Nestlé**: "according to the 2009 cocoa plan, we aim at distributing over 12 million better quality, high-yielding cocoa plants as well as opening up an R&D centre in Abidjan and improve the supply chain in partnerships with cocoa processors such as Cargill and Olam by buying cocoa beans from farms and cooperatives which use sustainable practices.
Which mechanisms can work to scale up sustainable production of cocoa?	**Armajaro:** "Certification can be a useful tool to drive change in farming practices. In order to do this, there is need for stronger criteria on productivity and alignment of standards on a common training curriculum. The Certification Capacity Enhancement Initiative goes in this direction."	**Mars:** "For certification to become the norm it should reach unorganised farmers (via outsourcing of ICS systems")	Developing new financing mechanisms to access to inputs (e.g. risk-sharing for input financing),
	Cargill: "It is crucial to make cocoa farmers better farmers, training in good agricultural practices (through local institutions) and promoting farmers aggregation in strong and autonomous cooperatives"	**Nestlé:** "Much should be done to improve the monitoring and evaluation mechanisms of inclusive approach in order to take corrective actions along the way."	Embedding strategies/platforms at producing countries' level (e.g. The Africa Cocoa Initiative aims to institutionalise the conditions for sustainable production at local level).

2.3. Horticulture Table

Which are the trends of the sector?	Vegetable crops, including root and tuber crops, are the second most important group of crops produced worldwide, after cereals. Their global production exceeds 1 billion ton every year.	In some countries agriculture-growth potential is more strongly linked with diversification into high-value horticulture crops (e.g. Morocco nucleus farms, Kenya, Ethiopia)	It can be significant in terms of inclusiveness for small farmers: It can be very profitable with very limited landholding and can be managed by family labour, without entailing additional labour costs
Which are the Incentives for inclusiveness ?	**SPAR** (South Africa): Store's cost saving by procuring locally, shortness of supply chain and in turn increased competitiveness. Strong motivation to make a success of the procurement system in the long term "Community involvement is part of SPAR group corporate strategy"	**Hillside Green** (Kenya): "Smallholder farming is more cost effective, small farmers apply high skills for cultivation and farmers groups farming has an effect of addressing food shortages in the rural areas".	For smallholders: secure and stable market provided by supermarket **Africa Flower** (Kenya): "flower growing allows high return for smallholders with low risk and low cost"
Which success factors made your business model inclusive?	**Transparency and traceability** – disclosing costs, expenses, margins with producers (AfricaJUICE) and EOSTA "Nature & More "trace and tell" system: a Sustainability Flower to monitor respect of human rights, fair trade and employer safety, energy use, wildlife protection, watercourse protection, sustainable soil management, bio diversity.	**Fairfield's** (fresh vegetables –Kenya): Sustained well target support to small farmers and collective training for small scale farmers with successful commercial farmers.	Morocco: Successful aggregation program for smallholders around nucleus farms. Key role of the agricultural-development agency to encourage and direct these investments and manage the contracts. **SFL/ ACOS** case dried beans (Ethiopia): – Set up a neutral intermediary and Combine training with technology packages to improve farmers' productivity and livelihoods
Which is the impact on smallholders?	**SFL/ ACOS** case dried beans (Ethiopia): Farmers who used training package on good agricultural practises successfully increased bean incomes from $160 to $230 for a typical half hectare plot (about twice of what they would have earned from the next widely grown crop in that area, sorghum).	**Hillside Green:** "Smallholder Farmers groups farming works to mitigate food security shortages as farmers are trained to embrace good agriculture practices such as crop rotation".	

Challenges	Lack of systemic government support Highly priced costs of inputs and weak seed systems. Sustainability challenges: Water usage, waste and carbon foot print.	For exporters/retailers: Small range of crops produced traceability, safety Risk in terms of timely delivery of quality products	For farmers: Consistency , adherence to phytosanitary standards, Difficult for small farmers to adapt quickly to the pull culture of supermarket High risk involved in producing without certainty of retailers' demand
Which mechanisms can work to scale up inclusive business in horticulture?	Ethical agent (**Africa flower**, Kenya) to offer a commercial model for aligning the business models of smallholders, SME suppliers, and demanding modern retailers.	Strategies to share risks more equitably throughout the chain (**Cuatro Pinos** of Guatemala and **LA Salad** of the USA jointly managed an innovative risk-management mechanism- a fixed percentage of all sales)	A safe platform of dialogue with all actors engaged -**EOSTA** - the Sustainable Pineapple Association, Objectives: train in GAP, Create a knowledge center, Engage supermarket to commit to minimum supply (via a purchase contract with growers)
	Financial innovations: Sacco's in Kenya allows the farmer organization to pay the farmers upon delivery despite the supermarkets delayed payment.	**AfricaJUICE** promotes shareholding of farmers so they become part-owners and can use the income generated to invest in their own development.	**Innovation in the chain/Spinoffs form export oriented horticulture –** africaJUICE: outgrowers in rotation with passion fruit plant vegetables for the local market. Other positive spinoffs include: Improvement in soil quality, introduction of more sustainable practices, such as for instance drip irrigation for the field(AfricaJUICE, Fairfields)

2.4. Rice Table

Which are the trends of the sector?	One-fifth of the world's population, more than one billion people, depend on rice cultivation for their livelihood. Rice is the staple food for more than half the world's population, including 640 million undernourished people living in Asia.	Only 7 per cent of rice is traded internationally. Rice is the fastest-growing food staple in Africa and one of the most important and fastest growing staples in Latin America - both regions are net importers.	Asia, where about 90 per cent of all rice is grown, has more than 200 million rice farms, most of which smaller than one hectare.
Which are the Incentives for inclusiveness ?	The advent of the global food crisis that provided an excellent opportunity in the global markets Unsatisfied domestic market- potential for commercialising rice as a smallholder cash crop.	For farmers: improve production techniques to improve quality and in turn income.	For farmers: organic rice costs less to produce than traditional rice and fetches higher prices
Which success factors made your business model inclusive?	**Zambia (SNV and local private processors)**[11] 1. Targeting the middle men- Aligning the incentives of producers and processors. Strengthening producer group so that they can undertake communal bulking in accessible areas for both traders and processors. The ability to bulk rice at smallholder level has reduced the cost of accessing the rice on the part of the processors thus increasing volumes of rice being processed and entering high end markets. 2. Stakeholder forums at district and provincial level to discuss and address issues that affect the growth of the rice sector in Zambia	**Colruyt supermarket/Fair Trade/Veco**[12] 1. Technical innovation thanks to participation in Fair Trade certification. 2. A hulling company (ESOP) engaged in lasting cooperation with producers' organizations and service companies. It ensured training, supply of raw materials at competitive prices and facilitated access to seeds and fertilizers	**Upland Marketing Foundation Incorporated (UMFI)**[13] 1. The role of UMFI as a marketing consolidator (buying from farmers and selling to supermarkets) which led to improvement of packaging and product quality/ positioning analysis, upgrading of rice mills, access to irrigation 2. Constant monitoring of the market environment 3. Transparency with partners (disclosing of costs, margins)

[11] Zambia (SNV and local private processors) :Food through the private sector.

