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Emma Blackmore and Caren Holzman with Abbi Buxton

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Scaling up certification in artisanal and small-scale mining: Innovations for inclusivity

Emma Blackmore and Caren Holzman with Abbi Buxton





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List of acronyms and abbreviations

ARM	Alliance for Responsible Mining
ASM	artisanal and small-scale miners
BCI	Better Cotton Initiative
DDI	Diamond Development Initiative
DRC	Democratic Republic of Congo
FSC	Forest Stewardship Council
ICGLR	International Conference on the Great Lakes Region
IRMA	Initiative for Responsible Mining Assurance
ITRI	International Tin Research Institute
iTSCi	The ITRI Tin Supply Chain Initiative
PGS	Participatory Guarantee System
RJC	Responsible Jewellery Council
RSPO	Roundtable for Sustainable Palm Oil
SAN	Sustainable Agriculture Network

I.

Introduction

The challenges of poverty, marginalisation and vulnerability characterise the livelihoods of the majority of the 20–30 million artisanal and small-scale miners (ASM) worldwide (Buxton 2013). Geographic isolation and lack of political influence means the nature of their activities and the structural challenges they face are often poorly understood, and are not well translated into public policy and development interventions. As a result, unfair prices, excessive use of dangerous chemicals and water pollution, deforestation, poor health and safety, and child labour are not being systemically addressed to transition ASM from a negative to a positive activity that can manage environmental impacts and create sustainable livelihoods (Hruschka and Echavarria 2011).

Sustainability certification has been positioned as a development tool for the market, leveraging market demand for sustainability to improve social and environmental conditions and outcomes. Certification can help producers access better markets, capture greater returns for their product, and offer an opportunity for learning (Blackmore and Keeley 2012). Producers (and typically others in the supply chain, such as processors, traders and retailers) must meet social, environmental and economic requirements in order to achieve certification. These standards - and the processes of auditing and certification that accompany them - assure consumers, companies and investors that a particular product has been produced and traded according to a series of performance criteria, usually relating to environmental, social, ethical and economic factors. They may also relate to broader governance issues. It is important to explore the opportunity for certification to offer a means of upgrading the ASM sector.

The market for social and environmental certification has grown rapidly in recent years, though in many cases from a very small base. The sales of certified cocoa, coffee and tea have increased by 248 per cent, 433 per cent and 2000 per cent respectively from 2005 to 2010 (SSI 2010). Though the certified market remains relatively niche – less than ten per cent of total market share for individual products¹ – the arrival of large multinational players such as Unilever, Nestlé and Kraft is helping to drive growth, in some cases taking certified production to the mainstream. Despite these efforts, sustainability certification is, by its very nature, exclusive. Evidence from the agriculture sector suggests that sustainability certification generally reaches only those small-scale producers who are organised to participate in markets, have the resources to organise, and have the capabilities to both comply with standards and have the appropriate systems in place to meet the needs of the certification scheme. These producers are typically close to markets or processing facilities, or benefit from effective local infrastructure (Blackmore and Keeley 2012). ISEAL Alliance - the global association for sustainability standards - recognises that 'standards organisations need to find new ways for producers and enterprises to engage, and make standards and certification simpler and less costly to access and implement, so that more producers and enterprises benefit from sustainable practices' (ISEAL undated: 3).

The benefits of certification are not reaching sufficient scale to drive sustainability throughout the market and are not reaching producers where they are likely to have the largest development impact. Certification can in fact reinforce differentiation and inequality by only being achievable for those producers with the largest asset base (i.e. the least poor). These farmers are then able to improve their positions in the market vis-à-vis other, less well-resourced producers in the market. There is a need to ensure that certification doesn't just work with the better off producers who are already closest to meeting the demands of the standards of the certification scheme (Blackmore and Keeley 2012). For certification to succeed in its social and environmental ambitions for the artisanal and small-scale mining sector, it needs to be appropriate for the realities of that sector. For certification to be credible it needs to be accessible to all types of enterprises (ISEAL 2013).

The mining and jewellery sectors are starting to use sustainability certification as a means to assure consumers, the supply chain and other stakeholders that production is taking place in a sustainable manner, although this is still very new and market coverage remains niche. As the mining and jewellery industries face criticism for their social and environmental performance, they are turning to sustainability

1 Such as certified tea, coffee and cocoa which have market shares of 7.7 per cent, 8 per cent and 1.2 per cent respectively (SSI, 2010).

certification as a solution, primarily focused on largerscale industrial mining. But fears that the minerals trade is contributing to conflict, in the Democratic Republic of Congo and elsewhere, are creating opportunities – via certification – that might help artisanal and small-scale miners become more viable and legitimate economic actors.

Since ASM sustainability certification schemes are at a relatively early stage of development, now is the ideal time to consider how they might become more scalable, inclusive and deliver impact, by drawing on lessons from other sectors. These systems might then avoid some of the current challenges faced by other sectors, for example around organisational structures and traceability.

Drawing on lessons from the agricultural sector, this paper investigates some of the factors that can lead to small-scale producers being excluded from certification – as well as looking at innovations and best practice design – to see how more inclusive certification could be achieved in the ASM sector. It also outlines a number of efforts and initiatives that exist outside the certification system that can help to scale up certification, by improving the ability of small-scale producers to participate.

The intended audiences for this paper are those involved in the setting and design of standards and certification systems, as well as policy makers who are considering using certification as a means to achieve certain development goals in the ASM sector. The paper does not consider the role for governments, though we recognise that the state has an important role to play in legalising and formalising the ASM sector in a way that supports certification and development and can help to improve the inclusion of small-scale producers in certification. The paper does not promote or endorse particular standards or offer recommendations on how to reform and restructure a particular certification scheme – it looks at particular innovations within the system as a whole. Any reference to a particular standard does not constitute endorsement by the authors.

The paper is structured as follows:

Section 1 provides a background to the key sustainability issues faced by ASM, the drivers for certification, and an overview of certification schemes currently in operation for ASM. This serves as useful context for the sections that follow it.

Section 2 provides an overview of the elements of a sustainability certification system and how these components can pose challenges to small-scale producers. It offers an analysis of innovations and best practice examples that exist in the design of the certification system, in order to maximise the numbers of producers who can participate.

Section 3 places this certification system in context and recognises that there are important *external* factors that determine the ability of sustainability certification to scale-up. This focusses on the enabling environment for sustainability certification. Indeed, sustainability certification schemes are often accompanied by a supporting 'ecosystem' which can be beneficial for small-scale producers – for example training, access to credit, and support to get certified – either from donors, NGOs, private sector players such as exporters, government or certification bodies themselves. Certification effectively brings together a variety of supply chain players, producers, traders, processors and retailers, to address sustainability.

Section 4 provides a summary of possible lessons learnt in regards to the design of certification for ASM.

Section 1: Artisanal and small-scale mining and certification

1.1 About artisanal and small-scale mining

Artisanal and small-scale mining (ASM) is an important sector from social, environmental and economic standpoints. The reality is that:

- 100 million people worldwide depend on artisanal and small-scale mining for survival (ILO 1999).
- There are around 15 million artisanal and small-scale gold miners globally, producing some 200–300 tonnes of gold, annually (Veiga and Baker 2004).
- Artisanal and small-scale miners account for 90 per cent of the labour force in gold extraction.
- ASM produces some 10 per cent of the world's mined gold (Hruschka and Echavarría 2011), 15–20 per cent of mined diamonds (KPCS 2008), approximately 20–25 per cent of mined tin and tantalum (Dorner *et al.* 2012), and 80 per cent of coloured gemstones (Lucas 2011).
- There are approximately 70 developing and transition countries with documented ASM activity (Hruschka and Echavarría 2011).
- Annual mercury emissions from artisanal and small-scale gold mining are estimated at 727 tonnes, making it the largest emitter, and accounting for more than 35 per cent of total anthropogenic mercury emissions (UNEP 2013: ii).

Artisanal and small-scale miners can be found mining for low-price bulk material like coal, certain industrial minerals and construction materials for local markets (marble, limestone, sand or clay) or high unit value minerals like gold and precious stones (diamonds and coloured gemstones), as well as higher-priced bulk ores and industrial minerals (tin, chrome, coltan, barite, fluorspar and so on) (Hruschka, and Echavarría 2011). These inputs can be found in products consumers use daily such as jewellery, electronics, cars and mobile phones.

ASM is an activity that usually occurs in isolated locations where small deposits of minerals can be found. It can also occur on larger mining deposits where the artisanal miners do not have the technology or capital resources to be able to extract all of the minerals that are a part of the deposit. It can be dangerous and environmentally harmful – mining can occur in deep underground tunnels with shafts which are prone to collapse; rivers can be dredged and contaminated, and miners can suffer water-borne disease; and the widespread use of mercury in the extraction of gold is a serious ecological and human health threat.

ASM is a labour-intensive activity that uses low levels of mechanisation or no mechanisation at all. There is a distinction between artisanal mining and small-scale mining. Artisanal mining is characterised by the use of rudimentary methods (shovels and machetes for instance), whereas small-scale mining uses more advanced equipment (bulldozers and dump trucks for example) and may involve a large plot of land (Villegas 2013). Regardless of the size, because of the nature of the work and the conditions of poverty which these populations face, women and children are often involved directly in the mining or in supporting roles. It can be a family activity where children work after school to pay for school fees; however, the worst forms of child labour have been found in the sector, and marginalisation of women is common. Miners often lack basic infrastructure such as housing, sanitation, schools and health clinics.

ASM populations face a number of challenges. These include legal recognition of land rights, limited or no financial resources, inability to access credit, and limited financial skills. The complex trading chains make miners prone to exploitation by middlemen and the opacity of the mineral trade makes it susceptible to being a funding mechanism for armed groups, criminal networks, corrupt governments, and illegal trade.

ASM is, however, a preferred livelihood option for people who find themselves with few alternative livelihoods, or who find that the returns from mining are far higher than those of agriculture, fishing, and forestry. There is also the prospect of getting cash immediately for the product, and ASM is increasingly profitable when mineral prices are high.

Many governments have not actively addressed ASM as a part of their mineral governance strategy – in some cases it has been ignored and the law does not address ASM at all (Spiegel undated). As a result, ASM in many states is an informal and/or illegal practice. When formalisation initiatives do occur they are often driven by an attempt to *regulate* the

sector, reduce its negative social and environmental impacts, and to capture the taxes from artisanally-mined resources. To be effective, formalisation policies require the state to recognise these unique realities and incentivise artisanal and small-scale producers to participate in the formal market.

When good social and environmental practices are applied, and when linkages are made between ASM and formal markets, ASM creates positive outcomes, such as improved livelihoods, and individual, family and community development and well-being. There is good reason to leverage certification to legitimise ASM and demonstrate that it can be both a commercially viable and socially and environmentally responsible activity (Levin 2008). Other drivers have included:

- Greater public awareness about the conditions of ASM production (e.g. movies such as Blood Diamond, exposés, growing media exposure) through which brands, retailers and even governments have felt exposed to reputational risks.
- A small but powerful demand in the jewellery industry for differentiated product that they can claim is produced by ASM and in a socially and environmentally responsible manner (i.e. the ethical jewellery movement).
- The realisation that the trade of certain minerals in specific regions where ASM occurs is linked to conflict and human rights abuses (these are now termed 'conflict minerals').
- An opportunity for NGOs and other institutions to enable development opportunities and to seek pro-poor solutions to address poverty and stimulate community development.

The first active efforts to develop sustainability certifications for the wider mining industry occurred around 2005, and as of 2013, there are a handful of sustainability certification efforts that directly or indirectly include ASM. This paper only considers private voluntary certification schemes that address social and environmental performance of ASM communities with a focus on leveraging the market as a driver of demand. Thus, certifications that are legally required or are governmentled are not considered.

We recognise that there are other initiatives to improve social and environmental outcomes for ASM via the market and that they may use certification in the future as a mechanism to enable assurance. For the purpose of this overview, we have taken a sample of the schemes that are furthest along in their development.

