Service delivery

How to design an effective service sector to drive sustainability in smallholder dominated sectors

2015

Commissioned by IFC

About this project

This research forms part of a project funded by the International Finance Corporation, the Dutch Ministry of Foreign Affairs, SECO and IDH the sustainable trade initiative in which Aidenvironment, NewForesight and IIED sought to develop a holistic transformation model to scale sustainability in smallholder dominated agricultural commodity sectors.

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Introduction

Many agricultural sectors are dominated by large numbers of small-scale farmers. For example, 70 per cent of Thailand's palm oil and 60 per cent of Kenya's tea comes from small farmers, and over 90 per cent of cocoa farmers in Côte d'Ivoire and Ghana are small-scale farmers. In terms of levels of organisation, precise estimations are hard to obtain – but is it estimated that in Ghana 75 per cent of cocoa producers are unorganised,[1] while at least 30 per cent of small-scale cocoa farmers in Côte d'Ivoire are unorganised. Despite the success of cooperatives in some regions, most small producers remain unorganised. In Honduras and El Salvador, for example, only 5 per cent of horticultural producers are organised (Hellin *et al.* 2009).

Small farmers in developing countries typically have very low incomes, cannot invest in their farms and have no access to quality extension services, inputs or finance to increase their productivity and crop quality. As a result, farm productivity and crop quality are low and market access is limited. Sustainability performance also tends to be low on these farms.

Achieving sector-wide sustainability requires investments in technical assistance, inputs and finance – what we refer to as service delivery – that support farm and sector quality. Farm quality means that: farmers, and their workers, earn a decent living; are adaptive, resilient and innovative; produce at optimum productivity and product quality levels; and that farming has a positive social and environmental impact.

This paper explores what effective service delivery looks like; discusses the common approaches to service delivery and their effectiveness; discusses the tools that can be used when designing service delivery to promote farm quality; and proposes possible options for sustainable financing of service delivery in sectors dominated by unorganised small-scale farmers.

1. What should an effective service sector look like?

Our research has identified the key features of an effective service sector: a service sector that contributes to the achievement of farm quality and therefore the overall sustainability of a sector. These features should be borne in mind when designing delivery services:

- **High quality.** Service delivery should improve farm quality, and therefore the overall performance of a sector. Farm quality includes both public and private goods, for example the delivery of improved yields and product quality, but also poverty alleviation and environmental protection. Farmers' behaviours change positively as a result of receiving training, inputs and finance. Farmers' purchasing power also increases.
- **Farmers as 'clients', not beneficiaries.** Farmer feedback on the quality of service delivery should be a key determinant of the design of delivery (who, how, when, where) and should be regularly assessed. Farmers should participate in designing service delivery.
- **Competitive.** Alternative service delivery can be used if quality of provision drops: ideally farmers should be able to choose between providers.
- **Accessible.** Delivery should be culturally relevant, non-discriminatory (other than, over time, on the grounds of performance in farm quality), available near or on farms so travel is minimised.
- **Comprehensive and consistent.** Farmers can work towards one holistic vision of farm quality in a way that minimises trade-offs (e.g. improvements in yield without compromising social or environmental norms). This also implies that different service providers send consistent messages to farmers on farm quality and the main technology packages to use.
- **Cost-efficient.** Bureaucracy is minimised. Modern systems are used to oversee, facilitate, and monitor delivery of services.
- **Bundled.** Inputs, credit and training should ideally be delivered as one integrated package of services. This reflects their interdependence: extension and training affects and informs the inputs used, which is in turn shaped by access to credit. By delivering these together, their effectiveness can

Table 1: Comparison of typical service sector that currently dominates with desired state of the service sector

	CURRENT SERVICE DELIVERY MODEL	DESIRED SERVICE DELIVERY MODEL
Target group	• Non-discriminatory	• Rewards best performers • Excludes worst practices
Who finances service delivery?	• Donors • Government • Private sector	• Financial sector
Who pays for the services?	• Donors • Government	• Farmers • Private sector
Availability and accessibility	• Limited and scattered • Often far away from farms	• Supply meets demand • Available near or on farms
Competition between providers	• Non-existent	• Existent; alternatives can be used
Quality	• Low • Not monitored	• High • Transparent
Approach	• Top-down, driven by supplier (NGOs and private sector) • Proliferation	• Demand driven • Participatory • Consistent throughout sector
Duration	• Differs	• Repetitive • Continuous available
Delivery model	• Not bundled	• Bundled services

be maximised and farm quality (in particular social and environmental considerations) better achieved. Bundled service delivery should, however, allow a certain degree of competition between providers, to prevent them being 'locked into' a finance-input scheme which does not allow them to change inputs when necessary.

