

Assessing IDH's contribution to public good impacts at scale

Appendices to the baseline report on existing evidence behind the IDH impact story

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The KPMG logo, consisting of the letters 'KPMG' in a bold, white, sans-serif font, with a stylized grid pattern behind the letters.

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1. Extended methodology

1.1 Programs and countries taken up in the evaluation 2016-2020 per impact theme

1.1.1 Impact theme Inclusive business models & smallholder farmer livelihood improvements

Country	Program					
	Cocoa	Coffee	Cotton	Fresh & ingredients	Tea	Palm oil
Cote d'Ivoire	X					
Indonesia	X	X				X
Ghana	X					
Ethiopia		X		X		
Uganda		X				
Tanzania		X			X	
Vietnam		X				
Colombia		X				
Brazil		X				
India			X	X	X	
Pakistan			X			
Mali			X			
Mozambique			X			
Zambia			X			
Kenya				X	X	
Madagascar				X		
Rwanda					X	

1.1.2 Impact theme Mitigation of Deforestation: programs and countries in the evaluation

Country	Program				
	Cocoa	Palm oil	Pulp & Paper	Soy	Timber
Cote d'Ivoire	X				
Indonesia		X	X		X
Brazil				X	X
Kenya					
Liberia					X

1.1.3 Impact theme Living wage and working conditions: programs and countries in the evaluation

Country	Program			
	Apparel	Cotton	Fresh & ingredients	Tea
Ethiopia			X	
Tanzania				X
Vietnam	X			
India		X	X	X
Pakistan	X	X		
Mali		X		
Mozambique		X		
Zambia		X		
Kenya			X	X
Madagascar			X	
Rwanda				X

1.1.4 Impact theme Responsible agrochemical management: programs and countries in the evaluation

Country	Program				
	Aquaculture	Coffee	Cotton	Fresh & ingredients	Tea
Vietnam	X	X			
India			X	X (fruit, spices)	X
Ethiopia				X (flowers)	

1.2 Methodology to come to conclusions on IDH impact and the plausibility of the IDH approach

We have created a database containing the evidence found on IDH impact and information on similar interventions, by listing all information found in credible sources. Through this exercise we assessed the *quantity* of the available evidence: i) per impact theme, ii) per result area and iii) per part of the impact story, e.g. whether IDH support leads to outcomes and whether such outcomes lead to impact. Through this exercise, we also assessed the *direction of change* indicated per information source. This database forms the basis of our conclusions on IDH impact and the plausibility of IDH's approach.

1.2.1 Steps in creating the impact evidence database

The following steps were undertaken to create a catalogue of all the information used in the impact study and assess the evidence base:

1. All documents received, from IDH and the literature review, were listed in an Excel database. The database distinguishes between types of document: i) studies on IDH impact, ii) individual studies on similar interventions, iii) review studies on similar interventions, iv) IDH program related documents and v) IDH documents related to corporate information.
2. All interviews with IDH staff and external stakeholders were listed in the database. Please note that the interviews focused on obtaining information on the IDH approach (i.e. Proof of Concepts) and less so on generating evidence on IDH impact so far (2013-present). Thus, the information from the interviews did not generate a total overview of IDH impact according to IDH staff and stakeholders.
3. Each source was listed indicating: i) the impact theme covered, ii) the result area covered, iii) the program covered, iv) a summary of the

information found, referring to indicators from the intervention logics, outcome and impact indicators.

4. The sector survey responses were not taken up in the database, and neither were the first results from the Balanced Score Card questionnaire from the RMF. They were reviewed separately.

The information in this database as well as information from the sector survey and RMF results was used to conclude on the evidence base – the quantity of evidence available for the impact themes and result areas, as well as the direction of change found in the sources.

1.2.2 Assessing the evidence base and the direction of change for sources referring to IDH impact

We assessed the information on IDH impact in the database per impact theme and result area, for two parts of the IDH impact story: i) whether IDH support leads to outcomes, and ii) whether outcomes lead to impacts. This was done by adding up the information from all different sources.

Source	The evidence base (quantity)			
	No evidence (counted as 0)	Limited (counted as 1)	Moderate (counted as 2)	Strong (counted as 3)
Studies by 3rd parties on IDH impact	0 studies	Between 1 and 5 Per impact theme / result area	Between 5 and 10 Per impact theme / result area	>10 Per impact theme / result area
Interviews IDH staff		Baseline study interviews		
Sector survey		Baseline survey responses		
RMF (BSC) results		BSC results		

The external stakeholder interviews for the baseline study were not conducted to obtain information on IDH impact, but for understanding stakeholder perceptions on the roles and additionality of IDH in sustainability processes. Therefore, we did not include information from such interviews in the baseline assessment of impact evidence.

We assessed the overall IDH evidence base per Result Area (Chapter 3) as follows:

1. The combined information from the sector survey, IDH staff interviews and BSC results count as 1 as this is a first assessment
2. The information from the studies conducted by 3rd parties count as in the table above
3. The scores are averaged over the result areas and parts of the impact story (IDH support leads to outcomes, and outcomes lead to impacts).
4. The scores are interpreted as follows:
 - a. <0.66 = not enough evidence to conclude on, depicted as N/A
 - b. Between 0,66 and 1.66: Limited evidence base
 - c. Between 1.66 and 2.66: Moderate evidence base
 - d. > 2.66: Strong evidence base.

We assessed the direction of change from the evidence base in the baseline report as follows:

	The direction of change (negative, no change, positive)
Studies by 3rd parties on IDH impact	No change: < 66% of studies conclude positively Positive change >66% of studies conclude positively
Interviews IDH staff	Positive change per interview
Sector survey	Positive change if >66% of respondents assesses change and IDH influence to that change as positive
RMF (BSC) results	Positive change if average score is between 4 and 5

1.2.3 Assessing the evidence base and the direction of change for approaches similar to IDH

The literature review on the effectiveness of similar interventions builds on the knowledge in Wageningen University & Research on these issues, vested in the experts and researchers, a scan of the professional/practitioner literature review around the result areas: ‘sector governance’, ‘business practices’ and ‘field-level sustainability’, and complemented with a short literature review on Scopus.com, using the key terms used to label each theme and key assumption and limiting the search to the last 3 years. Most of the information on the effectiveness of similar interventions comes from review studies, which often draw conclusions based on a large number of studies. An example of this is a study on the costs and benefits of certification, which draws conclusions by a review of 270 studies (Kuit and Waarts, 2014). We thus did not draw conclusions on the plausibility of IDH’ approach by counting the number of individual studies.

We draw some preliminary conclusions about the plausibility that the intervention logic or key assumption can be expected to happen as a result of IDH support. As this is the baseline situation, we will mostly give it the benefit of the doubt and label it as plausible. Next to this, we indicate the strength of the evidence on these causal links, considering the evidence that we reviewed. These inferences reflect our current reading of the literature, and are not meant to be conclusive, because it is not based on a systematic review of the literature. In subsequent years this evidence-base will be explored further, likely using students to expand the evidence-base and refine the analysis.

1.2.4 Sector survey methodology

In the sector survey, we asked a range of questions on whether the respondents had seen changes occurring for a range of indicators (question 1), and what IDH’s

contribution was to such changes (question 2). See for the sector survey questionnaire Appendix 5.

These questions were translated into a contribution score, a percentage which indicates the effectiveness of IDH. The higher the contribution score (percentage), the higher the effectiveness of IDH's approach, according to the respondents. We have also reported upon the extent of IDH's influence if a positive change was observed. We calculated the contribution score in the following way: each answer option received a score based on the score card depicted below.

How did the indicator change?	Did IDH influence this change?	Contribution score
Strong decrease	No influence	0
Decrease	No influence	0
No change	No influence	0
Increase	No influence	0
Strong increase	No influence	0
Increase	A little	13
Strong increase	A little	25
Increase	Somewhat	38
Strong increase	Somewhat	50
Increase	Much	63
Strong increase	Much	75
Increase	Very much	88
Strong increase	Very much	100

Based on these scores, we calculated a contribution score for each indicator, for each respondent to the survey. The contribution score for the whole group is the average for all respondents who answered the questions.

Sometimes respondents indicated that there was a decrease or no change, but that IDH influenced this change. Often this is not considered realistic from IDH intervention point of view and thus the contribution score would then be zero. Sometimes a decrease is actually expected (pesticide use/deforestation), or no change is a positive result (mitigation of deforestation). For those indicators, the calculation differs. In this report, we did not include calculations for such indicators, but based our assessment on respondent's qualitative statements.

2. Proof of Concept research strategy and coverage

2.1 Overview in-depth studies for IDH Proof of Concepts

2.1.1 Impact theme Inclusive business models & smallholder farmer livelihood improvements

Proof of concept	Study #	Study name	Status at time of writing of baseline report	Author	Coverage Result Areas	Future outlook
1 Innovative service delivery approaches targeting yield and livelihood improvement in coffee in East Africa	1a	Baseline study coffee program Uganda	ToR under development		RA 3: Field level sustainability	Budget reserved for 2 studies in 2017 and 2 studies in 2020
	1b	Evaluation of IDH contribution to a National Platform in Uganda (through GCP)	Project under development		RA 2: Sector governance	
2 Improved productivity and livelihoods (including gender and nutrition) for cocoa farmers in West Africa (Cote d'Ivoire). Amongst others by financing of Productivity Packages (PP) for smallholder cocoa producers in Cote d'Ivoire	2a	Farmer Field Book implementation in the cocoa sector in Cote d'Ivoire and Ghana	Ghana: First report completed in May 2016. CDI: Implementation started in May 2016. First season report foreseen in Q1 2017	Agri-Logic	RA 3: Field level sustainability	Budget reserved for 2 studies in 2017
	2b	Establishing the baseline for IDH's Innovative Finance project 'Financing of Productivity Packages (PP) for Smallholder Producers in Cote d'Ivoire	Expected delivery start of 2017	KPMG and Wageningen Economic Research	RA 1: Business practices with a reflection on RA3: Field level sustainability.	

2.1.2 Impact theme the Mitigation of deforestation

Proof of concept	Study #	Study name	Status at time of writing of baseline report	Author	Coverage Result Areas	Future outlook
3 Landscapes approach for protection of High Conservation Value (HCV) forest and business cases for Sustainable Forest Management in West Kalimantan	3	Forest Fire Prevention and Orangutan / Proboscis Monkey Conservation in Kubu Raya and Ketapang Landscape, West Kalimantan	Report finalised	Kemitraan	RA 3: Field level sustainability	Budget reserved for 1 study in 2017 and 1 study in 2020
4 Landscape model for sustainable management of Mau Forest watershed, Kenya	4	Inventory of promising interventions and identification of gaps for the Sondu River Basin, SW Mau, Kenya	Report finalised	CIFOR	RA 3: Field level sustainability	Budget reserved for 1 study in 2017 and 1 study in 2020

2.1.3 Impact theme Living wage and improved working conditions

Proof of concept	Study #	Study name	Status at time of writing of baseline report	Author	Coverage Result Areas	Future outlook
5 Malawi 2020 Tea Revitalization Program - living wages	5a	Living Wage for rural Malawi with Focus on Tea Growing area of Southern Malawi	Report finalised, January 2014	Anker & Anker	RA 3: Field level sustainability	Budget reserved for 1 study in 2017 and 1 study in 2020
	5b	Nutrition for Malawian Tea Workers: The Options	Report finalised, June 2015	GAIN	RA 3: Field level sustainability	Unclear
	5c	Sector competitiveness analysis	SWOT analyses finalised by May 2016	IDH		Unclear
	5d	Concept Paper Supply Chain Survey Malawi 2020	Finalised	OXFAM		Unclear
	5e	Sustainable Procurement Practices- Findings and Way Forward	Finalised	OXFAM		Unclear
6 Clean manufacturing, improved working standards and satisfaction in Apparel, Vietnam	6	Baseline study in apparel sector in Vietnam	Study under development	Impact ltd		Budget reserved for 1 study in 2017 and 1 study in 2020

2.1.4 Impact theme Responsible agrochemical management

Proof of concept	Study #	Study name	Status at time of writing of baseline report	Author	Coverage Result Areas	Future outlook
7 Reduced toxic load of agro-chemicals in spices, table grapes, cotton and tea in India	7a	Trustea Baseline study (tea India)	Under development	CMS		
	7b	Reduced toxic load of agro-chemicals in spices in India	Endline study under development	CMS	RA 3: Field level sustainability	Budget reserved for 1 study in 2020
	7c	Reduced toxic load of agro-chemicals in fruits (table grapes) in India	Finalised	CMS	RA 3: Field level sustainability	Budget reserved for 1 study in 2017 and 1 study in 2020
	7d	Reduced toxic load of agro-chemicals in cotton India	Make use of BCI monitoring data (Harvest Reports)	BCI	RA 3: Field level sustainability	
	7e	Overall synthesis of India studies	Under development	KPMG India		
8 Reduced toxic load of agro-chemicals in coffee, Fresh & Ingredients and tea, Vietnam (water & soil pollution) - part of ISLA	8a	The analysis of agrochemical use and the development of an improved management system for agrochemical use and trade in Lam Dong province of Vietnam	Under development	Fresh Studio		Budget reserved for 1 study in 2017 and 1 study in 2020
	8b	FFB implementation in the coffee sector in Vietnam under ISLA program for four companies; 2 companies in in Lam Dong (350 farmers) and 2 companies in Dak Lak (650 farmers).	Under development	Agri-Logic	RA 3: Field level sustainability	

2.2 Detailed recommendations for improving the measurement of IDH impact for some in-depth studies

2.2.1 Impact theme Inclusive business models & smallholder farmer livelihood improvements

Study #	Study name	Feedback for improvement
2a	Farmer Field Book implementation in the cocoa sector in Cote d'Ivoire	<p>Assessment</p> <p>The Farmer Field Book implementation by the implementing partner and Agri-Logic has been setup to monitor the performance of 125 cocoa farmers who will receive a Productivity Package and 125 farmers who will not, initially for one year. The first-year report is expected in Q1 2017. The information from the FFB will provide detailed and accurate information for the farm level KPIs of the program, as indicated in the list with KPIs (time spent on training, cocoa production costs, productivity, price, gross margin, agronomic and economic efficiency).</p> <p>The main issue with using the FFB results for evaluating the programs' impact is that the FFB was not designed to establish a baseline situation for a future impact evaluation. It was designed to be part of the Monitoring and Evaluation activities for the program, which is a slightly different – but important - purpose. This leads to some methodological challenges for using the FFB results to conclude on program impact.</p> <p><u>Design:</u> The FFB implementation is designed to compare the evolution over time in performance for a group with program participants and a comparison group. But it has not established the baseline situation of farmers before they started participating in the Project. Thus, it may be that there are historical differences between program participants and non-participants, e.g. in terms of trainings participated in earlier, use of services prior to program participation, productivity levels or asset base. Such historical differences may influence the performance measured though FFB, which can thus not be (fully) attributed to the program.</p> <p>The FFB does appear to have started a little while prior to the implementation of the program but it would need to be verified whether this is true, and if so, for how long. This will enable an assessment of whether some indications of pre-program performance can be established, information which can then be used in a future impact evaluation.</p> <p><u>Sample:</u> Agri-Logic has sampled the farmers with whom FFB will be implemented from two lists with farmers who: i) are certain to receive a Productivity Package and ii) are certain not to receive a productivity Package. But we do not know yet whether the FFB participants have received Productivity Package 1 (PP1), Productivity Package 2 (PP2) or whether some FFB farmers received PP1 and others PP2. This has implications for the conclusions that can be drawn from FFB results:</p> <ul style="list-style-type: none"> - If all FFB farmers receive either PP1 or PP2, then only conclusions can be drawn of the program impact of the applicable Package, so not on overall program impact. Also, the sample size may be too small to verify small impacts of the productivity package on profitability and farmer income with statistical significance

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- If some FFB farmers receive PP1, and others receive PP2, then the sample size will most probably be too small to verify program impact with statistical significance, but this depends on how many farmers per PP are part of FFB and how large the program's impact is.

Furthermore, due to practical reasons, the FFB participants are not entirely randomly sampled from the whole list. As BC team members are collecting information at farm level bi-weekly, the sampling procedure has ensured that the number of farmers to be interviewed is similar for each staff member. This might have implications for the representativeness of the sampled farmers for the target group, which should be assessed during future impact evaluation analyses.

Finally, it may also be that the sampled program participants are not representative of all farmers supplying BC because their characteristics differ from those of non-participants because they need to comply with selection criteria to receive the Productivity Package. This can happen even though the farmers are sampled as randomly as possible. Such a selection bias can be mitigated by conducting the analyses on a matched sample of farmers with similar characteristics, after Propensity Score Matching. So far, such analyses are not foreseen to be conducted. We therefore recommend including such analyses in the future impact evaluation analyses.

Required information not collected through FFB: Several program related aspects are not collected through the FFB while they are important to take into account in the impact evaluation:

- Whether the farmers have a Farm Development Plan
- Whether the farmers have received the PP on credit (no information on credits is collected)
- The bankability of farmers. One of the elements to assess the bankability of farmers is a farmers' profitability track record - the number of years of profit on the relevant farm. We expect this information to be derived from the FFB. But the other two aspects of bankability are not covered by FFB.