1.2 Existing sustainability certification schemes for **ASM**

There is currently only one certification system that targets ASM with the direct goal of improving the lives, conditions, and market access of ASM miners: Fairtrade and Fairmined Gold and Associated Precious Metals. There is one other certification to date offered by the Responsible Jewellery Council (RJC) that *can* involve certified ASM production; however the principle aim of RJC is not development. In recent years, standards and auditing schemes have emerged in reaction to the conflict in the Democratic Republic of Congo (DRC) and its linkages to the minerals trade – in particular columbite-tantalite (tantalum ore), cassiterite (tin ore), wolframite (tungsten ore), and gold. ASM is paramount in the DRC:

- An estimated 90 per cent of national mineral production in the DRC comes from ASM (UNEP 2011).
- An estimated 1.8 million people involved in ASM and 'as many as twelve million people – 18 per cent of the population – are dependent directly or indirectly on artisanal mining? (UNEP 2011).

'Conflict mineral certification' works to address conflict-free sourcing in contexts like the DRC, and to assure that there are no human rights abuses. These initiatives include the Dodd-Frank Wall Street Reform and Consumer Protection Act Section 1502 - a regulatory approach for companies that file with the US Security Exchange Commission to disclose their use of 'conflict minerals' and to certify their due diligence as 'DRC Conflict Free' through an independent audit. Another is the voluntary OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas². There are also government-led initiatives such as the Mineral Certification Scheme of the International Conference on the Great Lakes Region (ICGLR), which is a mechanism to enforce legislation passed by governments in the Great Lakes Region; and BGR's (Bundesanstalt für Geowissenschaften und Rohstoffe) Certified Trading Chains, a German government-sponsored effort to support partner countries in Central Africa which are most affected by illegal production and trade. Lastly there are new efforts to create assurance along the supply chain, such as the Conflict-Free Tin Initiative³, a multi-stakeholder approach using all of the aforementioned tools and iTSCi (ITRI Tin Supply Chain Initiative; see Section 1.2.3 below).

The schemes mentioned above (ICGLR, OECD Due Diligence, and so on) are not regarded as sustainability certification schemes for the purposes of this paper, since they do not employ a theory of change whereby the market can be leveraged to bring about sustainable development, and they are not private schemes. In fact, many of the initiatives that address conflict minerals do not consider development as a central pillar, but instead are more focussed on validating that human rights abuses (trafficking, violence, and the worst forms of child labour) are not occurring, and that armed groups are not benefitting from the trade. Although the conflict mineral certifications are helping to create a level of assurance for the marketplace, it is doubtful that they are addressing the structural challenges leading to conflict minerals, such as institutional weaknesses, corruption, and poverty. They do not have financial incentives or mechanisms built in to help development for those ASM groups that are fortunate enough to be certified 'conflict free'. Although these conflict mineral certifications are helping ASM miners retain the opportunity to sell into international supply chains and access markets, they are far from being a tool for social and environmental

² See http://www.oecd.org/daf/inv/mne/GuidanceEdition2.pdf for more information

³ See http://solutions-network.org/site-cfti for more information.

improvements and economic and social development and inclusion. It is also important to note that in some cases the fear that minerals are associated with conflict is causing some market actors to abandon sourcing from ASM supply chains from the DRC – which causes further marginalisation.

For the purposes of this paper, we recognise that the only voluntary and private sustainability certification schemes aimed at the market that addresses conflict minerals is iTSCi.

Below is a brief overview of the existing certification schemes that do address sustainability issues in ASM, and are voluntary and private.

1.2.1 Fairtrade and Fairmined Gold and Associated Precious Metals

The Alliance for Responsible Mining (ARM) and Fairtrade International came together in partnership to develop a certification scheme for ASM gold aimed at the jewellery supply chain. The partnership's aim was to build upon the strengths of ARM's knowledge and relationships in ASM with Fairtrade's brand and affiliation with small-scale producers. The partnership aimed to build a consumer market for responsibly mined and traded ASM gold.

In its current iteration, the certification scheme is limited to mining organisations based in Latin America; however, work is underway to include Africa and potentially Asia in its geographic scope. The mining organisations that are eligible for certification must be formalised and legally recognised by the state, and must have auditable accounting systems and democratic decision-making. Basic social, environmental and health and safety requirements must be met, including: mandatory use of protective gear and safe use of toxic chemicals such as mercury and cyanide; protection of local ecosystems, including managing water pollution; having anti-discrimination policies, recognising the rights of women miners, and working to eliminate child labour (The Fairtrade Foundation, undated). ASM miners are included in the standard's consultation process, via consultations held in their regions, and via ARM's mining 'networks' and affiliated partners (ARM, 2013).

The current certification scheme requires traceability in the transactional and physical supply chain. In order for a product to be sold with the Fairtrade and Fairmined label, all the operators in the chain must be certified; a Fairtrade premium is to be paid to the mining organisation and a license fee paid to Fairtrade and ARM.

This is a 'best in class' standard (see Section 2.1) but its application is limited: only formal organisations consisting of artisanal and small-scale miners can be certified. The mining organisation that owns the certificate is required to either hold the mining rights of its mining area, or to have a legal and transparent lease agreement with its owner.

The work on the standard started in 2006 and the certification was launched in 2011. As of March 2013, only five organisations in South America have been certified, representing a volume of approximately 350 kilograms of

available gold per annum. Only about 12 per cent of this production volume of certified gold has been traded on Fairtrade and Fairmined terms (with a premium paid to the certified groups) in order to be made into jewellery products, which are then sold with the Fairtrade and Fairmined label and guarantee (Fairtrade International 2013b). Challenges to the purchasing of Fairtrade and Fairmined gold have included the requirements for full physical traceability through the supply chain; costs associated with the premium; certification along the supply chain; and licensing fees and administrative burdens.

As of April 2013 the two organisations, Fairtrade International and ARM, will end their exclusive partnership for Fairtrade and Fairmined Gold and will as individual organisations explore how to scale up the amount of certified gold available and how to maximize the market potential (Fairtrade International 2013b). How this new structure may change the certification scheme is yet to be fully understood, but one can anticipate that it will create more options for the market to more easily source and claim the purchase of Fairtrade and/or Fairmined gold.

The Responsible Jewellery Council is another certification scheme addressing social, environmental and transparency issues in the mining sector. It does not address ASM from a development perspective but instead looks at social and environmental compliance for the jewellery sector at large, of which ASM is a component.

1.2.2 Responsible Jewellery Council (RJC)

The Responsible Jewellery Council (RJC) Member Certification is designed to apply to all sectors of the diamond and/or gold jewellery supply chain, from mining through to retail. They operate a Code of Practices that defines responsible ethical, human rights, social, and environmental practices. In order to be certified, an organisation needs to be an RJC member. Facilities or sites that are not owned or controlled by RJC Members do not fall within the scope of the certification (RJC, 2012).

The RJC views formal ASM as a legitimate and important part of the jewellery supply chain alongside larger scale industrialised mining, refining, manufacturing, retailing and other supply chain services. As of 2013, three out of ten of RJC's mining members have sourcing links with ASM producers, although no ASM producers are RJC members (RJC, 2013).

In addition to its Code of Practices, RJC offers its members a voluntary Chain of Custody (CoC) (see section 2.4 where this term is explained) certification scheme. The CoC Standard provides two ways for ASM produced materials to enter the certified supply chain. One way is via Fairtrade and Fairmined certification, so long as the supply chain provides evidence that the material comes from a source with a Fairtrade and Fairmined certificate, or any other comparable mining standard that the RJC deems in the future to be comparable to the Code of Practices. The other way for ASM material to enter the supply chain is via a mining company which declares that

the materials were produced by ASM producers operating on the company's concession(s). The product can then be recognised, as long as the miners on the concession have participated in initiatives that enable their professionalisation and formalisation,⁴ and the material originates from the concession, not an illegitimate source. (RJC, 2012: 8)

Box 1: Inclusion of ASM in RJC Certification

Eurocantera, a subsidiary of Goldlake, is in the process of seeking RJC Certification with ASM inclusion. Two thirds of Eurocantera's gold production is from the mine's commercial operations and the balance is extracted by independent local artisanal miners that operate inside the concessions. Eurocantera work in partnership with ASM co-operatives on their site who are using traditional environmentally safe, mercury-free methods.

Source: Goldlake (2013) 'Goldlake Group'. http://www.goldlake.co.uk/ The_projects/Eurocantera.aspx (accessed March 2013).

In general, RJC has very little focus or inclusion of ASM, although they are examining ways to make the standard and certification process more applicable and accessible to ASM. There are ASM experts on the RJC Standards Committee who are helping to incorporate this thinking into future iterations of the certification scheme, including in the review of the Code of Practices taking place in 2013. However, it should be noted that ASM will most likely continue to be a niche part of the overall focus and impact of RJC.

1.2.3 ITRI Tin Supply Chain Initiative (iTSCi)

ITRI is a membership organisation dedicated to supporting the tin industry and expanding tin use. It started development of its tin supply chain initiative, iTSCi, in 2008. iTSCi was created for upstream companies (mining cooperatives and companies, processors, exporters, local and international traders and smelters) and mine sites, to help ensure that the minerals they supply and purchase have been managed and handled in line with OECD's Due Diligence Guidelines (DDG) and UN recommendations on conflict minerals (ITRI, 2013).

iTSCi is a 'chain of custody' and due diligence system for conflict minerals that includes independent and third party risk assessment; independent third-party audits; and protection against human rights abuses, including the worst forms of child labour, as required by the OECD Due Diligence Guidelines. The iTSCi system uses bar-coded tags that are added to the bags of minerals at the first two points of the supply chain: extraction and processing. The tagging is accompanied by detailed data collection via purposedesigned logbooks, which provide a record of the tagging process and the additional data required by the OECD DDG. iTSCi works with artisanal and small-scale miners who are organised in cooperatives, or who might be in a formal supply relationship with a processor, trader, or exporter (ITRI, 2013).

1.3 Sustainability certification schemes under development for ASM

The following certification schemes are under development but yet to be launched.

1.3.1 Initiative for Responsible Mining Assurance (IRMA)

This initiative is in the process of developing standards. IRMA itself is focussing initially on large- and medium-scale mining, rather than ASM, but is committed to ensuring that the implementation of the IRMA scheme does not result in unintended negative impacts for artisanal miners. To this end IRMA expects to consult and coordinate with other standards schemes which focus on ASM in order to align its requirements with such groups, and find mutually supportive ways of working (IRMA 2013).

1.3.2 Development Diamond Standard™

The Development Diamond Standard[™] is still in a 'proof of concept stage'. Led by the Diamond Development Initiative (DDI), a draft standard has been written and is being piloted along a diamond supply chain originating in Sierra Leone. Direct input from miners was provided through consultative workshops with artisanal miners in four countries. The pilot project is ongoing with participatory input from mining communities (DDI 2013).

Its intention is to develop a certification process for rough and polished diamonds originating from even the most informal diamond mining sites. The diamonds will be verified, traced and independently confirmed as having been produced through specific socially and environmentally responsible practices; with respect for human rights and community rights; in conflict-free zones; with benefits to mining communities; and payment of fair prices to miners. Only licensed miners are eligible for the certification, and DDI is exploring cost-effective ways to provide verification, such as leveraging in-country NGOs (DDI 2013).

1.4 Current limitations of existing and forthcoming schemes

Despite the good work of the certification schemes mentioned above, they are still quite limited in scope and inclusion:

- RJC and IRMA focus on industrial (medium- and largescale) mining and ASM is only a niche part of their scope.
- The jewellery sector is the target market for most certification schemes, with a focus on metals (for example gemstones, which are 80 per cent artisanally mined, are not yet included in any certification scheme). Artisanallymined diamond certification could be forthcoming after the pilot stage of the Diamond Development Standard, but at a very small scale.

4 Professionalisation in this context is the ability of miners as individuals and as a group to establish and manage a legitimate and functioning business

- None of the above-mentioned certification schemes have reached any significant scale in terms of the number of certified ASM organisations, and/or the volume of product they have to offer. There is very little penetration of ASMcertified product in the market.
- The need to have legitimate, formalised organisations (such as the requirement of the Fairtrade and Fairmined scheme) is a de facto barrier to reaching the millions of ASM miners.
- A program like iTSCi requires onsite monitoring for its traceability system, which limits its scalability.

