Brewing business models for smallholder tea certification

A quick scan of models in Sri Lanka, Indonesia and Kenya

By Bart Doorneweert and Yuca Waarts
Certification initiatives with smallholder tea producers are expanding worldwide. Despite this, little is known about the operational set-up of the business models that will be able to drive implementation and adoption in the long term without donor funding.

We have been fortunate to work closely with the Kenya Tea Development Agency (KTDA) to observe how it is developing innovative business models that will tackle these challenges. Together with KTDA and Rainforest Alliance, Lipton, Egerton University, Partner Africa, ETC East Africa, ETP and IDH, we designed the current KTDA business model and devised possible future business models.

We are grateful to the other pioneers who helped us to create an overview of several recent examples of business models applied in smallholder tea certification. In particular, we would like to thank Nelia Latief (ETP Indonesia), Geertje Otten (Solidaridad in the Netherlands), Stan Thekaekara (founder of Just Change India, and fellow of the Skoll World Forum) and Lee Byers (senior coffee & tea advisor, Fairtrade International).

We would also like to acknowledge the efforts of the Netherlands embassy in Kenya and IDH (the Sustainable Trade Initiative). Without their support, our search for scalable and repeatable business models that will enhance smallholder tea producer sustainability would be even more arduous.

This study compared several business models that have been implemented for smallholder tea certification in Sri Lanka, Indonesia and Kenya. The purpose of this comparison was to reflect on the business model innovation that is currently taking place within the Kenya Tea Development Agency.

The comparison showed that certification initiatives are pairing their training activities with training in productivity improvement. This is done in order to meet the quality specifications demanded by the market.

In line with this development, there is a growing awareness in all the cases we studied that training for both certification and production would benefit most from a structural knowledge transfer infrastructure like Farmer Field Schools (FFSs).

Both factors increase the demands on the business models that are aimed at creating self-sustaining systems. To achieve this, implementing agencies need to find ways of funding these activities with internal revenue or revenue from the market. None of the models we examined has found a way of generating this revenue.

The aim of the new KTDA business model is to integrate its certification programme with its FFS system. The key challenge KTDA faces is to develop marketing activities that will generate the required revenues to cover operational costs. This will create a sustainable economic basis for running and expanding the extension system over all 53 tea factories. With expansion of the extension system, KTDA also faces the challenge of warranting the quality of the knowledge it provides.

Thus far, KTDA is the only organization working on smallholder tea certification on such a large scale. It will therefore be very worthwhile to follow the developments in its business model innovation.
In this research, we studied the design of the business models that are used to organize smallholder certification programmes for sustainable tea. We selected examples from initiatives in such major tea producing countries as Indonesia and Sri Lanka. The purpose was to provide case material to reflect upon the certification initiative that has been deployed by KTDA. The research was requested by ETC East Africa and the Netherlands embassy, which have supported KTDA in developing its smallholder certification programme.

This study fits into a context where KTDA is seeking input on reconsidering the operation of its own business model. The objective of this redesign is to create a self-sustaining business model through internal revenue and/or revenue from the market. The aim of our study was to contribute to this design activity by providing a reflection on the state-of-the-art in other cases. In this way, reflection is provided on business models for certification and at what level KTDA’s intervention is new to the sector or not. Also, other certification efforts could learn from the cases presented through this quick-scan study when they build their own models.

Methodology

The business model represents the rationale by which an organization creates, distributes and captures value. In the case of product certification programmes for sustainability, the term value would refer to the curriculum and knowledge transfer practice that the programme offers to farmers, and to how certification practice would generate revenues to fund its costs in return for providing this value.

A business model captures all the elements of an organization’s activity system in order to describe how it creates, captures and delivers value. A business model is most comprehensively and concisely described according to the methodology provided by Osterwalder and Pigneur (2010), who posit that a business model, in its essence, consists of nine building blocks.

An overview of the business system is provided by describing each building block and how it relates to the eight other building blocks. This is done by using a 'canvas' approach, whereby all the interrelating building blocks are described in a single overview. The figure below shows what this blank canvas looks like.

In this study, we used the business model canvas (see figure) to look at how alternative certification models are designed. We did this by looking through the lens of the agency that initiated the certification programme, and we show how the agency reaches out to its target farmers (the customers), thereby explaining how the certification programme is organized.

We have colour coded the canvas to indicate which activities are provided by which actors. The initiators’ activities are coded with yellow notes.