- **Transparent.** Delivery should be based upon transparent and mutually agreed prices, quality and timing.
- **Driven by a clear business case.** The public and private goods that should be delivered as a result of anticipated improvements in farm quality should be calculated and monitored.

Over time there should be a progression towards delivery of services that can be:

- **Targeted and linked to performance in terms of farm quality.** Service delivery should exclude farmers who are not willing to give up worst practices (e.g., negative environmental impacts) and exclude farmers from obtaining the next 'level' of service delivery if there are no improvements in performance. Accessibility should not be restricted based on race, gender, geographical location, level of education, etc., however. The intensity and scope of service delivery should increase as farmers progress towards higher levels of farm quality. This is discussed in greater depth in the next section of this paper.
- **Affordable and financed directly from *within* the sector** itself. Once purchasing power has been built through improvements in farm quality**,** services also need to be affordable so that farmers can pay for provision themselves. This may be through direct payment by individual farmers or via revenue generation/collection within the sector as a whole. Ultimately service delivery should be free from donor support and financially sustainable. This is discussed in greater depth at the end of this paper.

2. Common models for service delivery

There are different models for service delivery, depending on two key variables: 1) **who finances** service delivery; 2) who **delivers the services**. Possible options for these variables are shown in the diagram below.

How services are delivered is also a key consideration (e.g., via information and communication technologies, or through face-to-face interactions with agents) and can be a key determinant in achieving farm quality, but this is beyond the scope of this paper.

In practice, various combinations of these options exist to deliver services, with varying degrees of effectiveness, financial sustainability and suitability for sectors dominated by unorganised smallholders (shaped as a flat pyramid). In the next section we discuss the most commonly used models and summarise their potential to deliver improvements in farm quality. We recognise that this potential differs significantly from scheme to scheme and a certain amount of generalisation is therefore necessary.

Figure 1

FINANCING OF SERVICES	DELIVERY OF SERVICES
• Commercial service providers (buyers, input suppliers, NGOs) • Public sector • Sector governance models (levies, taxes etc, administered by marketing boards, commodity exchanges etc) • Producers (direct payment, or via producer groups) • Financial institutions • Donors • NGOs	• Commercial service providers (buyers, input suppliers, NGOs) • Public sector • Producer groups • Sector governance models

The models included are:

- Delivery of services by buyers
- Delivery of services by professional service providers
  - Commercial
  - NGOs
  - Public sector
  - Producer organisations
  - Sector governance models

2.1. Delivery of services by buyers

Description: Buying companies provide services to farmers and in return receive access to some or all of the farmers' produce. Buyers may include traders, manufacturers or cooperatives which buy and market crops on behalf of their members.

Buyers can also help to obtain finance for the delivery of services from financial institutions on behalf of producers, by reducing the risk of lending as compared to lending to individual farmers. For example, cooperatives that buy crops from farmers can secure finance for loans or service delivery for their members.

Drivers and business case: This provision typically emerges in vertically integrated supply chains via contract farming schemes, for example, where farmers are obliged to sell their produce to the buyer/service deliverer.

In some countries the government may legally require buyers to deliver services as a condition for market access (e.g., in the case of biofuels in Brazil) or may incentivise buyers financially to do so.

The costs of providing these services or the repayment of loans are recouped when the produce is sold. Service delivery can improve the quality or quantity of products available for buyers to purchase, leading to greater profitability or revenue for the buyer.

Where producers are not in a vertically integrated supply chain, service provision by buyers is more likely to come in the form of pre-competitive approaches because the producer–buyer relationship is not exclusive and the benefits of service provision can effectively accrue to other buyers, allowing free riding. But this is not always the case; some buyers choose to provide services to producers who are not contracted to sell to them in order to become 'buyers of choice' and encourage loyalty from producers.