[12] Colruyt supermarket/Fair Trade/Veco: support to rice value chain in Benin.

[13] Small organic rice producers sell to Philippine Supermarkets: Upland Marketing Foundation Incorporated (UMFI).

Which is the impact on smallholders?	From 2007 to 2012, productivity increased by 30 per cent thanks to training in agronomical practices; most market systems in the seven district SNV works have been re-built with many farmers bulking and negotiating the prices at which they sell their produce-prices to farmers increased by threefold to €3.08 per 50Kg bag of paddy to €11.55	Colruyt supermarket/Veco (Benin): The average productivity per hectare rose from 2 tonnes/ha in 2003 to 3.3 tonnes/ha in 2009. Self-sufficiency in rice is now a reality at the level of the local population of the Collines department. All producers' households have access to quality rice	From 2001 to 2006 Sales of organic rice have risen by 54 per cent in volume and by 89 per cent in money terms. Farmers' net income increased by 119 per cent.
			System of Rice Intensification(Vietnam) 11% higher average yields, 16% lower urea fertiliser use, 45% less frequent pesticide application, 35% reduction in average irrigation expenses, and 50% increases in income.
Challenges	Increasing volumes of rice produced to meet local and regional demand increasing business performance of many SMEs involved in the value chain	Strengthening the production process, and marketing	Improving volume and consistency of supply
Which mechanisms can work to scale up inclusive business in rice?	Zambia SNV: Enhancing the capacity of the processors to penetrate lucrative markets and to pull the producers, leading to increased production and incomes, and thus increased food security	Colruyt supermarket/Veco (Benin): certification can lead to use of good practices for rice growing, higher quality and higher returns. The revenue per hectare for Fair Trade rice is theoretically 147% higher than the same rice, sold on the local market	UMFI (organic rice): increase ownership: Suppliers can become shareholders. And introduce Feedback mechanisms between the distributor and producer(determining the cause of a produce rejected) which allow producers organisations to fine tune their produce.
	Multi-stakeholder platforms for better sector coordination for policy and advocacy. SNV (Zambia): setting up of the Zambia Rice Federation which led to the Zambia National Rice Development Strategy in October 2011.		Apply sustainable intensification methods, e.g. System of rice Intensification (India) and Viet Nam (model programs has boosted rice productivity and quality, mitigated greenhouse gases and increased income for farmers)

2.5. Dairy table

Which are the trend and challenges of the sector?	The total number of dairy farms in the world is estimated at 149 million, of which 20 per cent in Africa (mainly Egypt, Kenya and South Africa, Ethiopia) mostly managed by smallholders. Dairy is an integral part of smallholder farming systems and represents a common means of livelihood and a critical safety net.	Dairy consumption is rapidly increasing in developing countries, driven by population growth and growing per capita incomes.	Growing urban demand for milk products stimulates the development of formal supply chains
Which are the Incentives for inclusiveness ?	The dairy sector has high potential for inclusiveness, given the perishable nature of dairy products and therefore the fact that the value chain is highly integrated	For **Floralp** (an Ecuadorian dairy company becoming inclusive of small producers in its value chain was one way to differentiate itself from its competitors. At the same time, it allowed the company to differentiate its supply chain and secure its supplies for a growing market.	Farmers' incentive lies in the added value to their milk thanks to linking it to processing and marketing. Progress for dairy smallholder farmers can be achieved by making milk collection systems more efficient.
Which success factors made your business model inclusive?	**Community milking centre in Karnataka** (India). Milk-quality was attained through community involvement in milking operations and doorstep delivery of veterinary and breeding services. The concept adopted was to consider the whole village as a single dairy herd. **Tiviski's camel milk dairy** (Mauritania) established a supplier code and tracking system and organised supply from a dispersed based.	**Floralp**: Upfront loans to milk associations, continual training and technical assistance program has created tighter ties of loyalty with the small producers and has secured a continuous supply of high-quality milk. **Friesland Campina's** Dairy Development Project in Vietnam : over 3000 dairy farmers have a direct contract with FS and benefit of training by Dutch farmers	**Nestlé**: Milk district model: work directly with smallholder dairy producers and cooperatives to build a supply chain. In India, Nestlé collects over 887 tonnes of milk per day in its factory from over 110 000 farmers, and provide assistance in improved farming methods better irrigation, subsidise the purchase of equipment, and help with access to financial assistance.
Which is the impact on smallholders?	**Operation flood (India)** has made the country self-sufficient in milk products by linking rural milk production to urban milk marketing through cooperatives and has impacted positively on income, employment and nutrition status of milk producing households.		Tailored models for communities. Tiviski camel's milk has enabled poor, nomadic people to earn a living from previously non-productive livestock and to look at animal husbandry as an economic activity.

Challenges	Traceability and quality assurance, organize and upgrade supply from a dispersed producer base.	Fluctuating milk prices as a result of reduced market protection. Higher feed and fertilizer prizes Lack of government's extension services	poor infrastructure, animal disease, inadequate water, and animal feed that lacks nutrients
Which mechanisms can work to scale up inclusive business in the dairy sector?	Government's integrated and long-term approach for dairy: Lifting market protection for dairy products, for example, can have a substantial positive effect on the competiveness of smallholder dairy farming.	Introducing improved technical packages and capacity building to link of smallholders to markets/dairy supply chains. **Friesland Campina** (Vietnam) Direct contracts combined with training	Increasing marketing of milk through formal supply chains e.g. Tanga Fresh Tanzania: construction of Milk Collection Centres (MCCs) as part of a cold chain to implement commercial milk collection, processing and marketing.
	Strengthening milk producer groups (The Indian dairy cooperatives are good examples of how the success of one operator in a producer-driven value chain was replicated to create a second chain. The key features contributing to the success of these dairy cooperatives included: committed management, adequate financing, and the delivery of an integrated package of services covering all stages of the chain, from production through to retail.		Increasing access to information**: Tanga Fresh**: provide a market guarantee for farmers' milk, and the establishment of a Dairy Farmers Information Service.

3. Tackling the challenge of scale: which lessons are emerging?

3.1 Introduction

Of course, each value chain is likely to be different in implementing inclusive business models and scale them up. For instance, scaling up practices will vary for livestock, export high value crops and local staples. Solutions and strategies should be tailored to the specific commodity and to the local context. However, some general principles are beginning to emerge.

Scaling up inclusive business calls for a pro-market focus. The profit motivation is fundamental to ensure that business involvement in enabling sustainable livelihoods is both scalable and replicable. Moving from Corporate Social responsibility to mainstream sustainability requires projects that are commercially driven. Sustainability requires moving away from the development project approach. The private sector has much of the necessary experience, skills and processes to make scaling up work. This is primarily because any agricultural technology or process that significantly increases income is marketable and hence saleable.