Because we use the same business model canvas approach for all the relevant cases, we can compare the organizational alternatives between the cases.
To guide the enquiry we, formulated the following research questions:

1. What are the business models currently applied in smallholder tea certification programmes in Indonesia and Sri Lanka?  
2. What is the current business model of KTDA’s certification programme, and what innovations are foreseen to roll out this model throughout the KTDA system and make this model self-sustaining?  
3. What commonalities and differences can be observed in the implemented business models?

Approach

For the cases of Sri Lanka and Indonesia, we carried out semi-structured telephone interviews with key experts from the certification programmes. We supplemented this with desk research on project documentation.

For the case of KTDA in Kenya, we utilized the outputs from the business model generation workshop that was held in Nairobi (Kenya) on 3–4 May 2012. These outputs were generated by a wide stakeholder group that was involved in implementing the current KTDA business model. We thus obtained more detailed knowledge of this case than of the others. Nevertheless, there is enough substance to compare all cases on the basis of their operationalization of certification with smallholder tea producers.

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This section provides an overview of several business models for smallholder tea certification. We first comparatively describe the models that have been implemented in Sri Lanka, Indonesia and Kenya with the model implemented by KTDA. This provides a reflection on the current model that KTDA has implemented and sheds some light on the innovations it is considering for its current business model.

As KTDA is currently considering a redesign, we finalize the case presentations with a redesign of the KTDA model and a reflection on the specific innovation challenges for the present KTDA model.

This chapter starts with a discussion of the cases of Sri Lanka and Indonesia. We then present the case of KTDA in Kenya, treating both the model it has worked on in recent years, and one of the options for the future model it is considering for the next phase of its certification programme.
ISD-Solidaridad Sri Lanka

Key Partners:
- Factory
- Solidaridad

Key Activities:
- Organizing and giving trainings
- Creating linkages with buyers
- IDH
- Hardware (PPE)
- Infrastructure
- Training module for UTZ certification
- ICS
- Training module on GAP

Value Proposition:
- Improved productivity
- New market channel for sustainable tea (UTZ)

Customer Relationships:
- Factory quality control staff
- ISD staff and lead farmers

Channels:
- Lead Farmers trainings certification and ICS
- Trainings on GAP

Customer Segments:
- Smallholder tea producers (outgrowers)

Key Resources:
- ISD-Solidaridad Sri Lanka

Cost Structure:
- Trainings
- Compliance costs: - Auditing - PPE

Revenue Streams:
- Possible extra revenues through cert tea
Smallholder tea certification in Sri Lanka

Context
The tea industry in Sri Lanka is characterized by large fluctuations in the export market. The country is not well connected to the markets for sustainably produced tea. It exports the bulk of its tea output to the Middle East, which is a market that has less demands regarding sustainability. Over 370,000 smallholder growers are engaged in the Sri Lankan tea sector, accounting for about 75% of the country’s total output of tea (ISD, 2008). Much of the smallholder production is organized in outgrower schemes, whereby smallholders supply some of the tea that is processed on the estates.

Initiator of the certification programme
The Institute for Social Development (ISD), which is based Kandy, Sri Lanka (yellow notes on the canvas) launched the initiative together with Solidaridad and in cooperation with the Keppetipola Tea Shakti Factory, to certify a group of over 3,000 smallholder outgrower farmers to UTZ Certified standards. The aim of the project is to improve economic and environmental sustainability, and to reduce the price volatility for smallholder farms. This is done by certifying the smallholders’ tea and linking them to new markets for certified tea.

Key activities and partnerships
The ISD built a partnership with Solidaridad to certify and train tea producers. Auditing is done by the Sri Lanka Standards Institution (SLSI). Solidaridad provided much of the funding through the donor IDH for run-up investments, and contributed to the capacity-building programme for producers. It also initiated market linkages with buyers in the Netherlands.

What is offered to farmers and in which way?
In the pilot phase of the project, ISD was involved in providing training to farmers on GAP (good agricultural practice). Through donor funding, Solidaridad provided hardware (e.g. protective clothing) and improvements to the infrastructure related to production, such as adequate transport access. Both lead farmers and factory employees were given capacity-building training in the internal control system for certification, which will enable them to maintain production standards after the initiators of the project withdraw and leave it run on its own.

After the withdrawal of donor funding from the project in 2011, the auditing costs were left for the producers to cover. The assumption is that they will recoup these costs through the additional value they will capture in the market through being UTZ certified.

