

# THE IMPACTS OF PRIVATE STANDARDS ON PRODUCERS IN DEVELOPING COUNTRIES

LITERATURE REVIEW SERIES ON THE  
IMPACTS OF PRIVATE STANDARDS – PART II



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LITERATURE REVIEW SERIES  
ON THE IMPACTS OF PRIVATE  
STANDARDS – PART II

## Abstract

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**The Impacts of Private Standards on Producers In Developing Countries.**

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Paper presenting the results of a systematic literature review undertaken to assess the resources tackling the socioeconomic and environmental impacts of private standards at the producer level in developing countries - provides an overview of the methods used to collect and screen the literature; presents a descriptive analysis of the research, including the type and timing of publications, the topics and geographies covered, and the methodologies applied; reviews the findings of selected papers, identifying and commenting on the literature dealing with the following topics: producer profitability, business opportunities, producer livelihood and labour conditions, social and economic impacts at community level, and environment impact.

Descriptors: **Standards, Food standards, Certification, Poverty Reduction, Small-Scale Industry, Bibliographies.**

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## Abbreviations

ATO	alternative trade organization
CIRAD	Centre de coopération internationale en recherche agronomique pour le développement
COSA	Committee on Sustainability Assessment
DIIS	Danish Institute for International Studies
FAO	Food and Agriculture Organization of the United Nations
FSC	Forest Stewardship Council
GVC	global value chain
FT	Fairtrade
FLO	Fairtrade Labelling Organizations International
GLOBAL G.A.P.	Global Good Agricultural Practices
IDS	Institute of Development Studies
IFOAM	International Federation of Organic Agriculture Movements
IISD	International Institute for Sustainable Development
ISEAL	The global association for social and environmental standards
ISO	International Organization for Standardization
MSC	Marine Stewardship Council
NGO	non-governmental organization
PEFC	Programme for the Endorsement of Forest Certification
SA 8000	Social Accountability (8000) Standards
T4SD	Trade for Sustainable Development
UTZ	Utz Certified Standards



## Executive summary

The question on how standards impact trade is more relevant than ever. Against the background of a world economy that is global in scope and organization with economic activities being spread across national boundaries, the liberalization of trade has been one factor contributing to a policy shift from import substitution to export-led growth strategies. This has resulted in the involvement of a large number of producers in export activities and in global or regional value chains. Although the number of entities encouraging sustainable practice has multiplied and publications addressing the role of private sustainability standards have grown exponentially over the last few years, little is yet known on crucial questions such as the actual impact these standards on producers' income, livelihoods and the environment.

This paper addresses these questions by presenting the results of a systematic literature review of 47 research papers that assess the evidence regarding socioeconomic and environmental impact at the producer level. Though great caution has to be taken when comparing across different theoretical approaches and diverse methodologies, findings of the analysis indicate a cautious optimism in terms of the economic and social impact that private standards have on producers and, to a certain extent, their surrounding communities. Findings can be summarized on the following seven areas:

**Producers tend to be better off financially when participating in private standards.** Overall, the direct impact of participating in private standards in terms of price received and profits made by producers was found to be moderately positive among the research reviewed, even when compared to alternatives. However, this was not a uniform conclusion. A number of studies also found mixed evidence on the net income for producers and some even found a negative impact on net income for producers, where the increased earnings did not compensate for the additional costs and increased labour involved in complying with standards requisites (Jaffee, 2008). The overall net impact, however, may or may not be completely visible to the producer when exporters, donors or NGOs temporarily cover certification costs. Lastly, as markets mature, there is a risk that increased supply of certified products may create increased competition to find buyers, certifications become 'commoditized' and premiums diminished or eliminated (Nebel et al., 2005). Questions about the allocation of costs and benefits across the commodity chains are also asked in related literature. In Part 1 of this series (von Hagen and Alvarez, 2011) a systematic review of literature on the topic concludes that research on revenue distribution is relatively comprehensive and outlines that (i) compliance with standards increases revenues along the value chain, (ii) but additional revenues are mostly distributed unevenly along the value chain to the benefit of the retailer and (iii) value chain structures and governance play a significant role in how revenues are distributed.

