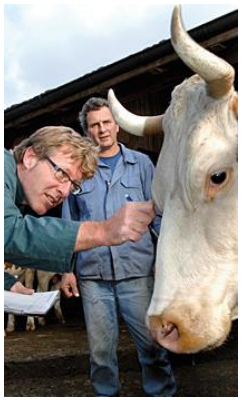
FiBL
EXCELLENCE FOR SUSTAINABILITY

Research Institute of Organic Agriculture
Forschungsinstitut für biologischen Landbau








SMART and GI sustainability assessment

Jan Landert (jan.landert@fibl.org)

4th of May 2017, Geneva

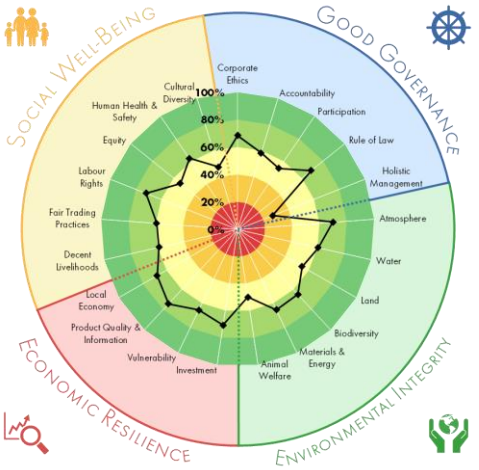
smart
sustainability monitoring and assessment routine

Outline

- The basics about SMART
- How SMART works
- SMART applications
- Possible options for GI sustainability assessments

Key Points

Measuring and comparing sustainability performances in the agricultural and food sector.



SAFA
SUSTAINABILITY ASSESSMENT OF FOOD AND AGRICULTURE SYSTEMS

Food and Agriculture Organization of the United Nations

Based on the UN-FAO SAFA guidelines: operationalization of the SAFA subthemes

Background

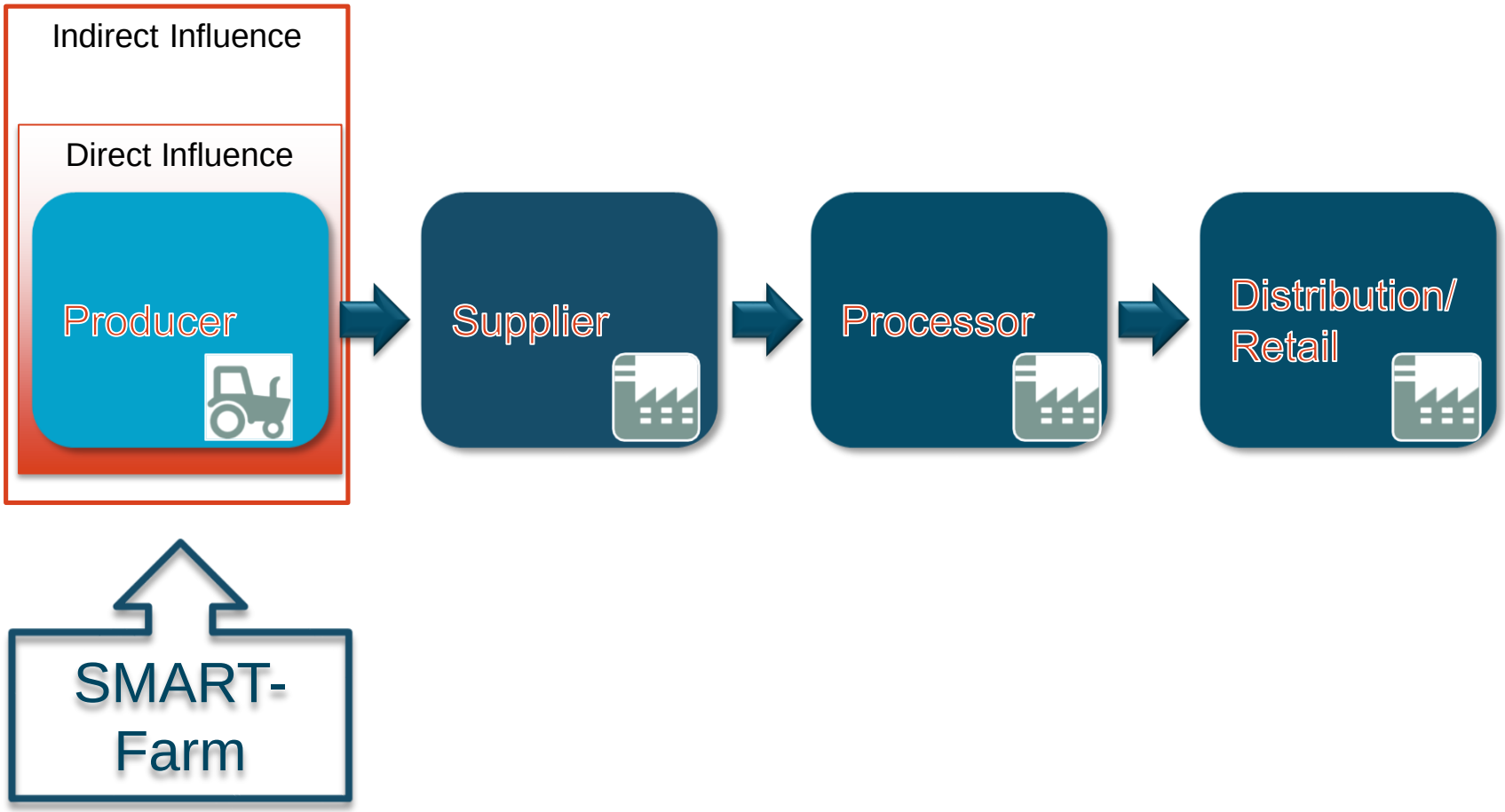
Research Institute for Organic Agric. (FiBL)

- Development of SMART
- Research projects with SMART
- 140 staff (6-8 staff + 3-5 PhDs permanently working on SMART)

Sustainable Food Systems GmbH (SFS)