Challenges to the model
UTZ certification provides tea producers with backing on sustainability claims to the market. The issue in tea, however, is that UTZ certification is mainly recognized by consumers in the Netherlands. Compared to the UK, this is very small market. On top of that, the main markets for tea from Sri Lanka in the Middle East are satisfied with lower quality standards. Maintaining the market channel for UTZ certified produce under these circumstances will thus be a challenge to keeping this business model for UTZ certified tea running.
ETP-Rainforest Alliance Indonesia

Key Partners
- RFA
- Research Institute and NGO
- IDH
- Rabobank Foundation

Key Activities
- Organizing training
- Mobilizing tea packers
- Lobbying government for smallholders
- Training module

Key Resources
- Factory quality control staff
- Factory quality control staff
- Lead farmers

Value Proposition
- Prepare smallholders for certification

Customer Relationships
- Factory quality control staff
- Lead farmers

Customer Segments
- Smallholder tea producers

Key Partners
- Factory quality control staff

Key Activities
- Organizing training

Value Proposition
- Prepare smallholders for certification

Key Resources
- Factory quality control staff

Customer Relationships
- Factory quality control staff

Customer Segments
- Smallholder tea producers

Cost Structure
- Trainings
- Compensation of lead farmers
- Credit

Revenue Streams
- Possible extra revenues through improved quality
Smallholder tea certification in Indonesia

Context
Smallholder tea production in Indonesia coexists with larger plantations. Smallholders trade mainly as individuals through middlemen, who in turn trade with factories. There are also producer groups that spot trade with factories, but they are not formally organized. Quality is a major issue, due to varying plucking techniques. Indonesian exports represent only a small share of its total tea output. It is therefore proving difficult to introduce international certification standards.

Initiator for the certification programme
The mission of the Ethical Tea Partnership (ETP) (yellow notes on the canvas) is to work with tea producers and companies at each end of the supply chain to create a thriving tea industry that is socially just and environmentally sustainable. ETP works in partnership with the major sustainability standards: Fairtrade, Rainforest Alliance and UTZ Certified.

Key activities and partnerships
In Indonesia, ETP is working with Rainforest Alliance to develop smallholder tea production. They made a start on preparing farmers to be certified, using a method to adapt and specify generic sustainability indicators to the local context. The implementing partners of the training programme are YPLK3 (which works with farmers on a daily basis) and the Gambung Research Institute of Tea and Chinchona (which is working on increasing productivity).

To address the challenge of limited exports, ETP is partnering with local factories that supply ETP members on improving productivity. By starting with building these relationships, sustainability standards can be more readily applied. At the same time, ETP is mobilizing the interest of foreign buyers in sustainable tea from Indonesia. The project is funded by IDH (which provides grants for running the training programme) and Rabobank Foundation (which provides farmers with soft loans to purchase inputs).

What is offered to farmers and in which way?
Because there is not yet a market for certified tea, farmers are offered the opportunity to prepare their farms and producer groups for certification by training them in the internal control systems (ICS) that are required for certification. This is coupled with training to achieve improvements in productivity.

Farmers are attracted to the programme by lead farmers who ensure that they maintain their knowledge by, for example, using demonstration plots. Factory quality control staff are also active in mobilizing farmers for the programme. About 1,000 farmers are currently part of the programme.

Challenges to the model
The main challenge to the certification process is that the farmers are not integrated into the supply chain, as they do not own any processing facilities, which makes developing a market outlet for sustainable tea a challenge. As such, there is currently no ownership of tea certification and no market momentum to cover the costs of certification.
KTDA Factory FFS-RA Current Business Model

**Key Partners**
- NL Embassy
- IDH
- Wageningen UR
- Egerton
- Rainforest Alliance/Partner Africa
- ETC
- Unilever
- ETP

**Key Activities**
- Training
- Marketing FFS/RA
- M&E

**Key Resources**
- Human Resources TESA/Lead Farmers
- Training Materials

**Value Proposition**
- Production knowledge + skills
- Enhanced farm sustainability

**Customer Relationships**
- Acquire: Motivational Equipment - LCC Interactions
- Activate: FFS - Exposure visits - AGM

**Channels**
- FFS
- Lead Farmers
- KTDA Smallholder tea producers

**Customer Segments**

**Cost Structure**
- Training cost FFS
- Certification Costs: compliance - lead farmers
- M&E
- Marketing cost

**Revenue Streams**
- Increased productivity + quality + overall consistency
- Enhanced sustainability
Smallholder tea certification in Kenya

Context

Kenya Tea Development Agency Limited (KTDA) is a private company, and one of the world’s largest private tea management agencies. It currently manages 54 factory companies in Kenya’s small-scale tea sub-sector, processing tea from 560,000 tea farmers. It supplies the world’s major tea packers.