There are lessons to be learnt from other sectors that can help these existing certification schemes – and future certification schemes – to be more inclusive and scale up more effectively. In order to do so, thinking about the scheme design itself becomes crucial. The following section (Section 2) presents a generalised map of the certification system. This outlines the key components of the certification system which have implications for the inclusion or exclusion of small-scale producers. This section defines and describes these key components and offers evidence on the challenges they present for small-scale producers. It then offers a number of insights into particular practical and theoretical design innovations in the agricultural sectors – innovations which can be considered in the design of certification to improve its inclusivity.

Т

Section 2: The certification system: challenges and innovations

2.1 Background to sustainability certification and the certification system

Sustainability certification schemes have been developed to assure consumers, processors, retailers, investors and other supply chain players that particular products have been grown, produced, traded, and processed in a particular way; a way that reduces the harmful - and enhances positive - impacts on sustainable development. Certification is the process by which compliance with the requirements of the standards are confirmed and guaranteed. Certification may involve the use of a label/and or a brand name, for example in the case of business-to-consumer (B2C) standards like Fairtrade where consumers can see the label and seek out Fairtrade products in the marketplace. In business-to-business (B2B) standards (for example in the case of 4C for coffee5) it is other businesses (manufacturers and processors, for example) in the supply chain who are assured that a product has been produced in a particular way and that its source is known.

Sustainability certification schemes are typically developed by industry consortia, NGOs, or partnerships between them. They link producers, exporters and buyers across national boundaries (Vorley *et al.* 2010). Sustainability certification schemes can be understood as a new form of private regulation (Muradian and Pelupessy 2005; Giovannucci and Ponte 2005). Sustainability certification schemes are stand alone in the sense that they do not necessarily link with public policymaking objectives (though they can). There is also no immediate platform linking schemes to one another and their adoption is voluntary.

The growth of sustainability standards is being driven by a variety of players: consumers, who want 'sustainable' or safe products; and retailers, brands and manufacturers who want to enhance their reputation, minimise reputational (or other) risks, or ensure future supplies of the commodities they need. Governments are another kind of player, who may want to drive sustainability using market-based dynamics rather than traditional command and control approaches (either because they are unable or unwilling to do so), according to the Steering Committee of the State-of-Knowledge Assessment of Standards and Certification (2012).⁶ Investors also play a role in driving the use of sustainability certification by recommending or requiring that their investees use standards.

Market demand for sustainability certification is an important determinant of inclusivity and scalability of a scheme. This can be generated from heightened consumer awareness of an issue (such as campaigns about deforestation or child labour), from a pressing business need (such as security of supply or fear of future regulation) or a result of investor pressures for business to find ways to manage their environmental and social risks. Growing demand requires increasing supply. The more companies that are involved and the greater the market pressure, the more urgent the issue of inclusion and available supply becomes.

The way in which sustainability certification schemes address economic, social or environmental issues differs depending on each scheme's *raison d'être* and theory of change. However, many of the sustainability certification schemes that exist for natural resource production increasingly overlap. For example, Fairtrade has increasingly integrated environmental criteria into its standards, and organic certification has added social dimensions. The overlapping objectives of sustainability schemes (duplication) and their growing number (proliferation) leads to confusion for producers and consumers as well as others in the supply chain (Blackmore and Keeley 2012).

Though there are schemes that increasingly overlap in agriculture, they tend to have different *levels* of sustainability to which they aspire. Roozen's pyramid of change (see Figure 1) details some of the different sustainability certification schemes that exist in agriculture. Some schemes are targeted at the bottom of the pyramid where the majority of producers are, and where the majority of production takes place. These schemes will set a lower bar than those that target producers higher up in the pyramid. They are able to cover more of the market (in terms of production and consumption). Examples

^{5 4}C is a baseline standard for sustainability in the coffee sector. The Code comprises 28 social, environmental and economic principles for the sustainable production, processing and trading of green coffee. See: http://www.4c-coffeeassociation.org/our-services/4c-code-of-conduct/standards-setting-procedure.html for more information.
6 In short, many consider certification systems as an option that allows government agencies to avoid controversy among powerful political players, be more effective, and spend less money (Steering Committee of the State-of-Knowledge Assessment of Standards and Certification 2012).

EKO – organic Consumers Max Havelaar - Fair Trade Consumer labels • Utz Certified - coffee, cocoa, tea · Rainforest Alliance - coffee, cocoa, tea and fruit Companies SA 8000 – social code for manufacturing Corporate social industry e.g. clothing and shoes responsibility Fair Wear – social code for fashion industry FSC – timber MSC – sustainable fishing Sectors **Round Tables Round Tables** coffee – 4C Industrial codes palm oil – RSPO of conduct sugarcane – BSI soy – RTRS cotton – BCI

Figure 1: Pyramid of change in relation to sustainability certification

Source: Roozen, N. (2007), 'Responsible soy for food, feed and fuel: The civil society perspective on soy production', Seminar on Sustainable Agriculture in Brazil, 15 October 2007, Wageningen.

include the Better Cotton Initiative (BCI) and the Roundtable for Sustainable Palm Oil (RSPO). These typically do not have consumer-facing labels because they are not niche products and are not reliant on consumer choice and the payment of premiums to drive sales.

Those targeted at the top of the pyramid are consumer labels such as organic and Fairtrade. These are niche products but have shown long-term growth in many markets (and for some commodities, like bananas, have made a move to the 'mainstream' – defined as more than 10 per cent of total market share). Those initiatives target first movers in the market (consumers, retailers and producers who are already the most 'sustainable').

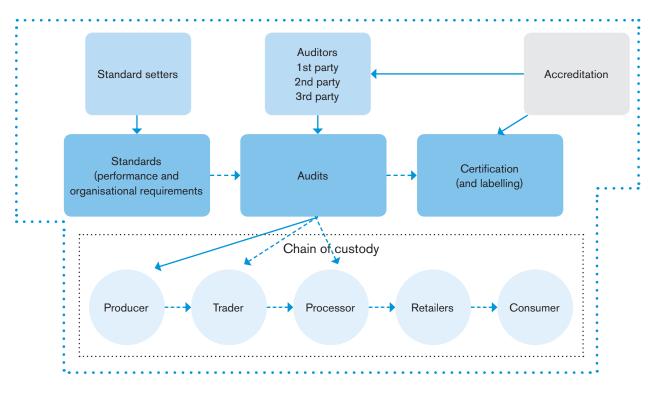
There is a need in the market for mainstream schemes, B2B schemes, and consumer-facing schemes; and ideally they should fit together instead of duplicating efforts. Any certification scheme developed would need to properly consider the starting point of the majority of producers in relation to sustainability and their position in relation to other certification schemes in the market. Schemes should consider how producers might move from the lowest bar upwards and how they might coordinate together. For instance, 4C will recognise a Rainforest Alliance certificate.

The positioning of a scheme on this pyramid of change is important. Those at the top of the pyramid, communicating to a consumer via a label, need a product promise that is understood and accepted by the consumer. Consumers might have higher expectations around labour conditions and environmental protection and may be willing to pay more for these products – thereby buying in niche markets. These consumers are early adopters and while there is space in the market for these schemes (and these may look more like the 'end goal' in terms of sustainability achievements), other schemes are needed to bring the rest of the market upwards. These niche schemes are inherently exclusive in that they limit the inclusion of producers who are in the early stages of social and environmental compliance.

Consumer-facing labels that accompany these 'niche' schemes also have additional costs involved. For instance, there may be greater pressure to have full product traceability ('identity preserved') which can impose extra costs throughout the supply chain. There can also be costs associated with marketing and promotion as well as licensing fees associated with the label. The total cost of the consumer-facing label model could obstruct the growth in demand needed to include greater production volume, and more producers – and thereby create a barrier to mainstream sustainability.

Figure 2 presents the key components of the typical sustainability certification system, focusing on the internal aspects of a certification scheme. There are a few key factors in the defining of a 'typical' sustainability certification system as defined for the purpose of this paper. First, the standards are set in a multi-stakeholder process. Secondly, to earn the classification of 'sustainability', components of the standard must address both social factors and environmental factors, in order to guarantee at least a minimum level of performance. These standards are voluntary for the entity that is certified, and an audit assures compliance with the standard. The certificate is then used by the market to assure this compliance. This interpretation is based on the work of the ISEAL Alliance, which is considered a leader in defining and communicating what good practice looks like for sustainability standards. For the purposes of this paper, we are not including certifications that are mandated by legislation, or strictly limited in terms of geographic scope, or any type of individual corporate level assurance.





Source: Authors' own.

2.2 Sustainability performance criteria and standards

These are the social, environmental, and organisational criteria set by a particular standard or certification scheme that producers have to meet in order to achieve certification.

Social standards are most often based on the International Labour Organization's eight fundamental labour conventions:

- Forced Labour Convention
- Freedom of Association and Protection of the Right to Organise
- Right to Organise and Collective Bargaining
- Equal Remuneration
- Abolition of Forced Labour
- Discrimination (Employment and Occupation)
- Minimum Age
- Worst Forms of Child Labour

Further social criteria may be developed relating to health and safety for a particular industry, gender issues, and living conditions, for example.

Environmental standards differ from industry to industry (and sometimes down to the particular product level) but are often linked to a set of distinct environmental risks associated with production and a process for managing those risks. These can range from prohibiting activities in protected areas and protecting water sources, to banning certain chemicals or pesticide use. Standards can range from a set of 'do no harm' criteria to very strict environmental practices that need to be in place in order to earn certification.

Other standards and criteria vary depending on the sector and scheme. These can include organisational development, traceability, accounting practices, trading practices and/or conflict resolution, for example.

Sustainability certification schemes are typically processbased standards, which relate to the ways in which producers produce or process a given product. The standard might require a particular production methodology or technique to be used, or that certain activities (like deforestation) are avoided throughout the production process. In agriculture, for example, producers might have to ensure that no dangerous pesticides are applied in the farming process. Farmers might be required to grow their coffee under trees rather than cutting these trees down. In the case of gold mining for example, the use and management of mercury or cyanide might be checked to ensure best practice that protects occupational health and safety of those involved, as well as the surrounding communities.

2.2.1 Challenges and innovations in relation to sustainability performance criteria and standards

The environmental and social standards set by certification schemes can be the most significant challenge for small-scale producers who wish to become certified. This is because the standards are either set too high to achieve in a costeffective way, and/or because the producers have insufficient capacities and assets required to achieve certification. Producers also have to have the necessary systems in place to meet the needs and requirements of auditors or certifiers, which in itself can be a significant requirement and can be costly. The costs involved in putting these systems in place are comparatively higher for small-scale producers who unable to establish (and benefit from) economies of scale and who therefore face higher transaction costs. In general, economies of scale are needed to participate successfully in certification.

Standard setters are faced with a balancing act - how high to set the 'bar' of the standard; how to maintain rigour of the standard, and thereby consumer and company confidence, while ensuring access for small-scale producers and manageable costs. They must decide how to reward 'sustainable' producers, either through improved productivity, practices or techniques which improve profits, or reduced costs; or linkages to markets that reward sustainable practices, and/or pay premiums, while incentivising continuous improvements. There are therefore a number of decisions that standard setters can make that can improve their accessibility as certification schemes. Some of these decisions are internal to the particular certification scheme (e.g. how and whether to outsource auditing); others are about how to work with other standards and certifiers, or how to structure their business or financial model in a way that supports farmers, as well as delivering certification.

Staged compliance: allowing for small-scale producers to improve over time

Facilitating greater inclusion of small-scale producers and greater overall improvements in the sustainability of production may mean compromising on rigour – or lowering the initial level of the sustainability 'bar' of standards with a stepwise process to full compliance.

Some schemes, such as Utz Certified and the Better Cotton Initiative (BCI), adopt points-based or staggered system for meeting its standards. This means that if producers fall short of compliance in some areas they can still achieve certification, provided that they demonstrate – over time – that progress is being made in areas of non-compliance, and that they meet some basic standards. This offers a stepwise approach to compliance and could have greater overall impacts for sustainability than systems that require stringent standards to be met at the outset, don't work with the majority of producers, and don't incentivise those who are far from performing at that level to get involved and move upwards.