EXAMPLES

GrowCocoa (an independently run joint venture by Blommer Chocolate Co. and Olam International) provides agricultural education and training on good agricultural practices, and integrated pest management in Cote d'Ivoire, using farmer business schools and farmer field schools (Nieburg 2013).

The National Microfinance Bank (NMB) in Tanzania developed a warehouse receipt financing system (with support from Rabobank) in early 2007. It offers financing against a commodity stocked by the bank's controlled and authorised warehouse after submission of a warehouse receipt. The bank holds the crops in the warehouse until buyers purchase and pay for the crops. NMB provides funds to farmers to enable them to continue preparing for the next crop while their goods are being stored. This scheme benefits from a 50 per cent guarantee provided by the government. To date, NMB has incurred no losses under the warehouse receipt financing and therefore has not had to call on the government guarantee (IFC 2012).

Potential for delivery of farm quality

Although the potential of buyer-led services to deliver farm quality depends to a large extent on the specifics of how each scheme is designed in practice, a number of general conclusions can be drawn:

- Buyer-led service delivery can be very effective in delivering certain aspects of farm quality – those aspects that marry what buyers need (typically, quality and quantity, for example). This may come at the expense of other aspects of farm quality, particularly pubic goods such as environmental protection, or farmer resilience in terms of diversity of production systems.
- There is an incentive for buyers to bundle services to maximise effectiveness, for example, offering inputs on credit alongside training, but to the extent that it benefits aspects of farm quality required by the buyer.
- Accessibility can be limited; business case typically only exists where producers can be locked in to certain trading relations (e.g. via contract farming) and for niche products where the financial investment by buyers in services makes commercial sense. It has the potential, therefore, to exacerbate existing inequalities in rural development.
- Buyers are more likely to make decisions on provision (who, when, where, how) than farmers, undermining farmers' role as clients.

2.2. Delivery of services by professional service providers

2.2.1. Commercial providers

Description: Services can be delivered by suppliers of agricultural inputs. Inputs can be provided on credit, and input suppliers may double up as finance institutions. Training may be delivered alongside sales of inputs (for example, on demonstration plots, when farmers visit stores, via field visits or mobile phone technology).

Drivers and business case: Input suppliers increasingly understand that they sell effects, not just products. If application of inputs is not effective, for example, due to a lack of knowledge by the producer on when the product should be applied or how often, the producer may not buy more in the future. Knowledge transfer needs to go hand in hand with the sale of products. Over time farmers may be encouraged to pay for all or some (i.e. 'topping up') of the extension services provided by input suppliers. This is a key longer-term business case for input suppliers who initially offer services for free.

EXAMPLES

Tata Chemicals Limited's Tata Kisan Sansars (TKS) centres. TKS centres are franchised retail outlets that cater for 30–40 farmers in the surrounding area. There are a total of 600 in India, catering for more than 3.5 million farmers. The centres sell inputs and offer services (e.g., soil and water testing, seed production, application services, advisory services, accident insurance) and access to credit. Farmers can obtain some extension advice when purchasing inputs but can pay for additional services. The centres also have a facility for farmers to lease out farm equipment and implements, enabling farmers to use modern machinery even if they can't afford it.[2]

Potential for delivery of farm quality

- They can be very effective in delivering certain aspects of farm quality, for example, maximising yields, but this may come at the expense of other aspects of farm quality, and particularly public goods, such as environmental protection.
- With regards to bundling, these service providers may be more focused on input provision than financial services or training and extension. Services may, therefore, not be comprehensive.
- Commercial orientation of service providers can maximise cost-effectiveness and minimise inefficiencies.

2.2.2. NGOs

Description: Many non-governmental organisations (NGOs) deliver services to producers. They may be national or international NGOs but usually operate in close proximity to producers, with a development agenda (usually poverty alleviation and/or environmental protection).

Drivers and business case: Service delivery by NGOs is mission-driven (e.g. delivering public goods, poverty alleviation, building resilience to climate change, empowering women, reducing pollution associated with chemical use, promoting sustainable agriculture via certification, etc.) but missions vary greatly from NGO to NGO and are usually shaped by donors who are funding specific service delivery programmes or the NGO more broadly.