- Founded in 2013 as a FiBL Spin-Off
- Owner of the SMART method and tools
- SMART as a service to companies, associations, NGO, etc.
- 2 staff + FiBL staff + external experts

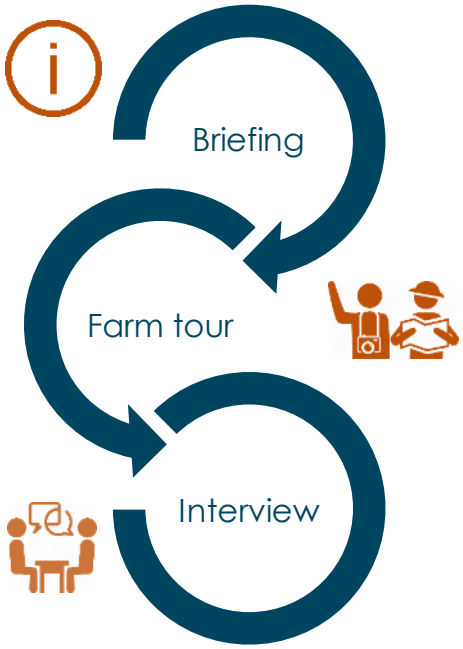
SMART-Farm Tool

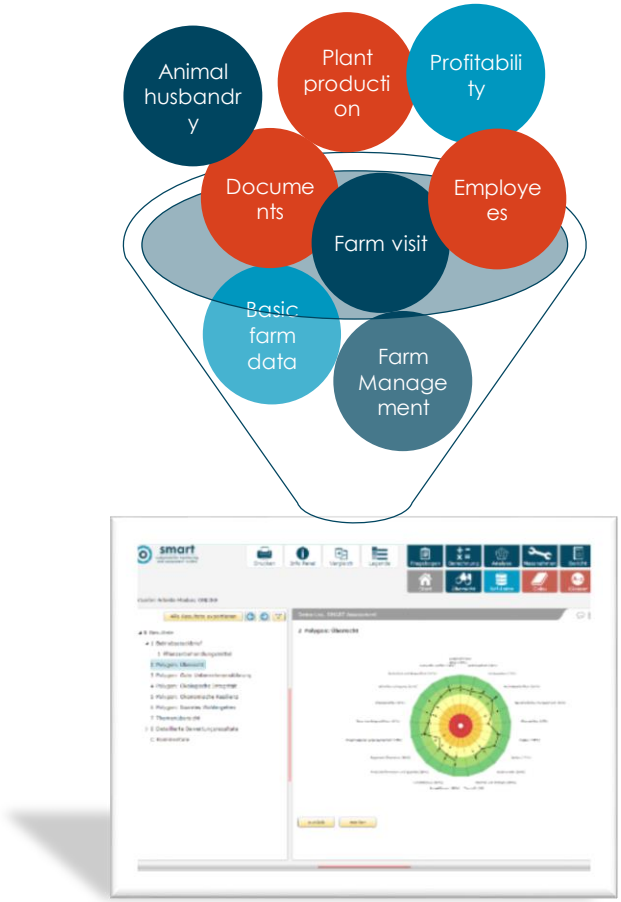


SMART Farm-Tool: how it works

- Method
  - Multi-criteria assessment approach with 300+ indicators in total
  - Adaptation indicator set to different conditions:
    - Farm size (smallholder, medium size farm, large farm)
    - Agricultural activities (beef, bananas etc.)
    - Regions (humid, temperate, arid/semi-arid)
    - Countries or development state
  - Auto-rating indicators based on existing certifications/labels (organic, GLOBALG.A.P., Fairtrade)
  - Report with results for each farmer is automatically generated.

SMART Farm-Tool: assessment process





1. Farm visit
(approx. 3h)

2. Data analysis
(www.smart-farmtool.com)

3. SMART report
(automatically generated)

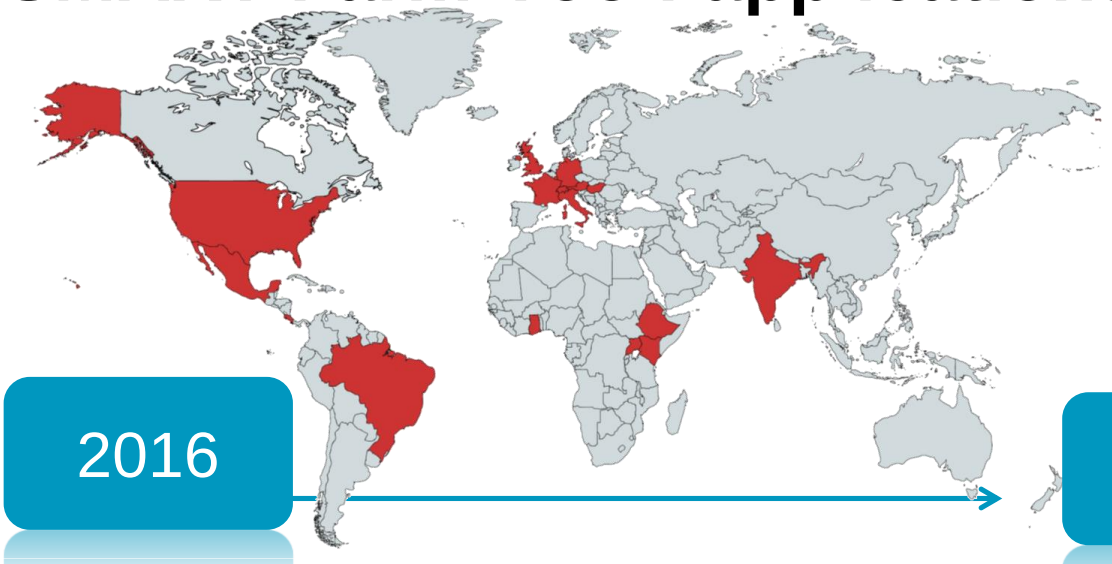
SMART Farm-Tool: advantages

- SMART is globally applicable and produces comparable results.
- SMART is very efficient and pragmatic in its application and does not rely on excessive collection of quantitative data.
- SMART has an independent scientific background and is fully consistent with the SAFA Guidelines

SMART Farm-Tool: use cases

- Project specific sustainability assessments of farms
  - Comparing & benchmarking of different production systems
  - Research and development projects, etc.
- Supply chain management
  - Risk assessments, hot spot analysis, supplier monitoring
  - Retail, Whole Sale, Processors, etc.
- Development & refining of labels and standards
  - Basis for direct payment systems
  - NGOs, public institutions, etc.