This is an important topic and needs to be further understood, as farmers living at subsistence level and barely covering their costs of production are already in a difficult situation, unprepared to make additional investments with uncertain payoffs.

**Indirect positive effects can outweigh direct financial impact of private standards.** In much of the reviewed research, other business conditions for producers were significantly enhanced, possibly outweighing direct and immediate monetary benefits. Better relationships with buyers, marketing guarantees, enhanced quality and increased yields were all positive impacts identified in multiple cases in the research. In addition, technical support and training, as well as increased access to credit were found to be important positive effects of the participation of producers in private standards.

**Relationship-based buyer-seller interaction linked to better results than transaction-based interaction.** Reynolds and Ngcwangu (2010) distinguished between mission-driven and market-driven buyers. This, indeed, appears to be an important element in the relationship between standards and impact. In the case they present of Fairtrade Rooibos tea in South Africa, commitment and engagement between mission-driven distributors and farmers associations had led to two cooperatives upgrading into processing and packaging with additional value being created and retained at origin. This was echoed in other studies reviewed (Fort and Ruben, 2008a, Bolwig et al., 2009; Gibbon et al., 2009) that established a better relationship with buyers and distributors as a factor enabling technical upgrade and market visibility. Private certification programmes, with the aim of increasing scale and efficiency, have sometimes been criticized for replicating existing 'conventional' commodity chains, arguing that with the exception of a

social premium there can be no difference in the structure (actors, institutions, regulations and activities) of conventional trade and that of sustainability standards (Dolan, 2010; Smith and Barrientos, 2005), limiting also the potential impact at the producer level.

**Private standards are one tool in a broader set of voluntary and regulatory options.** Linked to the previous conclusion, programmes that address multiple areas such as technical support, training and pre-financing were consistently linked to better results at the producer level. Ultimately, improvements in yield and in quality led, in some cases, to higher financial rewards than private certification premiums did. In forestry, a focus on environmental issues showed that there could be limited incremental effects when comparing private standards to other effective local forest management practices (Barbosa de Lima et al., 2009). There were also strong similarities between the standards and 'the letter of the law' and Visseren-Hamakers and Glasbergen (2006, p.10) found that the most valuable contribution of forest standards with regards to conservation 'has been filling the gap when governments were not willing and/or able to regulate'. A closer linkage with other development programmes as well as national regulations is thus important to generate broader systemic results more efficiently than what is achieved today. This brings also the question of the role that international private sustainability standards should play vis-à-vis other local and national initiatives in developing countries. As of today, most of these operate independently of each other. Integrating these approaches could result in less inefficiencies and, ultimately, a more integrated approach to supporting sustainable development.

**Research on the impact of private standards is still focused around the individual producer.** Most of the research reviewed focused on the impact at producer level. Thus, for meso- and macro-level issues such as social and environmental impact coverage was very limited and even within this limited coverage attention was divided on different topics, making it difficult to venture any overarching conclusions. The positive aspects identified in the research included a positively perceived use of the societal premium that is part of the Fairtrade standard system (Fort and Ruben, 2008a; Kilian et al., 2006; Sáenz-Segura and Zuñiga-Arias, 2008). Still, a warning sign was presented by some of the articles that addressed gender balance, pointing out that the issue may still be influenced by current practices and that these conditions still have a much larger effect on the possibilities available to women than those resulting from compliance with standards (Gibbon et al., 2008).

**Is it sufficient?** The review of the evidence gathered so far by researchers points to private standards having the potential to contribute positively to the economic and social well-being of producers in developing countries. However, a broader question arises when reviewing the research. Is this enough? Can private standard systems make a significant contribution in key issues such as helping farmers out of poverty and in reversing deforestation? Although premiums associated with private standards can increase the price received for crops, structural factors such as small farming plots may mean that the income generated by the farm is still not comparable to minimum wages and may alleviate but not reverse the poverty trap in which farmers can be immersed. Forest conservation and increased biodiversity may also require broader efforts than enforcing current regulation or private certification programmes.