Finally, the indicator for 'farmers' profitability record' should be improved to come to meaningful results. A farmer with \$1 cocoa profit a year would receive the same score as a farmer with \$5.000 profit a year. Whereas their 'true' bankability would be entirely different.

Recommendations

For a full evaluation of whether the FFB results can be used for evaluating the program's impact, the following information would need to become available:

- Whether the farmers in the FFB who receive a PP are part of the SDM program. Or whether they are part of another activity in which a PP is offered to them. We think they are indeed part of the SDM program, but this needs to be absolutely clear to assess the usefulness of the FFB for measuring program impact.
 - How many of the FFB farmers receive PP1 and PP2.
 - How the program participants were selected to be on the short list which was used for sampling (e.g. meeting the selection criteria as in the investment proposal page 5?)
 - When the farmers started with the PP (If some farmers start later with the PP than others then this would affect the impact evaluation analyses)
 - Whether the FFB implementation timelines match with the program's timelines
-

- Whether the sample size is sufficient to detect the expected changes in cocoa yield per hectare, cocoa profitability and income. Agri-Logic to conduct statistical power calculations to assess this, after the previous points are addressed.
- How bankability is assessed for all farmers in the program if information on farmer profitability is only obtained from FFB farmers

Improve the effectiveness of the future evaluation activity by:

- Connecting the programs M&E data and information sources with the FFB, to include information on credit and whether farmers have an FDP in future FFB analyses
- Ensure that sufficient information is collected on the use of PP (e.g. does the farmer use the fertilizer for his maize as well or only for cocoa?)
- The baseline situation of all FFB farmers to be reconstructed in terms of interventions participated in (services and trainings) and yields, to be taken up in FFB analyses
- FFB analyses to assess whether the FFB participants (both program and non-program participants) are representative for the sector/ suppliers
- Including analyses on farmer bankability through FFB analyses.
- Review indicator definition of bankability, regarding the profitability element. We recommend to take up a benchmark in the definition, e.g. USD/day poverty line per family or household member.

2b	Establishing the baseline for IDH's Innovative Finance project 'Financing of Productivity Packages (PP) for Smallholder Producers in Cote d' Ivoire .	This study was under development at the time of writing. The feedback on the FFB implementation in study 2a is derived from the review by the evaluation team which is also included in the draft report of study 2b. As study 2b was not finalised at the time of writing, the aspects related to Business Practices have not been incorporated in this Appendix.
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2.2.2 Impact theme the Mitigation of deforestation

Study #	Study name	Feedback for improvement
3	Forest Fire Prevention and Orangutan / Proboscis Monkey Conservation in Kubu Raya and Ketapang Landscape, West Kalimantan	<p>Assessment</p> <p>The baseline study does not appear to be setup to measure changes in sustainable land management practices by farmers. Neither do they indicate whether and how possible 'leakage effects' are taken into account. Leakage effects occur if the people who cannot use land or a forest areas as they were used to anymore (e.g. for obtaining wood, or grazing animals) move to other areas to do the same activities. The intervention may then result in sustainable land use in the intervention area, but an increase in unsustainable land use or deforestation elsewhere because of this. In terms of measuring the impacts of changes at landscape level, satellite-based monitoring of land use and land cover changes should thus look wider than only the intervention areas (i.e. landscape level), because of these leakage effects. In addition, it will be a challenge for future evaluations based on these baseline studies to address whether the intensification of production and an increase in farmer incomes lead to sustainable land management. Finally, this baseline study does not contain sufficient information on baseline levels of deforestation to be used in a future impact evaluation study.</p>

	<p>Recommendations</p> <ol style="list-style-type: none"> 1. Ensure that the study/ a future study includes a measurement of the adoption of sustainable land management practices and its effects on the mitigation of deforestation, including why farmers have adopted the improved practices 2. Ensure that study/ a future study includes an evaluation of the effects of production intensification and income increase on sustainable land management practices 3. Ensure that the study/ a future study include information on how possible leakage effects are taken into account.
<p>4 Inventory of promising interventions and identification of gaps for the Sondu River Basin, SW Mau, Kenya</p>	<p>Assessment</p> <p>The baseline study does not appear to be setup to measure changes in sustainable land management practices by farmers. Neither do they indicate whether and how possible ‘leakage effects’ are taken into account. Leakage effects occur if the people who cannot use land or a forest areas as they were used to anymore (e.g. for obtaining wood, or grazing animals) move to other areas to do the same activities. The intervention may then result in sustainable land use in the intervention area, but an increase in unsustainable land use or deforestation elsewhere because of this. In terms of measuring the impacts of changes at landscape level, satellite-based monitoring of land use and land cover changes should thus look wider than only the intervention areas (i.e. landscape level), because of these leakage effects. In addition, it will be a challenge for future evaluations based on these baseline studies to address whether the intensification of production and an increase in farmer incomes lead to sustainable land management. In the in-depth study for the Mau Forest project, much of the relevant information is being collected, but the study does not contain actual calculations of extent or rates of deforestation. Thus, this baseline study does not contain sufficient information on baseline levels of deforestation to be used in a future impact evaluation study.</p> <p>Recommendations</p> <ol style="list-style-type: none"> 1. Ensure that the study/ a future study includes a measurement of the adoption of sustainable land management practices and its effects on the mitigation of deforestation, including why farmers have adopted the improved practices 2. Ensure that study/ a future study includes an evaluation of the effects of production intensification and income increase on sustainable land management practices 3. Ensure that the study/ a future study include information on how possible leakage effects are taken into account. <p>We would like to make one final recommendation on indicator development for IDH for the Mau Forest project. Given the fact that the ISLA Kenya program is already assessing the opportunities to develop a REDD+ 1 project to maintain the activities after the IDH program finishes, it would be advisable to also make sure the M&E indicator for deforestation meets the REDD+ standards, including information on deforestation reference levels, and also assessments of (possible) leakage to other areas.</p>

¹ REDD+: Reducing Emissions from Deforestation and forest Degradation, which includes: (a) Reducing emissions from deforestation; (b) Reducing emissions from forest degradation; (c) Conservation of forest carbon stocks; (d) Sustainable management of forests; (e) Enhancement of forest carbon stocks.

2.2.3 Impact theme Living wage and improved working conditions

Study #	Study name	Feedback for improvement
5a	Living Wage for rural Malawi with Focus on Tea Growing area of Southern Malawi	<p>Assessment</p> <p>A baseline study on wage levels in the tea growing area of Southern Malawi was conducted by Anker & Anker (2014), based on their living wage calculation methodology. This living wage study has been followed up in 2016, and shows wage increases in the tea sector. But it does not contain an analysis of the contribution of these changes to IDH and other stakeholders.</p> <p>Recommendations</p> <ol style="list-style-type: none"> To conduct survey research within a sample of workers as this proves feasible and informative, as shown in two IDH-funded pilot studies in China by the Economic Rights Institute (2015). Such a study is also recommended to include structured focus-group interviews with workers and management that will trace the registered changes back to IDH-supported activities if applicable. To include an analyses of IDH's contribution to changes in wage levels in the Malawi tea sector in a future living wage study.
5b	Nutrition for Malawian Tea Workers: the Options	<p>Assessment</p> <p>A nutrition baseline study on Malawian tea workers was conducted in 2015. Other HRM aspects (apart from wages, see section 6.6.1), are not included in the baseline studies for the Malawi 2020 program. Please find recommendations to include such other HRM aspects for study 5f (Recommended new study)</p> <p>Recommendation</p> <p>As complementary university research, the effect on nutritional status of fortification of maize in Malawi tea estates could be a good case to be tested with an RCT. It is a replicable treatment and with policy relevance. However, existing evidence is already very strong that it is beneficial for health (Gera et al. 2012) decreasing the need for such studies.</p>
5c	Sector competitive analysis	<p>Assessment</p> <p>The RMF will contain information on the number of business cased developed and IDHs contribution to the development of such business cases. But the actual evaluation of the business models and their effects on worker wages can only be covered by in-depth studies.</p> <p>Recommendation</p> <p>The Malawi tea sector competitiveness analyses to be followed up to include an assessment of change in business practices and their effect on margins and wages.</p>

5f	Recommended new study, possibly combining several future studies as recommended above.	<p>Assessment</p> <p>Currently, no in-depth study has been conducted that includes an assessment of all HRM aspects and working conditions, apart from the living wage studies, and a study on nutrition.</p> <p>Recommendation:</p> <p>Conduct one in-depth study in Malawi to include an assessment of IDH's contribution to changes in wages, HRM and working conditions, including its effects (e.g. on nutrition and worker productivity). The nutrition baseline study and Living wage studies could be used as starting points for this. This study to include an analyses of the contribution of IDH to the outcomes and impact, and together with evidence from literature that fortified foods indeed improve nutrition, an overview of the total number of workers reached and an ex post analyses of how IDH contributed to the outcomes and impacts will lead to conclusions on IDHs contribution to impacts.</p>
6	Baseline study in apparel sector in Vietnam	<p>Assessment</p> <p>The in-depth study for the Apparel sector in Vietnam can be expected to include an assessment of changes in sector policies and strategies, but it is not entirely clear whether it will include all required elements as the baseline study methodology is currently being developed. Also, it is a baseline study for an initiative which has started relatively recently. Therefore, a question is whether changes in policies and strategies can already be observed.</p> <p>The Higg index is to be included in the Apparel baseline study for Vietnam. Whether it will actually be fully included is unclear at the time of writing. The Higg index contains information on: recruitment and hiring, compensation, work hours, worker involvement, worker treatment and development, health and safety and termination and retrenchment. The use of the Higg index, in two measurements, will shed light on changes in HRM practices and thus working conditions. But they do not measure their effects (e.g. on worker productivity). In addition, IDH wants a third party to conduct in-depth research to analyse the Higg Index as proxy for environmentally sound production. This index is useful for benchmarking but might be too rough to detect small changes within each firm with pilot experiences and technical innovations.</p> <p>The RMF indicator on the number of processing facilities with sustainable production practices will give an idea of the sustainability of the processing facilities, but detailed information (e.g. case studies) are necessary to capture data (costs-benefits) on changes in and effects of business models, that permits upscaling and replication. Confidentiality of data on pilots, due to inter-firm competition, might be an issue that limits sharing for replication.</p> <p>Recommendations</p> <p>The in-depth study in the apparel sector in Vietnam should include an evaluation of changes in HRM practices and working conditions, and their effects, e.g. on worker productivity. Also it should include an assessment of IDH's contribution to the changes found.</p>

2.2.4 Impact theme Responsible agrochemical management

Study #	Study name	Feedback for improvement
7b	Reduced toxic load of agro-chemicals in spices in India	<p>Assessment</p> <p>The studies on chili production in India do not present findings on actual pesticide use (kg of active ingredient per hectare) and does not measure toxic load. But the end-line study does report a change in the application of banned chemicals. The information collected during the study may thus enable the calculations of pesticide use in terms of kg of active ingredient per hectare, after an update of pesticide use data to reflect correct naming (product, a.i. identification according to registration authority) and use/dosage both reported and according to GAP. And thus such data may also be used for assessing changes in toxic load</p> <p>A key element to consider in the study is the adoption of responsible pesticide management practices, as generally many, but not all farmers apply all promoted practices. The data collection could focus on the question 'what type of farmers apply better pesticide management practices', and not only measure average effects. This could assist in the adaptation of the intervention, or of the recommendation of practices if necessary.</p> <p>The end-line study does not contain an assessment of (change in) service delivery to farmers yet, related to pesticide use and its effects at farm level. Nor does it contain an analysis of the contribution of IDH to the program and its effects.</p> <p>Recommendation</p> <ol style="list-style-type: none"> 1. IDH to ensure that the study will include findings on the use of pesticides in terms of kgs of active ingredients per hectare, as described in the RMF, as well as on toxic load. After updating the pesticide use data to reflect correct naming. For the chili study, this would mean that additional analyses would need to be done, reported in a renewed end-line report. 2. For toxic load calculations, combine use data with hazard data, see for more information under 8c. 3. IDH to ensure that the end-line study will contain an evaluation of changes in occupational health and safety related to pesticide use. 4. IDH to ensure that the end-line study contains an analysis of what type of farmers apply better pesticide management practices. 5. IDH to ensure that the end-line study contains an evaluation of the impact of changes in service delivery at farm level. 6. IDH to ensure that the end-line study contains an analysis of the IDH contribution to the program and its effects.
7c	Reduced toxic load of agro-chemicals in table grapes in India	<p>Assessment</p> <p>The baseline study on table grape production in India does not measure toxic load, and does not report on pesticide use in terms of kg of active ingredients per hectare. But the study annex contains information on average use of pesticides per acre, per pesticide. Thus probably</p>

sufficient information is collected through the study to calculate kgs of active ingredient applied per hectare. Combined with hazard data, toxic load could be calculated.

A key element to consider in the study is the adoption of responsible pesticide management practices, as generally many, but not all farmers apply all promoted practices. The data collection could focus on the question 'what type of farmers apply better pesticide management practices', and not only measure average effects. This could assist in the adaptation of the intervention, or of the recommendation of practices if necessary.

Recommendation

1. IDH to ensure that the end-line study will include findings on the use of pesticides in terms of kgs of active ingredients per hectare, as described in the RMF, as well as on toxic load.
2. For toxic load calculations, combine use data with hazard data, see for more information under 8c.
3. IDH to ensure that the end-line study will contain an evaluation of changes in occupational health and safety related to pesticide use.
4. IDH to ensure that the end-line study contains an analysis of what type of farmers apply better pesticide management practices.
5. IDH to ensure that the end-line study contains an evaluation of the impact of changes in service delivery at farm level.
6. IDH to ensure that the end-line study contains an analysis of the IDH contribution to the program and its effects.

7d Reduced toxic load of agro-chemicals in cotton in India

Assessment

In the cotton sector, BCI reports on profitability and yield, amongst others, through their Harvest Reports, and compares performance of BCI farmers with comparison farmers. We have reviewed the BCI harvest reports for 2013 and 2014 in which information on India is presented, as well as a publication by Ge and Waarts (2014) which also refers to BCI implementation in India.

There are some methodological issues with using information in the BCI Harvest reports for evaluating IDH's impact on smallholder cotton producers:

1. Both reports do not mention IDH as a funder or partner. Therefore it is a challenge to assess the extent of IDHs contribution to the India activities reported upon based on these Harvest reports.
2. The reports present results of farmers whose learning group is randomly sampled from all learning groups in India (10 states) and a group of comparative farmers. However:
 - a. The results are presented for one year only, i.e. for 2013 and 2014, but different numbers of farmers are taken up in the year reports (13,345 BCI Farmers and 5,010 Comparison Farmers in 2013 and 22,129 BCI Farmers and 6,697 Comparison Farmers in 2014. See BCI, 2013 and 2014).
 - b. The sampling methodology is based on the collection of data from a representative sample of Learning Groups that are randomly selected by BCI on a yearly basis at the end of the season. It is unclear whether the farmers reported upon in 2013 are also part of the group of farmers reported upon in 2014. If so, then there are differences in the dates that farmers started

participating in the BCI projects; this hampers an assessment of the evolution over time for indicators, underestimating the impact of BCI implementation.

- c. It is unclear in what year farmers reported upon in both years have started with the BCI project
- d. BCI indicates in its 2014 Harvest report that the results presented “were calculated based on data from 22,129 BCI Farmers and 6,697 Comparison Farmers. Some data was excluded from the analysis because complete data was unavailable for 22 Producer Units. Therefore, the results shown here are representative of 74.07% of BCI Farmers in India” (BCI, 2014). It is unclear how this 75% relates to the information presented for farmers in 2013.
- e. It is unclear from the report whether the indicator information for 2013 constitutes the baseline situation or that farmers reported upon already participated in the projects in 2012. We know that in 2012 already projects were implemented in India by some of the implementing partners mentioned in the BCI Harvest Report 2013 (see Ge and Waarts, 2014).
- f. It is unclear on what basis the comparison farmers have been selected as “comparable”; no information has been presented in the reports on how the comparability was assessed. Furthermore, it may be that there is a selection bias in the farmers participating in BCI implementation projects. This selection bias was also noted in Ge and Waarts, 2014).

Because of these findings, we cannot assess whether BCI implementation has had an impact on smallholder cotton producers in India as we cannot verify:

- What the baseline year was for farmers reported upon in the 2013 and 2014 reports and whether the information presented for the year 2013 enables a before-after analyses of the impact of BCI implementation
- Whether farmers reported upon in 2013 are also reported upon in 2014.
- What the difference is in the evolution over time is for the various indicators for the BCI farmers and comparison farmers
- Whether the comparison farmers are indeed comparable to BCI farmers.

BCI also does not claim an impact of BCI for the various indicators in their Harvest Reports, but report on differences between BCI farmers and the comparison group per year. “The results presented in this Harvest Report compare country averages of key environmental, economic and social indicators achieved by BCI Farmers to comparable farmers in the same regions who operate outside of BCI projects” (BCI, 2014).

A promising baseline study on BCI implementation in India has been published (Kumar et al., 2015). This baseline report is methodologically strong and is likely to capture the net-effects of the Better Cotton Initiative in one district in India in a future evaluation. The report, however, does not refer to any role of IDH in this project.

Recommendations

1. Assess IDH’s contribution to BCI implementation in India in terms of funding and other types of contribution
2. IDH to explore how to use the BCI data for impact evaluation purposes, tackling the methodological challenges outlined above.
3. IDH to explore whether the study by Kumar et al (2015) is connected to activities by IDH and partners.