KTDA started as a parastatal organization in the 1960s. Through privatization in 2000, smallholder tea producers have become the owners of the tea factories. The factories are the shareholders of KTDA.

Initiator for the certification programme

KTDA is a supplier for Unilever’s Lipton tea brand. KTDA, together with the factories, has joined forces with Lipton to realize the latter’s ambition to have all 54 factory companies fully Rainforest Alliance (RA) certified in 2013. Although Unilever is the initial partner of the programme, KTDA aims to provide certified tea to all its client packers in the long run.

Key activities and partnerships

To operate the initial model, KTDA employed a host of partners ranging from implementation partners – like ETC East Africa, Rainforest Alliance and Partner Africa, which provide train-the-trainers programmes for KTDA field staff (Technical Extension Service Agent) and lead farmers, to research institutes for monitoring and evaluation purposes (Wageningen UR and Egerton University). The programme works with various donor organizations, amongst which the Netherlands embassy in Nairobi (which funds the development of the FFS system) and IDH (which finds the training programmes for certification).

What is offered to farmers and in which way?

Building capacities to increase knowledge and skills in farming practices is central to the value proposition that KTDA offers to smallholder tea producers. This is offered through two channels: the FFSs (training in tea production and other topics) and a lead farmer system (training in RA certification).

Farmers are attracted to the programme through regular interaction at leaf collection centres (LCCs) and annual general meetings. The FFSs and lead farmers are also involved in maintaining and promoting knowledge of production and certification. The content and method of knowledge dissemination has proven to be very effective, and is showing promising results in the sustainability of the production system.

Challenges to the model

FFS and certification training programmes are provided through separate channels. This creates a situation whereby activities are partly duplicated. Through learning about its model, KTDA has concluded that the certification training will become more effective if it is backed by continuous learning through the FFSs.

There are currently just over 500 farmer field schools where certification training was not part of the curriculum, but could technically be included in a modular way. However, another 3,400 FFSs are needed to scale-up this combined model in order to cover the entire KTDA system. Upscaling the FFS whilst maintaining the quality of knowledge and skill transfer is still a major challenge to achieving a higher level of sustainability in the combined extension system.

Another key challenge to the model is to create a system that can sustain itself financially. ETP and Unilever currently guarantee demand for certified tea. But the main question (which is yet to be answered) is whether the realized productivity and quality improvement will deliver enough indirect revenues for KTDA factories to fund the FFS activities and RA certification costs.
### KTDA Factory FFS-RA New Business Model

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<tr>
<th>Key Partners</th>
<th>Key Activities</th>
<th>Value Proposition</th>
<th>Customer Relationships</th>
<th>Customer Segments</th>
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<tbody>
<tr>
<td>KTDA coordinates need-based involvement 3rd parties</td>
<td>Training</td>
<td>Production knowledge + skills</td>
<td>Acquire: - Motivational Equipment - LCC Interactions</td>
<td>KTDA Smallholder tea producers</td>
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<tr>
<td>Donors</td>
<td>Marketing FFS</td>
<td>Enhanced farm sustainability</td>
<td>Activate - FFS - Exposure visits - AGM</td>
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<tr>
<td>NGO</td>
<td>M&amp;E</td>
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<td>Grow: Mass-Media</td>
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<tr>
<td>Research</td>
<td>Training materials</td>
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#### KTDA Smallholder tea producers

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<tr>
<th>Key Resources</th>
<th>Channels</th>
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<tr>
<td>Human Resources TESA/FFS</td>
<td>Lead-farmer or TESA-led FFS</td>
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<td>IMS</td>
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<td>Training materials</td>
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### Cost Structure

- M&E
  - Marketing costs - FFS - Tea
  - Training Costs
  - Certification Costs: - compliance (PPE audit, lead farmers) - lead farmers

### Revenue Streams

- Increased productivity + quality + overall consistency
- Sustainability fee
- Enhanced sustainability
Business model innovation in the KTDA model

Based on what it has learnt from the current business model for the FFS–RA programme, KTDA is currently considering several changes to address the issues of self-sustainability. These projected changes to the current business model are marked in grey with an extra frame around the stickie note in the above new business model for KTDA.