SMART Farm-Tool: applications



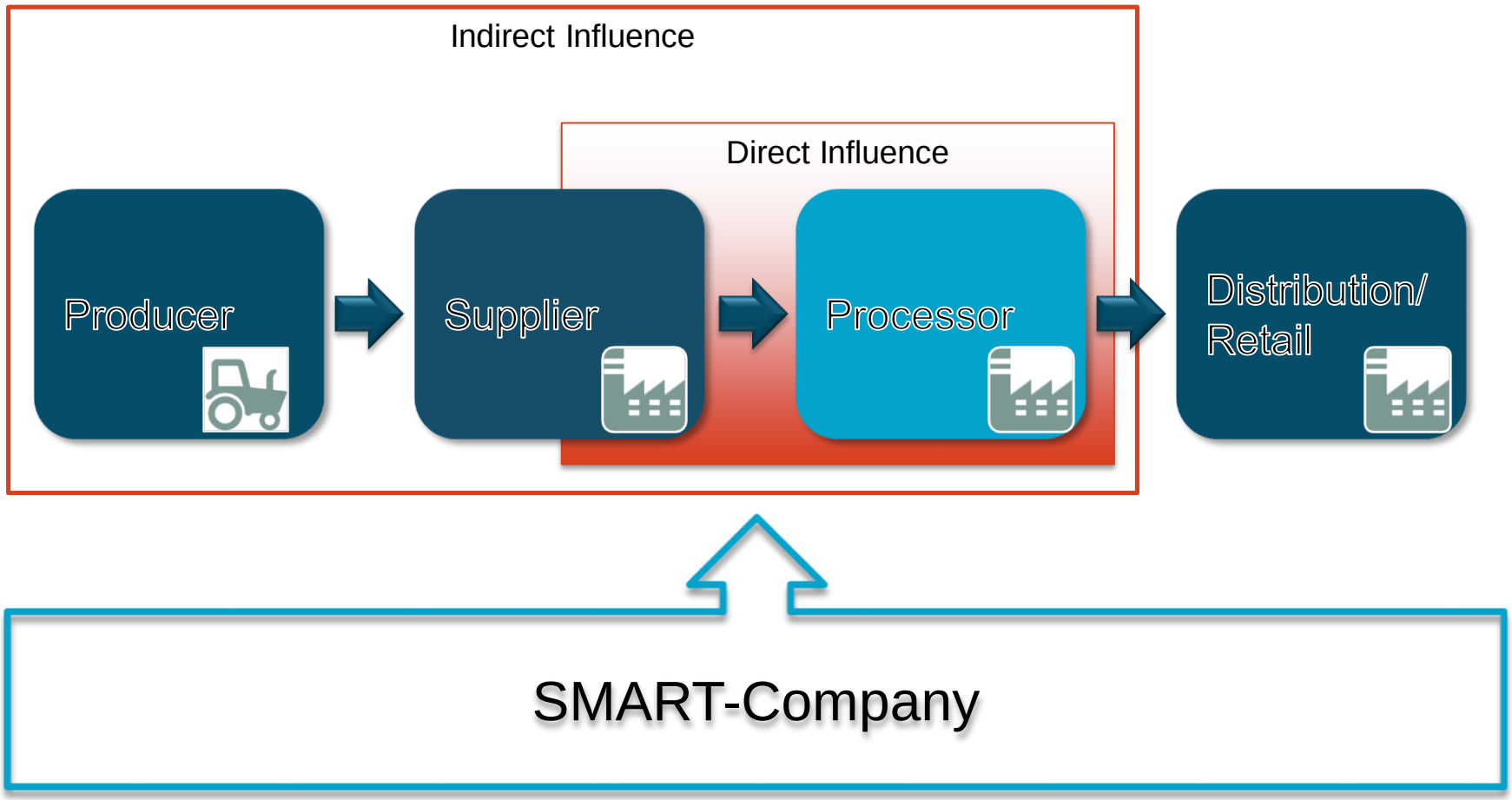
2016

2017

- 1‘200 farms assessed
  - CH: 110
  - Uganda: 360 (Phd)
  - Kenia: 500 (Phd)
  - etc.
- Release SMART Farm 4.0
  - New software
  - SMART trainings for external users
  - Development of license-scheme
- 6 PhDs / 2 scientific publications
- Projects with retailers (DE, AT, CH)

- 3‘000 farms assessed
- Projects
  - Coop/Halba (CH): 100 cocoa producers (Ecuador)
  - Bio Suisse (CH): 200 farms
  - Hofer (AT): 500 farms
  - etc.
- Public sector
  - Swiss federal office for agriculture (FOAG) evaluating SMART for direct payment schemes
- Aligning SMART with SDGs