**Need for further research.** Across all areas that were analysed, the studies found greater evidence of positive net impacts than mixed or negative effects for producers and their surrounding environments. But an overarching conclusion that also arose from reviewing the evidence is that the knowledge base that exists today in this area is still very thin, sparse and fragile in terms of scope, method and depth of coverage. The studies on which most research is based focused mostly on Fairtrade and Organic standards, and even these are generally heavily influenced by local conditions, making it difficult to make conclusions beyond the specific cases being covered. Many of the studies in the field also still lack a convincing and consistent methodology. Encouragingly, growing interest in the topic is evidenced by the increased number of publications over the last five years. There have also been calls to action from academics, institutions and engaged buyers requesting a more solid knowledge base on which to act (Blackman and Rivera, 2010; Ruben et al., 2009; Giovannucci and Potts, 2008). Initiatives such as those currently underway by the global association for social and environmental standards (ISEAL) on defining relevant indicators, that pursued by the Committee on Sustainability Assessment (COSA) ([www.iisd.org/standards/cosa.asp](http://www.iisd.org/standards/cosa.asp)) on measuring impact, and the International Trade Centre's Trade for Sustainable Development (T4SD) Standards Map ([www.standardsmap.org](http://www.standardsmap.org)) provide promising approaches to increasing knowledge in this area. These initiatives are welcome contributions in a field that holds promise for contributing to sustainable development but where investments and risks are significant and where informed choices for producers, buyers and for development organizations are urgently needed.

This paper addresses these questions by presenting the results of a systematic literature review undertaken to assess the evidence in existing research regarding socioeconomic and environmental impact at the producer level, providing an assessment of the methods used for measuring this impact, summarizing their findings and identifying relevant gaps in the knowledge base.



## 1. About the literature review series

This paper on the impact of private social and environmental standards on producers is part of a broader systematic literature review on the impacts of private standards. The review consists of a series of four papers in total, each paper focussing on one specific issue. The topics were selected according to their relevance to ITCs main constituents - producers, exporters, trade support organizations and policymakers in developing countries - and their prevalence in research.

The question on how standards impact trade is more relevant than ever. Against the background of a world economy that is global in scope and organization with economic activities being spread across national boundaries, the liberalization of trade has been one factor contributing to a policy shift from import substitution to export-led growth strategies. This has resulted in the involvement of a large number of producers in export activities and in global or regional value chains. Compliance with standards has become an important determinant of trade competitiveness. Given the importance of value chains and standards for producers in developing countries, we decided *in a first part*, to analyse the literature on private standards impacts in global value chains.

While only few standards include requirements that directly address the value chain, most private standards comprise requirements that pertain to social and environmental conditions on producer/farm or factory level. In most cases producers and/or factory workers are the primary target group, and standards aim to improve living and/or working conditions. At the same time, standards impact producers' surrounding communities, or the wider environment. This is why *in a second part* we analyse the results obtained by studies looking into the impacts of private standards on producers, exporters and their environments.

The framework within which producers and exporters and all other stakeholders act is provided by public standards that pertain to, for example, product safety, food security, quality or environmental protection. While public standards are set by governments or intergovernmental bodies, interdependencies between private standards and public standards are growing. Private standards are increasingly being aligned to public standards and, conversely, standard setting on a public level is being influenced by private standards. Regulations are also beginning to include principles and provisions developed by private standards. In order to better understand these interdependencies and their implications for producers and policymakers, *the third paper* will analyse the literature relating to these issues.