EXAMPLES

The Better Cotton Initiative (BCI) coordinates a capacity building programme to support farmers to adopt practices consistent with the Better Cotton Production Principles. This is delivered through Implementing Partners, including a large number of national and international NGOs who carry out training of producers.[3]

Training is offered on 'Better Cotton' production principles and criteria, how to enable farmers to participate in self-assessments, how to conduct credibility visits, and generally how to deal with the successes and challenges of growing Better Cotton. BCI not only provides general training, but also offers personal support to Implementing Partners during the whole year. Expert organisations, such as FAO, ILO, and Fair Labour Association have been contracted by BCI to deliver specific training to Implementing Partners (BCI, 2011).

Potential for delivery of farm quality

- Can be more likely to deliver services that take a more comprehensive approach to delivery of farm quality (for example balancing both public and private goods), but this very much depends on the mission of the particular NGO (and the donor offering financing, where relevant).
- May prioritise accessibility and coverage of farmers to ensure maximum development impact.
- With regards to bundling, NGOs may have more scope to make a business case for delivering inputs, training and finance as a holistic package.
- It may be easier to establish trust between farmers and service providers because no direct trading relationship exists and farmers are still free in their choice of input and product markets

- Producers may not be regarded as 'clients' but rather as beneficiaries. NGOs may be more accountable to external funding sources than the clientele they aim to serve (but again this can vary significantly from organisation to organisation).
- Some NGOs can lack processes, systems and drivers to maximise cost-effectiveness.

2.2.3. Public sector

Description: Services delivered by staff employed by national and local government – typically organised and administered by the Ministry of Agriculture. Service delivery by the public sector grew significantly in the 1960s and 1970s, but has declined subsequently due to a lack of investment in agriculture.

Drivers/business case: In many developing countries, agriculture is a significant source of employment, foreign exchange earner and contributor to government revenue via taxes. Agricultural development can deliver both public and private goods, for example, poverty alleviation and environmental protection. Service delivery can also influence producers' voting choices.

EXAMPLE

In India, each state government funds their own extension and manages service delivery via their department of agriculture. However, household surveys reveal that 60 per cent of farmers do not access information on modern technology, and those who do source most of it from progressive farmers and input dealers and very little from public extension officers. Staff are too focused on other tasks (e.g., delivering subsidies). A major reform in recent years has been the establishment of a district-level coordinating agency (an Agriculture Technology Management Agency, ATMA). This is an autonomous agency with its own governing body consisting of representatives from government, NGOs, the private sector and farmers at district level. ATMA consults with farmers to identify local research and extension priorities.

Between 1998 and 2003 the ATMA model was implemented as a pilot in 28 districts in seven states in India (with some funds from the World Bank). In 2005 the government of India expanded the scheme with its own funds to 252 districts to all districts in the country in 2007. However the scheme suffered from lack of resources, a lack of dedicated manpower and functional autonomy. The new model improved the degree of consultation with farmers and introduced new concepts (such as bottom-up planning). New revisions were introduced in 2010 (alongside plans to invest a further US$360 million in the model) to overcome some previous weaknesses, including a requirement to hire staff exclusively for ATMA (Glendenning *et al*. 2010).

Potential for delivery of farm quality

- Can be more likely to deliver services that take a comprehensive approach to delivery of farm quality (for example, balancing both public and private goods).
- Public sector service delivery has typically been characterised by large, bureaucratic systems (particularly in developing countries) which has reduced cost-effectiveness.
- A reduction in funding since the1970s has led, in many countries, to insufficient coverage of producers.
- Most services have been targeted at the needy, but in many cases targeting has been ineffective or driven by politics (e.g., to encourage votes).

2.2.4. Producer organisations

Description: Services delivered via cooperatives/producer groups/associations. They are able to generate income from difference in price paid by buyers and price paid to farmers, or by value-adding activities of producer groups.

Drivers/business case: delivering improvements in yield or quality for the groups' members to meet buyers' demands for quality and volumes. They can incentivise loyalty from members for the group structure. Bulk buying of inputs, economies of scale in training, and collateral offered by the group can reduce costs of service delivery (e.g., lower interest rates).