Figure 2 below summarises the structure of this section. In order to understand what works and what does not work in scaling up inclusive business it is crucial to understand which are the incentives and how they can be aligned. Incentives lead to different mechanisms for scaling and in turn mechanisms create different incentives. In what follows we detail the different incentives which have emerged from the interviews to the different players involved in setting up inclusive business, as well as different mechanisms emerged from successful cases. It is important to note that in some cases there is a combination of these different mechanisms. In addition, the reader should be aware that the mechanisms illustrated here have worked on the specific cases analysed and they are not representative of the full set of mechanisms and innovation actually taking place in the agri-food sector. However, this synthetic overview aims at identifying successful experiences which might be tested in other contexts to support the scaling up small farmers inclusion.

Another important dimension to consider when scaling up inclusive business is the actual impact. As stated in the reconnecting market analysis[14], "*inclusion or exclusion does not imply per se any differences in welfare outcomes. A group of small-scale producers who are "included" in a supply chain will not automatically be better off than those who are "excluded", in terms of net income or assets, exposure to risk, or autonomy in decision making".* The open question is therefore: Is inclusive business delivering sustainable impact at scale. Does Inclusive formalisation bear a great risk of exclusion of the bottom of the pyramid? The Unilever Sustainable living Plan calls for 100 per cent sustainability and for targeting 500000 SMEs. Is this statement contradictory as in order to achieve sustainability they will need to work with a fewer number of reliable trusted suppliers?

[14] E. Biénabe, J.Berdegué, L. Peppelenbos and J.Belt (2011) Reconnecting markets: Innovative Global Practices in Connecting Small-scale Producers with dynamic Food Markets, IIED.

Figure 2: Incentives and mechanisms to scale up inclusive business

Tackling the challenge of scale: Emerging lessons

Mechanisms

Require

Which initiatives can be done at the level of individual business model and which at the level of system?

- **Policies** (Morocco Plan Vert)
- **New Business models** (e.g. Tiviski camel's milk dairy)
- **Project alliances** (Nib/Technoserve/IFC)
  - Intermediation (ethical agent)
  - Trust
  - Long term relationship
- **Platforms** (e.g. RSPO SAGCOT, Africa Cocoa initiative)
- **Innovative fin. Mechanisms** (Rabobank and NMB Tanzania WHR financing and put options
- **Inclusive Certification** (e.g. Certification Capacity Enhancement initiative)
- **Chain wide innovation/spinoffs** (e.g. africaJUICE)
- **Networks/New Technologies** (e.g. Esoko platform)
- **Sustainable intensification** (System of Rice Intensification, India)

Create

Incentives

Which are the incentives /how can they be aligned?

For business

For small-scale producers

For government

For development partners

3.2 Scaling up inclusive business: Which are the incentives?

a. For Business:

- The paradigm has changed. We are in a situation of shortage of supply and high prices for most commodities. There are strong incentives for companies to move closer to farmers to secure consistent supply. According to the interviews carried out, the incentives that are bringing many companies to set up inclusive business include: increase productivity, attract future generations in farming and react to consumers' pressure, reduce operational/reputational risk, brand differentiation to attract new consumers, and build strong localised supply chains.[15]
- There is an increasing willingness by the industry to solve the problems at a precompetitive level and to be part of the solution. According to Paul Polman, CEO of Unilever "*Transparency in food markets is crucial to help understand why people enter the markets and what value they bring*"..."*People don't have to disclose their positions. You can significantly leverage and gear a position which might not be in the interest of all parties*".
- The critical change for a company is to adapt its practices for sourcing and purchasing and to work with key partners in the supply chain to restructure trading relationships or develop new chains. However, to enable change of this kind to happen, companies also need to adapt their: corporate culture – from a competitive mindset to a partnership oriented outlook; operations – to create incentives for buyers to invest in creating long-term stability and development benefits in supply chains; corporate or brand communications – to integrate verified commercial and development benefits delivered through these changes.[16]

b. For small scale producers

- The incentive for small producers to engage in inclusive business is increased resilience (e.g. secure and stable markets provided by supermarket) and revenue growth, stemming from increasing access to premiums for higher-quality and certified products and increased productivity thanks to better agricultural practices.[17]
- Other incentives include:
    - Geographical location (proximity to buyers and marketing channels in general)
    - Membership to an association (providing a range of services)
    - Access to water and irrigation infrastructure
    - Access to inputs
    - Access to Risk management options and credit
    - Access to information and connection to exporters

[15] As stated in the Unilever website: "Why inclusiveness matters for our business?: "Changing weather patterns, water scarcity and unsustainable farming practices are putting pressure on agricultural supplies. In addition, food security is also under threat from rising populations. Climate change is having an impact. Flooding and more severe droughts can lead to the loss of ecologically and agriculturally valuable soils, and damage agricultural yields. Since half the raw materials we buy are from farms and forestry, a secure supply of these materials is a core business issue. Unsustainable farming practices will have serious repercussions on the environment and in grower communities. This presents an operational and reputational risk to our business. Our business is linked to a complex network of thousands of farmers: smallholders as well as large agri-businesses and third-party suppliers. We also buy ingredients from the agricultural commodity markets. Sustainable sourcing not only helps us manage a key business risk; it also presents an opportunity for growth, allowing our brands to differentiate themselves to the growing number of consumers who choose products based on their sustainability credentials.".

[16] Oxfam (2010) Briefings for business No 6, "Think Big. Go Small. Adapting business models to incorporate smallholders into supply chains". International edition.

[17] B. Jenkins and E. Ishikawa (2010) SCALING UP INCLUSIVE BUSINESS: Advancing the Knowledge and Action Agenda, IFC.

- Smallholders or rural small and medium enterprises will be included or excluded in the evolving supply chain depending on their ability to undertake the necessary technological, managerial and organisational changes. The government, private business models, intervention by development partners can change the incentives that smallholders face and strengthen their capacity to do so. [18]

c. For governments /development partners

- For governments and development partners, the most common development outcomes of the inclusive business models are expanded economic opportunity and access to goods and services for the poor.

3.3 What is keeping inclusive business models from reaching their full potential?

Going to scale means that challenges become systemic: Companies doing business with smallholders face a number of systemic constraints, ranging from lack of infrastructure to low levels of knowledge and skills among farmers, ineffective regulation to limited access to finance for low-income producers. Indeed, as observers have begun to point out, large-scale success stories – reaching large numbers of poor people directly or via replication – are still the exception, not the rule.[19]

Which are the Challenges to scale for small farmers?

Limited knowledge and skills	Lack of market information
Lack of access to adequate financing	Ineffective regulations/poor infrastructure

Which are the Challenges to scale for firms?

Unrealistic expectations on time to reach scale (i.e. scaling too quickly or too soon)	Difficulty in adapting the initial business model to new geographies and scales of operation	Lack of internal buy-in within the firm
Lack of access to adequate financing	Lack of appropriate partners in new geographies of operation	Short term cost against long term benefits

Source: adapted from CSR Initiative, Harvard Kennedy School "TACKLING BARRIERS TO SCALE: FROM INCLUSIVE BUSINESS MODELS TO INCLUSIVE BUSINESS ECOSYSTEMS"

Evidence shows that inclusive business models can still take a long time to scale. The pathways they are taking to scale are often iterative, rather than linear. Some companies think of it as one long series of pilots, with the model adapting to circumstances and lessons learned. Seeing it through takes time, money, initiative and often senior executive buy-in and significant dedication from staff involved.[20] These

[18] E. Biénabe, J.Berdegué, L. Peppelenbos and J.Belt (2011) Reconnecting markets: Innovative Global Practices in Connecting Small-scale Producers with dynamic Food Markets, IIED.