SMART-Company Tool



SMART-Company Tool: use cases

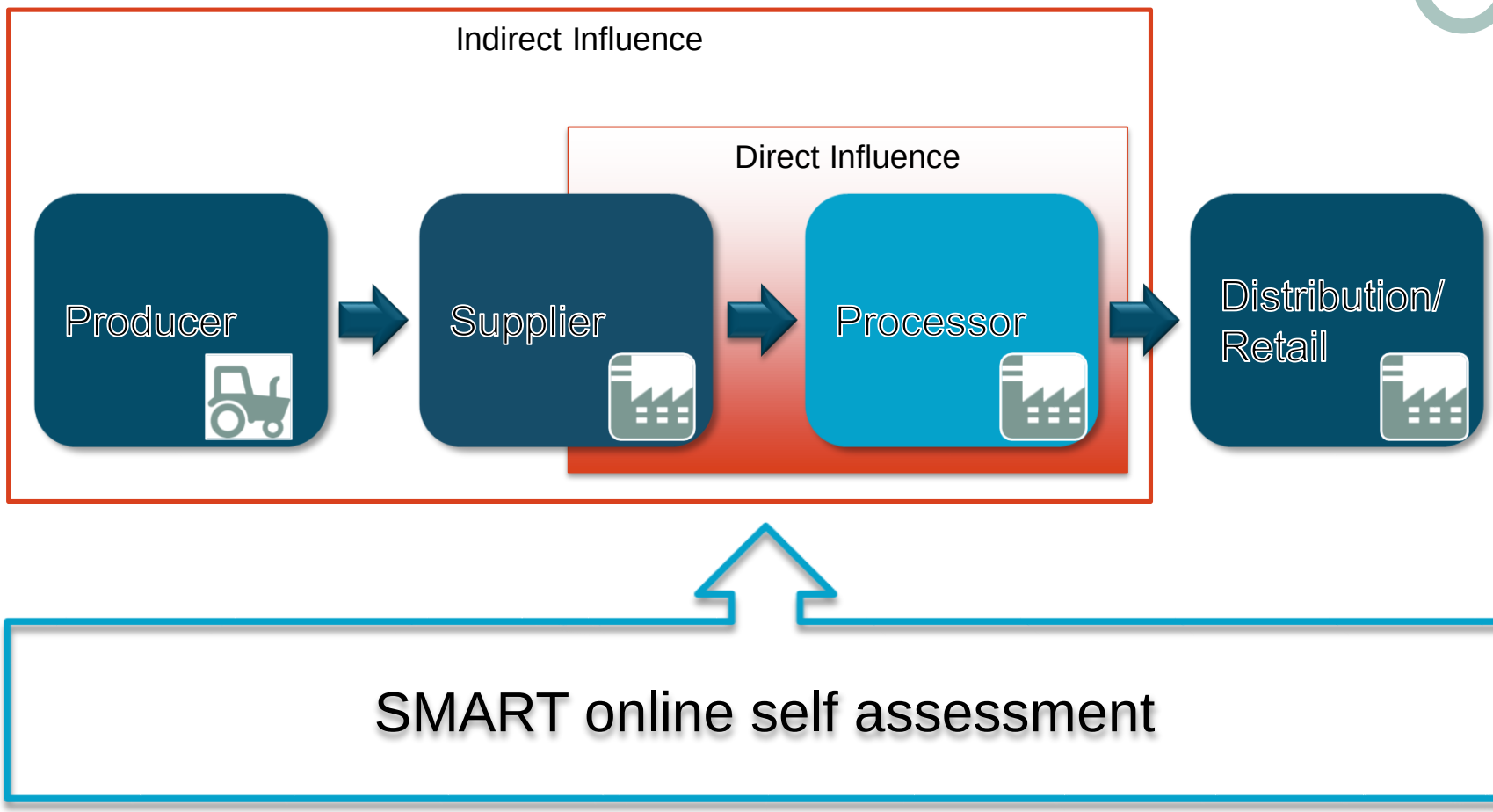
- Professional Sustainability Management
  - Risk assessment and sustainability hotspot analysis within the company and along value chains
  - Retail, Whole Sale, Processors, etc.
- Reporting & Communication
  - Transparent & credible sustainability communication
- Impact Monitoring
  - Measure progress

SMART Company-Tool: applications

- 6 projects:
  - E.g.: CH: Bio Partner Schweiz AG (wholesaler)
- Online self-check for companies

- Building a global reference database for raw materials
- Developing a B2C communication
- Strategic refining of assessment method