EXAMPLE

Kuapa Kooko, a Fairtrade-certified cocoa farmers' organisation in Ghana – carries out extension services and offers input on credit to its members. It has established its own credit union, the Kuapa Kokoo Credit Union (KKCU) with an American NGO partner, CNFA. KKCU's input credit scheme provides various types of certified agrochemicals and training to members. Farmers can pay back loans after harvest.[4]

Potential for delivery of farm quality

- Can be very effective in delivering certain aspects of farm quality, for example, maximising yields, but this may come at the expense of other aspects of farm quality, and particularly public goods, such as environmental protection. May prioritise private gains over public goods.
- Service delivery is limited to group members, restricting accessibility.
- Can be better at delivering services to farmers as clients, rather than beneficiaries.
- The benefits of achieving higher product quality or meeting market specifications are shared, which creates incentives, via peer pressure, for all farmers/members to deliver on improved farm quality.

2.2.5. Delivery of services via sector governance models

Description: Sector governance models are the structures and institutions used to build and govern markets and sectors – in contrast to vertical approaches that focus on value chains alone. They cover the majority, if not all, producers in the sector. Examples of sector governance models are: state-managed or state-sanctioned commodity boards; commodity exchanges; and private smallholder-owned companies that cover a large proportion of producers in the sector. Most effective sector governance models offer access to finance, inputs or extension to some extent, via revenue collection and generation that is built into the model itself.

Drivers/business case: enhancing agriculture's contribution to government revenues or company revenues (where sector governance models are producer-owned), and improving product reputation (and therefore sales) in international markets. Where sector governance models are government-led, encouraging political buy-in (votes) may also be a driver.

EXAMPLES

The Ghana Cocoa Board, a state-managed commodity board, delivers extension, spraying services and cocoa tree replacement schemes to cocoa producers in Ghana. The cost of these services is deducted from the revenue collected by government at the point of sales and export of cocoa.

Colombia's Federation of National Coffee Producers (FNC), a farmer-initiated and farmer-led Federation supporting the coffee sector and its growers, offers its members extension services, as well as a purchase guarantee. This is financed by a legislated tax on coffee, which is managed by FNC and reinvested in the sector to support coffee growing.

The Ethiopian Commodity Exchange has helped producers to access credit via warehouse receipt financing – a form of secured lending to owners of non-perishable commodities, which are stored in a warehouse and have been assigned to a bank through warehouse receipts. According to IFC (2012), warehouse receipts give the bank the security of the goods until they have been sold and the proceeds collected. In light of the limited options for farmers in terms of finance, often attributed to the limited collateral available to support farmers' financing needs, commodities and warehouse receipts represent a liquid form of collateral against which banks can lend. An effective warehouse receipt system gives farmers a choice of whether to sell immediately after harvest (when prices are often lowest) or to store in a licensed warehouse and to apply for short-term credit and sell at a later date when prices might be higher (IFC, 2012).

Potential for delivery of farm quality

- In general, they are highly dependent on the specific governance model in question and how it is has been designed.
- State-led models have a stronger business case to take a comprehensive approach to improving farm quality (incorporating public and private goods), but may be more inefficient in their use of resources and may be less accountable to producers (who are regarded as beneficiaries rather than clients).
- Producer-owned/led groups may be more accountable to their members and therefore service delivery may be more effective and efficient. But yield aspects of farm quality may be prioritised over reduction in chemical use and environmental impacts, for example.

3. What tools can be built into service provision to incentivise improvements in farm quality over time?

A number of different tools exist that can be built into the design of service delivery to incentivise improvements in farm quality. The appropriateness of these tools will depend greatly on the current performance of producers, their purchasing power, their existing levels of organisation, the demands and priorities of buyers, and so on. These considerations will need to be borne in mind when choosing the appropriate tools. A number of tools are presented below, along with some practical examples of implementation.