Finally, in a *fourth paper* we aim to understand under which circumstances the application of standards can be an effective tool to foster sustainable development. The underlying question is: What is the role of standards within the broader array of mechanisms to promote sustainable development? And under which circumstances are private standards a relevant tool? Based on the main results obtained in the earlier papers, this fourth contribution approaches these issues from a practitioner's perspective and concludes this series by outlining some policy recommendations.

Accordingly, four categories were found suitable for organizing the research. The categories include:

- The impacts of private standards on global value chains.
- The impacts of private standards on producers and exporters.
- The interdependencies between private and public standards.
- The role of standards as an effective tool to foster sustainable development.

## 2. About this paper

About a quarter of the people in developing countries still live on less than \$1.25 a day (United Nations, 2010). Many of these people live and work in rural areas and they are seen as primary beneficiaries of private sustainability standards promoting 'a better deal for producers' (FLO, 2010) and the adoption of 'ecologically, socially and economically sound systems' (IFOAM, 2010).<sup>1</sup> Although the number of entities proposing programmes encouraging sustainable practice has multiplied and publications addressing the role of private sustainability standards have grown exponentially over the last few years, little is yet known on crucial questions such as the actual impact these have on producers income, livelihoods and the environment.

A key assumption behind the growth of private standards and the support the issue has received from the corporate and donor communities is that they do indeed result in a positive social, economic and environmental impact and a better livelihood for producers and their surrounding community. But do they? Do the positive impacts of private standards actually outweigh the costs to introduce and operate them? Are the indicators used to measure this impact based on actual results or only on inputs? And do these impacts go beyond what would have been otherwise achievable with alternative policies or management tools? A recent report of the global association for social and environmental standards (ISEAL Alliance) notes that most impact assessment activities have been carried out as isolated exercises and 'suffer from a lack of broadly comparable data and a limited ability to draw system-wide conclusions about impacts' (ISEAL Alliance, 2008 p. 5). The field has also been criticized for being very fragmented, with different studies focusing on different questions and many using very 'crude methods that do not correct for selection effects or are likely to bias results for other reasons' (Blackman and Rivera, 2010 p. 2).

Indeed, as self-regulatory mechanisms in general and private sustainability standards in particular are relatively new phenomena, a number of difficulties have not yet been resolved on measuring their impact. There are many challenges, but these can broadly be grouped in concerns regarding **what** is measured, **why** it is measured, **how** it is measured and **how it compares** with other alternatives.

This paper addresses these questions by presenting the results of a systematic literature review undertaken to assess the evidence in existing research regarding socioeconomic and environmental impact at the producer level, providing an assessment of the methods used for measuring this impact, summarizing their findings and identifying relevant gaps in the knowledge base.

Following this introduction, the next section summarizes the major challenges related to identifying and measuring impact. The following section presents an overview of the methods used to collect and screen the papers that were analyzed and is followed by two sections that provide a descriptive and a thematic overview of the evidence base respectively. The last section discusses these findings and concludes by considering the research gaps and proposing future research directions.

## 3. Assessing impact of private sustainability standards

### 3.1. Impact indicators used in the literature - What to measure?

In any process, the activity of measuring results has to start with an agreement on what success means and what the effects are that are sought with the intervention. Measuring these effects is one of the major difficulties of using standards to achieve sustainable development objectives in practice. As measuring effects can be very difficult, compliance with the tasks or requirements or the intervention itself is what is often measured. For example, a compliance with requirements of having a conservation plan may be counted as a positive impact, rather than the social, economic or environmental effect this conservation plan has, such as increased biodiversity.