SMART Online Self Assessment

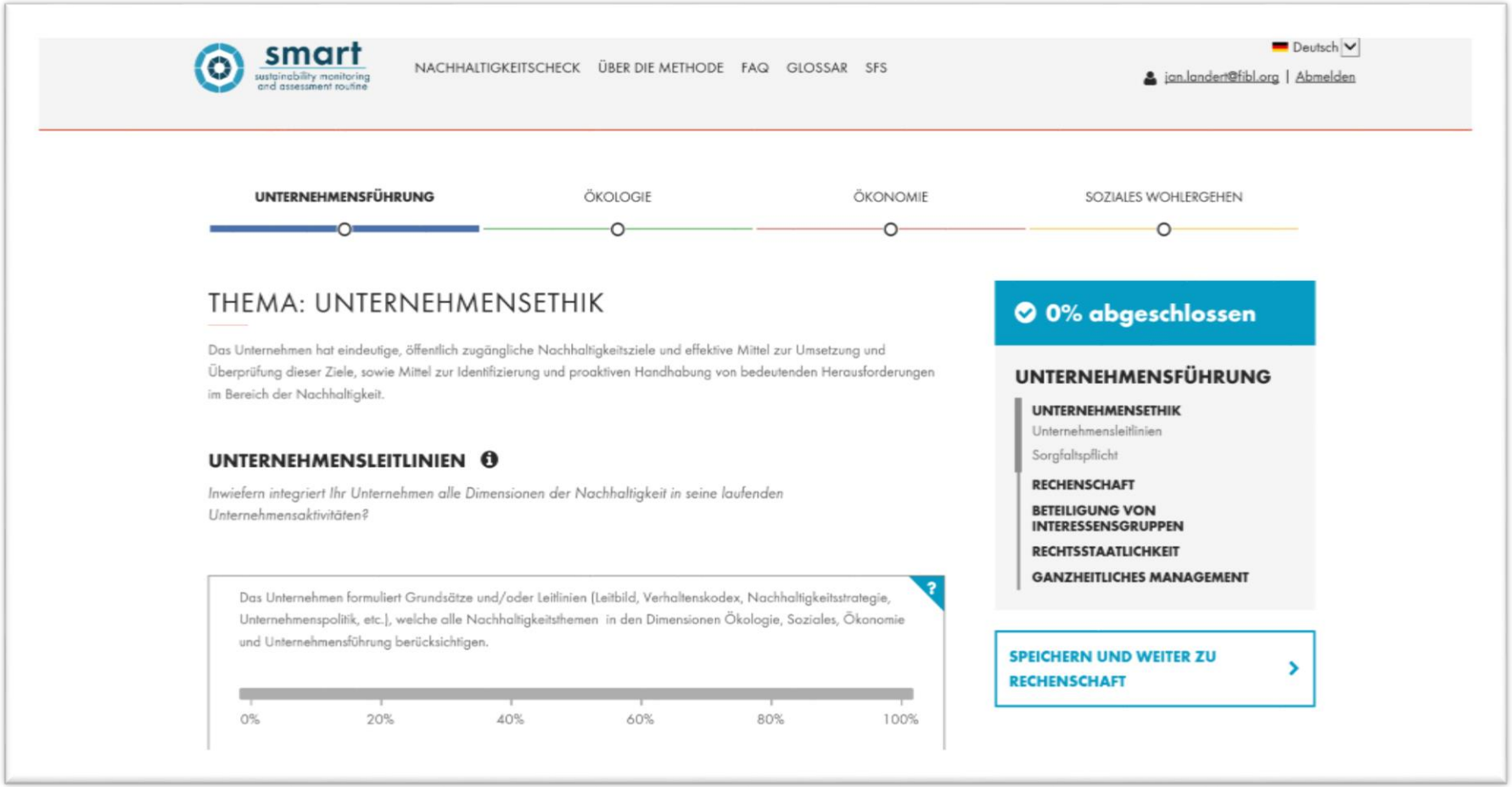


SMART Online Self Assessment: use cases and applications

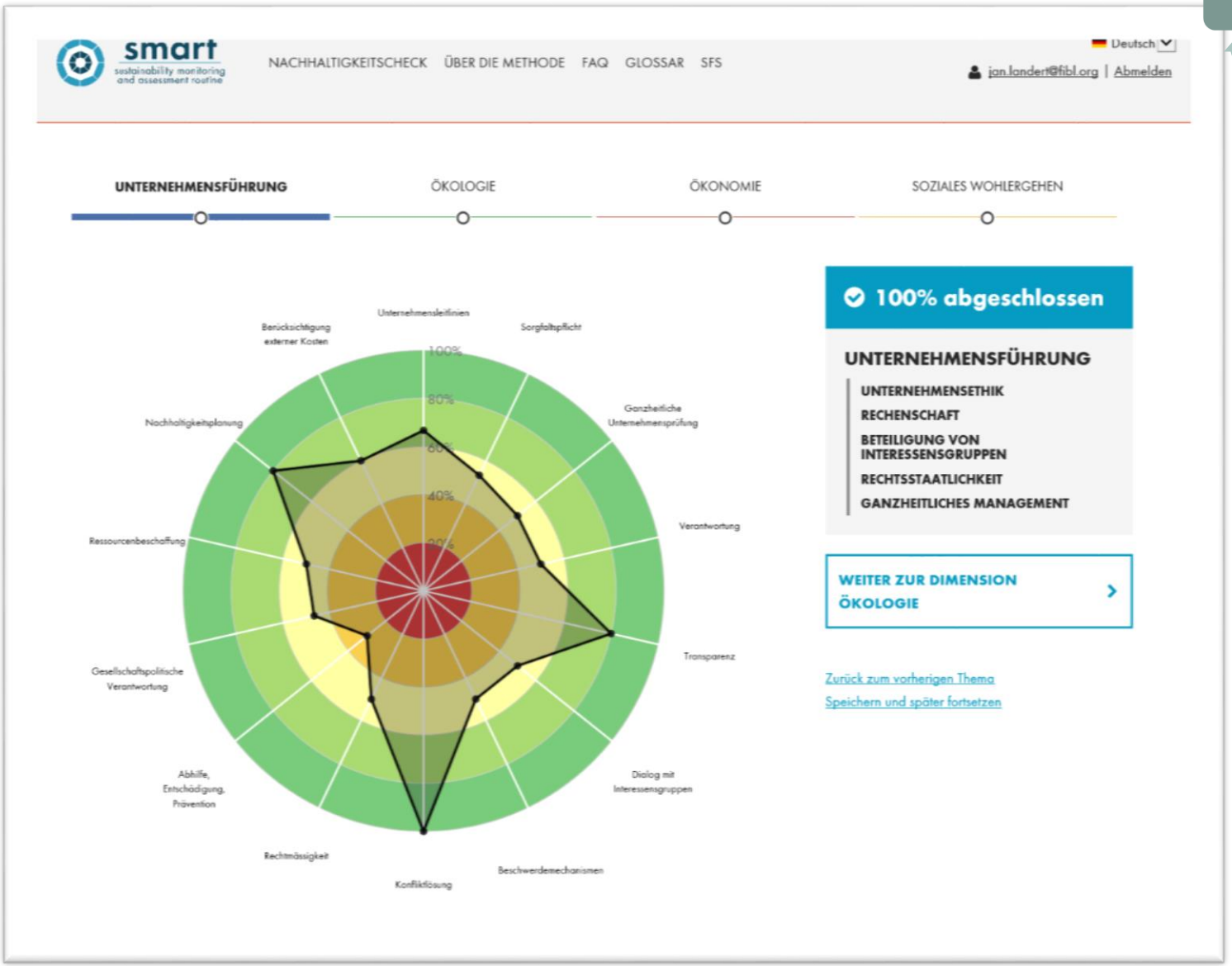
- Internal improvement (first step)
  - First analysis of sustainability hotspots within the company
  - Retail, Whole Sale, Processors, etc.

- 2017: Bio Suisse-requirement
  - Bio Suisse- licensed processors in Switzerland are required to self assess their sustainability every two years.