MECHANISMS	EXISTING EXAMPLES
Performance-conditioned access to services Linking access to services to farmers' performance (i.e. farm quality). Farmers receive additional inputs, training and credit if they can demonstrate appropriate application of inputs or training received previously. Curricula-based training programmes with different levels of intensity, complexity and access to inputs/credit can offer farmers incentives to keep progressing. Farmers complete a basic business plan and by doing so become eligible to receive certain financial services or technical assistance.	In Saskatchewan, in Canada, farmers can access government funding for training and consulting services by completing a questionnaire that helps farmers understand their needs for growth and development in their business; and a 'Farm Development Plan'.[5]
Bundled service delivery Farmers cannot access inputs if they do not follow training. Farmers might receive inputs on credit, instead of receiving credit for inputs. Typically, bundled service delivery offers more holistic packages which include business and financial training, access to machinery, etc.	**One Acre Fund, Kenya and Rwanda** Offers bundled services to producers: inputs (high quality seed and fertiliser), financing, weekly farmer education, post-harvest and market support. By bundling they offer better value for their clients and improve the likelihood that producers will adopt new practices. Inputs are provided on credit, with flexible loan repayments. Farmers pay for the service via the loans they repay for inputs. These are expected to fully cover field expenses (i.e. extension) in the next five years, though the project currently relies on donor funding in part. Has an explicit aim to work with small and poor smallholders.
Preferential market access based upon service uptake Buyers buy only from farmers who use certain inputs and have followed certain trainings.	Buyers who have committed to buying from **Better Cotton Initiative, Rainforest Alliance, Utz Certified, Organic, Faitrade certified producers.** **India, Andhra Pradesh. Permits for sugar cane** In Andhra Pradesh private sugar processors issue 'permits' to selected cane growers a few weeks before harvest, rather than signing contracts pre-planting. These permits allow growers to deliver a certain amount of cane to the factory during a specified period of time. The buyer issues the permit based on quality of produce/implementation of good practice (as assessed in the field) and distance to the mill. This is a cheaper way for buyers to assess quality as fields are tested once, rather than testing each individual delivery to the factory gate. Farmers compete on implementing good practice to receive delivery permit and related higher price or market access (Patlolla, 2010).
Farmer payment for services: incremental reduction in subsidies and increased farmer contribution	Documented developing country examples are hard to find. However, some developed country examples exist. The **UK government's agricultural advisory service** was successfully privatised in 1997 (when it became The Agricultural Development and Advisory Service – ADAS) after a period of commercialisation which began in 1986, and which followed 40 years of free, nationwide services for farmers. ADAS began by providing a free service to farmers. It then recovered an increasing proportion of its costs from clients. It then became an agency outside of, but still answerable to, the Ministry of Agriculture, Fisheries, and Food. During the agency phase, ADAS had to meet performance targets which included increased rates of cost recovery; reduction in total cost per hour of service provided; milestones for research and development projects; and customer satisfaction as assessed through surveys (Rivera & Alex, 2004).

MECHANISMS	EXISTING EXAMPLES
Reductions in service prices for improved performance Lower interest rates for loans/machinery rental prices with better track record	Typical examples are the reduction in interest rate after the successful repayment of previous loans or deduction in input price after proof has been delivered that the previous ones have been well used.
Shared risks and benefits of service provider and recipient Service provider receives a margin on product sales, or farmer receives profit margin from service provider if it is also the buyer of a product.	**Kenyan Tea Development Agency (KTDA)** The role of KTDA is to collect, process and market tea. Equity in KTDA is owned by smallholder tea growers themselves. Tea factories are governed and managed by KTDA-elected officials. KTDA buys tea from smallholders for processing in its factories. Farmers deliver tea to KTDA buying centres where it is weighed, graded, and valued. A levy is applied by KTDA at point of processing which funds its extension services (and materials/inputs, etc.). The better the quality of services, the higher the quality of tea, which leads to increased revenues delivered to KTDA and farmers as KTDA's shareholders (in the form of bonuses).Incentives are in place to maximise effectiveness of service delivery. Costs and benefits of provision are shared.
Vouchers for service delivery Farmers who comply with certain conditions receive vouchers for inputs or training.	**Malawi Agricultural Input Supply Programme** The objective of this programme was to improve smallholder productivity and food and cash crop production, reduce food insecurity and hunger, and develop private sector input markets. The programme allocated 2 million seed and 3 million fertiliser coupons to targeted households – targeted on the basis of being 'able' but also lacking access to inputs. Subsidised fertiliser was distributed through both private and government channels. A number of private firms won the right to procure and distribute subsidised fertiliser through their networks. Farmers who received coupons could hand them in at participating retailers along with US$6.75 to redeem their fertiliser. Retailers would then submit the coupon and receipt to the government for payment. Research has found an increase in the uptake of practices that enhance innovations on smallholder farms and increase yields. The scheme also helped to establish input supply chains in rural areas that need a threshold market demand; incentivising private investors (agrodealers) to invest in these chains. Targeting of producers was a challenge, however (Ton *et al.*, 2013).
Services conditioned to group membership Participation in farmer groups as the main precondition to gain access to services, for example Farmer field Schools, learning groups or cooperatives. Services can be provided by the group or external service providers. Group membership may become dependent on performance. This requires a low entry barriers and progressively higher demands in performance.	**Better Cotton Initiative learning groups** Farmers who belong to BCI are organised into a learning group. Learning groups are the level at which farmers receive training or technical assistance is delivered by implementing partners (typically NGOs or private sector players) and the level at which farmers undertake self-assessment against the BCI standard (which is a step-wise certification scheme). Implementing partners themselves are trained by BCI on the principles, criteria, self-assessment, how to conduct credibility visits etc. Implementing partners also receive training from FAO, ILO, and Fair labour Association and other support from BCI. Certification licenses are owned at the learning group level (though believe they are now adapting this model). BCI members (e.g. retailers and manufacturers) partly pay for the capacity building through their licence fee on the volumes of BCI procured (BCI, 2015).