For example, the Utz certification code of conduct is based on a model of continuous improvement. From year one the producer has to fulfil the core criteria concerning safety, farm management and record keeping, employees and environmental protection. In the subsequent years more detailed requirements are added to these points to allow the producer to develop and improve over time (Utz Certified 2013). The Better Cotton Initiative adopts a similar approach, as shown in Box 2.

Designing certification in a way that can work with producers who are not necessarily at the top of the pyramid, and incentivising or supporting them to improve over time, is undoubtedly critical – both in terms of inclusivity, and of scaling up certification and driving progress throughout the market towards sustainability.

Adaptation of standards to local conditions

One option to improve the inclusivity of standards is to adapt 'international' standards to match local conditions and contexts, or to create national standards that are better suited to local contexts but meet the requirements of international standards. These standards would better suit the specific needs and challenges faced by producers and the specific sustainable development challenges found in each country.

For example, Rainforest Alliance allows for the adaptation of its generic standard to local conditions. Sustainable Agriculture Network (SAN) - the standard setter for Rainforest Alliance - explains that 'Local interpretation guidelines interpret the binding criteria of the standard in the context of local conditions or for a specific crop and are developed by local workgroups in each country' (SAN 2013a). SAN offers local interpretation guidelines which offers 'orientation and interpretation' on how standards need to be understood in the local context: 'Criteria interpretations are generated for selected crops and countries through a participatory dialogue with a balanced group of stakeholders' (SAN 2013b: 3). These interpretations are created through a series of multistakeholder workshops, to be 'conducted in a participatory manner' (*ibid*) – there are typically 3 one-day workshops and the process may last one to two years, depending on available resources and capacities. The overall process is coordinated by the SAN secretariat together with the local country representatives. In the case of coffee, for example, the SAN standard has local interpretations in Brazil, Colombia, El Salvador, Honduras, Kenya, Peru, Vietnam and Tanzania. For more information see SAN's standards and local interpretation guidelines (SAN 2013a and 2013b).

Participation of small-scale producers in the definition of criteria and standards

Standards bodies should consider how they can meaningfully involve small-scale producers in the setting and design of standards. This inclusion in the standard-setting process is extremely important in ultimately determining the extent to which producers are able to participate successfully in certification.

The process and means by which participation of small-scale producers occurs in standards design is important. Once criteria have been meaningfully co-designed, pilots should be undertaken in a variety of settings to offer feedback on the effectiveness of the standard (of which inclusion should be a core consideration), with enough time left for adapting standards in response to pilots, feedback and full participation of small-scale producers. The approach being used by RSPO may serve as good practice for participatory definition of criteria (see Box 3).

Many of the most high-profile sustainability standards – Fairtrade, Rainforest Alliance and Utz Certified – abide by ISEAL's Code of Good Practice for standard setting (ISEAL 2010). This includes a need to proactively approach stakeholders to contribute to standards 'consultation'

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Box 2: Better Cotton Initiative (BCI) case-study

Background

The Better Cotton Initiative (BCI) seeks to target the majority of farmers, rather than only working with a small percentage at the top of the 'pyramid'. It aims to be a mainstream certification scheme. Farmers are not rewarded for certification through price premiums but through improved productivity as a result of better agricultural practices. Its emphasis is on continuous improvement. It works with a wide diversity of farmers (large and small) who are all at different starting points in terms of sustainability. BCI is now looking to scale-up significantly to meet its 2015 target of having one million farmers BCI certified (from the 165,000 farmers certified in 2012).

Principles and criteria

BCI has six key principles:

- 1. Water: Better Cotton is produced by farmers who use water efficiently and care for the availability of water
- 2. Crop protection: Better Cotton is produced by farmers who minimise the harmful impact of crop protection practices
- 3. Soil: Better Cotton is produced by farmers who care for the health of the soil
- 4. Habitat: Better Cotton is produced by farmers who conserve natural habitats
- 5. Fibre quality: Better Cotton is produced by farmers who care for and preserve the quality of the fibre
- 6. Decent work: Better Cotton is produced by farmers who promote decent work

Farmers are required to meet a number of minimum production criteria under each of the principles. For example, under 'decent work', producers need to ensure that there is no child labour.

Farmers work with a number of implementing partners on the ground, who work to support farmers' compliance with BCI. Implementing partners are typically NGOs or private sector players. Implementing partners offer capacity building support and will carry out credibility checks of the farmers.

Continuous improvement

Farmers who wish to participate in BCI decide which production criteria to prioritise and identify how improvements will be made each year to meet all the BCI production criteria. Farmers do have to meet some minimum production criteria and are monitored using self-assessment or first party verification (see also Section 3.3.) for which they receive tools and guidance (BCI 2009). BCI explains that 'the results of the self-assessment process are subject to credibility checks, at random and based on a risk assessment. Self-assessment is linked to BCI's own monitoring, evaluation and learning' (BCI 2009: 6).

The principle of continuous improvement encourages partners to change their mindset away from focussing on checklists and compliance processes, whereby failure results in lack of certification. Rather, success is determined by how projects are implemented and how continuous improvements and learning are ensured. In fact, retailers were encouraged to buy from participating projects in the pilot phase (2009–13) even if full compliance with BCI had yet to occur (Kindornay and Higgens 2012: 30).

Source: BCI (2013), interview with monitoring and evaluation Officer, conducted by IIED, 14 March 2013.

when they are drafted or redrafted, and the setting of goals in relation to which, and how many, stakeholders should participate in the setting of standards. The code of good practice explains that the standard setting organisations need to ensure interested parties are 'given the opportunity to comment on the public summary for the proposed standard and, in particular, on the terms of reference' (ISEAL 2010: 7).

But the process by which consultations are organised and designed is a significant determinant of the nature of participation – in terms of both breadth (numbers of stakeholders) and depth (numbers of people within each stakeholder group). Consultation that relies on the Internet for provision of information, which is common, is inevitably exclusive – many small-scale producers will not have access to the Internet or may not have the technological capacity to use a computer or email to submit comments. The process of consultation needs to avoid internet-based and written methods for producers and use face-to-face engagement as far as possible. It needs to consider levels of literacy and language barriers and ensure that a representative set of producers is chosen for consultation. It is also important to bear in mind that consultation is not the same as participatory standard setting, with the latter constituting a bottom-up process and the former being largely 'top-down'.

Box 3: RSPO's Task Force on Smallholders

The Task Force on Smallholders (TFS) was set up by a General Assembly Resolution at the 3rd Roundtable of the RSPO (RT3). Its mandate was to: promote smallholder participation in the RSPO; carry out diagnostic surveys of smallholder situations and views; carry out and document trials of the application of the RSPO principles and criteria with smallholders; and ascertain the suitability for smallholders of these principles and criteria. The Task Force was then to make proposals on how RSPO's principles and criteria can best be adjusted, nationally and/or more generally, to ensure increased participation of small-scale producers in RSPO certified palm oil production. The aim was to ensure that smallholders are not marginalised from the sustainable palm oil market and are able to benefit from improved standards and best practice. The Task Force would report to the RSPO Executive Board. It was led by Sawit Watch and the Forest Peoples Programme, NGOs working closely with local communities engaged in forestry activities, who arguably have an in-depth knowledge of the challenges faced by smallholders engaged in the production of palm oil.

After intensive consultations, *Generic Guidance for the Certification of Scheme Smallholders* was adopted by the RSPO Board in July 2009. After further intensive consultations, in July 2010, the RSPO Board adopted *Generic Guidance for the Certification of Independent Smallholders under Group Certification*. At the same time a *Group Certification Protocol* was developed through further consultations by BioCert and ProForest.

Despite the work of the Task Force, smallholder participation within the RSPO system remains limited. Several challenges need to be overcome in order to create a certification system that is inclusive of small-scale producers. A major challenge is linked to the RSPO system itself, such as the standards, guidance documents, supply chain systems and incentive mechanisms. Other challenges are related to the institutional environment in which smallholders operate, such as access to finance, access to farmer organisations, and technical assistance.

The Task Force has had to restructure in order to fit in with the changes in RSPO's overall structure. It has now become a Working Group and is co-chaired by a grower from New Britain Palm Oil Ltd (a sustainable palm oil company who source 25 per cent of their supply from smallholders in Australasia) and a representative from the NGO Oxfam Novib. It has 23 members including growers (some large-scale), smallholders, environmental and social NGOs (such as WWF-Malaysia, Flora and Fauna International, Forest People's Programme), investors (such as IFC), and manufacturers (including Unilever).

The Working Group continues the mandate of the Task Force but is also mandated to promote active participation of smallholders in the RSPO organisation itself, as well as to explore issues that go beyond certification and relate to the enabling environment. The Working Group has five work streams: 1) RSPO System and Documents; 2) Smallholders Support Mechanism; 3) Smallholder Knowledge Management; 4) Smallholder Trials; and 5) Smallholder Funding Mechanism.

Source: RSPO (Roundtable on Sustainable Palm Oil) (2013a), 'Smallholders Task Force'. www.rspo.org/en/smallholders_task_force (accessed March 2013); RSPO (2013b), 'Smallholders Working Group'. www.rspo.org/en/smallholders_working_group (accessed March 2013).

Mutual recognition of standards

Producers may be faced with having to meet multiple certifications to participate in different markets. This has been the case in agriculture where producers are increasingly required to meet multiple standards at the demand of other supply chain players or to obtain any benefits from certification. The costs and burdens of meeting the requirements of one certification scheme, let alone two, can be substantial – and prohibitive – for small-scale producers (Blackmore and Keeley 2012). As the 'market' for certification develops and expands, and it appears to be doing so in mining as it has in agriculture and food-based products, producers face greater pressure to achieve more than one certification, despite there being no additional financial benefit beyond market access.

Mutual recognition of standards could be one way of reducing costs of certification, thereby improving (to some degree at least) its accessibility to small-scale producers – as long as these cost savings are passed on to producers. The EU recommends, in its best practice guidelines for voluntary certification schemes for agricultural products and foodstuffs: 'any cost savings arising from mutual recognition and benchmarking should be passed on to the operators [producers] subject to inspections and audits' (EU 2010: C341/5). If mutual recognition is not possible, then schemes could facilitate combined auditing – with combined checklists of what is required in each scheme – to reduce total auditing or transaction costs and to establish economies of scale in auditing.

2.3 Organisational requirements

Certification schemes have requirements in relation to how small-scale farmers need to be organised. At a basic level, this is a necessity in order to facilitate recognition of these producers (i.e. who is to be included in certification and where they are geographically disbursed), to facilitate certification, and to help establish economies of scale. In order to audit, an auditor needs to know what producers are included in the scope of certification to ensure, for instance, that these producers are not using child labour. Also, if the auditor needs to review recordkeeping or to verify a policy or its implementation, there needs to be an accountable actor. The relationship between the accountable party or institution that becomes the certificate 'holder' and the producers needs to be defined. The strictness of these organisational requirements can vary widely from scheme to scheme.

For example, Fairtrade International (FLO) requires farmers to be organised into groups that allows for democratic decisionmaking. This is to facilitate the fair distribution of the 'social' premium that comes with Fairtrade but also to empower producers through improved visibility, voice and bargaining power.

Other schemes allow for more flexible forms of organisation, such as BCI's 'learning group' or 'producer unit' model. Producers are organised loosely into learning groups by geography. These learning groups are the level at which technical assistance and training is delivered and certification licenses are granted. For this group to be recognised, a representative is required (this can be a lead farmer, a trader, or a representative from the 'implementing partner'); see Box 4 for more information. BCI's grouping allows a degree of flexibility in terms of compliance so that the failure of one farmer in the group to meet the requirements of the certification does not automatically lead to all farmers losing their licence.

Different types of producer organisations exist, as identified by Molenaar *et al.* (2011), and outlined in Box 4.

Box 4: Producer organisations typology

Producer-based groups – social constructions that pursue a common goal which usually goes beyond material gain alone.

- Cooperative and producer associations
- Informal and registered producer groups
- Communal land groups

Supply-chain based groups – involve structural relationships between producers and an actor further down in the value chain. These actors may be processors, large-scale plantations or traders. They can be privately owned, state owned or have mixed ownership including producer participation.