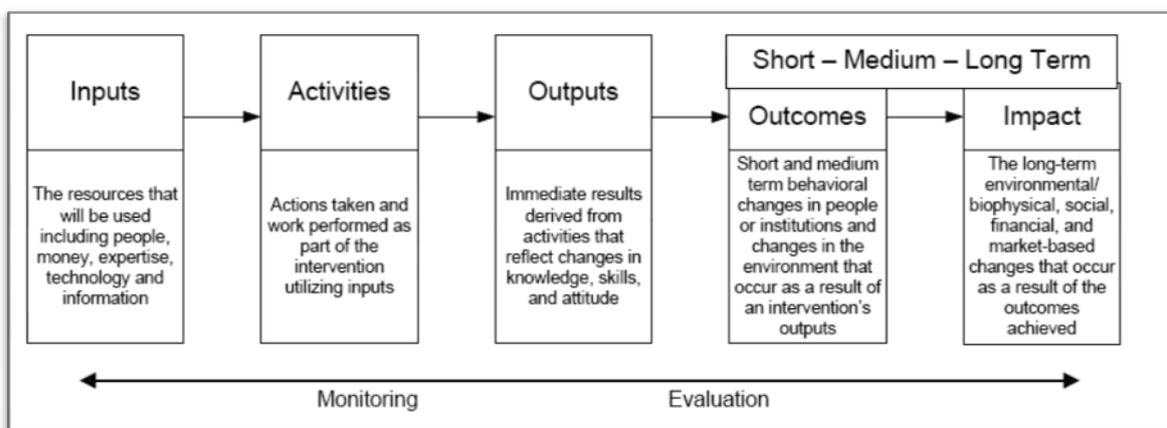
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<sup>1</sup> Private sustainability standards refer to production and processing standards that address social and environmental criteria. For an overview of these standards see: Alvarez, G. (2010), 'Fair trade and beyond: Voluntary standards and sustainable supply chains', in Mena, C. and G. Stevens (eds.), *Delivering performance in food supply chains*, Woodhead Publishing Limited, Cambridge, UK, pp. 478-510 or ITC's Standards Map website: [www.standardsmap.org](http://www.standardsmap.org).

A first step thus is to define what to measure in order to assess the impact of private standards. In terms of the areas covered, the majority of literature uses broad categories of social, economic and environmental impact. However, within these broad areas, themes can be grouped either by outcome (e.g. biodiversity or health), or by areas of impact (e.g. gender equality), making it difficult to compare across these areas.

A second challenge lies in differentiating between measuring activities, outputs or outcomes and impact. In a recently introduced draft for a code of good practice on identifying and measuring impacts, ISEAL defines impacts as 'long-term changes in the social, environmental, or economic situation that the standards system seeks to address. They are positive and negative long-term effects resulting from the implementation of a system, either directly or indirectly, intended or unintended' (ISEAL, 2010 p. 5). A related document (ISEAL, 2008) distinguishes these impacts from measuring inputs or activities that can be used for monitoring purposes other monitoring and evaluation activities, as displayed in Figure 1.

**Figure 1. What to measure?**



Source: (ISEAL, 2008)

Following this logic, for purposes of this research, only documents that contained evaluations at outputs, outcome or impact levels were considered (which for simplicity are all referred to by the term impact in this document). The review process screened out a number of reviews that focused mostly on the auditing of activities that had been performed and not the results these activities had.

**3.2. Impact assessment methodologies: How to measure?**

Impact assessment studies can be undertaken with different objectives and audiences in mind. And, in turn, answering the question on why impact is measured can also shed light on the priorities and methodologies that are selected for carrying out the measurements. For the private standards systems, the main goal is to improve practice and focus on the learning aspects of the evaluation process. But due to the relatively recent emergence of private standards, there is still a need to establish these systems as a valid form of development, and this has influenced the research to be driven by the need to 'prove' rather than to 'improve', responding to donors and other stakeholder pressure to prove that certification has positive impacts that are felt (ISEAL, 2008). Increasingly, as standard systems aim to scale up their presence, they also in some ways 'compete' for increased market share of mass branded products. Fast moving consumer goods companies and retailers that decide to engage need increased assurances to engage in what is effectively a 'co-branding' activity with a private standard. For the donor community, combining private standard support programmes with an array of other development tools makes it difficult to isolate the effects of standards from those of other initiatives.