8a The analysis of agrochemical use and the development of an improved management system for agrochemical

The baseline study is under development.

Recommendations:

	<p>use and trade in Lam Dong province of Vietnam</p> <ol style="list-style-type: none"> 1. IDH to ensure that the study will include findings on the use of pesticides in terms of kgs of active ingredients per hectare, as described in the RMF. As well as report on changes in toxic load. 2. IDH to ensure that the study will contain an evaluation of changes in occupational health and safety related to pesticide use.
<p>8b FFB implementation in the coffee sector in Vietnam.</p>	<p>Assessment</p> <p>The implementation of the Farmer Field Book (FFB) in the coffee sector in Vietnam (amongst others in Lam Dong) is likely to result in detailed evidence on pesticide application rates throughout the years. It is not expected to yield results on toxic load. Also, the FFB implementation is not setup as ‘real’ baseline study so this could result in methodological challenges in measuring IDHs contribution to impact. But possibly, the FFB analyses could be connected with the foreseen baseline study on ‘agrochemical use and the development of an improved management system for agrochemical use and trade in Lam Dong province of Vietnam’.</p> <p>Recommendation</p> <p>IDH to explore whether it would be possible to connect the FFB work in the coffee sector in Vietnam with the planned baseline study for the coffee, tea and fruit and vegetable sectors to enable a future evaluation of IDH’s support in the coffee sector.</p>
<p>8c Other recommendations</p>	<p>Measurement of Toxic Load</p> <p>A toxic load indicator represents the average annual amount of toxic pressure by active ingredients of pesticides applied on one hectare of agricultural land. It is crucial to realise that in this definition toxic loading is not only determined by the amount of pesticides used but also by the environmental and toxic properties of each of the active ingredients in these pesticides. So information on both these aspects is needed, not only on volumes of pesticide products used. The indicator can be useful in situations when more detailed input data are not at hand.</p> <p>Pesticides include a number of groups of compounds used for different purposes like insecticides, herbicides, fungicides, acaricides, nematocides, rodenticides, etc.</p> <p>The toxic load indicator is a relatively simple indicator which requires limited input data. That is a strength of the approach but there are also limits. The scope of a toxic load indicator (just like any other pesticide indicator or tool used for monitoring sustainable use of pesticides) should be clear when using it. Since exposure is not part of the toxic load approach, this type of indicator does not express the actual risk, nor the toxic effects resulting from pesticide applications in the field. Actual exposure may depend on multiple aspects, such as the method of application, equipment used, operator skills, conditions during application (weather), properties of the crop, soil, etc. These conditions vary both in place and in time. Therefore, pesticide risk indicators require more site-specific input data than a toxic load indicator and usually also include some modelling.</p> <p>Moreover, there are no benchmarks for toxic load indicators, i.e., there exists no indicator value for which it can be concluded with certainty that no or little impact occurs.</p>

Finally, the impact resulting from unsafe use of pesticides, the use of banned products, products containing unknown active ingredients and counterfeit products often cannot be quantified with the toxic load approach, but may affect the outcome of other pesticide indicators.

The toxic load indicator combines the inherent toxicity of the active ingredient(s) of a pesticide product (e.g. LD50, LC50) with a volume of its active ingredients and with the area grown. The Toxic Load indicator for a particular species (group) and crop is calculated as:

$$TL_{yr} = \frac{\sum_{ai} \frac{V_{ai,yr}}{T_{ai}}}{A_{yr}} \quad \text{Eq. 1}$$

TL_{yr} Toxic Load indicator value for one year

V_{ai,yr} volume of an active ingredient in a particular year (kg)

T_{ai} toxicity of the active ingredient (e.g. L(E)C50 of either fish, *Daphnia* or algae (mg/L), or the LD50 of bees (µg/bee)

A_{yr} area of the crop in a particular year (ha)

To monitor achievements in sustainable use, an evaluation period needs to be set with a survey at least at the baseline / start and at the end. A time series of annual based import, sales or use volumes can be combined with such detailed surveys. A clear definition of pesticides is needed to include and exclude different types of product groups.

FAO (2016b) used the toxic load indicator to calculate annual-based indicators based on national import data and the total agricultural area in Mozambique. A similar study was conducted for pesticide use in cotton, for the major cotton producing countries (De Blecourt et al., 2010, https://www.icac.org/seep/documents/reports/2010_alterra_report). How it was interpreted and used for recommendations, see https://www.icac.org/seep/documents/reports/2010_interpretative_summary.pdf

3. Detailed recommendations per impact theme

3.1 Introduction

This Annex outlines the detailed recommendations for how IDH can best measure its contribution to impact over the coming years. The recommendations follow the same structure as the report: divided in sections for each impact theme and storyline. Each section first gives an overview of the challenges to measuring impact, then it lists the actions already undertaken to measure IDH contribution to impact and it concludes with proposed solutions to enhance the evidence base towards 2020. This Annex does not include the recommendations on the individual PoC studies; these are covered in Annex II, section 2.2.1 until 2.2.4.

3.2 Impact theme inclusive business models & smallholders farmers' livelihood improvements

3.2.1 Measuring IDH's contribution to improvements of sector policies and strategies (public-private) and its effects on smallholder farmer livelihoods

Key challenges in measuring IDHs contribution to impact

The key challenges in measuring IDH's impact through their sector governance activities are:

1. To verify IDH's contribution to the effectiveness of multi-stakeholder processes in delivering changes in public and private policies and strategies
2. To prove the impact of such changes in policies and strategies on smallholder farmer livelihoods.

Actions already undertaken for measuring IDHs contribution to impact

IDH measures changes in policies and standards and IDH's contribution to such changes within the RMF, through qualitative reports by the IDH program teams. But the impact of such policy changes on smallholder farmers are not measured through the RMF.

In addition, one in-depth study is foreseen to evaluate the impact of IDH activities with the Ethiopian Coffee Exchange (ECX). The IDH activities are under development at the time of writing this report.

Proposed solutions to enhance the evidence base towards 2020

To fill the gap in the evidence base on the effectiveness and impact of IDH's support to multi-stakeholder processes, we propose to specifically focus efforts on the following activities:

1. Ensure that the **in-depth study** on IDH activities with the ECX will include an evaluation of the impact of changes of ECX policies on smallholder farmer livelihoods
2. Analyse **RMF information** on changes in policies and standards and use this information as a basis for stakeholder interviews (2016-2020)
3. Conduct **10 Interviews with stakeholders** (public and private) in the coffee and cocoa sectors in both 2018 and 2020, focused on IDH's contribution to policy and strategy changes and their impacts on smallholder farmers.
4. Include questions in the **sector survey** on IDH's contribution to policy and strategy changes and their impacts on smallholder farmers (2018 and 2020).

As the sector survey can only take a maximum of 10 minutes to be filled out, it needs to be discussed which questions are most important to be included to be taken up in the survey, as not all foreseen questions can be included. This will be done during the preparation of the next sector survey.

3.2.2 Measuring IDHs contribution to farmers' adoption of good agricultural and business practices and its effects on smallholder farmer livelihoods

[Key challenges in measuring IDHs contribution to impact](#)

The key challenges within this impact storyline is to measure the impact of IDH on:

1. Productivity
2. Profitability
3. Farmer incomes
4. Nutrition.

Especially, measuring the impact on profitability and incomes is a challenge because of two reasons. Firstly, factors outside IDHs sphere of influence (e.g. crop and labour prices) can have a significant influence on profitability and income. This decreases the effect-sizes that can be expected because of IDH support. Furthermore, there can be a high variance in such outcomes due to a wide diversity of types of producers and the possibility of measurement errors when asking yield figures and prices in surveys (Nelson and Martin 2012; Ton et al. 2014b). Because of that, sample sizes need to be sufficiently large to be able to assess small but significant changes with statistical significance. This is especially the case for measuring household income. Therefore, we advise to focus net-effect measurements on changes in profitability and crop incomes, with less attention to the measurement of changes in household incomes.

Secondly, next to IDH and their partners, other actors are involved in the sectors IDH works in, delivering similar services to the farmers, and thus also contributing to changes in smallholder farmer livelihoods. This is especially the case in the cocoa and cotton sectors. A result of this is that farmers who are not part of an IDH supported intervention can also be part of a similar intervention. And therefore, it can be a challenge to find differences in the evolution over time in profitability and income between IDH supported farmers and a comparison group. In that situation, conclusions can be drawn on the effectiveness of a specific service package (a combination of training, credit, inputs, etc.), but additional research is needed to verify the additionality of the IDH support over other activities.

Two final challenges in impact research are that studies sometimes do not answer the question 'for what type of farmers, does the intervention seem to work better?'. This is needed to address the concern that support is picking the winners, instead of the poorer strata. Furthermore, instead of measuring net-effects of one specific intervention with case-specific indicators, it is important to compare the effects of different interventions to enable the future selection of interventions that work better than others.

[Actions already undertaken for measuring IDHs contribution to impact](#)

IDH measures the delivery of different services to smallholder farmers and the adoption of good agricultural practices through the RMF. Productivity, profitability and incomes are measured through in-depth impact studies conducted by third parties in which adoption is also measured.

IDH has currently commissioned two in-depth field level studies in the cocoa sector (Ghana and Cote d'Ivoire). Two baseline studies in the coffee sector (Uganda and Tanzania) are under development. Furthermore, in the tea sector, studies on IDH impact have been completed or are underway.

In the cotton sector, BCI reports on profitability and yield, amongst others, through their Harvest Reports, and compares performance of BCI farmers with comparison farmers. However, they only do so for year. Therefore no conclusions can be drawn on the impact of BCI on smallholder cotton farmers as no information is available on the evolution over time in farmer performance for both groups of farmers. We know that BCI has a dataset with many farmers and for many years, so it would be of interest to explore whether such data could be used for a difference-in-difference impact evaluation. A promising baseline study on BCI verification in India has been published (Kumar et al., 2015). This baseline report is methodologically strong and is likely to capture the net-effects of the Better Cotton Initiative in one district in India in a future evaluation. The report, however, does not refer to any role by IDH in this project. Thus, robust evidence on the impact of BCI, as supported by IDH, is not available yet.

The in-depth study for the cocoa program in Ghana (Kuit Consultancy 2016) provides a wealth of very detailed information. However, this study is not setup as a 'real' baseline study with a plausible counterfactual, and does not yet contain info on all indicators required for the evaluation (see for more information Appendix 2). The baseline report shows a range of regression-based analyses to explore for variables that explain key outcomes. As it does not contain a comparison group, this will limit attribution of changes found to IDH support. Possibly this could be mitigated by comparing the results with data from other sources. And, analyses could be done to assess the effects of farmers receiving different service packages, and identify differences in effectiveness for different types of farmers. The in-depth study in the cocoa sector in Cote d'Ivoire also was not setup as a 'real' baseline study, though this study does contain a comparison group. Therefore it also does not fully cover the information expected in a baseline study for a future impact evaluation. See for more information Appendix 2.

A final observation is that the current in-depth studies appear to be conducted on the implementation of Service Delivery Models which have been developed with support by IDH (see also section 4.6.3). It would be extremely valuable to ensure that the in-depth studies include comparisons between SDMs on the conditions under which they tend to be successful or fail to be taken up by others. Also we need to explore how to verify the effectiveness and impact of the SDMs on productivity, profitability and income as net effect measurements often do not deliver informative study results. However, information on farm level impacts connected with information on the financial performance of the SDM as well as enablers or barriers to replication/scaling will inform future decision makers how best to invest in service delivery.

[Proposed solutions to enhance the evidence base towards 2020](#)

To fill the gap in the evidence base on the effectiveness and impact of IDH's support to service delivery to farmers, we propose to specifically focus efforts on the following activities:

1. Analyse **RMF information** on services delivered to farmers as well as changes in adoption (2016-2020)
2. The **two currently undertaken in-depth studies in the cocoa sector** should be adapted to enable a future evaluation of IDHs impact on smallholder farmers (see for detailed information appendix 2).
3. IDH to ensure that the **two foreseen in-depth studies** (both in the coffee sector) contain a credible methodology to measure impact on productivity, profitability and crop income
4. Include questions in the **sector survey** on changes in yield, profitability and incomes, including an assessment of IDH's contribution to such changes (2018, 2020)
5. **IDH and Wageningen UR to explore** whether the in-depth studies will enable the evaluation of impact of the SDMs in the coffee and cocoa sectors.

6. **IDH to explore with BCI** whether their database on BCI and comparison farmers could be used for evaluating the impact of BCI on smallholder cotton producers by comparing the performance of BCI and comparison farmers over time.

3.2.3 Measuring IDHs contribution to the replicability and scalability of service delivery models and their impacts on smallholder farmer livelihoods

Key challenges in measuring IDHs contribution to impact

The main challenge with this storyline is to verify the scalability and replicability of the IDH supported business models. The process of scaling and replication takes time, and needs a historical perspective. Next to monitoring and evaluating new pilots, it is important to document the scaling, replication and adaptation of business models that have been tried out throughout the 2013-2020 period. Where possible, the IDH approach should be compared to business models piloted by other stakeholders than IDH.

Concrete information about the costs and benefits of new business models for service delivery is highly incomplete, though the new 12 SDM studies commissioned by IDH add value to the literature by modelling costs and potential benefits of various service packages. One issue with these studies is that it is not clear how the assumptions on costs and benefits have been arrived at (e.g. on what sources the expected impact of a service package on productivity is based upon). Empirical evidence on the effects and impacts of the actual implementation of these SDMs is thus required.

Actions already undertaken for measuring IDHs contribution to impact

IDH is already measuring the services delivered to the farmers through the RMF. In addition to the RMF, the projects implementing Service Delivery Models and Innovative Finance schemes are required to monitor progress through Key Performance Indicator monitoring. We have seen one example of such project monitoring strategy for an Innovative Finance scheme in the cocoa sector in Cote d'Ivoire. This monitoring data is useful for project monitoring and assessing replicability and financial performance of the scheme, but it does not contain sufficient information to assess the changes in business practices or the effectiveness and impact of the Innovative Finance scheme on smallholder farmers.

In terms of in-depth research regarding changes in business practices due to IDH support, one study is currently underway in the cocoa sector in Cote d'Ivoire. This study measures the first changes in business practices of one cocoa company in terms of service delivery to farmers and assesses IDH contribution to such change.

Proposed solutions to enhance the evidence base towards 2020

The evidence base for changes in the delivery of services to farmers by companies, and for the scalability and replicability of business models can be supported through:

1. Analyzing **information from the RMF** on business cases developed to show the potential of sustainable practices and the number of producers reached by service delivery.
2. Including **monitoring information** from the SDM and Innovative Finance projects in the analyses
3. **Interviewing 3-5 private sector stakeholders** on scalability and replicability of the SDMs and IDH's contribution to this (one for each implemented SDM).
4. Include questions on changes in service delivery in **the sector survey**, including an assessment of IDH's contribution to such change.

3.3 Impact theme Mitigation of deforestation

3.3.1 Measuring IDHs contribution to impact on improving land use governance (public-private) and its effects on the mitigation of deforestation

Key challenges in measuring IDHs contribution to impact

The key challenge in measuring IDHs contribution to the mitigation of deforestation through improving land use governance is to causally link actual changes in land use and deforestation rates because of land use governance improvements.

It is also considered quite a challenge to assess the extent to which voluntary and regulatory standards and their harmonisation across sectors reduce deforestation (Hansmann, Essel and Klose 2014). The number of laws and regulations adopted by a country is not necessarily a good indicator to measure progress in this area, as policy implementation, including enforcement, is often a challenge. However, some proxy-indicators exist. For example, monitoring the quantity and quality of the sanctions imposed to stakeholders in order to make them comply with forest related regulations is needed and possible, e.g. by Global Witness and Transparency International (Kaimowitz 2003).

Actions already undertaken for measuring IDHs contribution to impact

IDH measures changes in policies and standards and IDH's contribution to such changes within the RMF, through qualitative reports by the IDH program teams. But the impact of such policy changes on the mitigation of deforestation are not measured through the RMF.

The current in-depth studies do not assess changes in sector-wide governance, because they are focused on field level / landscape impacts. The baseline study for the Mau Forest project in Kenya does describe the interventions currently implemented in the area, which is useful for a future impact evaluation.

Proposed solutions to enhance the evidence base towards 2020

To fill the gap in the evidence base on the effectiveness and impact of IDH's support of improving land use governance, we propose to specifically focus efforts on the following activities:

1. IDH is recommended to ensure that **at least one in-depth study** is undertaken to assess IDH contribution to land use governance and its impacts. This study should be connected to one of the in-depth field level studies already undertaken (West Kalimantan in Indonesia or Mau Forest in Kenya). Such an in-depth study should include qualitative research to retrospectively assess the effect of IDH support on sector governance, and its impact on the mitigation of deforestation at field level.
2. Analyse **RMF information** on changes in policies and standards and use this information as a basis for stakeholder interviews (2016-2020)
3. Conduct **6 Interviews with stakeholders** (public and private) in the two landscapes (West Kalimantan and Mau Forest), both 2018 and 2020, focussed on IDH's contribution to policy and strategy changes and their impacts on sustainable land use and deforestation rates.
4. Include questions in the **sector survey** on IDH's contribution to policy and strategy changes and their impacts on sustainable land use and deforestation rates (2018 and 2020).