[19] B. Jenkins and E. Ishikawa (2010) SCALING UP INCLUSIVE BUSINESS: Advancing the Knowledge and Action Agenda, IFC.
[20] CSR Initiative, Harvard Kennedy School "TACKLING BARRIERS TO SCALE: FROM INCLUSIVE BUSINESS MODELS TO INCLUSIVE BUSINESS ECOSYSTEMS".

issues lead to these open questions: how the costs (mainly short term) of adapting core business stack up against the benefits (mainly long term)? Where are the key influence points that need to be leveraged to create internal buy-in, and when and how should they be employed? What are the indicators that an inclusive business model is ready to scale, and what are the most common mistakes to avoid?

A central question for governments and development partners is how to create the appropriate incentive framework to facilitate further innovation in inclusive business. Where do constraints need to be removed, should direct incentives be provided, and which mechanisms can work?

3.4 Scaling up inclusive business: Which are the Mechanisms to scale?

As highlighted earlier, there are systemic barriers to scale that can only be tackled in collaboration with other players in the private sector, in government, and in civil society. New models of collaboration are as important as new business models.[21] Ultimately, the private sector can develop capacity only if its incentives are aligned with the government's strategy and those of the sector's agricultural players. Inclusive business need to be institutionalized at country levels to be viable. All international actors must work closely with producing countries' governments to build the local capacity required to transform the sector. In most cases there has to be a public-private partnership. Sometimes this will simply consist of governmental action to provide the right kind of enabling environment for the private sector to operate. In others, more formal public-private-community partnerships are required that harness the different qualities and comparative advantages of the relevant actors. The open question here is: **What must be done at the level of the individual business model or value chain, and what must be done within the broader system**?

3.4.1 Enabling policies and regulatory environments

Of course the government has the main responsibility in terms of setting the appropriate context in which business can deliver and small farmers can participate. The World Economic Forum's New Vision for Agriculture initiative highlight some Government's actions that are essential stepping stones toward success in a large-scale transformation effort, including:

- *Leadership and alignment of stakeholders* around shared goals.
- *Clear strategy and priorities*: Priority should be placed on value chains that have significant demand markets – rural, urban and export – that can be competitively served. The best approach for making these choices is to conduct a transparent and objective analytical exercise that examines the costs and benefits of various options across regions and value chains, and enables stakeholders to debate them in an open way. By undertaking this type of exercise, Ghana chose to focus on four breadbaskets and selected soy, maize and rice for its value chain focus. Engaging stakeholders in "co-creating" the approach and communicating the rationale creates a shared foundation upon which all stakeholders can build their plans.
- *A Concrete Investment and Entrepreneurship Pipeline.* Bringing new and existing innovations into the system requires market stimulus to induce potential entrepreneurs and investors to take on a defined set of initiatives by identifying incentives (such as access to land) as well as conditions for success (such as aggregating smallholders). For example, bidding rounds of lots or contracts are transactional approaches to kick-starting and accelerating investment. As part of its national Maroc Plan Vert agricultural transformation, Morocco decided to move from wheat

[21] CSR Initiative, Harvard Kennedy School "TACKLING BARRIERS TO SCALE: FROM INCLUSIVE BUSINESS MODELS TO INCLUSIVE BUSINESS ECOSYSTEMS".

towards high-value crops on its irrigated land, yielding much higher incomes to small farmers and used private sector nucleus farmers as the change agent in the transformation (see box 3)

Box 3: Innovation through Aggregation: Morocco's Nucleus Farm/Outgrower Model

As part of its national Maroc Plan Vert agricultural transformation, Morocco decided to move from wheat towards high-value crops on its irrigated land, yielding much higher incomes to small farmers. The challenge to implementing this strategy was that high-value crops require significant investment (e.g., in storage and conditioning equipment, inputs) and greater capabilities (e.g., growing techniques, quality control, access to European markets) than what is usually available to traditional smallholder wheat farmers. The use of a limited number of private sector nucleus farmers as the change agent in the transformation was a critical decision, and one that has proven to be very successful. The government orchestrated a process of soliciting several hundred more sophisticated farmers (larger Moroccan and Spanish farmers and international companies) through long-term land leases of 50 hectare plots and other start-up assistance. In return, the nucleus farms have a contractual obligation to work with small farmers in their vicinity to help transition them to higher value crops (e.g., providing inputs on credit, provide extension, offering marketing services). The role of government has moved from direct extension to oversight, ensuring that contracts are adhered to and that market prices are available to small farmers to prevent power imbalance.

- *Enabling hard and soft infrastructure policies and investments:* According to Reconnecting Markets' analysis: Public policies favouring inclusion can and need to be at the same time very pro-poor and very pro-market. "Public policy can be a vital factor in promoting smallholder farmer participation in dynamic markets. Smart subsidies and institutional change fostered by public policy can be used to: encourage private sector firms to source from small-scale farmers; provide support services to small-scale farmers (e.g. technical assistance, access to certification schemes); provide direct financing to small-scale farmers or to facilitate their access to financial services provided by others; adjust the development of private grades and standards so that the cost of compliance does not lead to widespread exclusion; or invest in community development." [22] See box 4.

Box 4: Public policies promoting smallholder inclusion

The new dairy policy of Kenya signals a clear departure from the old and ineffective 'command and control' approach to regulation of the informal and traditional milk markets that was used to try to eliminate informal small-scale milk vendors. Licenses are issued to vendors, linked to compliance of quality and hygiene regulations, and business development services are now available including training and certification. The pioneer Kenyan approach is being promoted in Uganda, Tanzania and Rwanda. Also, there is an East African regional effort to rationalize and harmonize dairy policies and standards across borders, including adoption of common training and certification materials and approaches. A key trigger of the change of approach was a research and development project (Smallholder Dairy Project) jointly implemented by Kenyan (KARI) and international (ILRI) organizations, in close coordination with a range of dairy industry stakeholders.

Source: E. Biénabe, J.Berdegué, L. Peppelenbos and J.Belt (2011) Reconnecting markets: Innovative Global Practices in Connecting Small-scale Producers with dynamic Food Markets, IIED

[22] E. Biénabe, J.Berdegué, L. Peppelenbos and J.Belt (2011) Reconnecting markets: Innovative Global Practices in Connecting Small-scale Producers with dynamic Food Markets, IIED.