- Contract farming or 'outgrower' schemes
- Trader networks
- Sharecropping and tenant farmer arrangements
- Business ventures with mixed ownership

Service provider networks – a model in which an actor who is not part of the value chain plays an important role in the outreach to farmers via the services delivered.

Public, private or not-for-profit

Source: Molenaar, J. W., Beekmans A., and Pelders, P. (2011), Producer Groups Models and Certification: An exploration of various producer group models in the agricultural and forestry sectors, Aidenvironment, Amsterdam.

2.3.1 Challenges and innovations in regards to organisational requirements

While Fairtrade International's requirement for cooperatives structures has led to positive outcomes for many farmer groups, there are many situations in which farmers are reluctant to organise in this way (in parts of Africa, for example, cooperatives have been associated with corruption and patronage). Cooperatives are not a reality for many small-scale producers. The need for specific types of organisation, without considering the circumstances of the farmer prior to certification, also entails costs – financial, time, and social costs. Schemes are likely to be more inclusive, and able to scale up, where they allow flexibility in respect of organisational requirements. While the ultimate aim could be to support organisation in the long term, allowing flexibility at the outset is likely to allow for greater overall participation.

In the case of Rainforest Alliance, for example, traders or exporters can hold the certification, and 'guarantee through their internal control systems that participating farmers meet the required standards. This means that producers can avoid the downsides of co-operatives, such as high costs and lack of accountability to members. Arguably this means that Rainforest Alliance certification can be implemented relatively quickly, and is less bureaucratic than Fairtrade' (Blackmore and Keeley 2012: 51). This flexibility in regards to organisational requirements can be more inclusive, though the lack of ownership of the certificate by producers can limit opportunities for independence or empowerment in the longer term.

Fair Trade USA, who broke away from the Fairtrade International scheme, are piloting new approaches to the organisation of farmers, allowing independent farmers to choose their own organisational form. Fairtrade International has also introduced some flexibility in their model by allowing for 'outgrowers'⁷ to become certified – see the examples outlined in Box 5.

Flexibility is key for inclusion and scaling up. While organisation, and ownership of certificates by producers, should be an end goal for producers who get certified, interim measures are needed to ensure certification is achievable and appropriate for the realities of small-scale production.

7 A contractual partnership between growers or landholders and a company for the production of commercial agricultural products

Box 5: Certifying different producer structures

Nariño, Colombia - certification through a trader

For a wide variety of reasons, cooperative farming has not seen much success in Nariño; the vast majority of farmers in the region are unassociated. To help bring the opportunities of fair trade to those farmers who are not part of a cooperative, Fair Trade USA has partnered with Empresas de Nariño (EN), one of the main coffee buyers in the region, and 245 independent small farmers to obtain certification.

Source: Fair Trade USA, 2013. Fair Trade USA (2013) 'Including more people/pilots'. www.fairtradeusa.org/fair_trade_for_all (accessed March 2013).

Homegrown, Kenya - certification through an outgrower scheme

Because export produce has to meet strict rules for freshness and quality, many vegetable farmers in Africa either sell their produce to larger plantations (that can invest in the necessary equipment and certifications) or sell directly to exporters. Many of these producers are small-scale outgrowers who are either not organised into groups or whose structure doesn't meet the Fairtrade criteria for small producer organisations. To overcome this, Fairtrade International has developed a new standard to allow outgrowers into the Fairtrade system and access its benefits. Plantations must source a percentage of vegetables from outgrowers, starting with 10% in their first year of certification for vegetables, 20% in the second, increasing the percentage in line with an agreed sourcing plan.

Plantations must support outgrowers in forming self-help groups if they haven't already done so. Over time, plantations must provide support and training so outgrowers can set up the systems and structures necessary to become certified in their own right under the Fairtrade standards for small producer organisations.

Source: The Fairtrade Foundation (2013), 'Meet the producers: Homegrown Kenya'. www.fairtrade.org.uk/products/vegetables/meet_the_producers. aspx (accessed March 2013).

Better Cotton Initiative – certification through learning groups

Currently, farmers who belong to the Better Cotton Initiative are organised into 'learning groups'. The learning group level determines the level at which self-assessment takes place and training or technical assistance is delivered to farmers, and is also the level at which farmers are certified (though this is due to change). Learning groups typically consist of 20–40 producers. Certification licences are collectively owned by the farmers' learning groups. There is some risk that all farmers will lose their licence if some do not comply; BCI specify that 80 per cent of farmers have to comply in order to keep their licence. Those who still fail to meet the standard or to work towards compliance after three years are asked to leave the scheme. When farmers are BCI certified, they can sell the cotton as they choose, so there is no issue of side-selling leading to exclusion.

At the moment licences are granted on an annual basis. For BCI's new system, licences will be granted for differing durations (with one year as a minimum). The duration offered will depend on producers' previous performance and the results of the risk assessment. If producers and implementing partners are performing well and are credible, then the licence may be offered for more than one year.

Source: BCI (2013), interview with monitoring and evaluation officer, conducted by IIED, 14 March 2013.

Fairtrade certification of FSC-certified small-scale forest enterprises – allowing for diversity

Fairtrade International has a standard for small-scale forest enterprises who are already FSC certified. This is in order to add 'an extra dimension to responsible forest management as defined by the FSC standard and fair trading practises at supply chain level' (Fairtrade International 2011: 4). In this case, Fairtrade offers a high degree of flexibility in relation to the organisational structures that can achieve certification: 'A Forest Enterprise (FE) can be a commercial enterprise, a self-contained co-operative or indigenous community, or any other organizational form that performs or organises forest management with optional additional processing activities on forest products' (Fairtrade International 2011: 4). This improves the inclusivity of the scheme by allowing for producers to get involved who already have their own forms of organisation – regardless of the form that this might take – rather than imposing a set structure on producers.

Source: Fairtrade International (FLO) (2011), Fairtrade Standards for Timber for Forest Enterprises Sourcing from Small-scale or Community-based Producers, FLO, Bonn.

2.4 Traceability and chain of custody

'Chain of custody' describes the ownership and control aspect of the supply chain. It refers to the movement of goods through a supply chain, from one custodian to another (Responsible Jewellery Council 2010). Traceability is the ability to document – and therefore prove – chain of custody.

At present, traceability is a desirable and important component of certification. Its purpose is to verify the successive links in the supply chain of products, from transport to processing and distribution. It ensures that products can be tracked from production to consumption, and therefore a product's chain of custody. It is a central feature of many ASM certification initiatives for conflict minerals.

Traceability makes it possible to make claims about the integrity of the product being delivered. It offers proof that the product has come from a particular area, such as the farm (as well as making its way through many other stages in the value chain), and if that area is certified, that the product has therefore been produced in particular ways or under certain conditions (such as an absence of conflict). In order for traceability to be achieved the various supply chain players will need to meet a chain of custody 'standard' (for instance, ensuring they have specific systems in place to prove they are able to separate certified and non-certified products and can prove their origin, through specific documentation, separation, transport, packaging and so on). This standard is required in addition to the standards of the certification scheme itself (i.e. the social and environmental requirements).

The basic characteristics of traceability systems are:

- Identification of units/batches of all products
- Information on when and where they are moved or transformed
- A system linking these data (Vorley *et al.* 2010).

Box 6: Types of chain of custody

Four different types of chain of custody exist for certification schemes:

Identity Preserved (IP): assures that the certified product and its derivatives delivered to the end user is uniquely identifiable to the supplier and is kept physically isolated from all other sources throughout the supply chain, including other certified products from different sources. The product is then traceable from the primary production unit through to the final end user.

Segregation: assures that products delivered to the end user come only from certified sources. This model differs from the Identity Preserved supply chain model in that it permits the mixing of certified products from a variety of sources.

Mass Balance: administratively monitors the trade of certified products and its derivatives throughout the entire supply chain. The mass balance system allows for mixing of certified and non-certified products at any stage in the supply chain provided that overall company quantities are controlled. The mass balance model is constructed in such a way that volumes of certified product shipped will never exceed volumes received by the end user.

Book and Claim: provides tradable certificates for certified products to the supply base. The supply base may then offer these certificates (for example on a webbased transaction system) to end users who choose to support specific volumes of certified products and/or their derivatives. The book and claim system allows for the transfer of certified sustainable volume credits from a supplier to the end user, independently of the physical supply chain. End users have the advantage of being able to support certified producers without having to establish a new supply chain and actually purchase their products. Instead, they pay a premium directly to the producer and associate it with their other, potentially uncertified purchases.

Mass balance and book and claim supply chain systems have particular utility with bulk commodities, where the costs of operating segregation are very high. The Roundtable on Sustainable Palm Oil (RSPO) standard for sustainable palm oil allows all four systems, and regulates the type of market claims that companies can make for each.

Source: RSPO (2009), *RSPO Supply Chain Certification System*, RSPO, Kuala Lumpur, Malaysia.

But full traceability is not necessary in order for certification schemes to be viable and for companies to make claims about the sustainability of their supplies, as demonstrated in the innovations section below. Greater flexibility in chain of custody requirements can offer more potential for inclusion and lower costs.

2.4.1 Challenges and innovations in relation to traceability and chain of custody

Fulfilling traceability requirements can be one of the most challenging aspects for producers wishing to achieve certification. This is particularly true for small-scale producers who lack the technical capacity and necessary management systems to ensure traceability can be achieved. Their geographical dispersion (and the fact they are often found far from markets and are geographically remote) makes achieving traceability even more challenging. Traceability also incurs costs for other supply chain players, such as processors and manufacturers, and there may be resistance from these players to participate in schemes that require full traceability where it would be very expensive to process products separately for particular commodities (such as cocoa).

The transaction costs incurred in meeting the traceability requirements of standards are far higher for small-scale producers than larger producers. Large-scale producers have access to the necessary infrastructure, tend to be organised geographically and can benefit from economies of scale. Walter et al. (2003) present evidence from three studies of certification of small-scale producers in the non-timber forest product sector (NTFP) in Bolivia, Namibia and Ghana (Fairtrade and organic). They identify traceability and chain of custody requirements as one of the major obstacles to certification: 'Given the vast land area and number of smallholders necessary to produce tonnage of shea butter for export, the logistics and costs involved are tremendous. It is therefore only possible with 'developmental' support, either from the private sector or non-governmental organisations' (Walter et al. 2003: 11)

One proposed solution to this problem has been for producers to form groups (see Section 2.3) – but this is not necessarily an appropriate solution for the majority of smallscale producers who are not organised in the market and who make up the 'informal' economy – see a discussion of this in Section 2.3. This is particularly true of the ASM sector where the majority of ASM are not organised in a way that would be recognised by certifications, that is, as part of formal cooperatives or producer organisations.

For certification and traceability to be possible, producers typically need to be structurally linked in some way, though this can take very different forms, as outlined in Section 2.3. Information and communication technologies can be used to establish and maintain the advantageous aspects of group formations for small-scale producers without actually requiring the physical organisation of producers – producers are still linked in some way, but this is virtual rather than physical.

'Mass balance' and 'book and claim' traceability systems may offer more potential for inclusion of small-scale producers than 'identity preserved' or 'segregation' (as described in Box 6). Utz Certified has decided to adopt a more flexible approach to traceability, for example, in part due to the costs it entails for producers but also the high costs that would be involved in establishing traceability throughout the supply chain; see Box 7.

Box 7: Utz Certified's approach to traceability for cocoa

The goal of UTZ Certified is to create an efficient certification programme for socially and environmentally responsible cocoa production that meets the needs of both producers and markets. It is therefore set up to benefit the largest number of producers possible. It focuses on capacity building in origin and training of farmers. In this way farmers improve their productivity and quality, which is then rewarded by the market: 'A better price for a better product'.

While volumes of certified cocoa are still limited but growing, and the processing is quite complex, keeping all certified cocoa separated would involve high investments in the supply chain. Utz believes it is better to invest in the training of farmers and actual purchase of UTZ certified cocoa. To support up-scaling of the initiative and in consultation with all stakeholders, UTZ Certified therefore allows both segregation and mass balance to create flexibility in the supply chain in terms of the processing and handling of UTZ certified cocoa and cocoa products. Credibility is assured by the unique traceability system and chain of custody certification. The traceability proves that certified cocoa sales are backed up by certified purchases. Given the challenges that the cocoa sector is facing, the focus is shifted from the physical product content to the producer, and how the product contributes to supporting him. With this current system the producers fully benefit from the certification and the stronger market position as certified farmers.