3.3.2 Measuring IDHs contribution to impact on the effectiveness and profitability of PPI business models and its effects on the mitigation of deforestation

Key challenges in measuring IDHs contribution to impact

At the moment of writing, the Production Protection Inclusion approach was just starting up. As it is quite a unique approach compared to other interventions to mitigate deforestation, the main challenge is to ensure that sufficient evidence becomes available in the next years on the effectiveness of such PPI business models.

It is important to document the scaling, replication and adaptation of business models that have been implemented with IDH support. Furthermore, we should reflect on and compare their results with the scaling of business models piloted by other stakeholders, and other (voluntary) market based schemes to boost demand for sustainably sourced products such as timber.

Actions already undertaken for measuring IDHs contribution to impact

The current two in-depth studies are not setup to measure the effectiveness and impacts of PPI business models and nor is the RMF collecting such information from program partners. However, the activities to be undertaken in the NICFI-IDH Partnership Program (Connecting Production, Protection and Inclusion), if granted, appear to include a strong monitoring and evaluation component.

Proposed solutions to enhance the evidence base towards 2020

The following activities are proposed to fill the evidence gap around IDHs contribution to effective and profitable PPI deals and projects:

1. **Analyse the information from the RMF** on the uptake rate of sustainable production by program partners (2016-2020)

2. **At least one in-depth study** should be conducted to evaluate IDH's contribution to establishing profitable and effective PPI deals / projects. This study should combine information on effectiveness (in terms of changes in land use or the mitigation of deforestation) with information on the profitability of the deal/project to assess the cost effectiveness of the approach. It may be possible to include such an assessment in the in-depth field level studies for the Mau Forest or West Kalimantan, if these programs are applicable to the new PPI approach.
3. Conduct **Interviews with 6 stakeholders** aiming to evaluate IDH's contribution to the creation and implementation of PPI deals and projects and to collect information on the business case for PPI models (2018, 2020).
4. Use **monitoring information** from the NICFI-IDH Partnership Program (2017-2020).

3.3.3 Measuring IDHs contribution to the adoption of sustainable landscape management practices and its effects on the mitigation of deforestation

Key challenges in measuring IDHs contribution to impact

The main challenge in measuring IDHs contribution to impacts at field level is to measure changes in land management and deforestation rates at landscape level., including an assessment of IDH's contribution to such changes.

For instance, the two in-depth baseline studies currently available do not appear to be setup to measure changes in sustainable land management practices by farmers. Neither do they indicate whether and how possible 'leakage' effects are taken into account. Leakage effects occur if the people who cannot use land or forest areas as they were used to anymore (e.g. for obtaining wood, or grazing animals) move to other areas to do the same activities. The intervention may then

result in sustainable land use in the intervention area, but an increase in deforestation elsewhere because of this. Finally, it will be a challenge for future evaluations based on these baseline studies to address whether the intensification of production and an increase in farmer incomes lead to sustainable land management.

In terms of measuring the impacts of changes at landscape level, satellite-based monitoring of land use and land cover changes should thus look wider than only the intervention areas (i.e. landscape level), because of these leakage effects (Garrett et al. 2016, Hosonuma, Herold, De Sy et al. 2012, Kissinger, Herold and De Sy 2012).

Actions already undertaken for measuring IDHs contribution to impact

IDH measures the adoption rate of improved practices and the farmland area where trained practices are applied. Implementing partners are to report on these outcome indicators through the RMF. Furthermore, in the in-depth impact studies, third parties are supposed to measure the number of hectares prevented from deforestation or the rate of deforestation in landscape dominated by the commodity production.

Based on the available in-depth baseline studies, it is not yet possible to assess baseline levels of deforestation to be used in a future impact evaluation study.

In the in-depth study for the Mau Forest project, for instance, much of the relevant information is being collected, but the study does not contain actual calculations of extent or rates of deforestation. Furthermore, no provisions are made to deal with potential leakage of deforestation to nearby locations outside the target landscape.

Proposed solutions to enhance the evidence base towards 2020

The following activities are proposed to enhance the evidence base so that IDHs contribution to impact on sustainable land use and the mitigation of deforestation can be verified:

4. Ensure that **the two in-depth studies** include a measurement of the adoption of sustainable land management practices and its effects on the mitigation of deforestation, including why farmers have adopted the improved practices
5. Ensure that **the two in-depth studies** include an evaluation of the effects of production intensification and income increase on sustainable land management
6. The **two in-depth studies** should include information on how possible leakage effects are taken into account
7. Analyse the **RMF indicators** for the adoption of practices and farmland area where trained practices are applied for the relevant programs (2016-2020)
8. **The sector survey** to include questions on sustainable land use change, the mitigation of deforestation and IDH's contribution to both (2018, 2020)
9. Use **monitoring information** from the NICFI-IDH Partnership Program, if applicable (2017-2020).

We would like to make one final recommendation on indicator development for IDH for the Mau Forest project. Given the fact that the ISLA Kenya program is

already assessing the opportunities to develop a REDD+² project to maintain the activities after the IDH program finishes, it would be advisable to also make sure the M&E indicator for deforestation meets the REDD+ standards, including information on deforestation reference levels, and also assessments of (possible) leakage to other areas.

3.4 Impact theme Living wage and improved working conditions

3.4.1 Measuring IDHs contribution to improvements of sector policies (public-private) and its effects on workers' wages and in-kind benefits

Key challenges in measuring IDHs contribution to impact

The key challenge in this impact theme is to measure the impact of IDH support on wage levels and in-kind benefits through changes in public and private policies.

Actions already undertaken for measuring IDHs contribution to impact

In terms of measuring the effectiveness of the IDH approach, the RMF outcome indicators do not directly cover the indicators for worker-management dialogue and collective bargaining agreements. It could be that the RMF indicator on “changes in policies in line with more sustainable production” will include such information. Program teams are to describe changes in standards and policies each year for the indicator, and assess the IDH contribution to such changes. However, these

descriptions do not include an assessment of the impact of changes in policies on wages and in-kind benefits.

Some in-depth studies are already available for the Malawi 2020 partnership regarding wage levels. A baseline study on wage levels in the tea growing area of Southern Malawi was conducted by Anker & Anker (2014), based on their living wage calculation methodology. This living wage study has been followed up in 2016, and shows wage increases in the tea sector. But it does not contain an analyses of the attribution of these changes to IDH and other stakeholders.

The in-depth study for the Apparel sector in Vietnam can be expected to include an assessment of changes in sector policies and strategies, but it is not entirely clear whether it will include all required elements as the baseline study methodology is currently being developed. Also, it is a baseline study for an initiative which has started relatively recently. Therefore, a question is whether changes in policies and strategies can already be observed.

Proposed solutions to enhance the evidence base towards 2020

The claim that worker-management dialogue and collective bargaining contribute to the attainment of better wages and working conditions is not contested in the literature. Even though first evidence is available on wage increases in the Malawi tea sector, it would be valuable if the IDH-supported monitoring of average wages for tea pickers would be continued annually in order to analyse and document – e.g. in a ten year period - trend-effects that can be related to the Malawi 2020 actions. Such efforts are currently undertaken, reporting wage levels in comparison to living

² REDD+: Reducing Emissions from Deforestation and forest Degradation, which includes: (a) Reducing emissions from deforestation; (b) Reducing emissions from forest degradation; (c)

Conservation of forest carbon stocks; (d) Sustainable management of forests; (e) Enhancement of forest carbon stocks.

wage levels between January 2014 and September 2016³. A comparative analysis of the processes in wages establishment and/or wage gaps in various sectors could add to the literature.

To fill the gap in the evidence base on the effectiveness and impact of IDH's support to improve sector policies and strategies, we propose to specifically focus efforts on the following activities:

1. Ensure that the **in-depth studies** on IDH activities will include an evaluation of IDHs contribution to changes in sector policies and strategies, and their effects on wages and in-kind benefits
2. Analyse **RMF information** on changes in policies and standards and use this information as a basis for stakeholder interviews (2016-2020)
3. Conduct **6 Interviews with stakeholders** (public and private) in Malawi (tea sector) and Vietnam (Apparel) in both 2018 and 2020, focused on IDH's contribution to policy and strategy changes and their impacts on wage levels and in-kind benefits.
4. Include questions in the **sector survey** on IDH's contribution to policy and strategy changes and their impacts on wage levels and in-kind benefits (2018 and 2020).

3.4.2 Measuring IDHs contribution to improvements of human resource management and its effects on working conditions

Key challenges in measuring IDHs contribution to impact

The main challenge is to increase the evidence base regarding changes in human resources management due to IDH support, and its effects on working conditions. This is not included yet in the in-depth studies, although a nutrition baseline study for the Malawi tea sector contains relevant information on nutrition aspects.

Actions already undertaken for measuring IDHs contribution to impact

A nutrition baseline study on Malawian tea workers was conducted in 2015. Other HRM aspects (apart from wages, see section 6.6.1), are not included in the baseline studies for the Malawi 2020 program.

The Higg index is to be included in the Apparel baseline study for Vietnam. Whether it will actually be fully included is unclear at the time of writing. The Higg index contains information on: recruitment and hiring, compensation, work hours, worker involvement, worker treatment and development, health and safety and termination and retrenchment. The use of the Higg index, in two measurements, will shed light on changes in HRM practices and thus working conditions. But they do not measure their effects (e.g. on worker productivity).

The current RMF outcome indicator that could assess changes in HR is 'sustainability embedded at corporate level'. But this indicator currently does not include changes in HR management and working conditions. This indicator furthermore targets the 'three main companies' which may suggest a focus on buying companies only, while insights from 'supplying companies' are key in assessing changes in HR management and its effects locally.

³ Wages Committee of Malawi 2020 Tea Revitalization Project

Update to October 2016: Living wage, prevailing wages, and alternative measures of wages and poverty. by Richard Anker and Martha Anker, October 2016

Proposed solutions to enhance the evidence base towards 2020

We propose to specifically undertake the following activities to fill the gap in the evidence base:

1. **The in-depth study** in Malawi should include an assessment of IDH's contribution to changes in HR and working conditions, including its effects (e.g. on nutrition). The nutrition baseline study could be used for this, and together with evidence from literature that fortified foods indeed improve nutrition, an overview of the total number of workers reached and an ex post analyses of how IDH contributed to the provisioning of fortified foods will lead to conclusions on IDHs contribution to impacts
2. The **in-depth study** in the apparel sector in Vietnam should include an evaluation of changes in HRM practices and working conditions, and their effects, e.g. on worker productivity.
3. Analyse **RMF information** on 'sustainability embedded at corporate level' and use this information as a basis for stakeholder interviews (2016-2020).
4. Conduct **4 Interviews with private sector stakeholders** in Malawi (tea sector) and Vietnam (Apparel) in both 2018 and 2020, focused on IDH's contribution to changes in HR and working conditions and their impacts
5. Include questions in the **sector survey** on IDH's contribution to policy and strategy changes and their impacts on wage levels and in-kind benefits (2018 and 2020).

An additional recommendation for the in-depth studies is to conduct survey research within a sample of workers as this proves feasible and informative, as shown in two IDH-funded pilot studies in China by the Economic Rights Institute (2015). The studies are also recommended to include structured focus-group interviews with workers and management that will trace the registered changes back to IDH-supported activities if applicable. In Vietnam, worker interviews and a worker survey are planned to be undertaken in the Apparel baseline study.

As complementary university research, the effect on nutritional status of fortification of maize in Malawi tea estates could be a good case to be tested with an RCT. It is a replicable treatment and with policy relevance. However, existing evidence is already very strong that it is beneficial for health (Gera et al. 2012) decreasing the need for such studies.

3.4.3 Measuring IDHs contributions to the effectiveness and efficiency of business models and its effects on workers' wages

Key challenges in measuring IDHs contribution to impact

The main challenge in proving IDHs contribution to impacts for this result area is to prove the effectiveness and efficiency, and the scalability and replicability of business models especially including information on the anticipated environmental effects that drive cost reductions.

Actions already undertaken for measuring IDHs contribution to impact

The RMF will contain information on the number of business cases developed and IDHs contribution to the development. But the actual evaluation of the business models and their effects on worker wages can only be covered by in-depth studies. The Malawi Tea Competitive Analysis by IDH could be an informative starting point to develop such analyses for the Malawi tea sector.

The RMF indicator on the number of processing facilities with sustainable production practices will give an idea of the sustainability of the processing facilities, but detailed information (e.g. case studies) are necessary to capture data (costs-benefits) on changes in and effects of business models, that permits

upscaling and replication. Confidentiality of data on pilots, due to inter-firm competition, might be an issue that limits sharing for replication.

Finally, IDH wants third parties conducting in-depth research to analyse the Higg Index as proxy for environmentally sound production. This index is useful for benchmarking but might be too rough to detect small changes within each firm with pilot experiences and technical innovations.

Proposed solutions to enhance the evidence base towards 2020

We propose to focus the business model research on the following activities

1. **The Malawi tea sector competitiveness** analyses to be followed up to include assessment of change in business practices and effect on margins and wages
2. A future **in-depth study** in the apparel sector in Vietnam to include an evaluation of changes in business models and their effects on workers' wages.
3. Analyse **RMF information** on 'business cases developed' and 'number of processing facilities with sustainable production practices' and use this information as a basis for stakeholder interviews (2016-2020)
4. Conduct **4 Interviews with private sector stakeholders** in Malawi (tea sector) and Vietnam (Apparel) in both 2018 and 2020, focused on an evaluation of changes in business models and their effects (efficiency, effectiveness, replicability, scalability).

3.5 Impact theme Responsible agrochemical management

3.5.1 Measuring IDHs contribution to improvements of public and private pesticide policies and their effects on farmers pesticide management

Key challenges

As with the other Impact Themes, a key challenge in changing farmer behaviour through supporting changes in public and private policies, is that policies may not be implemented as planned. There is a general lack of evidence on the impacts at field level from interventions that aim to change public and private policies.

Actions already undertaken for measuring IDHs contributions to impact

The current in-depth studies commissioned by IDH do not contain analyses of the effects of IDH support on policies and their impact on farmers' pesticide management. A follow up of these studies should include such an assessment, if policy changes indeed have been part of the IDH support.

Proposed solutions to enhance the evidence base towards 2020

To fill the gap in the evidence base on the effectiveness and impact of IDH's support to improve policies and strategies, we propose to specifically focus efforts on the following activities:

1. Ensure that the **in-depth studies** on IDH activities will include an evaluation of IDHs contribution to changes in public and private policies and strategies, and their effects on farmer pesticide use. At least one such in-depth is to be conducted.
2. Analyse **RMF information** on changes in policies and standards and use this information as a basis for stakeholder interviews (2016-2020)

3. Conduct **6-8 Interviews with stakeholders** (public and private) in Vietnam (coffee program) and India (Cotton, Tea and Fresh & Ingredients programs) in both 2018 and 2020, focused on IDH's contribution to policy and strategy changes and their impacts on farmers pesticide use
4. Include questions in the **sector survey** on IDH's contribution to policy and strategy changes and their impacts on farmer's pesticide use (2018 and 2020).

3.5.2 Measuring IDHs contribution to improved pesticide management and its effects on farmer profitability, occupational health and safety, market access, food safety and ecosystem health

Key challenges in measuring IDHs contribution to impact

The main challenges in verifying IDHs contribution to field level sustainability are: i) to use a credible indicator of toxic load for measuring the impact of IDH supported interventions on ecosystems, and ii) verify the impact of IDH supported interventions on farmer profitability, ecosystems, food safety, market access, and occupational health and safety for all programs.

For assessing IDH's contribution to ecosystem impact, it is not required to *measure* ecosystem impact due to better pesticide management and use as it is self-evident that less pesticides use and/or the use of less toxic pesticides always reduces the ecosystem impact of agriculture. The same counts for the impacts of IDH support on food safety and market access. This is different for occupational health and safety, as this is not only affected by pesticide use, but also by how pesticides are applied. Therefore, the assessment of changes in occupational health and safety are important to take into account in impact studies.

In terms of measuring reduced ecosystem impacts through responsible agrochemical management, there is a need for a good indicator of 'toxic load'. The indicator in the RMF for "reduced toxic loading in the natural environment" does not reflect actual toxic loading as it measures pesticide use only (in terms of kilogram of active toxic ingredients used per hectare or per kg of produced crop) and does not combine such use data with hazard data.

The need for a good toxic load indicator is supported by many scholars, especially for monitoring the potential risk of environmental effects using national statistics (De Blécourt, Lahr and Van den Brink 2010). IDH is a co-investor in the development of a 'toxic loading indicator' in partnership with the BCI and the Aid-by-Trade Foundation, which is a good step in the direction of such a common toxic load indicator. Indicator results are not available yet.

It is crucial to realise that toxic loading is not only determined by the amount of pesticides used but also by the environmental and toxic properties of each of the active ingredients in these pesticides. So information on both these aspects is needed, not only on volumes of pesticide products used. The toxic load indicator thus combines the inherent toxicity of the active ingredient(s) of a pesticide product (e.g. LD50, LC50) with a volume of its active ingredients and with the area on which it is applied.

Since exposure is not part of the toxic load approach, such an indicator for toxic load does not express the actual risk nor the toxic effects resulting from pesticide applications in the field. Actual exposure may depend on multiple aspects, such as the method of application, equipment used, operator skills, conditions during the application (weather), properties of the crop, soil, etc.