Figure 3: Major changes in public policies

Effective transformation leadership sometimes means a major step change from the way things were done before

From . . .	. . . to
▪ Broadly implement individual initiatives across entire country (e.g., fertilizer subsidies, extension, seed systems)	▪ Holistic mini-transformations with enough change energy in a geographic region or value chain – then scale from there
▪ Individual agendas for country, donors and private sector	▪ Coordinated, multistakeholder planning process and execution management
▪ Government-driven	▪ Market-driven, with government as enabler
▪ Design programmes around technical and political considerations	▪ Design for scalability — Scalable private sector change agents (e.g., nucleus farmers, warehouse aggregators) — Focus on replicable contracts — Transaction-focused approach
▪ Everything is a priority	▪ Explicitly sequence one's activity choices, and explicitly choose *not* to do certain things

Source: WEF (2012) Putting the New Vision for Agriculture into Action: A Transformation is Happening

3.4.2 New business models

Scaling up of inclusive business can be achieved through private initiative and innovation. For instance the Camel's milk Tiviski Dairy created a market for camel's milk in Mauritania by changing consumer mindsets; creating an independent, membership-based NGO to provide animal husbandry training, financing, and veterinary services to camel herders; and engaging the government to develop appropriate standards and administrative bodies. This mechanism presumes sufficient resources and the necessary capabilities, and typically works best when incentive problems are limited to the company and its direct customers and suppliers – and can be addressed through payment and certification systems embedded in the business model. For the private initiative structure to be effective, the company needs to have a core business interest in including small farmers.[23] However, there are cases in which a limited public support or the absence of an external actor to provide finance or business development services, for instance, does not allow to increase the outreach of these successful initiatives. In turn, the new business models reach a critical growth limit and remain an island of success.

3.4.3 Effective partnerships

Public Private Partnerships/ Project Alliances - When the company's own resources and capabilities do not suffice, and when broader or more complex coordination problems exist, partnership in the form of project alliances might be more appropriate. A project-based alliance brings two or more players together under a formal agreement to accomplish a certain objective within a set timeframe. In Central America, ECOM partners with Rainforest Alliance and CIRAD to improve farmers' productivity and eligibility with certification. Training activities are financed by Nespresso and IFC. In Ethiopia, NIB bank provides access to finance for cooperatives of smallholder coffee farmers as part of the Coffee Initiative in East Africa. The Coffee Initiative is a $47 million program funded by the Bill and Melinda Gates

[23] CSR Initiative, Harvard Kennedy School "TACKLING BARRIERS TO SCALE: FROM INCLUSIVE BUSINESS MODELS TO INCLUSIVE BUSINESS ECOSYSTEMS".

Foundation and managed by the US-based non-governmental organization TechnoServe. Its goal is to increase the incomes of coffee farmers in Ethiopia, Kenya, Rwanda, and Tanzania by increasing the quality and quantity of coffee they produce. The Bank's inclusive business model hinges upon partnerships for financial risk-sharing and farmer capacity-building.

Another example of project alliances is the NorminVeggies association In the Philippines, which is a collaborative organizational arrangement between NGOs, a smallholder farmer organization and a private company. The private company, NorminCorp, acts as a marketing agent with a social enterprise emphasis (operated with keen business sense but also full empathy for the small-scale farmers). The NGOs and the farmers' organization work together as a rallying point in providing development support to the small-scale farmers. Support is aimed at addressing the vulnerabilities of small-scale farmers and enabling them to be part of the clustering effort. Financial support provided by NGOs consists of a production fund functioning in a similar way to financier/traders. Support is funded by NGOs but operated by NorminCorps as it is perceived as a business transaction and not as a project fund. A technician is also provided to guide small-scale farmers on integrated pest management to answer to market requirements in terms of food safety. [24]

Specialized and hard-to-replicate assets like local knowledge and relationships of trust may be required. Money may also be required – money that is hard to come by internally, because the financial return is too small or too uncertain to justify the investment.[25]

- **Successful partnership builds on trust**. Trust is vital as is capital investment — investment for technical assistance, improved productivity and access to credit. Scaling inclusive business also means allowing small-scale farmers to participate in building the model and how it works, rather than simply allowing them to operate within it. For instance in successful cases, farmers can become shareholders of the (e.g. africaJUICE aims at providing local communities with a genuine share of the success of a project by, for example, offering a stake in the new business so they become part-owners and can use the income generated to invest in their own development).

- **Intermediation is also crucial to solve incentives problems when a series of players are involved.** "Achieving scale requires much higher investment in experienced people which can play intermediary role".[26] The presence of a strong intermediary to drive procurement, quality and efficiency is key to many value chains that successfully link informal smallholders to modern markets. As part of the New Business Models for Sustainable Trade project, IIED, Sustainable Food Lab and other partners supported a flower company in Kenya (Africa Flower) to build the capacities necessary to sell smallholder flowers to UK and US supermarkets. This case shows the importance of an ethical agent in bringing specific expertise and in facilitating the flow of information and overcoming coordination problems along the chain. In the case study, the

[24] E. Biénabe, J.Berdegué, L. Peppelenbos and J.Belt (2011) Reconnecting markets: Innovative Global Practices in Connecting Small-scale Producers with dynamic Food Markets, IIED.

[25] CSR Initiative, Harvard Kennedy School "TACKLING BARRIERS TO SCALE: FROM INCLUSIVE BUSINESS MODELS TO INCLUSIVE BUSINESS ECOSYSTEMS".

[26] Interview to Mark Lundy - Senior Researcher, Decision and Policy Analysis Program (DAPA) Centro Internacional de Agricultura Tropical).

ethical agents although supported by development project funds has offered a commercial model for aligning the business models of smallholders, SME suppliers, and demanding modern retailers.

Platforms: In the case in which public goods (research, joint infrastructure) need to be created platforms are appropriate vehicles. Collective action is also necessary where the success of one actor depends on the success of another, because activities are complementary. They often operate from a jointly-created platform, such as a task force or coordinating unit, which creates a neutral space in which to develop and enact the shared agenda. Such a structure engages leaders representing broader stakeholder networks whose support is essential to the initiative's success. One example is the Southern Agricultural Growth Corridor (SAGCOT) Executive Committee. The Committee – co-led by the Minister of Agriculture and a vice-president of Unilever, and engaging global and local companies, donor agencies, civil society and farmer leaders – worked intensively to deliver a blueprint for generating US$ 1.2 billion in farming revenue and 420,000 new jobs in the corridor, largely for smallholders. The Committee has since helped establish the SAGCOT Centre to coordinate and mobilize investment and partnerships in the corridor, and a Catalytic Fund to spur investments.[27]

The recently launched **Africa Cocoa Initiative**, supported by the World Cocoa Foundation, USAID and IDH is another interesting platform that aims to institutionalise the conditions for sustainable production at local level. It is a forum which involves main chocolate manufacturers, grinders (ADM Cocoa, Barry Callebaut, Blommer Chocolate Company, Cargill, Continaf BV, Ferrero, Guittard Chocolate Company, The Hershey Company, Kraft Foods, Lindt & Sprüngli, Nestlé, and Olam International Ltd.) and the four main producing countries in Africa (Côte d'Ivoire, Ghana, Cameroon and Nigeria). The objective is to develop their cocoa sector in four critical areas: foster public-private cooperative investments in cocoa and agriculture, improve the genetic quality and productivity of the cocoa varieties under cultivation, expand farmer education and training programs, and improve the agriculture input supply chains that serve the farmers. The four national governments Côte d'Ivoire, Ghana, Cameroon and Nigeria have each endorsed WCF/ACI and are committing their agencies to participating and investing in its sponsored activities. The success of this initiative will largely depend of the effective ownership of the initiative by local authorities.