4. What sustainable options exist for financing service delivery?

Financial sustainability is a key challenge for effective delivery of services to sectors dominated by smallholders. Finding ways to build financial sustainability into delivery models is essential. Ideally, service delivery should be financed directly from *within* the sector itself to enable the transition towards a sustainable sector. Various options exist to finance service delivery in this way, these include:

Direct payment for services: this is usually not an option at the outset for transforming smallholder-dominated agricultural sectors towards sustainability, unless prices are very low. As farm quality improves, producers' purchasing power will increase and their capacity to pay will increase. This may therefore be a longer-term option.

Indirect payment through membership fees of producer organisations: this relies on producer organization, which, as described earlier, is limited in many countries. This means that coverage (and therefore accessibility) will remain limited.

Indirect payment via levies on produce processed or marketed, for example, by a sub-sector organisation or a private company.

Earmarked tax revenues raised from agricultural produce, *such as export taxes or trade taxes collected by a public body that can be earmarked for the financing of service delivery.*

Sector governance models described, if designed effectively, offer a structure for collection and governance of levies.

EXAMPLES

Kenya Tea Development Agency (KTDA) is a private company (formerly parastatal) owned exclusively by 150,000 smallholder shareholders. It runs a total of 63 tea processing factories, producing tea that is known for its high quality and that delivers a high share of value to producers. It is governed and managed by officials elected by KTDA's shareholders (i.e. its smallholders).

KTDA applies a levy on tea production at point of processing which funds services: planting materials, fertilisers and extension services, inspecting and collecting from buying centres, processing and marketing of tea.

KTDA's sector-wide coverage (i.e. of almost all smallholders in Kenya) and the size of its production and exports allows for cost-efficient collection of the levy.

A tax on coffee production is managed by the National Federation of Coffee Growers (FNC) in Colombia on behalf of the government. FNC is a non-profit national federation of coffee growers that has worked to raise the whole sector's economic and social performance. It represents the majority of the 560,000 coffee-growing families in the country. The tax is used to finance service delivery for its members.

Taxes and levies involve collective action by producers and processors, nearly always backed by legislation, to deduct a small amount of money at the point of production or export to fund collective goods, such as research and development, technical assistance, and market promotion. Spending of funds needs to be transparent. In addition, those responsible for the allocation and disbursement of funds need to be accountable to the producers and processors who have raised the funds (and are the intended beneficiaries) (Byerlee, 2011).

Levies and taxes are easiest to administer for a single commodity, but they can work in multi-commodity systems if designed appropriately. Levies are well suited to commercial export commodities because the produce passes through a small number of processing, marketing or export points allowing for easier collection of funds. This is much harder where processing occurs on a smaller scale, though an earmarked export tax could be applied instead. Levies work best where there are strong producer and/or industry associations in place to ensure an important or even controlling interest in the governance and accountability of the funds collected. That takes time and political effort, especially in deregulated economies.