Actions already undertaken for measuring IDHs contribution to impact

Several in-depth studies have been conducted or are currently undertaken:

1. A baseline study on agrochemical use in chili production in India (finalised). An endline study has also been finalised, but has not been fully reviewed by the team yet.
2. A baseline study on agrochemical use in table grape production in India (finalised)
3. A baseline study on Trustea implementation in the tea sector in India (underway)
4. A study to generate an overall synthesis of information and literature on agrochemical use in relevant sectors in India (underway)
5. A baseline study on agrochemical use and the development of an improved management system for agrochemical use and trade in Lam Dong province of Vietnam (coffee, tea, fruit & vegetables, underway)
6. For the cotton sector in India, IDH proposes to use BCI's Harvest Reports as evidence on IDH's contribution to impact
7. The implementation of the Farmer Field Book approach in the coffee program in Vietnam (underway).

The studies on **chili production in India** do not present findings on actual pesticide use (kg of active ingredient per hectare) and does not measure toxic load. But the endline study does report a change in the application of banned chemicals. The information collected during the study may thus enable the calculations of pesticide use in terms of kg of active ingredient per hectare.

The baseline study on **table grape production in India** does not measure toxic load, and does not report on pesticide use in terms of kg of active ingredients per hectare. But the study annex contains information on average use of pesticides per acre, per pesticide. Thus probably sufficient information is collected through the study to calculate kgs of active ingredient applied per hectare.

For the **cotton sector in India**, BCI reports on pesticide use amongst others, through their Harvest Reports, and compares performance of BCI farmers with comparison farmers. However, they only present findings for one year. Therefore no conclusions can be drawn on the impact of BCI on smallholder cotton farmers as no information is available on the evolution over time in farmer performance for both groups of farmers. We know that BCI has a dataset with many farmers and for many years, so it would be of interest to explore whether such data could be used for a difference-in-difference impact evaluation. A promising baseline study on BCI verification in India has been published (Kumar et al., 2015). This baseline report is methodologically strong and is likely to capture the net-effects of the Better Cotton Initiative in one district in India in a future evaluation. The report, however, does not refer to any role of IDH in this project. Thus, robust evidence on the impact of BCI, as supported by IDH, is not available yet.

The implementation of the Farmer Field Book (FFB) in **the coffee sector in Vietnam** is likely to result in detailed evidence on pesticide application rates throughout the years. It is not expected to yield results on toxic load. Also, the FFB implementation is not setup as 'real' baseline study so this could result in methodological challenges in measuring IDHs contribution to impact. But possibly, the FFB analyses could be connected with the foreseen baseline study on 'agrochemical use and the development of an improved management system for agrochemical use and trade in Lam Dong province of Vietnam'.

Proposed solutions to enhance the evidence base towards 2020

To enhance the evidence base, we propose to specifically focus efforts on the following activities:

7. IDH to ensure that the **in-depth studies for chili and table grapes** will include findings on the use of pesticides in terms of kgs of active ingredients per

hectare, as described in the RMF, as well as on toxic load. For the chili study, this would mean that additional analyses would need to be done, reported in a renewed endline report. The foreseen table grape endline study should also contain such analyses.

8. IDH is recommended to ensure that **the studies for Vietnam** will include findings on the use of pesticides in terms of kgs of active ingredients per hectare, as described in the RMF. As well as report on changes in toxic load.
9. IDH and Wageningen UR are to **explore** whether it would be possible to connect the FFB work in the coffee sector in Vietnam with the planned baseline study for the coffee, tea and fruit and vegetable sectors to enable a future evaluation of IDH's support in the coffee sector.
10. **IDH is recommended to ensure that all in-depth** studies will contain an evaluation of changes in occupational health and safety related to pesticide use.
11. **IDH is recommended to explore with BCI** whether information from their database could be added to evaluate the impact of BCI on pesticide use through comparing the evolution over time between BC farmers and a comparison group.
12. Include questions in the **sector survey** on IDH's contribution to responsible pesticide management (2018 and 2020).

A key element to consider in the in-depth studies is the adoption of responsible pesticide management practices, as generally many, but not all farmers apply all promoted practices. The data collection could focus on the question 'what type of farmers apply better pesticide management practices', and not only measure average effects. This could assist in the adaptation of the intervention, or of the recommendation of practices if necessary.

3.5.3 Measuring IDHs contribution to service delivery models and market demand for sustainable produce and their effects on farmer's pesticide management

Key challenges in measuring IDHs contribution to impact

The main challenge for measuring the impacts of IDH support on business practices is to generate evidence on proven business models.

The targets mentioned in the IDH strategy 2016-2020 on the issue of toxic load are focused on compliance with international regulations (not using WHO class 1 or class 2 pesticides), and less with input service delivery models that reduce toxic load. These service delivery models are more prominent in the impact area on smallholder livelihoods where yield and income improvements are the prime goals, not environmental impact. In the evaluation of new business models related to improving the access to less toxic products, it is important to monitor the quality and toxicity of the inputs provided to farmers.

Actions already undertaken for measuring IDHs contribution to impact

Data collected through the RMF is to provide results on the producers/workers reached by service delivery. A question will be whether the information in the RMF will be specific enough to measure improved access e.g. it does not include information on the type of pesticides delivered to farmers.

The RMF is also tracking the uptake rate of sustainable production by program partners covered by a sustainability standard (certification/verification scheme). This indicator focuses on sustainability certification, while products exported to Europe also need to comply with EU food law and GlobalGap, standards relevant for pesticide application and MRLs. Therefore, companies sourcing products which are

not certified may also be produced sustainably in terms of pesticide application and MRLs.

The in-depth studies do not contain an assessment of (change in) service delivery to farmers yet, related to pesticide use and its effects at farm level. Nor do they contain a business model analysis on service delivery.

Proposed solutions to enhance the evidence base towards 2020

We propose to specifically focus efforts on the following activities:

1. IDH is recommended to ensure that the **in-depth studies on field level impact** currently undertaken will also contain an evaluation on the impact of changes in service delivery.
2. Conduct at least **one in-depth study on the profitability, efficiency and effectiveness of business models**.
3. Analyse **RMF information** on 'business cases developed' (if applicable) and 'service delivery to farmers' and use this information as a basis for stakeholder interviews (2016-2020)
4. Conduct **4 Interviews with private sector stakeholders** in India and Vietnam in both 2018 and 2020, focused on an evaluation of changes in business models and their effects (efficiency, effectiveness, profitability).

4. RMF indicator baseline information

Result Area 1 - Change in business practice		Frequency	Definition	Metrics	Aquaculture			
					Baseline	Baseline data Comments/qualitative description	Target 2020	Targets 2020 Comments/qualitative description
RA1.Output.1	Private sector (sustainability) investments in the program	Half-yearly	The total size of all realized eligible private sector investments (in €) as co-funding to the program and the ratio between these private sector investments and the	1. Euro (€) 2. Ratio	€11.1 million (situation up to 2015) Ratio of 1:2.6	Based on the information included in the Annual Report 2015 covering the period 2008-2015.	Ratio of 1:1.5	
RA2.Output.2	Market share by program partners	Half-yearly	The aggregated market share of all private sector partners in the program in terms of the annual volumes of the respective commodity produced.	Market share as percentage (%) of global volume production				
RA1.Output.3	Business cases developed to show the potential of sustainable practices	Half-yearly	The number of business cases that have been developed within the program to show the private sector the potential of sustainable practice that could be adopted and implemented company wide or by other companies.	1. The number (#) of business cases developed; 2. Qualitative description explaining the context against which the business cases have been developed and some characteristics of the business case itself and the role of IDH in this process (see measurement guidance below for the elements that should be included in the narrative).				
RA1.Outcome.1	Sustainability embedded at corporate level	Yearly	The degree to which companies that are involved in the program (ie. not only the formal contractual program implementing partners) have embedded sustainability at their corporate level (based on the impact claim that has been defined for the program). Embedding sustainability could entail various aspects, amongst which: <ul style="list-style-type: none"> • The degree of inclusion of sustainability in corporate strategies; • The development of Key Performance Indicators (KPIs) with clear targets; • The connection with the internal rewarding system; • The embeddedness in the procurement system of the company; • The degree of priority of sustainability issues on the CEO's agenda; • The company reports on progress in addressing sustainability in its external communication. 	Qualitative description about the embeddedness of sustainability at corporate level for three of the main companies that are involved in the program. This description should provide insights in what the companies have changed over the reporting period in terms of their approach towards sustainability issues (see measurement guidance below for the elements that should be included in the narrative).	Not applicable	No baseline value is expected for this indicator as it provides an annual assessment of the current situation of sustainability embedded at corporate level for companies the program works with in terms of elements the program teams defined in the annual plan phase.	Up till 2020 the Aquaculture program will work to further embedding sustainability at corporate level of the companies the program works with. The focus is on the following dimensions of sustainability: <ul style="list-style-type: none"> • Aquatic animal health management; • Aqua feeds & traceability of ingredients; • De-bottleneck investments for sustainable development aquaculture in Africa. 	
RA1.Outcome.2	Uptake rate of sustainable production by program partners	Yearly	This indicator registers what percentage of total sourcing of the program partners is sourced sustainably. In sectors in which certification or verification standards are in place, sustainable production could be measured against these standards (e.g. ASC, RSPO, RTRS, ETP, UTZ). When formal certification or verification standards are lacking, or where the program teams feel the existing standards are not (only) a good proxy, program teams themselves need to define 'sustainable' production through a dedicated protocol.	The total sustainable procurement by program partners (in MT) as percentage (%) of the total procurement by program partners (in MT).				

Result Area 1 - Change in business practice		Apparel				Cocoa			
		Baseline data		Targets 2020		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description	Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA1.Output.1	Private sector (sustainability) investments in the program	€0.8 million (situation up to 2015) Ratio of 1:1	Based on the information included in the Annual Report 2015 covering the period 2008-2015.	Ratio of 1:1.5		€42.9 million (situation up to 2015) Ratio of 1:2.2		Ratio of 1:1.5	
RA2.Output.2	Market share by program partners								
RA1.Output.3	Business cases developed to show the potential of sustainable practices	Zero		Ten	Business cases will be replicated across countries and parts of the value chain.	Zero		Six	Business cases will be developed on the following topics: • 2 related to nutrition; • 3 related to different types of agri-loans; • 1 related to forest protection.
RA1.Outcome.1	Sustainability embedded at corporate level	Not applicable No baseline value is expected for this indicator as it provides an annual assessment of the current situation of sustainability embedded at corporate level for companies the program works with in terms of elements the program teams defined in the annual plan phase.		Up till 2020 the Apparel program will work to further embedding sustainability at corporate level of the companies the program works with. The focus is on the following dimensions of sustainability: • Working conditions; • Occupational Health & Safety (OH&S); • Chemicals; • Energy usage.		Not applicable No baseline value is expected for this indicator as it provides an annual assessment of the current situation of sustainability embedded at corporate level for companies the program works with in terms of elements the program teams defined in the annual plan phase.		Up till 2020 the Cocoa program will work to further embedding sustainability at corporate level of the companies the program works with. The focus is on the following dimensions of sustainability: • Companies adopting strong data collection strategies for the generation of reliable management data on the effectiveness of service delivery models	
RA1.Outcome.2	Uptake rate of sustainable production by program partners								

Result Area 1 - Change in business practice		Coffee				Cotton			
		Baseline data		Targets 2020		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description	Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA1.Output.1	Private sector (sustainability) investments in the program	€19.8 million (situation up to 2015) Ratio of 1:1.8	Based on the information included in the Annual Report 2015 covering the period 2008-2015.	Ratio of 1:1.5		€21.6 million (situation up to 2015) Ratio of 1:1.6	Based on the information included in the Annual Report 2015 covering the period 2008-2015.	Ratio of 1:1.2	
RA2.Output.2	Market share by program partners	28%		Roasters 30% Traders 50%	Targets might be revised based on input from GCP membership 2017. GCP membership 2017 will be known by early November 2016 and based on that we can make a more realistic estimate of the 2020 target.	Not yet available	No baseline information is yet available. The production figures of the Better Cotton Initiative (BCI) brands global cotton footprint in 2015 (as the baseline figure for this indicator) will be collected and reported in the Annual Report of 2016.	Not yet available	BCI has been approached to confirm the availability of this type of information from their brands. In any case this figure will be reported on in the Annual Report of 2016.
RA1.Output.3	Business cases developed to show the potential of sustainable practices	Zero		Three	Business cases developed on the 3 priority areas of the Coffee program: • Gender and Youth; • Climate Change; • Economic viability of coffee farming/service delivery models.				
RA1.Outcome.1	Sustainability embedded at corporate level	Not applicable No baseline value is expected for this indicator as it provides an annual assessment of the current situation of sustainability embedded at corporate level for companies the program works with in terms of elements the program teams defined in the annual plan phase.		Up till 2020 the Coffee program in partnership with GCP will work to further embedding sustainability at corporate level of the companies the program works with. The focus is on the following dimensions of sustainability: • Gender and Youth; • Climate change adaptation; • Economic viability of coffee farming. These are the topics for which GCP and IDH see the highest need to work on a sector wide agenda and action plan and for which GCP is best positioned to make impact. We have yet to establish a measurement system to measure the change in which sustainability (as per these dimensions) is embedded at corporate level. IDH and GCP will work on this together.		Not applicable No baseline value is expected for this indicator as it provides an annual assessment of the current situation of sustainability embedded at corporate level for companies the program works with in terms of elements the program teams defined in the annual plan phase.		Up till 2020 the Cotton program will work to further embedding sustainability at corporate level of the companies the program works with. The focus is on the following dimensions of sustainability: • Commitment of the top management; • Public declaration of sustainability goals; • Key Performance Indicators (KPIs) and targets at the procurement level; • Sustainability progress reporting in the public domain; • Embedded in the procurement system of the company via product specifications; • Sustainable procurement as a preferential criterion towards suppliers.	
RA1.Outcome.2	Uptake rate of sustainable production by program partners	not yet available		not yet available	At the current stage due to the establishment of a new organization and the currently on going development of the measurement methods, such as the global progress framework. In the terms of participation commitments of members include the integration of sustainability into their businesses, be it through external third party certification/verification or other innovative, accepted methods of assurance for BCC	9%		17%	The overall target is to reach an uptake of 1 million MT of Better Cotton lint by retailers out of a total production of 6 million MT of Better Cotton lint.

Result Area 1 - Change in business practice		Fresh & Ingredients				Tea			
		Baseline data		Targets 2020		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description	Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA1.Output.1	Private sector (sustainability) investments in the program	€6.4 million (situation up to 2015) Ratio of 1:0.9	Based on the information included in the Annual Report 2015 covering the period 2008-2015.	Ratio of 1:1.5		€9.4 million (situation up to 2015) Ratio of 1:1.1		Ratio of 1:1.5	According to latest projection Tea budget is €9.85 million EUR (BZ & DANIDA) so that would be a total
RA2.Output.2	Market share by program partners					21%	The selected level is tea traders, buyers, packers. Source: State of sustainability report (2014) mentions that 85% of the global tea production is sold by multinationals of that Unilever has tea 12%, Tata Global Beverages 4%, Twinings 3% and we believe Taylors of Harrogate will have 2%. This sums up to a total of 21% based on figures of 2011 (latest figure available).	30%	Definition of indicator should be global marketshare (removing production side and against baseline).
RA1.Output.3	Business cases developed to show the potential of sustainable practices	Zero		Twelve	The Fresh & Ingredients Program will inspire and support partners in prototyping new business models for delivering impact on the 4 program externalities. The majority of business cases will address smallholder livelihood, but at a minimum one business case will be developed per externality.	Zero		Ten	10 business cases developed.
RA1.Outcome.1	Sustainability embedded at corporate level	Not applicable No baseline value is expected for this indicator as it provides an annual assessment of the current situation of sustainability embedded at corporate level for companies the program works with in terms of elements the program teams defined in the annual plan phase.		Up till 2020 the Fresh & Ingredients program will work to further embedding sustainability at corporate level of the companies the program works with. Participating companies will participate in and sign at least 1 covenant of the Fresh and Ingredients program. The private companies commit themselves to map their supply chains and to monitor the volume by using the agreed measurement methodology as agreed per covenant. To reach the targets set by the different sector platforms, the companies will have to establish specific internal policies and to dedicate resources to perform the monitoring and support their suppliers accordingly.		Not applicable No baseline value is expected for this indicator as it provides an annual assessment of the current situation of sustainability embedded at corporate level for companies the program works with in terms of elements the program teams defined in the annual plan phase.		Up till 2020 the Tea program will work to further embedding sustainability at corporate level of the companies the program works with. The focus is on the following dimensions of sustainability: • Establishing a living wage in Malawi; • Mitigation of Gender Based Violence in Kenya; • Reduced agrochemical usage in India.	
RA1.Outcome.2	Uptake rate of sustainable production by program partners	Not yet available	The 2016 result will serve as baseline	25% points increase	25% points increase in volumes sourced by covenant partners in at least 5 categories by 2020.	not available	No point to specify this per partner as both companies source from the same producers, but in terms of resources and allocation to either one of the two is made (and three in the future).	40%	