Criticisms have been raised that methodologies and indicators are not always transparent and testable, data sources are sometimes murky, base-line studies and reference studies are scarce, longitudinal analysis of livelihood conditions are absent, weaknesses and biases are not acknowledged, generalizations are frequently made based on very few or single cases, and that studies based on secondary literature can bias conclusions depending on the agenda of the institution (ISEAL, 2008; Ruben et al., 2009).

Yet another important criticism of current research projects is that most do not correct for selection effects and that there is scarce use in most studies of credible counterfactual outcomes (Ruben et al., 2009). This is, 'an estimate of what environmental or socioeconomic outcomes for certified entities would have been had they not been certified' (Blackman and Rivera, 2010, p.3), or more precisely the causal effects of certification on producers. Using 'non-certified' entities as counterfactual outcomes or as a control group is a common approach but this entails an implicit assumption that these entities are comparable to the certified ones. As Blackman and Rivera (2010) note, this assumption can be violated when entities with characteristics that affect outcome select themselves to be certified, in a problem known as selection bias.<sup>2</sup>

As the objective of this paper is to integrate relevant and methodologically sound research on impact, we distinguish those studies that use credible counterfactual outcomes and synthesize the results from this research and then complement these results with qualitative information from the other selected studies.

#### **4. Methodology overview**

As was the case for all the papers contained in this publication, the analysis of existing literature about the impact on producers and exporters in developing economies was carried out employing a systematic literature review methodology. The method is centred on creating a 'replicable, scientific and transparent process which aims to minimize bias through exhaustive literature search of published and unpublished studies and by providing an audit trail of the reviewer's decisions, procedures and conclusions.' (Cook et al., 1997 cited by Tranfield et al., 2003).

The method (described in detail in Appendix II) consists of 10 steps that can be grouped in three phases: planning and search, screening, and extraction and analysis. In a first step the main questions guiding the research were defined and all relevant sources of literature were identified. This included: (i) identification of the main keywords used in the different streams of literature. These keywords were later used to build search strings in the most comprehensive academic search databases; (ii) identification of key journals that are not covered by these databases and use of an additional database to search these journals applying the same keywords; (iii) review of the references used in previous literature analysis; (iv) review of influential authors in the field; (v) identification of central research institutes and international organizations in the field and review of their publications and (vi) identification of key articles and book sections providing background information on specific topics.

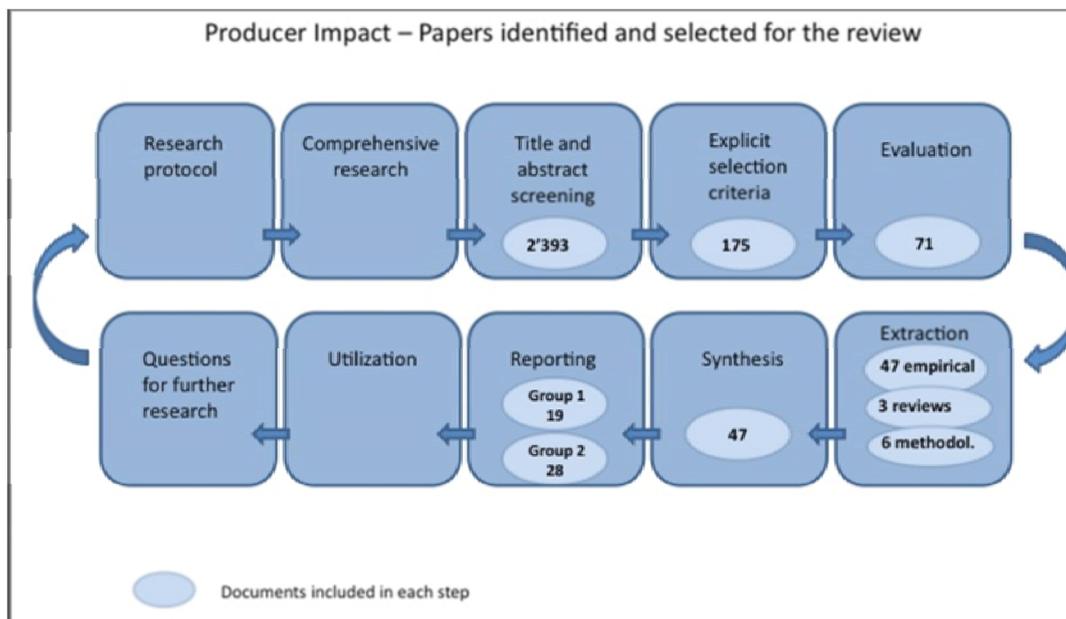
The next step in a systematic literature review consists of the selection of papers based on their relevance and quality. The screening process entails three steps: a title review, the review of abstracts and the full paper review. Before each step inclusion and exclusion criteria was defined to ensure transparency and the ability to replicate the process.