In the long term, as supply builds up, Utz foresees a natural shift to segregated cocoa. Then buyers will want to profit from the better quality of the beans and will be able to do so against a reasonable surcharge.

Source: Taken from Utz Certified (2012:1), Mass Balance and segregation What's in it for the producers? www.utzcertified.org/ images/stories/site/pdf/downloads/cocoa/massbalancesegregation_ thefarmer.pdf?phpMyAdmin=OID7nWGYX8e6ifrJ98TPV3BJSz7&php MyAdmin=3d81e3370877212193cf2f61673caf47. Accessed March 2012.

2.5 Verification and auditing for certification

ISEAL Alliance defines verification as the 'confirmation, through the provision of objective evidence, that specified requirements have been fulfilled. An assessor or inspector audits or verifies that requirements of a standard have been fulfilled. The results of verification are used as the basis for a decision on certification' (ISEAL 2007).

Certification is granted based on the evidence provided through verification and auditing. The process of certification is carried out by the standards body and therefore gives assurance – to other supply chain players – that a product, process or service is in conformity with a certain standard or set of standards. In this section we focus on verification and auditing since this ultimately determines the costs (and therefore ability) for producers to get certified.

There are three main methods used to verify whether a supplier adheres to a particular standard:

- First party or self-verification: The person or organisation that is undergoing evaluation assesses itself. Internal audits or peer reviews are carried out to verify that the requirements of a standard have been fulfilled. Guarantees of compliance are provided by the person or organisation itself.
- 2. Second party verification: Assessment is undertaken by a person or body that is related to, or has an interest in, the person or organisation being evaluated. For example a client, or a purchaser of products from the producers being subject to an audit, might carry out the assessment.
- **3.** Third party verification or certification: Assessment is undertaken by a person or body that is independent of the person or organisation being evaluated. It has no interests in that person or organisation. Third party verification requires accreditation bodies⁸ to identify and 'accredit' the acceptable third party verifiers (ISEAL 2007).

No independent assessor is a part of the system for first and second party verification. Internal inspections are an important part of many standards that recognise farmer groups as a single certified entity, but in almost all cases will not be the only form of verification – third party verification will still take place.

2.5.1 Challenges and innovations in relation to verification and auditing

The costs of verifying small-scale producers against the requirements of a standard can be significant. It is typically the producer who absorbs the auditing costs and in some cases they are prohibitive – where, for example, auditors are sent from overseas or have to travel long distances to audit geographically dispersed producers. The desire for rigour (in independence and objectivity) needs to be balanced with an assessment of costs.

'The downside to organic certification from many growers' perspective is the cost of periodic inspection. For the multitude of small coffee growers who are de facto or 'passively' organic producers because they cannot afford to use agrochemicals, inspection costs can present a formidable obstacle to certification, and hence to the premium price they might otherwise obtain for their coffee' (Rice and Ward 1996: 21).

Producers typically have to pay the costs associated with the visit of an auditor and have to make significant investments of time and resources to ensure the correct paperwork is ready for auditors to verify production practices. Farmers, for example, are often required to pay a *per diem* and travel expenses for technicians and auditors to certify farms. Farmers are also charged an annual certification fee based on the size of their farm. Small-scale producers may organise an internal

management system and seek certification as a group, thus reducing costs and administration (Rainforest Alliance 2009a in Blackmore and Keeley, 2012).

Reducing costs of auditing through using local certifiers

Certification bodies themselves can help to reduce costs for producers through the means by which they structure their auditing and certifying operations or their selection of auditors. They can also adapt their verification or auditing requirements – for example the types of audits required and their frequency, and the types of 'structures' or institutions that can hold certificates.

Though third party verification – if done well – is evidently more 'rigorous' and objective than first party, there is a need to balance cost and rigour. One idea could be to reduce the frequency with which third party auditing takes place (such as every two years, instead of one) and increase first party or second party auditing. In the case of the Better Cotton Initiative, for example, farmers commit to self-assessment, and are given tools to guide this process. These self-assessments (and farmers' performance) are subject to credibility checks, at random and based on a risk assessment (see Box 8).

Box 8: Auditing and assessment in the Better Cotton Initiative:

Self-assessment: this takes place about once a year. The decision to award farmers a licence is based on this assessment.

Second party credibility checks: these are carried out by the implementing partners. These happen once a year for each producer unit and are used to check the selfassessments are credible. The frequency of these checks depends on the number of producers the implementing partner works with and a risk assessment (the greater the number of producers per implementing partner, the more often credibility checks will be carried out).

Third party verification: these are carried out annually.

The more compliant farmers have been in the past, the less farmers will need to be audited and carry out selfassessment. This can reduce costs for producers.

Source: BCI (2013), interview with monitoring and evaluation Officer, conducted by IIED, 14 March 2013.

The Steering Committee of the State-of-Knowledge assessment of Standards and Certification describes the merits of risk-based assessments (such as that employed by BCI) as follows:

New tools, such as risk-based modelling, are emerging as a means of reducing the assurance burden. In risk-based modelling, risk assessment is introduced at a number of stages in the certification process as a tool to first identify the potential risks of noncompliance and then assess

8 Accreditation is the process by which an authoritative body – usually a national accreditation body but an international body in some cases (e.g. FSC) – recognises the competence and impartiality of the bodies involve in certification of producers/miners and traders. Accreditation is the process of licensing certification bodies, allowing them to operate, provided that they follow clearly defined rules (Bass et al. 2001). Accreditation is not included as part of the analysis in this paper since it does not concern producers.

where those risks are most likely to occur. The results of the risk assessment can be used to guide more efficient sampling at different points in the assurance process, from determining the frequency and intensity of audits to the auditor choosing which aspects of standards compliance to pursue in greater depth (Steering Committee of the State-of-Knowledge Assessment of Standards and Certification, 2012: 15).

Certification and standards bodies can themselves help to reduce costs for producers through the means by which they structure their auditing and certifying operations or their selection of auditors. By adopting a *decentralised* approach to auditing, the costs of travel and time taken in the field to carry out audits can be reduced. International standards could become nationally 'owned' by shifting training and certification processes to national level organisations (Kindornay and Higgens 2012). For example, outsourcing certification to national certification bodies can play an important role in cost reductions. Rather than producers having to pay for auditors to travel internationally from centralised certification bodies, they only have to pay for an auditor to travel within the same country.

This is determined by the model adopted by the standards body, but can also be constrained by the availability of local or national certifiers. Fairtrade and Rainforest Alliance adopt different models, for example, and some have argued that this has allowed Rainforest Alliance to move into the mainstream, something which has proved more difficult for Fairtrade (Blackmore and Keeley 2012). While Fairtrade uses a centralised certifying body (FLO-CERT) (which has some regional offices) to carry out auditing, Rainforest Alliance's practice is to outsource its auditing. This has arguably allowed Rainforest Alliance more flexibility, by allowing auditing services to be outsourced to a number of independent, thirdparty inspection bodies found in the country in which auditing is to take place. Rainforest Alliance claims that 'as visits are performed by local organizations, the costs are often lower than other systems' (Rainforest Alliance 2009a in Blackmore and Keeley, 2012). It has its own certification division -RA-CERT - which outsources auditing to various regional (independent) auditors, for example, in Europe, Russia and Brazil. For other regions of the world Rainforest Alliance has regional Rainforest Alliance offices - US, Canada, Central America, South America, Africa, Asia Pacific, which are responsible for carrying out audits, or will outsource to incountry auditors such as Japan and India (RA-CERT 2013).

Adapting how certification schemes collect their auditing or certification fees through flexible payment plans

As outlined earlier, many farmers struggle with paying for certification. Finding ways to both reduce costs of certification (as outlined above) and offering more flexible methods of payment, so that farmers aren't faced with substantial up-front costs, can help to drive inclusivity. One example is allowing producers to pay their certification costs in instalments, as the case study in Box 9 demonstrates.

Box 9: Case-study of staggered certification payments, organic certification, Kenya

A large number of Kenyan farmers had organised themselves into groups in order to make organic certification affordable. Some groups disintegrated, however, leaving the remaining members to shoulder a high price for certification. To avoid this pitfall, some farmers wished to pursue individual certification – but faced high upfront application and certification costs (an average of 16,000 Kenya Shillings, or approximately USD183).⁹ These farmers approached EnCert, a Kenyan certification body which offers organic certification services to individual producers as well as producer groups, to ask if they could implement a payment plan by instalments. EnCert were willing, and farmers were asked to sign an agreement.

For new farmers seeking certification, 10 per cent is deducted from every sale and paid to EnCert. Once the certification is paid for, EnCert starts inspection and certification procedures. In the case of already certified farmers, the certification body issues a certificate after adherence to the plan for two months.

Source: The Organic Farmer (2010) 'Farmers prefer individual certification', *The Organic Farmer*, 3 June 2010. http://www.infonetbiovision.org/res/res/files/3324.TOFjune2010red.pdf (accessed 10 March 2013).

Participatory guarantee systems or participatory network certification

While not formally recognised by any of the international sustainability certifications, alternative ways of ensuring compliance with a set of principles and standards do exist. For example, Participatory Guarantee Systems, which are a type of first and second party verification, can be used as a form of guarantee to consumers that products have been produced in a particular way.

While these methods are not currently recognised by the best known certification schemes targeted at the top of the pyramid, they may offer relevant lessons for both new and existing certification schemes as alternative ways to monitor compliance (for example by reducing the number of 'formal' audits and supplementing these with 'informal' audits, as mentioned above). These alternative auditing systems offer potential for national certification schemes for developing country contexts, as in seen in the Pacific Islands – see Box 10.

Box 10: Pacific Islands' Participatory Guarantee Systems for organic production

In the Pacific Islands a Pacific Organic Standard (POS) has been developed by The Pacific Organic and Ethical Trade Community (POETCom).¹⁰ It is based on IFOAM's basic standards¹¹ and CAC/GL 32 (the international guidelines for the production processing, labelling, and marketing of organically produced foods, published by international food standards organisation, Codex Alimentarius).¹² This standard was developed in response to 'the high cost of certification, auditing and compliance involved in meeting importing country organic standards and/or international standards' (SPC Land Resources Division 2011b).

POS is in the process of seeking equivalence with the European Union's organic standard and will then pursue equivalence with the Australian Organic Standard, National Organic Program and Japanese Agricultural Standard (SPC Land Resources Division 2011c). While the usual third party verification will be needed to ensure compliance with these schemes, alternative verification systems can be used for local or domestic markets.

POS has developed a participatory guarantee system as a means of avoiding the high costs associated with conventional third party auditing. The farmers and consumers themselves have helped to shape the methodology and process of PGS in the Pacific Islands. While the details of the methodology and process vary between communities, geographies, politics and markets, there are a number of core principles that underlie PGS which can be adapted to local conditions. According to the SPC Land Resources Division (2011a), 'Participatory Guarantee Systems have transparent, systemised decision-making processes and aim to share the responsibility for the organic guarantee and to verify that farmers are consistently maintaining the standards. Trust is created through open information and peer reviews. PGS involves less administration and lower costs than export focused third party certification.'

The benefits of using PGS in the Pacific Islands include the improvement of local socio-economic and ecological conditions, by encouraging small-scale production and product processing (SPC Land Resources Division 2011a). Its ability to include a greater number of producers in organic production than overseas schemes (such as the EU's organic standard) is better for both producers and consumers – and ultimately better for sustainable development.

Source: SPC Land Resources Division (2011a), 'Participatory Guarantee Systems', *SPC Land Resources Division*, 10 February 2011. www.spc.int/lrd/ index.php?option=com_content&view=article&id=750<emid=524 (accessed January 2013); SPC Land Resources Division (2011b), 'Background', *SPC Land Resources Division*,10 February 2011. www.spc.int/lrd/index.php?option=com_content&view=article&id=752<emid=498 (accessed January 2013). SPC Land Resources Division (2011c), 'Certification'. www.spc.int/lrd/index.php?option=com_content&view=article&id=747<em id=523 (accessed January 2013).