Result Area 1 - Change in business practice		Timber			
		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA1.Output.1	Private sector (sustainability) investments in the program	€9.1 million (situation up to 2015) Ratio of 0:0.8		Ratio of 1:1	For certification and for ETTF projects, for other activities lower ratio.
RA2.Output.2	Market share by program partners	Not available		25%	
RA1.Output.3	Business cases developed to show the potential of sustainable practices				
RA1.Outcome.1	Sustainability embedded at corporate level	<p>Not applicable</p> <p>No baseline value is expected for this indicator as it provides an annual assessment of the current situation of sustainability embedded at corporate level for companies the program works with in terms of elements the program teams defined in the annual plan phase.</p>		<p>Up till 2020 the Timber program will work to further embedding sustainability at corporate level of the companies the program works with. The focus is on the following dimensions of sustainability:</p> <ul style="list-style-type: none"> • Sourcing of sustainable tropical timber. 	
RA1.Outcome.2	Uptake rate of sustainable production by program partners	35%		50%	

Result Area 2 - Improved sector governance		Frequency	Definition	Metrics	Aquaculture			
					Baseline	Baseline data Comments/qualitative description	Target 2020	Targets 2020 Comments/qualitative description
RA2.Output.1	Representation and commitment of key-stakeholders in multi-stakeholder processes or coalitions	Yearly	The degree of representation and commitment of sector stakeholders in the program through their participation in multi-stakeholder processes associated with the program per type of organization.	Balanced Score Card questionnaire amongst all members of multi-stakeholder processes associated with the program (this approach is integrated in the questionnaire used for indicator RA2.Outcome.1).	Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders are represented and committed to the multi-stakeholder processes associated with the Aquaculture program.	
RA2.Outcome.1	Satisfaction about the effectiveness of multi-stakeholder processes or coalitions associated with the program	Yearly	The perceived satisfaction by the participating stakeholders (i.e. private sector, government, NGOs) of the multi-stakeholder process in which they participate.	Balanced Score Card amongst all stakeholders in the program's multi-stakeholder processes.	Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders that are member of the multi-stakeholder processes associated with the Aquaculture program are satisfied about the effectiveness of these processes.	
RA2.Outcome.2	Application of voluntary standards on sustainable commodity	Yearly	Assessment whether voluntary national or international standards have been agreed upon and applied by the sector. There should be no overlap with the indicators covering the effectiveness of multi-stakeholder platforms and the indicator for policy changes.	1. The number of voluntary (national or international) standards; 2. Qualitative description explaining the background and progress of the voluntary standards that have been agreed upon or applied by the sector as a result of IDH interventions (see measurement guidance below for the elements that should be included in the narrative).	Zero	The application of standards/practices that address fish health using either a population-based or a zone management approach is negligible	Four	The adoption of population-based and/or zone management approaches to fish health is recognised by the sector broadly. Examples of the application of this approaches exist in 4 focus countries (including Vietnam and Thailand) and are well disseminated
RA2.Outcome.3	Changes in policies in line with increased sustainability and management of resources	Yearly	The effects of implemented changes in policies (in line with the program's theory of change and more sustainable production model in the sector) that lead to an improvement in terms of economic, social and/or environmental performance of the sector.	1. The number of policy changes; 2. Qualitative description explaining the background and progress of the changes in policies as a result of IDH interventions (see measurement guidance below for the elements that should be included in the narrative).	Zero	No focus country recognises the adoption of population-based and/or zone management as key to fish health	Four	4 focus countries (including Vietnam and Thailand) recognise the importance of a population-based, zone management approach and develop policies to support it.

Result Area 2 - Improved sector governance		Apparel				Cocoa			
		Baseline data		Targets 2020		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description	Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA2.Output.1	Representation and commitment of key-stakeholders in multi-stakeholder processes or coalitions	Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders are represented and committed to the multi-stakeholder processes associated with the Apparel program.		Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders are represented and committed to the multi-stakeholder processes associated with the Cocoa program.	
RA2.Outcome.1	Satisfaction about the effectiveness of multi-stakeholder processes or coalitions associated with the program	Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders that are member of the multi-stakeholder processes associated with the Apparel program are satisfied about the effectiveness of these processes.		Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders that are member of the multi-stakeholder processes associated with the Cocoa program are satisfied about the effectiveness of these processes.	
RA2.Outcome.2	Application of voluntary standards on sustainable commodity								
RA2.Outcome.3	Changes in policies in line with increased sustainability and management of resources	Zero		Four	Expected policy changes target improving inspections, better regulatory frameworks for environmental protection, trade and tax policy rewards sustainable business practices/disadvantages polluting business, enabling better working conditions.	Zero		Two	Breakthroughs expected on a total of at least 2 major policy bottlenecks: <ul style="list-style-type: none"> • One regarding sustainable landuse probably in the area of tree titles; • One on farm financing.

Result Area 2 - Improved sector governance		Coffee				Cotton			
		Baseline data		Targets 2020		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description	Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA2.Output.1	Representation and commitment of key-stakeholders in multi-stakeholder processes or coalitions	Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders are represented and committed to the multi-stakeholder processes associated with the Coffee program.		Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders are represented and committed to the multi-stakeholder processes associated with the Cotton program.	
RA2.Outcome.1	Satisfaction about the effectiveness of multi-stakeholder processes or coalitions associated with the program	Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders that are member of the multi-stakeholder processes associated with the Coffee program are satisfied about the effectiveness of these processes.		Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders that are member of the multi-stakeholder processes associated with the Cotton program are satisfied about the effectiveness of these processes.	
RA2.Outcome.2	Application of voluntary standards on sustainable commodity					Three	<p>BCI is currently working with provincial governments and trade associations in India, China, Brazil, Pakistan, Mali and Mozambique. However, other than Brazil and Mozambique, there has been no implementation of the BCI principles as they are currently implementing partners and are learning about the BCI standard and assurance program.</p> <p>BCI is also benchmarked with MyBMP in Australia and Cotton Made in Africa (CMiA). 'myBMP' is a voluntary farm and environmental management system which provides self-assessment mechanisms, practical tools and auditing processes to ensure that Australian cotton is produced according to best practice. Cotton Made in Africa is an initiative of the Aid by Trade Foundation (AbTF) that helps African smallholder cotton farmers to improve their living conditions.</p>	Five (additional ones)	As the BCI GIF Strategic Partner, IDH will support the BCI targets for national embedding. Pending additional work on developing a good enough definition and supporting indicators, the working model is as per below: Definition: The BCSS is seen as fully embedded into a country when there is an organisation or institution, with a national mandate that is accountable for the implementation and credibility of the BCSS (or a recognised equivalent) in country. All funding beyond any global VBF contribution is secured and managed by this same entity. To be developed: Clear and measurable indicators supporting the definition and which will allow BCI to evaluate the degree to which an ongoing embedding process can be said to be 'national' or 'full'. While BCI is in the process of defining a target (9 is the number in discussion) - IDH via the BCI GIF strategic partnership aims to support atleast 5.
RA2.Outcome.3	Changes in policies in line with increased sustainability and management of resources	Zero		Ten policies, six already identified	<p>List of policies that the program is working on:</p> <ul style="list-style-type: none"> • Uganda: Extension service policy • Tanzania: Tax policy • Vietnam: agro chemicals and coffee professionalization • Indonesia: Coffee roadmap and IS Standard <p>The additional 4 policies will be developed as opportunities arise</p>				

Result Area 2 - Improved sector governance		Fresh & Ingredients				Tea			
		Baseline data		Targets 2020		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description	Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA2.Output.1	Representation and commitment of key-stakeholders in multi-stakeholder processes or coalitions	Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders are represented and committed to the multi-stakeholder processes associated with the Fresh & Ingredients program.		Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders are represented and committed to the multi-stakeholder processes associated with the Tea program.	
RA2.Outcome.1	Satisfaction about the effectiveness of multi-stakeholder processes or coalitions associated with the program	Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders that are member of the multi-stakeholder processes associated with the Fresh & Ingredients program are satisfied about the effectiveness of these processes.		Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders that are member of the multi-stakeholder processes associated with the Cotton program are satisfied about the effectiveness of these processes.	
RA2.Outcome.2	Application of voluntary standards on sustainable commodity								
RA2.Outcome.3	Changes in policies in line with increased sustainability and management of resources					Zero		Four	At least 4 policies, in the areas of agrochemicals, gender and wages embedded in Vietnam, India, Malawi and Kenya.

Result Area 2 - Improved sector governance		Timber			
		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA2.Output.1	Representation and commitment of key-stakeholders in multi-stakeholder processes or coalitions	Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders are represented and committed to the multi-stakeholder processes associated with the Timber program.	
RA2.Outcome.1	Satisfaction about the effectiveness of multi-stakeholder processes or coalitions associated with the program	Included in impact evaluation baseline report (available end 2016).		Up till 2020 the main sector stakeholders that are member of the multi-stakeholder processes associated with the Timber program are satisfied about the effectiveness of these processes.	
RA2.Outcome.2	Application of voluntary standards on sustainable commodity				
RA2.Outcome.3	Changes in policies in line with increased sustainability and management of resources	Zero		To be defined	

Result Area 3 - Improved field-level sustainability				Aquaculture				
				Baseline	Baseline data Comments/qualitative description	Target 2020	Targets 2020 Comments/qualitative description	
Frequency	Definition	Metrics						
RA3.Output.1	# of producers/workers trained on key subjects for sustainable production, environmental and social sustainability issues	Half-yearly	The number of producers/workers (m/f) trained on key subjects for sustainable production, environmental and social sustainability issues to capture the scale and reach of the work on the ground and understand the gender balance in these activities.	The number (#) of persons trained, with the following distributions: a. Gender segregation: • Men • Women b. The number (#) of individual training events c. The topic of the training (see measurement guidance for the list of topics that should be selected)	Zero	No smallholders are trained through the program yet in the context of population/zone management	50.000	Smallholders are trained in the context of population/zone management.
RA3.Output.2	# of producers/workers reached by service delivery	Half-yearly	The number of producers or workers that have been offered services other than training within the scope of the program (already measured under indicator RA3.Output.1). These services could be: 1. Input services – planting material, fertilizer, crop protection products/ pesticides; 2. Financial services – inputs on credit, cash advances, pre-harvest finance; 3. Value adding services – services that add value to the product of smallholder farmers, such as mechanization (use of tractors), processing, post-harvest handling and storage services.	The number (#) of persons reached, with the following distributions: a. Gender segregation: • Men • Women b. The types of services delivered (see measurement guidance for the types of services that should be selected) c. The amount of services delivered				
RA3.Output.3	# of smallholder producers organized/aggregated by the program	Half-yearly	The number of smallholder that have been organized or organized themselves to collectively receive services, market their products, and have an agreed governance. IDH follows the system of IFC that groups producer organizations into three tiers that differentiate their capacity to manage information and resources such as crops, inputs or money.	1. Number (#) of producers aggregated with the following distributions: a. A proportional (%) distribution amongst the following three classes: • Class A - Smallholder groups that share facilities and assets and which are bankable/have access to finance as a result of formal aggregation (i.e. legal registration, internal control system). • Class B - Smallholders groups that share a common approach towards collective business, procurement, administrative organization, etc. • Class C - Smallholder groups that only exist on paper, but do not (yet) have a formalized registration and aggregation strategy. b. Gender segregation: • Men • Women				
RA3.Output.4	# of trainers, auditors and/or government staff trained in the program	Half-yearly	The number of trainers, auditors and/or government staff trained through a dedicated curriculum to deliver extension services aimed at overcoming sustainability issues (key externalities).	1. Number (#) of people, with the following distributions: a. Gender segregation: • Men • Women b. The number (#) of individual training events.				

Result Area 3 - Improved field-level sustainability		Frequency	Definition	Metrics	Aquaculture			
					Baseline data	Targets 2020		
					Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA3.Output.5	Volume of sustainably produced production	Half-yearly	The amount of sustainable produced production (in Metric Tons) as the result of the training or input as measured under indicator RA3.Output.1 and RA3.Output.2).	Metric tons (MT).	Zero		250,000 metric tons	
RA3.Outcome.1	Adoption rate by producers/workers of improved practices	Yearly	The adoption rate is the number of farmers and/or workers who start using a new improved practice (Good Agricultural Practice or Good manufacturing Practice), technology or innovation during a specific period of time. The rate of adoption is a relative measure.	1. Number of target producers and/or workers that adopted the new practices, per practice with the following distributions: a. Gender segregation: • Men • Women 2. Percentage of these producers and/or workers as share of the total population of producers and workers trained.	n.a.		50%	
RA3.Outcome.2	Farmland area where trained practices are applied	Yearly	This indicator measures whether trained skills are actually applied in the field.	Hectares (ha) of land where trained practices are applied within the farm system.	Zero		50,000 hectares	
RA3.Outcome.3	# of processing facilities with sustainable production practices and social standards applied	Yearly	The number of processing facilities that are involved in the program that apply sustainable production practices and social standards.	Number (#) of facilities				

Result Area 3 - Improved field-level sustainability		Apparel				Cocoa			
		Baseline data		Targets 2020		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description	Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA3.Output.1	# of producers/workers trained on key subjects for sustainable production, environmental and social sustainability issues								
RA3.Output.2	# of producers/workers reached by service delivery	Zero		60,000	The services provided focus on social, environmental and occupational health & safety issues.	Zero		30,000	Of this total amount of targeted farmers around 27,000 are expected to be men and 3,000 to be women. One third of this group will be coached.
RA3.Output.3	# of smallholder producers organized/aggregated by the program								
RA3.Output.4	# of trainers, auditors and/or government staff trained in the program	Zero		100					

Result Area 3 - Improved field-level sustainability		Apparel				Cocoa			
		Baseline data		Targets 2020		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description	Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA3.Output.5	Volume of sustainably produced production					Zero		30,000 metric tons	Based on the total number of farmers expected to be trained. Calculation: 30,000 farmers with 1 ton/ha each (with success proven on just one hectare)
RA3.Outcome.1	Adoption rate by producers/workers of improved practices	Zero		100%	Factory would change business practices and working conditions as a whole, impacting the total workforce.				
RA3.Outcome.2	Farmland area where trained practices are applied					Zero		30,000 hectares	Based on the total number of farmers expected to be trained. Calculation: 30,000 farmers with 1 hectares each. Focus on replanting and soil fertility restoration and maintenance.
RA3.Outcome.3	# of processing facilities with sustainable production practices and social standards applied	Zero	IN 2016 already 32 textile mills & CMT factories.	60	Textile mills & CMT factories.				

Result Area 3 - Improved field-level sustainability		Coffee				Cotton			
		Baseline	Baseline data Comments/qualitative description	Target 2020	Targets 2020 Comments/qualitative description	Baseline	Baseline data Comments/qualitative description	Target 2020	Targets 2020 Comments/qualitative description
RA3.Output.1	# of producers/workers trained on key subjects for sustainable production, environmental and social sustainability issues	Zero		90.000	Of this group of trained people around 30% is expected to be women Topics of training are water & water management, soil management, financial literacy and associations management.	1.5 million farmers	BCI in developing a data collection and management system for IP reporting and validation by the M&E team - this system will be developed by 2017 and will then provides annual baselines and basis for target setting and reporting on gender segregation of farmers. The program will not report on the number of training events as the definition of trainings would be different across the (currently) 20 BCI countries and because the BCI system is essentially a continuous farmer training and support system.	3.5 million farmers	BCI is developing a data collection and management system for IP reporting and validation by the M&E team - this system will be developed by 2017 and will then provides annual baselines and basis for target setting and reporting on gender segregation of farmers. The program will not report on the number of training events as the definition of trainings would be different across the (currently) 20 BCI countries and because the BCI system is essentially a continuous farmer training and support system. The topics of training are on the 7 production principles of the Better Cotton Standard.
RA3.Output.2	# of producers/workers reached by service delivery	Zero		60.000	Of this group of people that received services 30% is expected to be women. Types of services provided are financial services, agro-input services, planting material services.				
RA3.Output.3	# of smallholder producers organized/aggregated by the program								
RA3.Output.4	# of trainers, auditors and/or government staff trained in the program	Zero		1.000	Of this group of trainers trained 20% is expected to be women.				