SMART Online Self Assessment



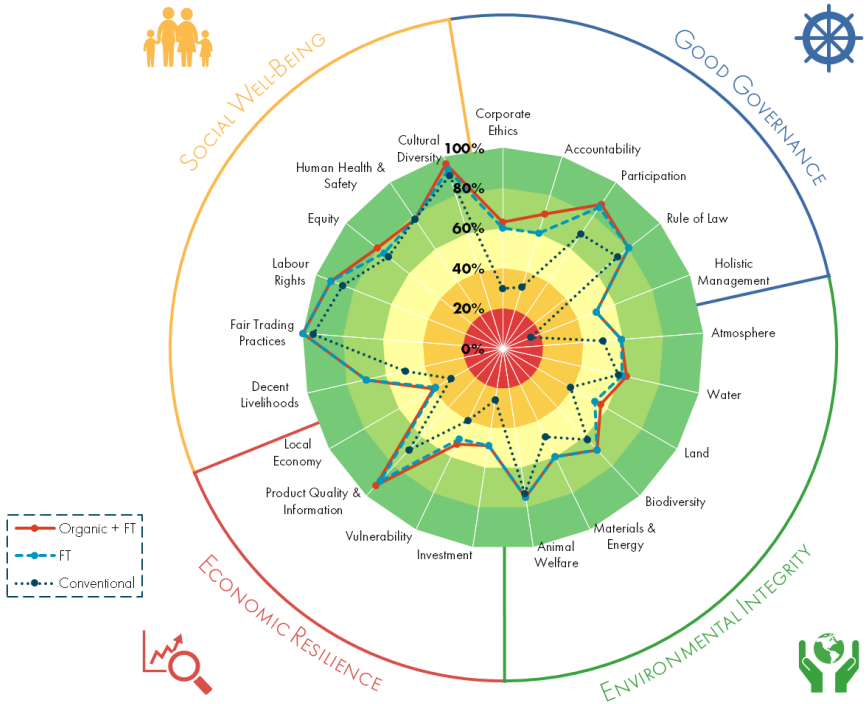
SMART Online Self Assessment



SMART applications, case 1: standard development in Austria

- In 2014, 11 ornamental plant-producing companies in Austria were assessed using SMART
- Participatory development of a standard based on the SMART results and the revealed sustainability hot-spots
- Implementation of 3rd party-auditing
- Standard is being revised all three years.

SMART applications, case 2: comparison of coffee production systems in Uganda



- Product: Arabica Coffee
- Location: Western Uganda
- Date: Q3 2015
- # farms: 180
- Production Systems:
  - Conventional (60 farms)
  - Fair Trade (60 farms)
  - Fair Trade Organic (60 farms)

Results:

- Significant differences:

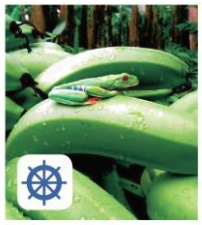
Fair Trade Organic > Fair Trade > Conv.

SMART applications, case 3: internal improvement on a banana plantation in Costa Rica

➢Aim:
Analyse the current state of sustainability

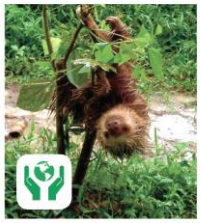
➢Method:
SMART assessment of the banana plantation

➢Results:
Implementation of improvements with regard to social and environmental conditions on the plantation.


Integrate true cost accounting


Empowerment of workers' council


Residue and wildlife monitoring in rivers


Release of sloths into forests

SMART application, case 4: assessment of a SME bakery in Switzerland

➢Aim:
Analyse the sustainability performance of the company to enable B2B communication with its customer.

➢Method:
Assessment of the company with the SMART company tool.

➢Results:
Report with detailed results with regard to the sustainability performance of the company which could be passed on the customer. Start of an internal improvement process.

Possible approach to GIs sustainability assessments: toolkit with different options.

Level / Options	Farm level	Food processor	GI governance body
Self assessment (₵)	SMART self assessment**	SMART online self assessment	SMART online self assessment*
Reduced assessment ($)	Hotspot-based, reduced SMART Farm-Tool assessments (selection of SAFA themes/ subthemes)	SMART online self assessment	SMART online self assessment*
Standard assessment ($$)	SMART Farm-Tool assessments	SMART online self assessment	SMART online self assessment*
Complete assessment ($$$$)	SMART Farm-Tool assessments	SMART Company-Tool assessment	SMART online self assessment*

* *Will be developed based on the SMART online self assessment for food processors.*

** *Will be developed based on the SMART online self assessment OR SMART Farm-Tool*

Self assessment

- Use: internal improvement, awareness rising, minimal external communication
- Communication example:
  - “GI XY has self-assessed its sustainability **based on the SAFA guidelines** to constantly improve its sustainability performance. Based on the results of the assessment, workshops were conducted and aims for future improvement defined.”
- Costs: local staff workhours, small licence fee.

Reduced assessment

- Use: internal improvement, minimal external communication
- Communication is different on each of the three levels because different methods are applied. Communication example (given representative sampling of farms):
  - "The farms of GI XY have been analysed **based on selected SAFA sustainability topics**: *Water Quantity* and *Gender Equality*. With their implemented measures, the farms contribute to save water in the region (rating of the topic: 80%) while *Gender Equality* will be further improved (rating of the topic: 40%). The processor XY as well as the GI governance body assessed itself in all of the SAFA sustainability subthemes to constantly improve their sustainability performance."
- Costs: **trainings of farm auditors (e.g. licenced regional training centres)**, licence fee, **local farm auditor workhours, preparing the results for communication.**

Standard assessment

- Use: internal improvement, external communication
- Communication is different on each of the three levels because different methods are applied. Communication example (given representative sampling of farms):
  - "The farms of GI XY have been analysed **according to the SAFA guidelines**. With their implemented measures, the farms contribute to save water in the region (rating of the topic: 80%) while *Gender Equality* will be further improved (rating of the topic: 40%)... The processor XY as well as the GI governance body assessed itself in all of the SAFA sustainability subthemes to constantly improve their sustainability performance."
- Costs: trainings of farm auditors (e.g. licenced regional training centres), licence fee, local farm auditor workhours (+), preparing the results for communication.