Another successful platform is the Roundtable on Sustainable Palm Oil (RSPO) – an industry-led initiative set up in co-operation with the conservation organisation WWF in 2004. The Roundtable works with plantation owners and commercial users to devise standards for sustainable production. "*In RSPO, all the sector is there (even if only 2 per cent of palm oil is sustainable). In coffee and cocoa some progress has been done, but the majority of the sector not involved*."[28]

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[27] CSR Initiative, Harvard Kennedy School "TACKLING BARRIERS TO SCALE: FROM INCLUSIVE BUSINESS MODELS TO INCLUSIVE BUSINESS ECOSYSTEMS".

[28] Interview to Han de Groot, Executive Director, UTZ Certified.

3.4.4 Inclusive Certification

Certification represents a powerful mechanism to scale up inclusive business however it needs to become more inclusive in its reach and impact.

- Certification if appropriately managed, does not only offer income opportunities but as well the chance to introducing sustainable agricultural practices with positive impacts on farm economics, the environment and social networks. If we consider the cocoa sector, a recent KPMG model to understand the costs and benefits of certified sustainable cocoa farming shows that **there is a business case for farmers and traders to invest in certification of cocoa production.**[29] The costs of certification (including training, audits, etc.) are outweighed by the increase in revenue coming from higher productivity and the market price premium. In general terms, farmers see a positive return on investment within a year, while traders (which normally do the bulk of investments) earn back their investments in less than 4 years. The positive business case depends, however, on a number of conditions that need to be in place. First and foremost, certification needs to be linked to increased farm productivity through a better use of pesticides and fertilizers and better availability of financial services. Secondly, the business case only applies to farmers who already have a basic level of organization and education.
- **Upscaling certification on to the large percentage of unorganized farmers (80 per cent in the cocoa sector for instance), is still a tremendous challenge due to the higher costs and risks.** As emerged from interviews "*If certification continues to reach only farmers working in cooperatives, it will not achieve the target of mainstream sustainability. Certification needs a critical mass to make it the new norm, to set a new benchmark.*" "*It is crucial to make intrinsic benefits more visible to farmers*"[30]. "*So far only cooperatives trained personnel manage ICS system; therefore it is very difficult for a trader to engage in certification. In order to reach unorganised farmers it is important to outsource ICS system management. This would allow about 30/40 per cent of traders interested in engaging in certification to hire ICS trained managers and in turn to reach a much higher number of unorganised farmers.*" [31]
- **It is important also to improve knowledge on the actual impact of certification on farmers' livelihoods.** According to De foundation: "*In our experience so far we recognise that while certification has brought a series of important benefits, there is need to go beyond certification. In most cases there are no clear targets in terms of income for farmers and quality. This needs to be improved. NGOs have a critical role to play, it is crucial to have them more involved and aligned with industry's attempts to set up inclusive business*".[32] "*At the moment it is easier to check for things that farmers do not do rather than establishing specific criteria on productivity or income. It is also crucial to incorporate Monitoring and Evaluation components in the certification assessments. Inserting M&E measurements in the ICS system would allow to have an ongoing measurement of changes occurred in productivity related to specific good agricultural practices. The qualitative metrics are very simple to do. Moving to this practice maybe costly for one certification agency only. It would be however important if all agencies could all align on this*[33].

[29] KPMG Sustainable Cocoa Fund Study (December 2011).
[30] Interview to Han de Groot, Executive Director, UTZ Certified.
[31] Interview to Peter Van Grinsven, Cocoa Sustainability Director - Origin Operations Mars Nederland B.V.
[32] Interview to Don Jansen Program Manager Douwe Egberts Foundation.
[33] Interview to Peter Van Grinsven, Cocoa Sustainability Director - Origin Operations Mars Nederland B.V.

- **There is need for greater harmonisation/alignment: "***Certification can be a useful tool to drive change in farming practices. But there is need for stronger criteria on productivity and alignment of standards on a common training curriculum*"[34]. Differing existing standards confuse producers, sometimes inefficient and very costly to comply with. Scaling up requires improved integration and coordination of existing initiatives. For instance, many efforts to make cocoa or coffee sector more sustainable are currently too expensive to scale up. By aligning training and standards across an entire country, with active engagement of local authorities, considerable costs can be eliminated. In this respect, the multi-stakeholder Certification Capacity Enhancement project (CCE) (see box 5) has been launched to come up with a common training program for the different certification schemes and to include stronger criteria on productivity. In a similar manner, by coordinating the approach to the delivery of inputs such as fertilizers and new planting material, broad cost efficiencies can be achieved. Efforts are also underway to organise joint auditing (e.g. so that farmers that are multi-certified can do one audit).

Box 5: The Certification Capacity Enhancement project (CCE)

The launch of the Certification Capacity Enhancement project (CCE) in 2010 has been an important step to boost the capacity of West African cocoa sector to benefit from sustainability certification programs and increased productivity. The CEE is a multi-stakeholder initiative within the West-African cocoa sector that has been developed jointly by the voluntary standard initiatives Rainforest Alliance, UTZ Certified and Fairtrade International (FLO), the development organisations Solidaridad, Dutch Sustainable Trade initiative (IDH) and German International Development Cooperation, GIZ (formerly GTZ), in collaboration with the private sector (Mars, Barry Callebaut, ADM, Armajaro, Toms). CCE aims at contributing towards a sustainable cocoa sector by enhancing farmers' capacities to meet the agronomic, environmental and social requirements of the three voluntary standard initiatives and to improve productivity. The project is being implemented in Ghana, Côte d'Ivoire and Nigeria. Ownership of local governments is key in this program. Up to December 2011 the CCE partners have defined a common training curriculum which aims to combine the efforts of standard initiatives, governmental extension services and public and private training programmes to facilitate access to certification by providing training materials for certification trainers and cocoa producers. This enables farmers and farmer organisations to fulfil the key criteria of three international standards initiatives for cocoa (UTZ Certified, Rainforest Alliance and Fairtrade) and to implement productivity improvement mechanisms. In 2012 there will be the upscaling phase which aims at strengthening certification capacities in the project countries, creating an information platform on certification related questions and implementing a monitoring and evaluation system.

3.4.5 Inclusive financial mechanisms

Innovative inclusive agri-finance models are emerging and can offer good lessons across different value chains. Increasingly, financial innovations in value chain finance involve the growing use of triangular supplier-buyer-producer-bank financial arrangements to reduce cost and share risks. In addition, technological innovations – including information and communication technologies (ITC) such as mobile banking, mobile technical support, electronic networks, etc., and improved management information systems (MIS) systems to accommodate "tailored" financial services have made value chain finance much more feasible across different crops.[35]

[34] Interview to Nicko Debenham Director Development and Sustainability, Armajaro Trading Limited.