Result Area 3 - Improved field-level sustainability		Coffee				Cotton			
		Baseline data		Targets 2020		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description	Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA3.Output.5	Volume of sustainably produced production					3 million metric tons		6 million metric tons	
RA3.Outcome.1	Adoption rate by producers/workers of improved practices	Zero		75%	Out of the population of farmers trained.	Not yet available	BCI is still collating the results of the 2015-2016 harvest report - hence we will only have the baseline by the end of October 2016.	75%	The minimum acceptable level as defined (in officially) by BCI has been used as the de-facto target. Since BCI is a farmer training and continuous improvement programme - compliance or licensing is not a hard KPI for Standard based on the reasoning that: a) farmers trained also may have adopted parts of the practices even if they did not meet the minimum criteria; b) farmers are licensed as a Producer Unit (PU) based on verification by random sampling; and not as individuals - therefore, there may be a sub-set of unlicensed farmers who may have also met minimum criteria but did not qualify as a PU.
RA3.Outcome.2	Farmland area where trained practices are applied					3.5 million hectares		6 million hectares	
RA3.Outcome.3	# of processing facilities with sustainable production practices and social standards applied								

Result Area 3 - Improved field-level sustainability		Fresh & Ingredients				Tea			
		Baseline data		Targets 2020		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description	Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA3.Output.1	# of producers/workers trained on key subjects for sustainable production, environmental and social sustainability issues	Zero		100,000	The topics of the trainings range widely depending on sector and level in the supply chain. Producers and workers often receive a blend of GAP training, technical assistance regarding use of agrochemicals and best environmental practices, as well as capacity building on managerial practices, health and safety and more in general working conditions.	43,000 smallholders 150,000 workers	No info available for segregation for baseline situation.	140,000 smallholders 200,000 workers	Smallholder and workers trained on sustainable production, environment and social issues in Malawi, Rwanda, Tanzania, Kenya, India & Vietnam.
RA3.Output.2	# of producers/workers reached by service delivery					0%		100%	
RA3.Output.3	# of smallholder producers organized/aggregated by the program					Zero		2 million hectares	
RA3.Output.4	# of trainers, auditors and/or government staff trained in the program								

Result Area 3 - Improved field-level sustainability		Fresh & Ingredients				Tea			
		Baseline data		Targets 2020		Baseline data		Targets 2020	
		Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description	Baseline	Comments/qualitative description	Target 2020	Comments/qualitative description
RA3.Output.5	Volume of sustainably produced production					220,000 metric tons		600,000 metric tons	
RA3.Outcome.1	Adoption rate by producers/workers of improved practices	0%		60%		0%	We haven't measured adoption rate previously.	70%	Producers/workers adopted improved practice
RA3.Outcome.2	Farmland area where trained practices are applied	Zero		30,000 hectares		30,530 hectares		350,000 hectares	Previous calculation under trustea was not correct and took the entire ha of the farm and not specifically that part under tea cultivation, so adjusted.
RA3.Outcome.3	# of processing facilities with sustainable production practices and social standards applied								

Result Area 3 - Improved field-level sustainability		Timber			
		Baseline	Baseline data Comments/qualitative description	Target 2020	Targets 2020 Comments/qualitative description
RA3.Output.1	# of producers/workers trained on key subjects for sustainable production, environmental and social sustainability issues	Zero		200	
RA3.Output.2	# of producers/workers reached by service delivery				
RA3.Output.3	# of smallholder producers organized/aggregated by the program				
RA3.Output.4	# of trainers, auditors and/or government staff trained in the program				

Result Area 3 - Improved field-level sustainability		Timber			
		Baseline	Baseline data Comments/qualitative description	Target 2020	Targets 2020 Comments/qualitative description
RA3.Output.5	Volume of sustainably produced production	Zero			10% increase of certified production by program partners.
RA3.Outcome.1	Adoption rate by producers/workers of improved practices	0%		100%	
RA3.Outcome.2	Farmland area where trained practices are applied	Zero		2 million hectares	
RA3.Outcome.3	# of processing facilities with sustainable production practices and social standards applied				

5. Sector survey results

5.1 Respondents to the sector survey

Figure A4.1 Number of respondents per organisation type (N = 230). The response rate was 37%.

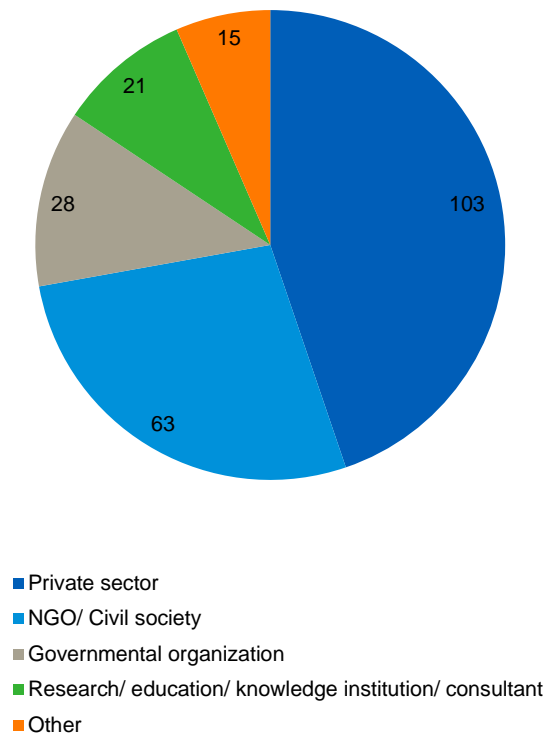
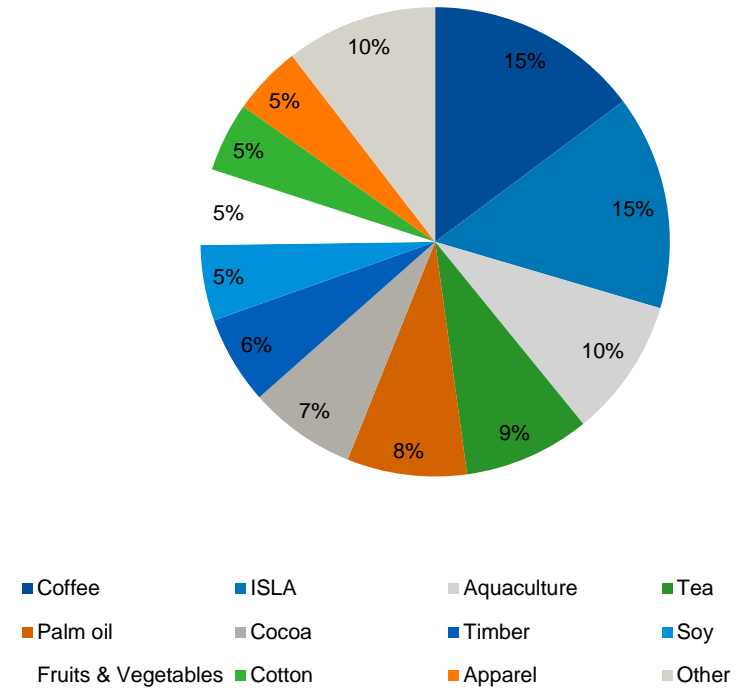


Figure A4.2 Number of respondents per program (N = 230). "Other" consists of i) multiple commodities (3%), Pulp & Paper (2%), Flowers & Plants (2%), Spices (1%) and other (2%).



5.2 Perception of stakeholders on effectiveness of roles by IDH

Figure A4.3a Stakeholder perception of the effectiveness of three roles of IDH (N = 220)

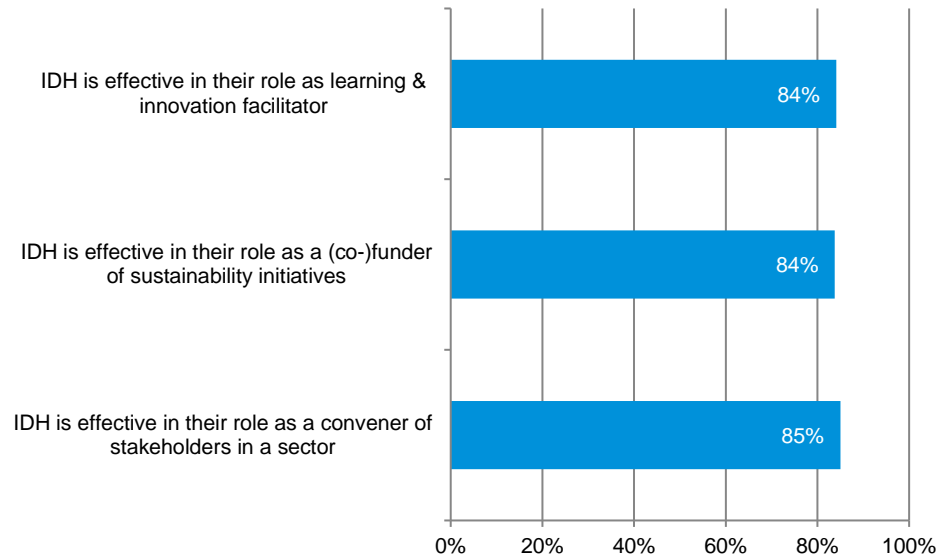
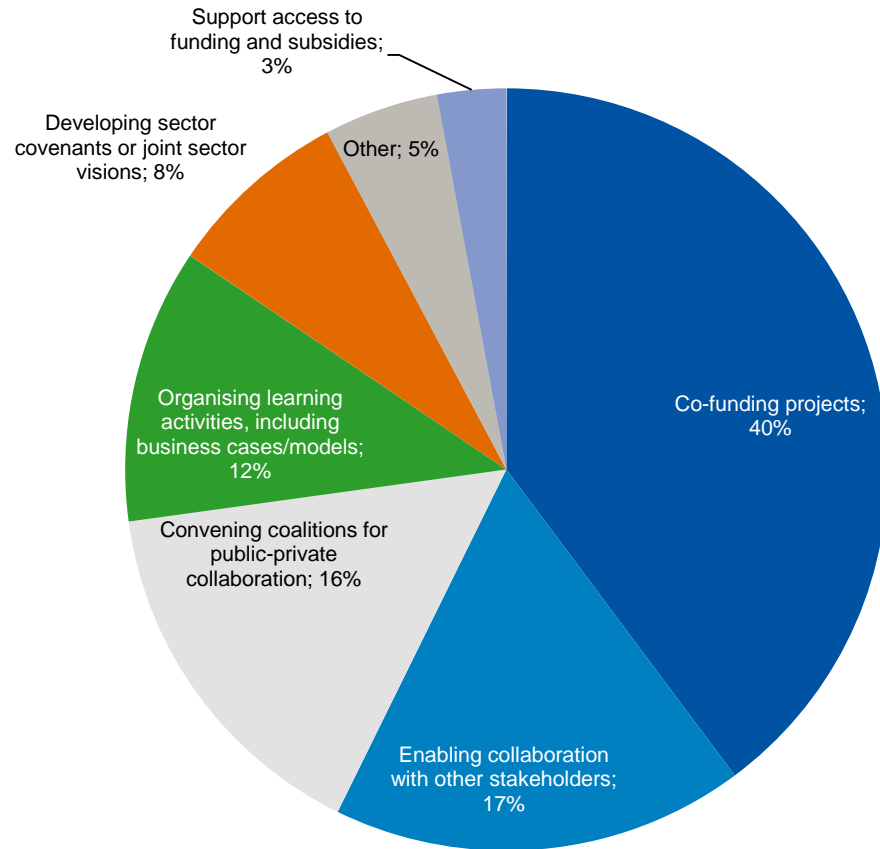


Figure A4.3b Perception of private sector stakeholders on which IDH activities were particularly important in bringing about changes in sustainable business practices (N = 103)



5.3 Perception of stakeholders related to sector collaboration IDH is involved in

Figure A4.4a Stakeholder perception on sector collaboration processes IDH is involved in (Responses range between N = 195 and N = 218)

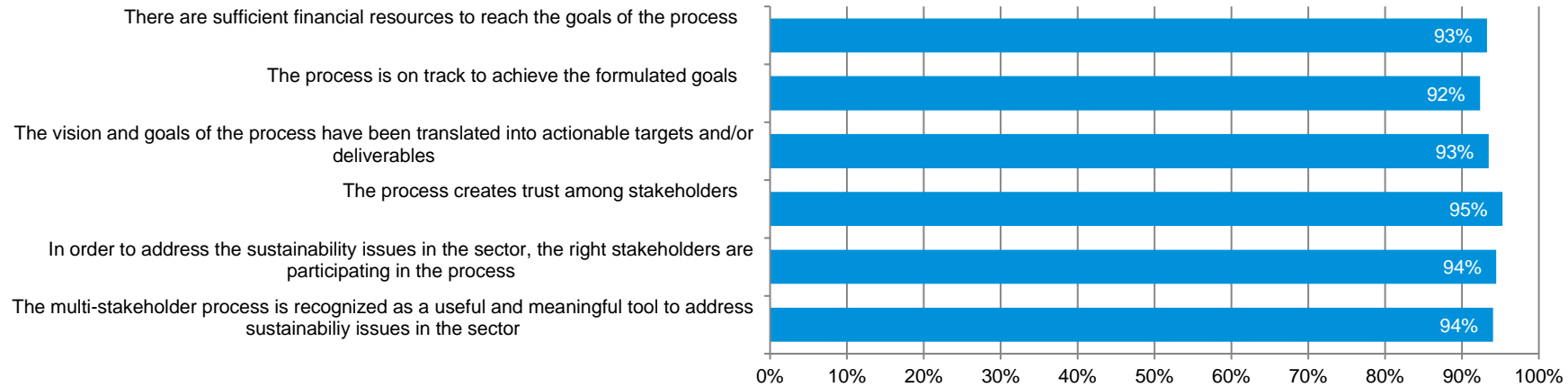
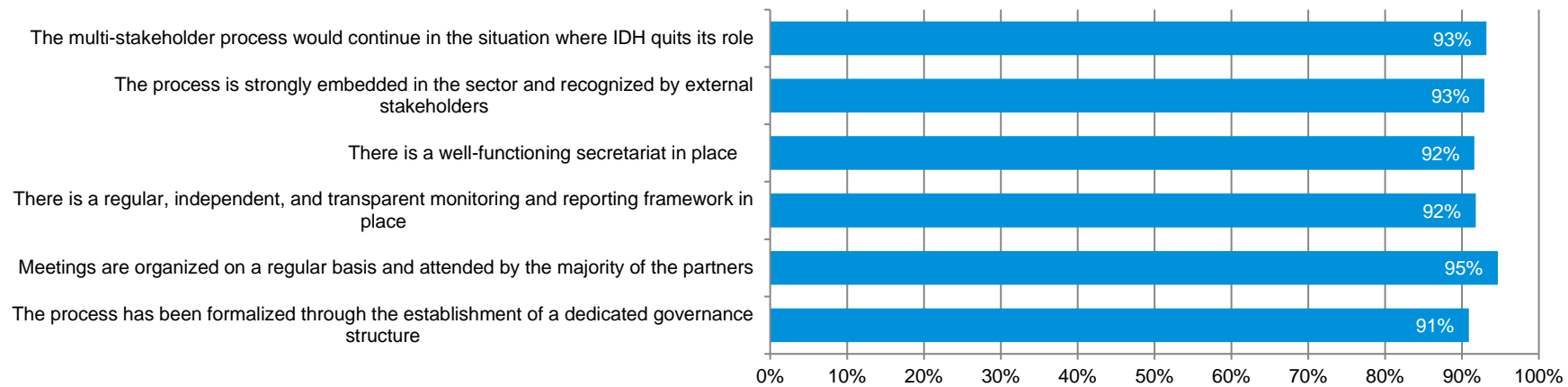


Figure A4.4b Stakeholder perception on sector collaboration processes IDH is involved in (Responses range between N = 195 and N = 218)



5.4 Perception of stakeholders on IDH's contribution to change

The table below indicates the median, mean and standard deviation for the IDH Contribution Scores . The scores are derived from the answers of respondents on two questions, both having Likert scale answer categories. We converted the answer on those two questions into an IDH Contribution Score. This scores varies between 0 and 100 and can thus be interpreted as a percentage.

	Median	Mean	Standard Deviation	Valid N	Total N
Contribution index Service delivery to farmers (excluding credit/loans)	38	43	33	71	230
Contribution index Access to finance for farmers	13	30	32	62	230
Contribution index Field level change: access to services	38	42	29	141	230
Contribution index Field level change: adoption of improved practices	50	49	27	177	230
Contribution index Field level change: access to finance for farmers	38	36	30	109	230
Contribution index Field level change: yield improvement	38	37	27	134	230
Contribution index Field level change: profitability	38	33	27	122	230
Contribution index Field level change: smallholder farmer livelihoods	38	39	25	133	230
Contribution index for Wage levels	0	21	28	64	230
Contribution index for Health and safety conditions	13	25	27	78	230
Contribution index Worker- management dialogue	13	24	29	68	230
Contribution index Natural resources management	38	37	27	118	230
Contribution index Share of sustainable procurement	50	46	29	89	230
Contribution index Public commitments/ targets for sustainable practices	38	44	29	83	230
Contribution index Engagement with other businesses and sector stakeholders	63	53	26	89	230
Contribution index Funding of sustainability projects in your supply chain	50	46	30	89	230
Contribution index Engagement of stakeholders: private sector	63	54	28	184	230

Contribution index Engagement of stakeholders: government	38	45	28	149	230
Contribution index Engagement of stakeholders: producers and their organizations	57	50	27	176	230
Contribution index Engagement of stakeholders: Civil Society	38	42	27	142	230
Contribution index Engagement of stakeholders: knowledge institutions/consultants	38	43	27	139	230
Contribution index Common vision and goals on sector sustainability issues	57	50	24	190	230
Contribution index Effectiveness of sector platform / coalition	63	52	24	168	230
Contribution index Demand for sustainably produced production	38	41	28	170	230
Contribution index Investment in the sector to address sustainability issues	50	48	26	179	230
Contribution index Clarity on sector improvement strategies	38	45	25	174	230

5.5 Heterogeneity analysis of the IDH Contribution Scores

When we compare the IDH Contribution Score per impact theme, we do notice several differences in the answers of respondents and the respective IDH Contribution scores. The differences are especially between stakeholders that work on smallholder livelihoods and those working on living wage and working conditions and relate to field level impacts for farmers and changes in business practices, such as wage levels, service delivery to farmers, access to finance. Except on the issue of access to finance, the respondents that work on Living wage and working conditions value the IDH contribution more positively than the respondents that work in the impact area Smallholder livelihoods. On the questions related with sector governance, the various impact areas show similar average contribution scores.