Complete assessment

- Use: internal improvement, strong external communication
- Communication is different between the GI and the other levels because different methods are applied. Communication example (given representative sampling of farms):
  - "**The supply chain of GI XY** has been analysed according to the SAFA guidelines. **Along the supply chain, implemented measures** contribute to water saving in the region (rating of the topic: 80%) while *Gender Equality* will be further improved (rating of the topic: 40%)… The GI governance body assessed itself in all of the SAFA sustainability subthemes to constantly improve their sustainability performance."
- Costs: trainings of farm **and company auditors** (e.g. licenced regional training centres) (**+**), licence fee, local farm **and company auditor** workhours (**++**), preparing the results for communication.

Advantages of the toolkit

- GIs are able to select the right solution for them depending on:
  - their financial capacity
  - their needs (communication, internal improvement)
- They have the choice to continuously expand their engagement by time by adding more sustainability topics or choose a more detailed assessment option.
- Aggregation of the results possible since all the results are based on the SAFA guidelines (same themes).
- Further cost savings possible:
  - Hand select farms instead of representative sampling
  - Selection of SAFA themes/subthemes for self assessment

How to communicate added value of the GIs for their place or area of production?

- SAFA / SMART already includes subthemes relating to the local economy → results can be communicated.
- Connect SMART results (such as water quality) to SDGs (clean water and sanitation) when communicating.
- Conduct benchmarking studies: Compare conventional supply chains (representative sample) in the region with the GI results.

Questions to address?

- How to include existing sustainability assessment/ policies/ communication?
- How to make best use of existing structures for the implementation phase?
- How to prioritize (select test case GI)?

Thank you for your attention.

smart
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and assessment routine

www.sustainable-food-systems.com
www.fibl.org/en/themes/smart-en.html

Contact:
jan.landert@fibl.org

Slides Backup

Possible scenarios of GI sustainability assessments

- Three different scenarios possible (or a mix), depending on **the aim** of GI sustainability assessments:
  - **Fail / pass standard:** Sustainability assessments are conducted to ensure compliance with a certain standard.
    - Strong communication and marketing advantage for GI
  - **Capacity building / internal improvement:** Sustainability assessments are conducted to raise awareness about sustainability issues among GI members and iniciate internal improvement.
    - Rather weak communication and marketing advantage for GI
  - **Differentiated sustainability assessments:** Sustainability assessments are conducted to communicate the level of sustainability of the GI members
    - Depending on the results, communication and marketing advantage for GI

Fail / pass standard (I)

- Basic workflow: Needs to be done separately for (clusters of) GI since hotspots are likely to vary from GI to GI

- Possible role of SMART: hotspot analysis.
- Possible role of manifest / guidelines:
  - Describe workflows and requirements for standard setting
- Advantages: Focus on key issues.
- Communication: Strong.

Fail / pass standard (II)

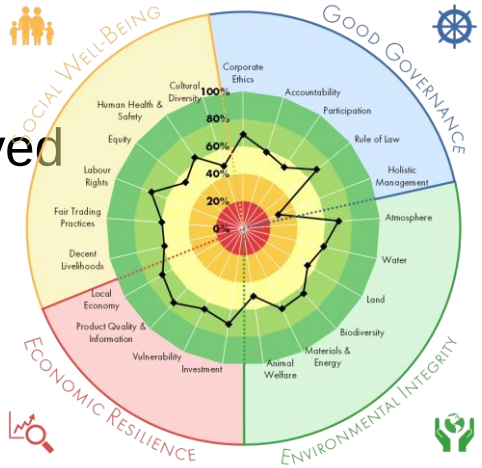
- Two possibilities for hotspot analysis:
  - Conduct **field assessments** among GI members and then discuss results in a workshop in order to prepare a first draft of a standard (acceptance).
    - Advantage: Real picture of the conditions on the ground.
  - **Model a typical GI farm** with SMART (including workshop)
    - Advantage: Less data intense in case of large GI by interviewing experts instead of collecting data from farms.
- Cluster GI according to product, value chain, size and country to decrease the number of standards to implement?

Capacity building / internal improvment

- Possible role of SMART: Conduct alternating assessments with GI members and discuss (anonymous) results with all GI members.
- Possible role of manifest/guideline: Define frequency and tools for sustainability assessments.
- Advantages: Easy to implement; extendable (e.g. can be used for standard setting after some years). SAFA compliant: All SAFA themes considered.
- GI can only communicate that they work on improving their sustainability performance by conducting assessments.

Differentiated sustainability assessments

- Possible role of SMART: Assess a **representative sample** of all GI members.
- Possible role of manifest/guideline: Define tools and requirements for GI.
- Results can be used:
  - For communication. Depending on the results, communication and marketing advantage might be weak.
  - Internal improvement: GI defines a selected set of goals which progress should be achieved in the following years.



SMART applications, case 3: modelling production system differences in Switzerland

Figure 4.5: Overall sustainability performance of the selected VSS

➢Aim:
Comparison of the sustainability performance of selected voluntary sustainability standards (VSS)

➢Method:
SMART assessment of an exemplary CH farm applying different VSS

➢Results:
Detailed overview of the added value of selected VSS to different sustainability themes