[35] IDH (2011) The Cocoa Productivity and Quality Program Prospectus.

Other emerging issues:

- There is the need of common financial metrics. Access to information is key to scale up inclusive finance (engaging with farmers/SMEs involve too high transaction costs and financial intermediaries are unable to assess them. It is crucial to improve information on borrowers).
- It is crucial to find the right point of engagement: e.g. IFC engages in partnership with large buyers
- The innovation lies in how you distribute the risk in order for incentives to be aligned. Indeed, scaling up calls for strategies to share risks (such as bad weather, transport losses, and last-minute changes in customer demand) more equitably throughout the chain. These include micro-insurance schemes against bad weather, supply chain risk-management funds, and shared investments to improve the functioning of the chain. For example, Cuatro Pinos of Guatemala and LA Salad of the USA jointly managed an innovative risk-management mechanism. By taking a fixed percentage of all sales, this allows the companies to guarantee payment to farmers, even when they do not receive the goods ordered due, for example, to logistical or weather problems.[36]

Box 6: Examples of inclusive financial models

In Ethiopia, IFC provided a $10 million risk-sharing facility to local Nib International Bank to encourage the bank to lend to coffee cooperatives that receive training on better production and processing practices by the U.S. nongovernmental organization Technoserve. IFC's guarantee enabled financing to 45,000 small coffee farmers to purchase milling equipment that has led to significant improvements in the quality of coffee and 50 per cent higher prices. IFC will replicate this approach in other countries and for other commodities that suffer from lack of financing due to perceived high lending risk by local banks. Other examples of financing mechanisms which had a successful uptake and can provide useful lessons learned for other commodities and countries include: Trade finance to local coffee cooperatives in Kenya and Uganda by Rabobank and warehouse receipt finance to coffee growers in Tanzania. Warehouse receipt finance is a form of secured lending to owners (farmers, traders, processors) of non-perishable commodities such as grains and coffee that are stored in a warehouse and that have been assigned to a bank through warehouse receipts. Warehouse receipts give the bank the security of the goods until they have been sold and the proceeds collected. With the support of Rabo Development, warehouse receipt financing has been successfully developed in the coffee sectors in Tanzania in partnership with the National Microfinance Bank (NMB). NMB is looking to extend WHR financing to other sectors (e.g. SF seeds). It is crucial to integrate these financial tools with innovative risk management tools (e.g. futures contract, combining warehouse receipt financing with put options)

3.4.6 Spinoffs: Scaling up can be achieved through a series of spinoffs of export oriented agriculture to the local economy.

Farmers can innovate on previously side-activities next to farming. For instance, one important spillover of export oriented horticulture is that products for Europe need to be grown with rotation, therefore this leaves space for crops suitable for local sales (for instance sweet potato or ginger). In addition, through the provision of inputs and training by the exporter, the soil quality improves. There are positive spinoffs also thanks to the introduction of more sustainable practices, such as for instance drip irrigation for the fields. This is the experience also of africaJUICE (a tropical fruit juice company in Ethiopia) outgrowers which in rotation with passion fruit plant vegetables for the local market. Outgrower farmers involved in passion fruit production are provided commercial loan from local bank to finance water delivery system and drip irrigation system. This allows them to diversify their income through the planting of onions and tomato for the local market.

[36] Oxfam (2010) Briefings for business No 6, "Think Big. Go Small. Adapting business models to incorporate smallholders into supply chains". International edition.

3.4.7 Networks/new technologies to work efficiently with large number of farmers

- Effectively reaching farmers is strongly linked to farmer organizations, farmer associations, cooperatives. The Indian dairy cooperatives are good examples of how the success of one operator in a producer-driven value chain was replicated to create a second chain, both of which compete with each other and with private companies, both Indian and multi-national. The key features contributing to the success of these dairy cooperatives included: committed management, adequate financing, and the delivery of an integrated package of services covering all stages of the chain, from production through to retail. The favourable outcome also resulted from the backing of strong government commitment to develop a domestic dairy industry because of its broad socio-economic impact. Another reason for their success is the fact that the original cooperatives were truly grassroots organisations that had developed at their own pace.
- However, it is also crucial to develop new ways of reaching farmers that are not associated with a cooperative or farmer organization, which are the majority in Africa. In general, small-scale farmers organizations can introduce new management models such as supplier differentiation and supplier clusters to ensure greater involvement of smallholders. These include quasi-membership arrangements and top-up suppliers.[37]
- In addition, ICT systems could provide an interesting social network function, that could either strengthen weak cooperatives or provide new virtual cooperatives opportunities (see box 7)

Box 7: Esoko's inclusive business model

The Esoko platform is a web-managed system that enables real-time data gathering and dissemination via the Internet and mobile phones. For example, farmers can sign up to receive alerts on their mobile phones when new market prices are posted or send one-time price requests for the most recent prices. Drivers for Esoko's inclusive business model : • Market inefficiencies in the African agriculture sector, • rapidly increasing mobile phone penetration, • A ready organizational market of development agencies, NGOs, and agribusinesses that had struggled to develop and maintain their own mobile-enabled solutions. Other early efforts to provide agricultural market information via mobile phone have struggled to achieve financial viability, due to the time and costs required to build the technology and the inability to scale. The inability to scale was rooted in several factors, the most important being flexibility and a valid business model. Earlier systems were project-based and limited to specific countries or value chains, while Esoko has developed a product that can be used regionally, in many different languages, and by many clients at the same time. That flexibility allowed the company to envision a solid revenue stream that provided a basis for large investments. Esoko believed that by establishing a platform that could be used across countries and sectors—achieving economies of scale—it could tap into a ready market of development agencies, NGOs, and agribusinesses that would find licensing its platform a more affordable option than trying to develop their own. Early evaluations of Esoko's impact on farmers specifically found that those using Esoko in Ghana have increased their revenues by an average of 30% to 40%. In 2009, Esoko won the United Nations' World Summit on the Information Society award for e-inclusion and participation, highlighting the importance of locally acquired, relevant content. Esoko has established 4 franchises in Ghana, Nigeria, Mozambique, and Malawi and 7 international partnership projects spanning 15 countries.

Source: IFC (2011) Inclusive Business Models — Guide to the Inclusive Business Models in IFC's Portfolio

[37] E. Biénabe, J.Berdegué, L. Peppelenbos and J.Belt (2011) Reconnecting markets: Innovative Global Practices in Connecting Small-scale Producers with dynamic Food Markets, IIED.