To the authors' knowledge, alternative auditing systems such as PGS have not been used for products that are traded internationally or exported. But their value and relevance for local markets is clear. These systems could, moreover, constitute a producer or group's internal control system – and thereby help to establish the internal systems needed to achieve certification that does require third party auditing. This could lead to longer-term benefits in terms of being able to access export markets.

Area-wide or blanket certification

'Blanket certification' certifies all producers in a certain area, based on the fact they employ particular production practices (such as organic agricultural). Geographical indications, for example, are one way in which producers from a given area are effectively certified, as producing their goods in a particular way and from a particular geography, which thereby gives the goods a particular quality. Darjeeling is an example of a geographical indication. Producers can then label and market their products as having a particular origin (and associated quality). While examples of sustainability requirements being integrated into geographical indications do not yet exist (to the authors' knowledge), it could be a possibility. Blanket certification could in theory lower the costs of certification for individual smallholders and mean that they do not need to form groups.

¹⁰ Organic Pasifika is the Organic and Ethical Trade movement of the Pacific Islands. It appears to be a non-governmental organisation. See: www.spc.int/lrd/index.php?option=com_content&view=article&id=755&Itemid=501.

¹¹ The IFOAM EU Group (International Federation of Organic Agriculture Movements) is the European umbrella organisation for organic food and farming. See www.ifoam-eu.org

¹² See www.codexalimentarius.org/standards/list-of-standards.

Section 3: Understanding the role of the external environment in helping certification to scale up

While Section 2 focussed on the elements that are internal to a certification scheme and help to determine scalability and inclusivity, this section gives a short overview of *some* of the enabling environments or supporting structures that are external to certification schemes but can help to promote sustainability – either through promoting sustainability certification directly, or by improving the sustainability of production more broadly, so that certification is more easily obtainable.

As with all market transformation, there are a number of levers that will drive scalability and allow for inclusivity. These rely on several interventions at both the demand side and supply side.

3.1 Increasing demand for sustainability

A business case or stimulus needs to exist – either driven by consumers, retailers, brands, investors or governments and/or coalitions – to necessitate procurement of products produced sustainably. Without a call to action or business case for best practice ASM, there is little reason for funders to get involved, for governments to act, and for traders, companies, or producers themselves to prepare for certification.

For example, during the last decade confectionary companies began to realise that the growing demand for chocolate was going to exceed the supply of cocoa, and that by 2020 there could be a gap of as much as one million tonnes (Almeida 2012). The solution considered by many companies was certification, as a holistic social, environmental and economic tool to increase production. A tipping point in demand came in 2009 when Mars committed to buying 100 per cent certified cocoa by 2020. Other companies committed to certification around that time (for instance Unilever converted some of its brands to 100 per cent certified sources) and subsequent commitments have helped to propel investment, training and innovation for certification. This has helped to build the capacity of producers, to enable them to meet the demands of certification schemes, and most importantly to put in place the building blocks of productivity that are needed to make certification viable. These horizontal approaches which work

with large numbers of farmers can help to support the scaling up of sustainability and the number of producers who may be able to achieve certification (see Section 3.2 on scaling up supply, below).

Governments can play a role in driving demand for certified produce and often have significant purchasing power. Many governments, for example, require or rely on Forestry Stewardship Council (FSC) certification to satisfy their sustainable procurement policies – for example, the Alberta Ministry of the Environment and the government of Manitoba in Canada, as well as the governments of Denmark, Japan, and New Zealand. Similarly, all coffee served in Swedish administrative offices must be certified organic as per IFOAM standards, and many schools in the United Kingdom serve Marine Stewardship Council (MSC)-certified fish (Steering Committee of the State-of-Knowledge Assessment of Standards and Certification, 2012).

3.2 Scaling up supply of sustainable production

In many cases where small-scale producers have been able to engage successfully with certification, external support has been given (Blackmore and Keeley 2012). Indeed, Molenaar *et al.* (2011) argue that subsidies are often a precondition, or at least an important driver, to invest in certification of small-scale producers. This support may come from the private sector (such as exporters who are involved in the specific value chain of the certified producers) or from non-governmental or donor organisations, or even government. It may also be offered by the certification schemes themselves (and funding for this may come from donors, membership fees and so on, depending on the scheme's business model). This support is often highly valuable and can deliver wider sustainable development benefits, and therefore public goods.

3.2.1 Certification bodies can offer support for producers to get certified

Certification schemes are reliant on producers to get certified and continuously improve. Interventions on the supply side

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should train producers and build capacity, which can be offered by the certification scheme itself. This producer support can be in the form of agricultural training and capacity building (such as good agricultural practices or child labour sensitisation); training on standards; access to finance; and further support once a group is certified.

In 2011–2012, for example, 125,000 farmers received training on Better Cotton production principles and criteria, self-assessments, and generally how to deal with the successes and challenges of growing Better Cotton (BCI 2012). Fairtrade has a producer support unit that offers direct support to producers through a network of liaison officers, who offer advisory services to farmers and workers, and training and information to help them comply with the Fairtrade Standards, strengthen their business capacities, and deepen Fairtrade impact (Fairtrade International 2013a).

3.2.2 Other supply chain players can support producers to get certified

Traders, retailers, investors and donors can play an important role in helping producers to get certified, either through offering access to finance, capacity building and training to achieve certification, or helping to pay the direct or indirect costs of certification.

Retailers/private sector

BCI members, for example, are expected to provide direct or indirect support to farmers as part of their membership commitments. For example, retailer and brand members will provide additional financial support, proportionate to their scale, for activities to support smallholder farming communities (BCI 2009). This can help producers get, and remain, certified.

In some instances, such as GLOBALG.A.P. certification of vegetables in Kenya,¹³ exporter companies have demonstrated their willingness to form partnerships with small-scale growers by providing high levels of financial, technical and administrative support to achieve certification. Research has shown that in Kenya outgrower production and income from vegetable exports actually increased between 2001 and 2007, despite the additional challenges posed by certification. Over GBP 2.2 million has been invested in getting smallholder farms to a position where they can be audited for GLOBALG.A.P. compliance (Blackmore and MacGregor 2011).

Ethical agents

An 'ethical agent' is a person (or team of people) with both development and commercial experience who works both upstream and downstream in the supply chain, building relationships with all the actors along the chain. Their ultimate goal is to both improve livelihoods for the producers and their families, and to ensure a commercially viable supply chain (Buxton and Vorley 2012). Ethical agents can help to facilitate training, capacity building and certification as well as help producers understand market expectations and needs. Ethical agents can be used as a conduit for enabling certification.

CottonConnect¹⁴ is an example of an ethical agent. Working with retailers and brands, it maps the supply chain and engages the farmers through farmer training products. When retailers and brands are interested in linking their supply to a certification such as BCI or Fairtrade, CottonConnect facilitates and supports that process.

Precompetitive multistakeholder initiatives

A number of horizontal (rather than vertical, chain-based) approaches exist that can help to support producers to move towards sustainability. These can be government-led, multistakeholder initiatives, or public-private partnerships. These approaches typically involve capacity building or training and support for producers to get certified, or to produce more sustainably.

One example is the Certification Capacity Enhancement project¹⁵ for cocoa. This is a public-private effort involving major cocoa brands, cocoa traders, German International Development Cooperation (GIZ), three certification schemes (Fairtrade International, Rainforest Alliance, and Utz Certified), and the Sustainable Initiative for Trade (IDH). The project provides training for the cocoa producers to improve their agricultural practices and meet the requirements of the three main standards initiatives in the cocoa sector - Fairtrade, Rainforest Alliance and UTZ Certified - and to achieve certification by them. A training curriculum has been developed based on the common elements of all three standards and pilot projects are underway to test the practicality and the effects of the collective training concept. Future plans to scale up include considering information platforms and service centres. This project also aims to engage the respective governments in West Africa to leverage the curriculum in government-level programmes (GIZ 2013).

Other examples include the Ethical Tea Partnership (ETP)¹⁶, a precompetitive, non-commercial (i.e. non-profit-making) alliance of international tea companies who 'share a vision of a thriving tea industry that is socially just and environmentally sustainable'. ETP was formed in 1997 when a number of major tea companies took the decision to work together to improve the social and environmental conditions in their supply chains. ETP's members range from large international brands to smaller independently owned labels. Together they account for more than 50 brands, including Sara Lee, Unilever, Tetley (Tata Tea Group), and Twining, which sell in over 100 countries. However, membership is only open to any tea packing company selling tea in Europe, North America, Australia and New Zealand.

The Ethical Tea Partnership has three main areas of work: 1) monitoring and certification – whereby producers (who supply to the retailers and brands involved in the scheme) are offered support in understanding the requirements of international standards, what tea buyers require of them in relation to social

13 GLOBALG.A.P. (Global Good Agricultural Practice) sets voluntary standards for the certification of agricultural products around the world. See http://www.globalgap.org/uk_en/who-weare.

14 See www.cottonconnect.org for more information.

¹⁵ See http://www.giz.de/themen/en/33272.htm for more information.

¹⁶ See http://www.ethicalteapartnership.org/ for more information.

and environmental performance, and where their gaps are in terms of performance; 2) producer support and training, for example in health and safety, agrochemical management, fair treatment of workers and environmental management; and 3) acting more broadly to address the underlying issues that are 'holding back the sustainability' of the tea sector by working with development organisations, tea bodies and governmental institutions.

Government-led approaches and industry associations

In a number of countries, governments have played a role in organising a sector and establishing platforms to improve the productivity, quality and sustainability of production. The Kenya Tea Development Agency (KTDA), for example, provides services to smallholders: offering planting materials, fertilisers and extension services, inspecting and collecting green leaf from respective buying centres, processing and marketing tea (with some government oversight, but is now fully liberalised). Farmers can have equity and shares in KTDA, and elected officials manage and govern the tea factories, collecting and marketing the tea (Nzuma 2011). This level of organisation has made certification much easier to achieve and has also facilitated the effective delivery of training, since farmers are organised around the KTDA factories. For instance, a partnership between Lipton and KTDA had piloted new methods for encouraging Kenyan smallholder tea growers to adopt more sustainable and profitable farming practices, using farmer field schools (supported by the UK government's Department for International Development, DFID). This is now being scaled up with additional donor support.

Countrywide initiatives can help to ensure a sector is 'certification-ready' or to directly drive the uptake of certification. In Brazil, for example, scaling up of Better Cotton has been rapid. This has been attributed to previous efforts to organise the sector, a commercial interest in certification, and efforts to ensure ownership of farmers of the ginning process¹⁷. Admittedly Brazil is dominated by large-scale farms, which has made organisation easier than if smallscale producers predominated. The national cotton farmer association, Abrapa, which represents 90 per cent of all Brazilian production, has also supported BCI certification, and is benchmarking their own national standard to that of BCI's. Scaling up is more likely to be possible where national standards support international standards (or indeed vice versa); where the sector is coordinated and managed; and where there is vertical integration. Strong industry associations can also play a role.

Investors

Finance organisations can also help producers to achieve certification. Having insufficient capital at the beginning of a planting season, or at the harvest season, is a significant barrier to delivering products to market for certified small producer cooperatives. In recognition of this, alternative finance organisations such as Root Capital, Alterfin, Shared Interest and others have created trade credit and other financial products to help certified organisations secure products and access the market. This ability to have 'cash in hand' at the time of collection (for instance in coffee or cocoa) can allow cooperatives to retain and include additional members.

The financial support of multilateral organisations and development finance institutions should not be underestimated - this can take the form of direct financial support for producers (access to credit or training), producer capacity building via NGOs or the certification scheme, or directly paying for certification. In the early stages of certification (and sometimes throughout a certification's lifetime) donor support can be vital, especially in terms of capacity building. The Better Cotton Fast Track Program, for example, brings together donors with leading brands, NGOs and other funders to channel funds directly to farmer training and improvement programs, all designed around the Better Cotton standard, with the aim of scaling up BCI certification. Rainforest Alliance was able to scale up their coffee programme in Latin America at a significant rate thanks to a USD 12 million biodiversity conservation project grant in 2005 from the Global Environment Facility (GEF), as a result of project approval from the UN Development Programme (Eco-Index 2006).