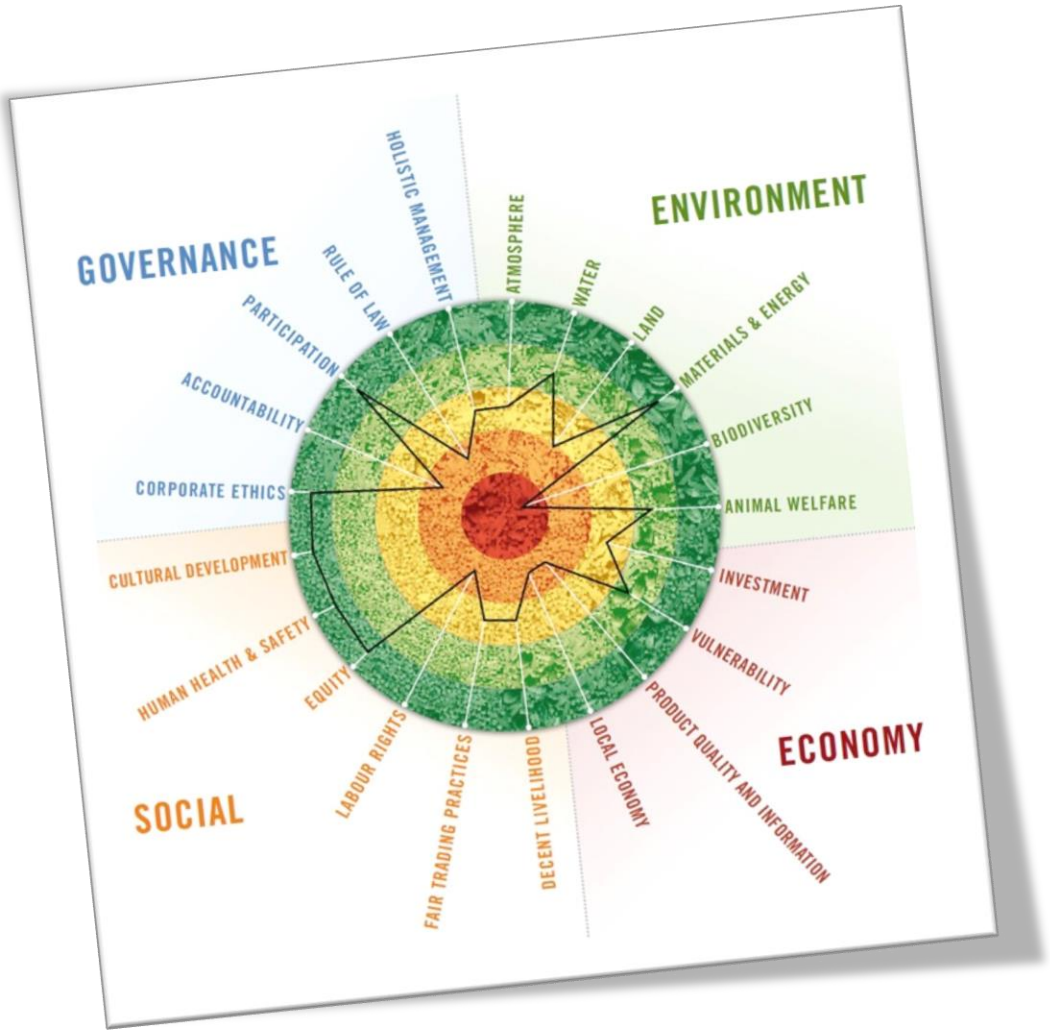
SMART applications, case 5: modelling the sustainability of agricultural inputs into the Swiss food industry (ongoing)

- Aim:
Facilitate the assessment of food processors and traders by having a database with assessed agricultural raw materials

- Method:
Modelling of a typical farm for a certain product, standard and country followed by a SMART assessment.

- Results:
Database with SMART assessed raw materials, including uncertainties.

SAFA Guidelines



SAFA Guidelines

Internationally accepted, Globally applicable

Holistic Approach

Multi-Stakeholder Process

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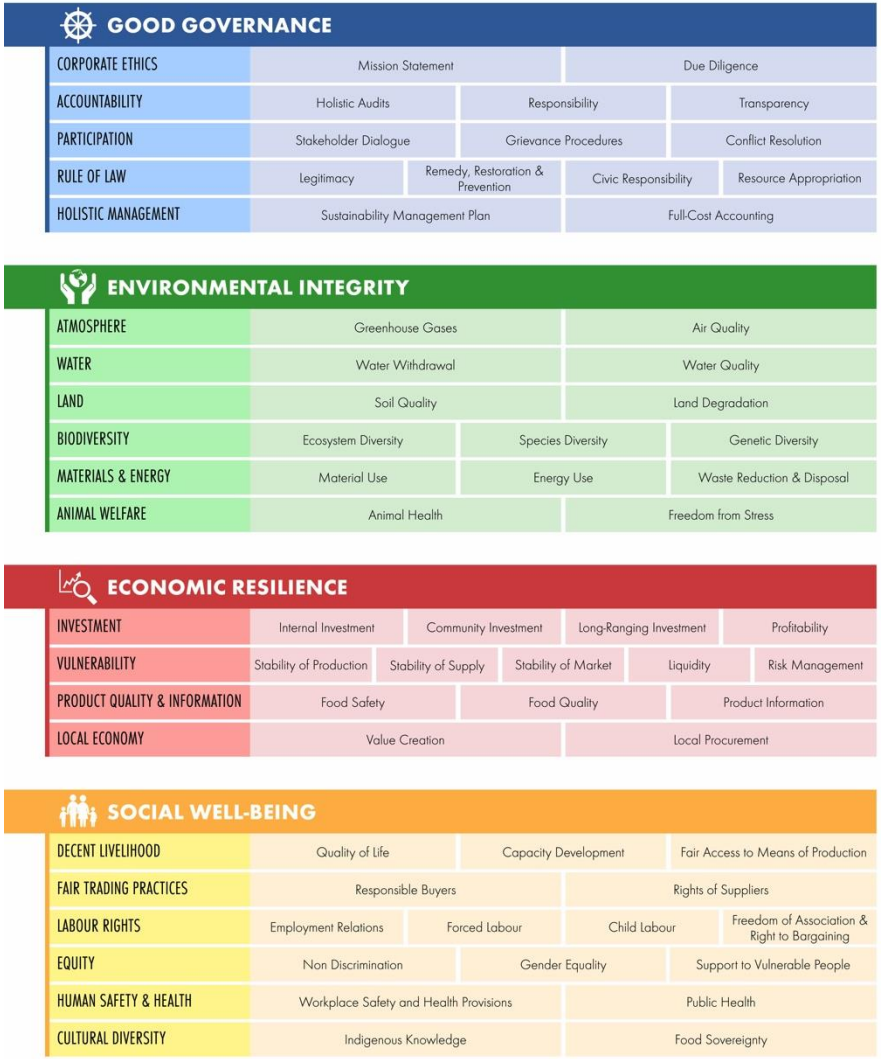

SAFA Guidelines

- 4 dimensions
- 21 themes
- 58 sub-themes, each with a specific sustainability goal

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