In general, taxes and levies have been underexploited to date as a long-term sustainable financing mechanism for service delivery. However, a transition period with co-funding (as a subsidy or loan) may be required to get producers and the sector to a level where they could pay for service delivery directly. Some examples include:

Non-competitive funding of capacity building: The private sector, via non-competitive partnerships, can play an important role in financing large-scale service delivery in a transition phase. For example, the Better Cotton Fast Track Fund channels funds directly to farmer training and improvement programmes. Private partners (for example Ikea, adidas, Hennes & Mauritz and Marks and Spencer) invest money into the fund. These investments are matched by Rabobank, ICCO and IDH. In 2012 the Fast Track Fund supported over 30 capacity-building projects and reached nearly 250,000 farmers and farm workers in six cotton producing countries.

Social impact bonds (also referred to as development impact bonds): Social bonds are another financing mechanism that could offer potential for funding service delivery in the short term. Social impact bonds are also known as pay-for-performance contracts. ‘Outcome funders’ – typically governments and/or donors – agree to pay investors an agreed-upon financial return in exchange for achieving agreed-upon (metric-based) impact performance targets. Once the upfront capital is provided by investors, service providers (NGOs or other organisations) manage the delivery of the project(s). Once the desired outcomes have been reached, the ‘outcome funders’ repay the investors, plus a financial return. Contracts ensure that the bond only pays once the previously stipulated metrics have been achieved. Such contracts can also involve repayment in the form of a percentage of the savings that result from the sustainability improvements.

Case studies of impact bonds in the agricultural sector are not readily available. However, experts are currently exploring the viability of adapting the Social Impact Bond (SIB) concept for international development, Development Impact Bonds (DIBs). DIBs appear to have been first piloted in 2010 to reduce recidivism in the UK (Peterborough Prison Social Impact Bond).[6] It has since been adapted to reduce homelessness in the US and improve family planning in developing countries. Recently, the UK’s Department for International Development purchased Nigeria’s First Social Impact Bond known as the Rise Out of Poverty (ROPO) Bond, designed to provide working capital for smallholder farmers. Initial results are promising.[7]

5. Conclusions

A number of factors need to be borne in mind when designing an effective service sector. A service sector should be of high quality, have a clear vision around what is needed at the farm level to achieve farm quality in a comprehensive and consistent way, and be accessible. Farmers should be at the centre of considerations of design, implementation and evaluation – they are clients rather than beneficiaries. Over time, service delivery should exclude farmers who are not willing to give up worst practices and should be cost-efficient and affordable so that services can be financed directly from within the sector as a whole. Options for financing within a sector include taxes and levies administered by a sub-sector organisation, large producer group or sector governance model. In the short term, external financing may be needed to kick-start service delivery, such as via non-competitive funding or social impact bonds.

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Notes

1 Based on interviews carried out with stakeholders in the Ghanaian cotton sector.

2 For further information see: http://www.tatachemicals.com/services/tata_kisan_sansar.htm#.U0d6yV6qxms

3 For further information see: http://bettercotton.org/about-better-cotton/better-cotton-standard-system/capacity-building/

4 For further information see: http://www.kuapakokoo.com/newsdetails.cfm?news_id=95

5 For further information see: www.agriculture.gov.sk.ca/AGV_0907_13

6 For more information see http://international.cgdev.org/sites/default/files/investing-in-social-outcomes-development-impact-bonds.pdf

7 for more information see: http://www.doreopartners.com/press-release-dfid-purchases-nigerias-first-social-impact-bond

This paper explores what an effective service sector looks like; discusses the common approaches to service delivery and their effectiveness; the tools that can be used when designing service delivery to promote farm quality; and possible options for sustainable financing of service delivery in sectors dominated by unorganised small-scale farmers.

This research forms part of a project funded by the International Finance Corporation, the Dutch Ministry of Foreign Affairs, SECO and IDH the sustainable trade initiative in which Aidenvironment, NewForesight and IIED sought to develop a holistic transformation model to scale sustainability in smallholder dominated agricultural commodity sectors.

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