IDH CONTRIBUTION SCORES PER IMPACT AREA	Theme Smallholder livelihoods	Theme Responsible agrochemical management	Theme Living wage and working conditions	Theme Mitigation of deforestation	Overall average
Field level					
Access to services	41	43	48	36	42
Adoption of improved practices	47	50	57	42	49
Access to finance for farmers	34	36	38	33	36
Yield improvement	35	36	42	32	37
Profitability	32	32	45	26	33
Smallholder farmer livelihoods	39	39	47	35	39
Natural resources management	38	37	40	37	37
Business practices					
Wage levels	16	20	23	15	21
Health and safety conditions	22	25	31	18	25
Worker- management dialogue	20	24	25	19	24
Service delivery to farmers (excluding credit/loans)	46	42	61	38	43
Access to finance for farmers	31	27	19	36	30
Share of sustainable procurement	47	46	51	44	46
Public commitments/ targets for sustainable practices	44	47	44	42	44
Engagement with other businesses and sector stakeholders	51	54	51	50	53
Funding of sustainability projects in your supply chain	42	45	49	39	46
Sector governance					
Engagement of private sector	55	55	64	49	54
Engagement of government	45	45	43	45	45
Engagement of producers and their organisations	51	51	55	48	50
Engagement of Civil Society	42	43	42	42	42
Engagement of knowledge institutions/consultants	41	42	43	41	43
Common vision and goals on sector sustainability issues	50	51	55	47	50
Effectiveness of sector platform / coalition	51	53	58	46	52
Demand for sustainably produced production	42	42	44	40	41
Investment in the sector to address sustainability issues	46	48	50	45	48
Clarity on sector improvement strategies	45	46	47	44	45
	40.50	41.50	45.08	38.04	41.35

5.6 Bias analysis related to the type of involvement of the respondent

The contribution scores of the respondents directly involved in IDH are slightly higher. However, only on two questions are these differences statistically significant: the contribution of IDH to a Common vision on sustainability and the Engagement of business and sector stakeholders. As can be expected, the respondents directly involved in IDH activities are more positive than indirectly involved stakeholders. When we differentiate the responses per stakeholder group, the difference in scoring between stakeholder groups is not statistically significant (see Tables XX below)

		Report				
		Contribution index	Contribution index	Contribution index	Contribution index	Contribution index
		Engagement: private sector	Engagement: government	Engagement producers and their organisations	Engagement Civil Society	Engagement knowledge institutions/consultants
Please indicate whether you are involved in one or more IDH program(s):						
I am directly involved in on or more IDH program(s)	Mean	54.57	47.82	50.06	41.78	43.87
	N	132	104	125	93	102
I am indirectly involved in an IDH program	Mean	52.79	43.23	51.76	43.40	43.34
	N	117	40	45	43	32
I do not know	Mean	37.75	.00	22.80	20.20	25.25
	N	4	4	5	5	4
Total	Mean	53.74	45.28	49.72	41.51	43.21
	N	183	148	175	141	138

Report

Please indicate whether you are involved in one or more IDH program(s):		Contribution index Field level change: access to services	Contribution index Field level change: adoption of improved practices	Contribution index Field level change: access to finance for farmers	Contribution index Field level change: yield improvement	Contribution index Field level change: profitability	Contribution index Field level change: smallholder farmer livelihoods
I am directly involved in	Mean	44.97	48.84	36.72	39.17	33.03	39.13
on or more IDH program(s)	N	100	129	78	95	86	91
I am indirectly involved in an IDH program	Mean	37.87	48.98	35.07	31.25	31.00	38.59
	N	38	45	28	36	33	39
I do not know	Mean	17.00	29.67	38.00	21.00	19.00	19.00
	N	3	3	3	3	2	2
Total	Mean	42.46	48.55	36.33	36.63	32.25	38.67
	N	141	177	109	134	121	132

Report

		Contribution index	Contribution index	Contribution index	Contribution index	Contribution index
		Common vision and goals on sector sustainability issues	Effectiveness of sector platform / coalition	Demand for sustainably produced production	Investment in the sector to address sustainability issues	Clarity on sector improvement strategies
Please indicate whether you are involved in one or more IDH program(s):	Mean	52.87	53.61	42.16	49.01	47.27
	N	131	122	119	126	123
I am indirectly involved in an IDH program	Mean	46.15	47.68	39.74	46.40	42.74
	N	53	41	46	47	47
I do not know	Mean	30.20	35.20	19.00	30.20	19.00
	N	5	5	4	5	4
Total	Mean	50.39	51.61	40.95	47.79	45.40
	N	189	168	169	178	174

Report

Please indicate whether you are involved in one or more IDH program(s):		Contribution index for Wage levels	Contribution index for Health and safety conditions	Contribution index Worker-management dialogue	Contribution index Natural resources management	Contribution index Share of sustainable procurement	Contribution index Public commitments/targets for sustainable practices	Contribution index Engagement with other businesses and sector stakeholders	Contribution index Funding of sustainability projects in your supply chain
I am directly involved in on or more IDH program(s)	Mean	21.23	28.14	26.57	36.92	45.47	47.44	58.57	50.86
	N	44	57	47	91	68	61	67	65
I am indirectly involved in an IDH program	Mean	20.33	17.70	16.63	38.48	46.89	34.00	37.15	31.13
	N	18	20	19	23	19	20	20	23
I do not know	Mean	19.00	.00	19.00	21.00	37.50	56.50	25.50	50.00
	N	2	1	2	3	2	2	2	1
Total	Mean	20.91	25.10	23.57	36.82	45.60	44.42	53.01	45.75
	N	64	78	68	117	89	83	89	89

5.7 Sector survey questionnaire

Introduction

Dear sir, madam,

The Sustainable Trade Initiative convenes companies, CSOs, governments and others in public-private partnerships. These partnerships aim to drive the joint design, co-funding and prototyping of economically viable approaches to realize green & inclusive growth at scale in commodity sectors and sourcing areas. Approaches are designed to drive sustainability from niche to norm, delivering impact on the Sustainable Development Goals. Impact focuses on deforestation, smallholder livelihoods, living wages, working conditions, and toxic loading.

Wageningen UR and KPMG are currently performing an evaluation of IDH's relevance and effectiveness, with the purpose to improve the IDH programs and its contribution to sustainable development. For this purpose, we would like to hear your views through a short electronic questionnaire. Your cooperation to this questionnaire is important in further strengthening IDH's approach in the sector. This survey will be carried out periodically so as to track progress over time and inform IDH decision-making to improve program effectiveness.

Answering the **5 sections with short questions** will only take 15 minutes of your time. We look forward receiving your completed questionnaire before **August 31, 2016**. Your input will be analyzed anonymously and only reported on at aggregated level. Your information will be treated with confidentiality.

A. General questions

1. Please indicate whether you are directly involved in one or more IDH program(s)
 - I am directly involved in on or more IDH program(s) (e.g. through a contract, agreement on active role in program activities etc.)
 - I am indirectly involved in an IDH program
 - I do not know.

2. Country of residence: ...

3. Your organization belongs to:
 - Private sector
 - NGO/Civil society
 - Dutch Governmental Organization
 - Other Governmental Organization
 - Research/education/knowledge institution / consultant
 - Other, namely:

4. Please indicate the main IDH program / commodity you are involved with:

- Apparel
- Aquaculture
- Coffee
- Cocoa
- Cotton
- Flowers & Plants
- Fruits & vegetables
- ISLA (Initiative for Sustainable Landscapes)
- Palm oil
- Pulp & paper
- Soy
- Spices
- Tea
- Timber
- Multiple commodities, namely: ...
- Other, namely:...

Please note that we would like you to answer the questions in this survey based on your experience in the program/commodity you are involved in.

5. Please indicate the country/countries of the above mentioned IDH program /commodity you are involved in: ... [open question]

B. Questions on IDH as an organization

1. How effective do you find IDH overall in improving sustainability in the commodity sector that you are engaged in? Please rate IDH's effectiveness in their different functions according to your own experience with IDH, with 1 being not effective at all and 10 being very effective.

	not at all effective										very effective	I don't know
<input type="radio"/> in their role as a convener of stakeholders in a sector?	1	2	3	4	5	6	7	8	9	10		
<input type="radio"/> in their role as a (co-)funder of sustainability initiatives?	1	2	3	4	5	6	7	8	9	10		
<input type="radio"/> In their role as learning & innovation facilitator	1	2	3	4	5	6	7	8	9	10		

C. Business practices

1. How do you assess the **changes (in the last three years) in your sustainable business practices** on the following issues **in your company?** [only applicable for private sector]

	How did this change over the past 3 years?						To what extent did IDH influence this change?					
	Strong decrease (1)	Decrease (2)	No change (3)	Increase (4)	Strong increase (5)	Don't know / not applicable	Not at all (1)	A little (2)	Somewhat (3)	Much (4)	Very much (5)	Don't know / not applicable
Share of commodities sources sustainably	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public commitments/targets for sustainable practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engagement with other businesses and sector stakeholders on sustainability issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Funding of sustainability projects in your supply chain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Service delivery to farmers (excluding credit/loans)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to finance for farmers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wage levels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health & safety conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worker-management dialogue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Only for questions where the answer for changes in the past 3 years is higher than 4 or lower than 2]. What other factors influenced this change? [open question, non-mandatory]

2. **In your sector / country**, which activities of IDH were particularly important in bringing about changes in sustainable business practices? Please select the three most important ones in your view. [only applicable for private sector]
- Developing sector covenants or joint sector visions
 - Convening coalitions for public-private collaboration
 - Enabling collaboration with competitors
 - Enabling collaboration with other stakeholders (e.g. governments, NGOs)
 - Co-funding projects
 - Support access to funding and subsidies
 - Facilitating workshops/learning/sharing experiences
 - Providing innovative business cases / providing evidence on effective business models for sustainability
 - Managing field level programs
 - Supporting demand for sustainable products by retailers and processors
 - Other: ...
3. Could you give us example(s) of **change(s) (in the last three years) in business practices** that would not exist without IDH's support? These experiences might be positive as well as negative. (Not mandatory)
4. Is there anything you would like to add concerning the role of IDH in changing sustainability practices in businesses **in your sector / country**?

D. Sector governance

The following questions relate to sector governance in your sector / country.

1. Please respond to some statements related to the sector collaboration IDH is involved in, **according to your experience** in the sector you are involved in:

very much disagree 1 2 3 4 5 6 7 8 9 10 very much agree

- The multi-stakeholder process is recognized as a useful and meaningful tool to address the sustainability issues in the sector
- In order to address the sustainability issues in the sector, the right stakeholders are participating in the process
- The process creates trust among stakeholders
- The vision and goals of the process have been translated into actionable targets and/or deliverables
- The process is on track to achieve the formulated goals
- There are sufficient financial resources to reach the goals of the process
- The process has been formalized through the establishment of a dedicated governance structure (platform, steering group, working group, etc.)
- Meetings are organized on a regular basis and attended by the majority of the partners
- There is a regular, independent, and transparent monitoring and reporting framework in place
- There is a well-functioning secretariat in place
- The process is strongly embedded in the sector and recognized by external stakeholders
- The multi-stakeholder process would continue in the situation where IDH quits its role

2. How do you assess the **changes (in the last three years) in sector governance in your sector / country** on the engagement of stakeholders?

	How did this change since 2013				To what extent did IDH influence this change?							
	Strong decrease (1)	Decrease (2)	No change (3)	Increase (4)	Strong increase (5)	Don't know/ not applicable	Not at all (1)	A little (2)	Somewhat (3)	Much (4)	Very much (5)	Don't know / not applicable
Engagement of the private sector	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engagement of the government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engagement of producers and their organisations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engagement of Civil Society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engagement of knowledge institutions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. How do you assess the **changes (in the last three years) in sector governance in your sector / country** on other issues?

	How did this change since 2013					To what extent did IDH influence this change?						
	Strong decrease (1)	Decrease (2)	No change (3)	Increase (4)	Strong increase (5)	Don't know/ not applicable	Not at all (1)	A little (2)	Somewhat (3)	Much (4)	Very much (5)	Don't know / not applicable
Common vision and goals on sector sustainability issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effective management of the sector platform / coalition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effectiveness of sector platform / coalition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Demand for sustainably produced production	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Investment in the sector to address sustainability issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clarity on sector improvement strategies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Only for questions where the answer for changes in the past 3 years is higher than 4 or lower than 2]. What other factors influenced this change? [open question, non-mandatory]

- Please describe policy changes in government policies regarding smallholder farmers in your sector/country in the last three years. These can be national government policies but also regional or local government policies. [open question]

To what extent did IDH influence this change?

Not at all (1)	A little (2)	Somewhat (3)	Much (4)	Very much (5)	Don't know / not applicable
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What other factors influenced this change? [open question, non-mandatory]

- Please describe policy changes in government policies regarding forest protection in your sector/country in the last three years. These can be national government policies but also regional or local government policies. [open question]

To what extent did IDH influence this change?

Not at all (1)	A little (2)	Somewhat (3)	Much (4)	Very much (5)	Don't know / not applicable
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What other factors influenced this change? [open question, non-mandatory]

- Please describe policy changes in government policies regarding agro-chemicals in your sector/country in the last three years. These can be national government policies but also regional or local government policies. [open question]

To what extent did IDH influence this change?

Not at all (1)	A little (2)	Somewhat (3)	Much (4)	Very much (5)	Don't know / not applicable
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What other factors influenced this change? [open question, non-mandatory]

- Please describe policy changes in government policies regarding wage levels for workers in your sector/country in the last three years. These can be national government policies but also regional or local government policies. [open question]

To what extent did IDH influence this change?

Not at all (1)	A little (2)	Somewhat (3)	Much (4)	Very much (5)	Don't know / not applicable
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What other factors influenced this change? [open question, non-mandatory]

8. Please describe policy changes in government policies regarding working conditions in your sector/country in the last three years. These can be national government policies but also regional or local government policies. [open question]

To what extent did IDH influence this change?

Not at all (1)	A little (2)	Somewhat (3)	Much (4)	Very much (5)	Don't know / not applicable
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What other factors influenced this change? [open question, non-mandatory]

9. Could you give us example(s) of **change(s) (in the last 3 years) in government policies** in the sector that would not exist without IDH's support? These experiences might be positive as well as negative. (Not mandatory)

E. Field level impact

1. How do you assess the **field level changes** in the sector you are involved in, related with the following issues?

	How did this change since 2013?						To what extent did IDH influence this change?					
	Strong decrease (1)	Decrease (2)	No change (3)	Increase (4)	Strong increase (5)	Don't know / not applicable	Not at all (1)	A little (2)	Somewhat (3)	Much (4)	Very much (5)	Don't know / not applicable
Access to services (excluding credit)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adoption of improved practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yield improvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Profitability of producers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to finance for farmers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smallholder farmer livelihoods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of agro-chemicals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deforestation rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Natural resources management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Only for questions where the answer for changes in the past 3 years is higher than 4 or lower than 2]. What other factors influenced this change? [open question, non-mandatory]

2. Could you give us example(s) of **change(s) (in the last 3 years) in field level changes** in the sector that would not exist without IDH's support? These experiences might be positive as well as negative. (Not mandatory)

3. This is the end of the survey. Do you have any other comments related to your experience with IDH that you would like to mention?

Thank you very much for your cooperation!

6. IDH staff and stakeholder interviewees

6.1 IDH staff cooperated with for the baseline study

Person worked with	Topic(s) discussed
Lucian Peppelenbos	Overall evaluation, intervention logics, indepth research
Esther Bosgra	Overall evaluation, RMF
Dave Boselie	Overall evaluation, intervention logics, indepth research
Bastian Mostert	RMF, intervention logics
Carla Romeu Dalmau	Overall evaluation, intervention logics, indepth research
Gerben de Witte	Overall evaluation, intervention logics, indepth research

6.2 Interviews and discussions with IDH staff

Impact theme	Person interviewed or discussed with, including impact theme workshop participants
Inclusive business models and smallholder farmer livelihood improvements	Iris van der Velden
	Nienke Keen
	Renske Aarnoudse
	Johnny Brom
	James Webb
	Jenny Kwan
Mitigation of deforestation	Paul Klein Hofmeijer
	Daan Wensing
	Winnie Mwaniki
Living wage and working conditions	Nienke Stam
	Jordy van Honk
	Sibbe Krol
	Jan Gilhuis

	Sonia Cordera
	Judith Fraats
Responsible agrochemical management	Flavio Corsin
	Pramit Chanda
	Jasmer Dhingra
IDH management	Joost Oorthuizen
	Ted van der Put

6.3 Interviews with external stakeholders

Impact theme	Person interviewed	Organisation or company name
Inclusive business models and smallholder farmers' livelihood improvements	Chris Brett	Olam
	Duncan Pollard	Nestlé
	Nicko Debenham	Barry Callebaut
Mitigation of deforestation	Per Pharo	NICFI
Living wage and working conditions	Laura Hawkesford	Marks & Spencer
	Sangwani Hara	Tea Association of Malawi
Responsible agrochemical management	Pham Duc Huy	Croplife Vietnam
	Keith Tyrell	Pesticide Action Network

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