3.4.8 Increasing productivity through sustainable intensification

"*To achieve meaningful change, farmer productivity needs to be the first priority. Through training in good agricultural practices, we can help farmers produce better crops and make more money for their families. Ultimately, this will create a sustainable supply of quality crops as farmers are empowered to reinvest in their businesses and communities.*"[38] Closing the yield gap requires to say it in the words of Pretty: "*sustainable intensification*"[39] making use of the best technical and best ecological means (and local knowledge) to produce more crops from the same area of land while reducing the environmental impacts, without ruling out any technology or inputs in ideological grounds. Interesting examples of sustainable intensification include: The System of Rice Intensification (SRI) which increases the productivity of resources used in rice cultivation, reducing requirements for water, seed, synthetic fertilisers, pesticides, herbicides, and often labour—especially tasks performed by women. SRI methods in India have tripled yields per acre leading to water saving up to 40 per cent. Also in Vietnam SRI has shown positive results. A 2008 review found 11% higher average SRI yields, 16% lower urea fertiliser use, 45% less frequent pesticide application, 35% reduction in average irrigation expenses, and 50% increases in income.

In addition, evidence shows that the use agroforestry systems (such as nitrogen-fixing leguminous trees and shrubs) in Africa has reduced soil degradation and improved crop yields – three-four fold, at the same time reducing the use of fertilisers and green house gas emissions. No till in Ghana has limited soil loss and water runoff. No-till can reduce production costs by 15–20 per cent, by eliminating four–eight tillage operations, with fuel reductions of up to 75 per cent. Overall these methods allow to tackle the triple challenge of contributing to food security, mitigating and reducing vulnerability, and increasing the adaptability of agricultural systems to climate change. These successful agriculture practices take place in about 3 per cent of total cultivated land in developing countries. They could provide useful lessons for developing countries and in Africa in particular. However, this requires considerable investments to research and develop technologies and methodologies and to build farmers' capacity.[40]

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References

Boselie D. (Wageningen University & Research Centre), Desalegn L. (Ethiopian Institute for Agricultural Research) (March 2011) Exporting fruit and vegetables from Ethiopia.

Biénabe E., Berdegué J., Peppelenbos L. and Belt J. (2011) Reconnecting markets: Innovative Global Practices in Connecting Small-scale Producers with dynamic Food Markets, IIED.

Buxton, B. Vorley, S. Homer and W. Van Bragt (2011) NMB case study: The Role of ethical agents: Fresh Flowers in Kenya.

[38] Interview to Peter Van Grinsven, Cocoa Sustainability Director - Origin Operations Mars Nederland B.V.

[39] Petty J. (2006), Agroecological Approaches to Agricultural Development, Rimisp – Latin American Center for Rural Development.

[40] Oxfam International (2011), Who Will Feed the World?, Research Report.

Climate Change Adaptation and Mitigation in the Kenyan Coffee Sector (September 2011)- Guide Book - Sangana PPP.

Fairtrade and Cocoa, (August 2011), Commodity Briefing, Fairtrade Foundation.

Giovannucci, D. And Alia (2008) Seeking Sustainability: COSA preliminary analysis of sustainability initiatives in the coffee sector. COSA.

Gradl,C. and B.Jenkins (2011). "Tackling Barriers to Scale: From Inclusive Business Models to Inclusive Business Ecosystems." Cambridge,MA: the CSR Initiative at the Harvard Kennedy School.

ICCO Annual report 2009/10 and Quarterly Bulletin of Cocoa Statistics (August 2011).

ICCO Monthly Review of the Cocoa Market situation September/October 2011.

IDH (2011) The Cocoa Productivity and Quality Program Prospectus.

IFAD (2010). Pro-poor rural value chain development. Thematic study.

IFC (2010) Jenkins, B. and Ishikawa E. Scaling up Inclusive Business: Advancing the Knowledge and Action Agenda.

IFC (2011) Inclusive Business Models — Guide to the Inclusive Business Models in IFC's Portfolio.

International Coffee Organisation, www.ICO.org.

KPMG Sustainable Cocoa Fund Study (December 2011).

McKinsey quarterly (April 2011), Four lessons for transforming African agriculture.

Oxfam (2009) Towards a Sustainable Cocoa Chain, International Research Report.

Oxfam (2010) Think Big. Go Small. Adapting business models to incorporate smallholders into supply chains, Briefings for business No 6, International edition.

Oxfam International (2011), Who Will Feed the World?, Research Report.

Petty J. (2006), Agroecological Approaches to Agricultural Development, Rimisp – Latin American Center for Rural Development.

Rabobank (2011) Rethinking the F&A Supply Chain - Impact of Agricultural Price Volatility on Sourcing Strategies.

Selected case studies form Seas of Change Partners.

Sustainable Food Lab case study (2011), Reaching High Value Markets: Fine Flavour cocoa in Ghana.

Sustainable Food Lab case study (2011) Seville et al. Dried Beans In Ethiopia: Increasing Food Security through Trade.

Tropical Commodity Coalition, Cocoa Barometer 2010.

Tropical Commodity Coalition, Coffee Barometer 2012.

Vorley B. (IIED), Lundy M. (CIAT), and MacGregor J. (IIED), (2008) Business models that are inclusive of small farmers- Paper prepared for FAO and UNIDO as background to the Global Agro-Industries Forum, New Delhi, 8 - 11 April 2008.

Interviews to

- Albert Boogard, Program manager Africa Rabo Foundation
- Carl Cervone, TechnoServe/Ethiopia - Coffee Initiative
- Han de Groot, Executive Director UTZ certified
- Daan de Vries, Field Director, UTZ Certified
- Margo Zuurveld van Oosterom, Manager Buying and Sourcing, Ahold Coffee Company
- Stefanie Miltenburg, Director International Corporate Social Responsibility, Sara Lee International
- Don Jansen, Program Manager Douwe Egberts Foundation
- Nicko Debenham, Director Development and Sustainability, Armajaro Trading Limited
- Taco Terheijden, Director Cargill Sustainability programs, Cargill
- JonasMwa Mwa, Program manager cocoa, IDH
- Darrell High, Cocoa Manager, Nestle- Nestec Ltd Confectionery SBU
- Bill Vorley, Principal Researcher, Sustainable Markets Group - International Institute for Environment and Development IIED
- Peter van Grinsven, Cocoa Sustainability Director - Origin Operations Mars Nederland B.V.
- Mark Lundy, Senior Researcher, Decision and Policy Analysis ProgramCentro Internacional de Agricultura Tropical
- Harry van Neer, Director africaJUICE
- Henk Zoutewelle, Product Manager EOSTA
- Harry Vervelde, Owner of FairFields B.V
- Eunice Mwongera, CEO, HILLSIDE GREEN GROWERS AND EXPORTERS
- Peter Niekus, International Business Manager - Food & Agri International Services, Rabobank International
- Jean Bosco Seminega, KIVU Arabica Coffee company, Rwanda
- Rene Verberk, Senior Project manager Agribusiness -Rabo Development
- Hans Bogaard, Head AgriBusiness - Rabo Development
- Don Seville, Co-Director at Sustainable Food Lab
- Sonja J. Vermeulen, Head of Research, CGIAR Research program on Climate Change, Agriculture and Food Security
- André Dellevoet Executive Manager, Africa Enterprise Challenge Fund
- Jan Kees Vis, Global Director Sustainable Sourcing Development Unilever
- Dave Boselie, Director Learning and Innovation, IDH