17 The 'ginning process' uses machinery to separate the cotton fibres from seeds, seed hulls and other small objects.

Section 4: Conclusions

Sustainability certification should help vulnerable and marginalised artisanal and small-scale miners achieve economic development as well as support good social and environmental practices. Furthermore, such certification would create confidence in sourcing products from ASM, helping market them to businesses and consumers. But, as evidence from other sectors demonstrate, it is typically the better organised and more advantaged producers with access to resources who are able to engage with certification and therefore obtain any benefits. Nevertheless, there are ways in which certification schemes can be designed in order to promote inclusivity of miners who are not formally organised and who may be marginalised - as demonstrated by a number of innovations in agriculture. This (final) chapter offers examples of where best practice is evident in ASM certification. It also outlines where there is scope for greater innovation in ASM certification design to promote inclusivity.

The sustainability certification schemes that are currently addressing ASM (which are limited in number) are taking some positive steps to address inclusion of marginalised artisanal and small-scale miners – they are learning from the experiences of other certification schemes and demonstrating innovations at early stages in their development that allow for inclusivity:

Recognition of standards and inter-scheme

coordination. Although it is not a 'mutual recognition', the Responsible Jewellery Council (RJC) has coordinated with Fairtrade International and the Alliance for Responsible Mining (ARM) to recognise the Fairtrade and Fairmined standard in their certification scope. Furthermore, RJC has a memorandum of understanding with the Diamond Development Initiative to recognise future standards. The ITRI Tin Supply Chain Initiative (iTSCi), one of the schemes addressing conflict minerals, has been proactive in working with other players in the conflict minerals space – such as the International Conference for the Great Lakes Region (ICGLR) – to interlink their work where possible. The Initiative for Responsible Mining Assurance (IRMA), in its development, is also looking for ways it can rely on existing knowledge and certifications to include ASM in its scope.

Certifying producer structures that include unorganised miners. RJC's inclusion in their certification scope of ASM miners who are on large-scale mining concessions is a good example of how the out-grower model in agriculture can be applied to mining. There are more opportunities to leverage large-scale mining companies to help capacitate ASM and get their product into certified supply chains.

Demand generation. Fairtrade and Fairmined have been working to create consumer awareness and demand for ASM-mined gold. This includes consumer campaigns, market development with brands and retailers, and leveraging events such as jewellery fairs, and holidays such as Valentine's Day. They are using labelled jewellery as a way to distinguish products that source best-practice ASM mined gold.

Inclusion of miners in standards development. Fairtrade, Fairmined and DDI have included miners in standards development. They have created local events near mining communities in order to get their insight. This has influenced the design of the standards as well as the design of the certification system.

Innovations in auditing and verification. DDI is considering innovations in verification including leveraging in-country NGOs who can do verification work. Whether this will ensure credibility is yet to be seen; however, it is seen as a cost-effective way to audit in situations where the miners have no access to funds to invest in certification. iTSCi leverages whistle-blowing mechanisms through local stakeholder committees (ITRI 2013) which creates local ownership and empowerment over compliance.

Despite the examples of best practice offered above, there are still a number of important lessons to be learnt from the landscape of sustainability schemes that exist in agriculture and their ability to include (or exclude) small-scale producers. In order to maximise inclusion of ASM miners in sustainability certification schemes that ensure development, those looking to develop certification schemes should consider the following:

1. Design stepwise approaches for certification and ensure both 'baseline' and niche schemes exist to move producers towards sustainability. There are a number of points to consider in relation to the pyramid of change. Firstly, there is an opportunity to create that 'bottom of the pyramid' or baseline certification, as no such certification or programme currently exists. Whether that is a blanket standard or an entry point of minimal level of acceptable compliance, it is the starting point of inclusion. It is important to use a baseline low-bar standard to get miners 'in the system' of certified supply chains.

Secondly, while baseline approaches are needed, it is also necessary to have other options as ASM develops and to continue to incentivise good and best practice. Thus it is important that certification schemes also cover the higher segments in Roozen's pyramid (Figure 1). However, different schemes need to coordinate and collaborate wherever possible in order to reduce costs for miners and to create interoperability where possible.

Lastly, stepwise approaches that allow miners to get into certification systems and develop and improve over time are an absolute necessity. These miners have not had access to training, capacity building and financial incentives to help them improve their practices, so it is vital to recognise what level they are currently at in terms of sustainability, and to provide a plan for progression. Those designing certification schemes should keep this in mind while developing the standards and certification frameworks.

2. Allow for different types of structures to be included so as to enable certification for unorganised miners. Very few artisanal and small-scale miners are organised into cooperatives, associations, or similar democratically run structures. In order to include more miners in certification systems, other types of organisational structures need to be allowed. These structures and relationships include leveraging traders who buy from ASM and can hold certificates, community-based structures and NGOs who can hold the certificate on behalf of the miners and own or share the accountability for the implementation of the standard, and large-scale mines that have ASM on their concessions.

The Responsible Jewellery Council is already leveraging ASM inclusion via large-scale mines that are working to formalise and legitimise ASM. This can be considered as best practice that can and should be replicated to help ASM access the benefits of certification. There are many larger-scale mines that can use their concessions to improve standards and certification opportunities for ASM.

Lastly, wherever feasible, miners should be able to selforganise around organisational structures particular to their locality and the way in which they work. Allowing for such flexibility permits self-organisation and avoids the social and economic costs that can result from forcing miners together just for the sake of certification. Recognising existing ways of working and reducing costs associated with organising will empower more miners to access certification.

3. Consider total costs of certification and ensure benefits. Costs are always a barrier for marginalised artisanal and small-scale miner to become certified and to extract sustainably. Certification schemes should consider costs at the design phase and should continuously evaluate where costs can be lowered at any part of the certification scheme's system or any phase along the certification's development. While attention is often placed on the costs of auditing and certification, it is important to consider the cost of complying with the standard, which is oftentimes not considered in schemes' development. This is a key reason why it is very important to include miners as far as possible in the standard's development – the miners themselves will undoubtedly have an accurate understanding of the possible costs of compliance.

Furthermore, if there are costs involved, then there needs to be some type of consideration of economic benefits for the miners. These benefits may take the form of premiums (either mandated or negotiated) or some type of economic incentive through market access or value addition. If there is no incentive, there is very little reason for miners to voluntarily pursue improving their practices and seeking the opportunity of certification.

4. Create the demand for sustainable minerals sourced from ASM. Demand is growing for sustainable minerals; however there is no specificity for these materials to come from ASM. Firstly, there is a need to create the business case for manufacturers, brands, and retailers to want to ensure sustainable mineral supply chains and to consider the importance of working with ASM sources where feasible and appropriate. There is a need for heightened education throughout the supply chain and to consumers in terms of the conditions of ASM and the development opportunities, and to make a compelling case for certification. Lastly, coalition building within industry would greatly help to stimulate demand.

Having sufficient demand is a stimulus for innovating and investing in supply. Demand is a driver for investment in the supply base either from companies, traders, multilateral organisations or collaborative investment from private and public sector funds - investment typically takes the form of capacity building which can help support inclusion. Demand also creates interest from government institutions to get involved. It also is a signal to the miners of opportunity and is an incentive to get them engaged in order to access the market. Lastly when there is large demand, it forces the certification schemes to think more creatively about how to get supply into the market. It is demand pressure that helped many of the innovations mentioned in this paper, such as stepwise approaches, and projects such as the Certification Capacity Enhancement project for cocoa.

Increased demand helps create economies of scale. These include making certification more cost-effective for miners, as they are able to sell more of their product into markets with more favourable terms. It also helps to mitigate costs, such as batch processing or separation and tagging, to create identity-preserved traceability in the chain, if large volumes of certified products are being handled in the supply chain. Scaling up takes certification from being 'business as unusual' to 'business as usual', and this is required in the context of mining – good practice ASM becomes the norm, not the exception.

- 5. Collaborate wherever possible in precompetitive activities. Certification schemes will need to work together wherever possible to allow for interoperability of systems and/or recognition of other systems wherever possible, in order to make it easier for miners to access market opportunities and to save costs. This pressure will inevitably come from the market and from donors who will require precompetitive activities in order to fund capacity building and support certification programs. Projects modelled after the Certification Capacity Enhancement project will be necessary in order to get miners more rapidly and more effectively into certification.
- 6. Involve government to legitimise and formalise the sector. As long as ASM remains an illegal and/or informal activity in some countries, there is little hope to use certification as a tool for good practice ASM and as a tool for development. Governments need to put the legislative frameworks in place to legalise good practice ASM, register miners, and ensure that the land rights are understood and that laws are applicable and enforceable. Governments should create the 'playing field' for what is legitimate ASM in their country and what is illegitimate (that is, environmentally or socially destructive). Once that playing field is created, certification can scale up at a more rapid pace.
- 7. Engage miners in the development of not only the standard but also in design of the certification system. If miners are to voluntarily engage in certification, then it needs to work for their needs and create benefits. Miners can best identify the gaps between their current reality and the standard; the costs involved in compliance; and the ways in which they can most effectively and efficiently be audited. Without that insight, the certification might not be as accessible or achievable and therefore miners will either chose not to pursue it or be excluded from participating, due to structural, compliance or economic factors.

8. Design standards with scalability inclusion in mind. There are opportunities to consider generic baseline standards that can apply to many different minerals. Rainforest Alliance's generic agriculture standards are a good model for thinking about looking at commonality across products instead of focussing on differences. There are also opportunities to adapt standards to local realities and conditions in mining so that there are no de facto barriers to entry. Fairtrade's certification of FSCcertified small-scale forest enterprises is a model that has addressed this issue by allowing for flexibility in the organisational forms that it will certify.

While there will always be some cases in which ASM would be illegal and not be permitted under any certification scheme (such as rush mining, infringing land rights or protected areas, or fuelling conflict), there is certainly room for a large portion of ASM miners to get involved in schemes that could bring them benefits and development. There needs to be flexibility in systems and a large investment in capacity building and infrastructure in order to make inclusion a reality. And as entrylevel standards are promoted it is important that consumer and business expectations are managed. While inclusion is the first step for development, there is also a need to consider the development trajectory where ASM miners can seek out value addition opportunities, take more ownership over the supply chain if appropriate, and become legitimate and empowered market actors and advocates. Scalability, inclusion, and achieving best practice for ASM mining will be a journey. If best practice is the destination, miners and supply chain actors - traders, manufacturers, brands, retailers, consumers, certification schemes, NGOs and multilateral funding institutions - need to be working in collaboration now and over the long term to achieve this goal.

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Scaling up certification in artisanal and small-scale mining: Innovations for inclusivity

The challenges of poverty, marginalisation and vulnerability characterise the livelihoods of the majority of the 20–30 million artisanal and small-scale miners (ASM) worldwide. Linking these miners to supply chains and guaranteeing good social and environmental practice via certification should help to address development issues as well as create confidence in sourcing products from ASM, and marketing them to businesses and consumers.

But it is typically the better organised and more advantaged producers with access to resources who are able to engage with certification and therefore obtain any benefits. Creating the infrastructure needed to make ASM certifiable – and for certification to deliver sustainability successes for ASM – is a challenge and requires innovative thinking. As sustainability certification schemes develop to address issues facing ASM, it is important to take into account and learn from other sectors in regards to what can be done to make certification and its benefits inclusive and accessible to larger numbers of miners.

This paper seeks to identify existing and emerging innovations and best practice in sustainability certification that enable fair and beneficial inclusion of producers. It seeks to learn lessons for artisanal and small-scale mining from the agricultural sectors, where certification has been operational for some time. These innovations could increase the inclusivity of certification to cater for the realities of the majority of ASM. It also explores the enabling environments or support systems that are necessary to scale up certification.

The paper is a first step in exploring this subject area. It offers initial lessons on what innovations and models exist to maximise inclusivity and how these might be replicated. These lessons are useful for those designing, implementing and using certification, and also identifies further research questions that warrant attention.

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