Affordable field data collection & data management solution for certified farmer organisations:

benefits and caveats

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Agenda

- Background on agricultural sustainability standards/certification
- Farmer organisations (FBOs) and innovation
- Effort vs. impact
- AuditAide data solution for farmer-based organisations
- Current and future customers
- Case study
- Q&A
Agricultural sustainability standards

What are sustainability standards?
“Sustainability standards and certifications are voluntary, usually third party-assessed, norms and standards relating to environmental, social, ethical and food safety issues, adopted by companies to demonstrate the performance of their organizations or products in specific areas.” Wikipedia website

Some common topics for agricultural sustainability standards:
- Record keeping
- Planting materials
- Good agricultural practices (GAP)
- Crop diseases and inputs
- Environmental protection
- Waste management
- Climate change
Agricultural sustainability standards (2)

Some examples....

- Fairtrade International
- Rainforest Alliance
- UTZ Certified
- Round Table of Sustainable Palm Oil (RSPO)
- Forest Stewardship Council (FSC)
- Bonsucro
- Organic standards
- And..
More than a decade ago, standards and certification was a new panacea to tackle unacceptable practices in agricultural supply chains. Where embraced by large MNC because they could ‘demonstrate’ that they were working towards better conditions in supply chains, even where they had little influence.

But what about the facts? Baselines? Impact?

What about data?
Effort vs. impact?

Since the beginning of this millennium, most contemporary sustainability standards have been set up:

- training of farmers on standards criteria,
- set up traceability systems,
- internal inspections of farms
- and many other efforts.

Also, a lot of funding has been allocated to these certification initiatives.

What has been the impact?
In the meantime......

- FBOs that started with certification had to comply with a set of high requirements, especially regarding documentation and assessment of farmers and farms
- For larger/expanding FBOs this required professionalization > adoption of IT tools or the need for adoption
- A necessity if they wanted to sell their produce with a premium
- And credibility towards donors/funders
What are their main challenges in adoption of ICT?

- No money to invest in IT tools
- Not seeing to need to invest in IT
- Lack of knowledge about IT in general
- No in-house expertise to work with data and no ‘data strategy’
Farmer groups and innovation (3)

- In 2013, Western region of Ghana > consultancy work at a cocoa farmers association to assist with the assessment of internal inspection forms
- The approval committee had to assess 20,000 6 page internal inspection form, and approve or sanction farmers in the program.
- Workload too high and remaining data ended up in boxes

That was when the idea of the AuditAide software was born.
AuditAide data solution for farmer-based organisations
Current customers

- Currently 4 FBO’s are using the AuditAide solution in Ghana and Cote d’Ivoire
- Comprising 25,660 farmers’ farms
- This year three new FBO’s will be added with additional 10,000 farms
- Customers are: farmer cooperatives, farmer associations and NGOs
What is AuditAide?

AuditAide is an affordable and practical data collection and data management solution specifically designed for certified farmer organisations.

Main focus areas:
- Efficient and reliable field data collection, not only for internal inspections but for many other internal processes
- Automated assessment of internal inspection forms (incl. feedback to farmers)
- Data analysis of member-, inspection- and other field data
- Data management of all member- and farm data
AuditAide components (1)

**Data collection tools**
- Scanner/forms
- Mobile app

**Data processing & assessment software**
- Data processing & analysis
- Assessment of inspection forms

**Data management software**
- To manage farmer and field data
- To get information out of valuable data

**Consultancies**
- Support & training (see next slide)

* FBO chooses the components that are needed
Data collection tools: Scantron data capture solution

Need to automate the processing of forms but no budget for mobile devices?

We deploy data capture solutions from Scantron US, including Optical Mark Recognition (OMR) and Intelligent Character Recognition (ICR) technologies.
POIMAPPER

Mobile field data collection: access to your data anytime, anywhere

Sharing field data
Poimapper field data collection tool

- Field data collection tool suitable for working in remote areas,
- App for smartphone (Android/iOS) and for feature phones,
- Broad range of question types possible in the ‘form builder’
- All data geo-tagged (what, where, when, who)
- Tailored subscription plans
- Data safe on a highly-secured server or local installation
- Good and dedicated support software development team
- Plan activities for field staff (scheduler).
AuditAide data processing & assessment software

- Data import/export functionalities
- Data processing module
- Scoring and sanctioning module (incl. feedback to farmers)
- Reporting module (incl. specific reports for certification)
- (Farmer) database with basic farmer data and document file upload,
AuditAide ‘roadmap’

- Intelligent inspection & monitoring forms
- Training on standards and data collection
- Scoring system & feedback to farmers
- Field data collection
- Data analysis and action plan improvement
- Development of training materials
- Determination of data strategy
AuditAide: areas for application

- Internal inspections
- Baseline studies
- Monitoring and evaluations
- Training attendance registration
- Farmer registrations and contract management
- Field monitoring
- Registration of input applications and trainings
- Social surveys
- Data management (incl. farm maps)
Data Management System for farmer organisations
Data Management System for farmer organisations

- Initial development funded
- Open-source software (Drupal)
- Flexible and customized to users’ requirements
- Very user-friendly
- Open to global standards (e.g. Open Data)
Functionalities data management system

- Member database for managing member and farm data
- Data import and export module
- Dashboard e.g. with status of indicators and other relevant data, in real-time
- Filters (predefined)
- Reporting module with variety of graphs and tables
- Project information
- and..........
What makes AuditAide unique?

- Reliable, of high quality solution which is affordable
- All components require a low IT-capacity within the organisation
- Bottom-up approach, strengthening capacity of farmer groups
- Use paper forms, a mobile data collection or a combination of both
- The AuditAide ‘roadmap’ assists with setting up or improving internal control systems of certification programs
- A tool that can fit into the organisation processes and local circumstances instead of determining them
Case study

- A large chocolate manufacturer from The Netherlands, with support of the Dutch national lottery, has funded the implementation of an automated data collection and data management system for their partner cooperatives in Ghana & Côte d’Ivoire (3,000 farmers, 11,000 after 2 yrs)

- Need for data for to demonstrate the chocolate the sell is produced under acceptable conditions

- How: AuditAide solution with mobile devices/app to collect and existing MIS of the cooperatives

- Use: collecting of sales data, registrations, internal inspections, impact assessment, data management in IMS of customer and cooperatives
Case study (2) - challenges

- Field staff needed re-training on use of mobile device
- Charging of devices
- Low internal capacity devices
- Very difficult to come with one data strategy for three separate FBOs in two different countries
- Sharing of data
- Tracking of field staff
- Process of achieving a self-sustaining data collection system and internal management system
QUESTIONS ?
Thank you for your attention!