One of the key business model innovations that KTDA would like to introduce is the integration of the certification training activities into the FFS system, thereby creating a single channel through which farmers are serviced. This would strengthen the continuity of knowledge dissemination and RA certification.

KTDA also plans to adapt its marketing activities in order to obtain a premium for its certified tea in the market. This premium is intended to cover part of the costs that are associated with providing the FFS knowledge infrastructure (including RA certification costs). This will be an essential transformation from the current donor-funded model.

Another significant transformation is that KTDA intends to limit its dependence on support from partners. The number of key partners and their roles will be limited in the new model it intends to implement. The idea is that KTDA will more efficiently coordinate required input from the outside, thereby in the end improving the effectiveness of its contribution to developing the self-sustaining FFS-RA business model.

A final innovation KTDA is thinking of, is to increase the outreach of the FFS system through mass media coverage. This could help both to strengthen transferred knowledge to existing FFS farmers and RA certified farmers, and to attract the interest of new farmers or groups of farmers.

Innovation challenges for the coming time

It is not yet known whether the market will reward certified RA tea with a premium. First, an estimate needs to be made of the costs of running both the FFS system and the RA certification programme.

Part of that estimate also requires considering how to operationalize the new FFS system, which will be rolled out over all 54 KTDA factory companies. Quality and continuity of knowledge transfer will be key. KTDA is currently considering a hybrid model. The idea is to employ graduates of the FFS for the lead farmer function in certification, by providing them with certification training. These graduates can then perform a dual function for FFS and certification training, where KTDA's own field staff (TESA's) can provide quality control and support. KTDA will employ its own field staff (TESAs) in support to provide the quality foundation for FFSs (e.g. conducting quality control and maintaining the knowledge level of FFS facilitators). It still remains to be seen through trials, what form will provide the most effective quality backing in the most cost-efficient way.

These two variables (market revenue, and set-up of the FFS system) form the bottom line of the cost/benefit equation, which will determine whether and, if so, in what form the model will be rolled out over the KTDA system.
All models described in this study were implemented with the aim of certifying the tea that is produced by smallholder producers. KTDA is by far the largest in terms of the scale of its operations and the implementation of its smallholder certification programme. Because KTDA is essentially an integrated smallholder-owned production and marketing organization, it is different from the cases in other countries.

A common observation is that in all cases training activities to prepare for certification are combined with training activities that are directed at improving productivity (e.g. implementing good agricultural practices). This is done because production training can contribute to realizing basic results, such as productivity and quality increase, which are important for both the farmer and the market. Certification alone focuses on sustainability issues, which might have some overlap with productivity issues but does not cover the breadth of the required integrated approach to productivity and quality improvement. There is also an awareness in all cases that farmers and extension trainers need to be exposed to continuous knowledge transfer in order to maintain their knowledge quality and skill levels, and to increase the depth of the knowledge they provide. Certification initiatives supported through FFS systems could provide a natural complement to achieve this if FFS systems with long-term future prospects are already available.

A second common observation is that all cases were initiated on the assumption that certification will generate additional indirect revenues for the implementing agency to recover the costs of running the certification programme. In all cases, this assumption is yet to be supported. The fact that there is a requirement to recover not only certification costs but also the expenditure on additional knowledge infrastructure, imposes an extra demand for business model innovation to integrate certification and extension systems into a single viable model.

Creating additional revenues for certified tea will thus be key to creating a self-sustaining integrated business model for smallholder tea certification programmes and extension. There are initial indications from the KTDA case that extra revenue can be generated through production improvement. However, this is unlikely to be sufficient. Therefore, initiators of certification programmes will also need to put considerable effort into market development to generate additional revenue from the market for certified tea. This too will be a challenge, because the market for certified produce is relatively small. This market is also fragmented, with various certification schemes competing in the same limited market segment.

In all, none of the certification programmes in this study has developed business models that are self-sustaining. Each model is still dependant on outside funding for operationalization. It is therefore recommended to expand on this study and explore whether there are other models that have managed to become self-sustaining.
Comparative insights need not come only from smallholder certification in tea. There are other sectors where certification initiatives have been deployed with smallholder farmers. Expanding the scope to these sectors could lead to significant insights into self-sustaining models.

Further study into business models would best be achieved through a participatory modelling exercise as done with KTDA and its partners. This enables clear definition and joint stakeholder learning. Conducting such a study would promote the dissemination of innovative solutions, which could contribute to lifting the tea industry to a higher level of sustainability, with positive results for both the smallholder farmers and companies involved throughout the value chain.

References