Lastly, in a final screening step full papers were reviewed according to quality selection criteria that included aspects such as contribution to research, clarity of data collection and sampling methods and the linkage between the methodology used and conclusions reached.

Applying this methodology, Figure 2 shows the relevant number of papers identified and screened at each step of the process. Based on the comprehensive search results and the topic and quality screening process, 56 articles were selected for the analysis, consisting of 47 empirical papers, 6 methodological documents and 3 previous literature reviews. The methodological documents and literature reviews were used as a reference and the remaining 47 empirical papers were coded and analyzed following a structure based on the questions guiding the review.

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<sup>2</sup> A broader debate exists among economists and policymakers regarding the need to find a method that can effectively capture the counterfactual outcomes or causality of specific interventions in dynamic environments (Kubler and Schmedders, 2010). In this paper, however, the term 'counterfactual outcomes' has a more limited interpretation, following Blackman and Rivera's distinction of studies that have tried to control the data for selection bias through experimental and quasi-experimental design.

**Figure 2. Search and screening process results**

An important distinction was then made among the 47 empirical papers as to which of these were based on a strong credible counterfactual outcomes and which, though applying a valid methodology, did not built such a strong counterfactual. This distinction follows the one made by Blackman and Rivera (2010, p.3) in their methodology for reviewing literature on private standards stating that:

*'To credibly identify the impacts of certification, an evaluation must construct a counterfactual outcome, which is an estimate of what environmental or socioeconomic outcomes for certified entities would have been had they not been certified. The impact of certification is defined as the difference between the actual outcome and counterfactual outcome'.*

Following these criteria, two groups were identified. Group 1 included articles with strong counterfactual outcomes and were used as the basis of the analysis and the conclusions of this study. Group 2 included all empirical articles that, though following a solid methodology and being considered a paper of high quality, were exploratory in nature or designed without the use of a strong counterfactual component.

The analysis was then carried out in two areas: a descriptive one and a thematic one, and the findings are summarized in the next two sections. The first describes all 47 studies included in this review, their time and type of publication, by product, geographic and thematic scope, by impact area analyzed and by the type of methodologies used. The second part classifies the 19 articles contained in Group 1 according to the coverage of topics and the results on impact and it then presents a count of the positive, neutral/mixed or negative results observed in these studies. Although it is not possible to aggregate the information from these different studies, the results across the various research pieces provides a view of the areas where stronger results have been identified and areas where private standards have not resulted in net positive gains. The 28 articles in Group 2 are mostly exploratory in nature or were deemed to be less concerned with the use of strong counterfactual outcomes or base of reference. Still, as they can provide rich qualitative data and observations, they are used to expand on certain topics covered by Group 1.

The Systematic Review methodology offers a comprehensive and transparent process to review a broad spectrum of studies in a specific field. It is, however, not without its limitations. An important one is related to the screening process being biased towards articles rather than books, as the first are captured by electronic search engines while the latter ones are not and are only identified through cross-referencing and author research. A second limitation, more specific to this topic, is that a large amount of research on the impact of standards is being carried out by standards organizations. On the one hand, these studies may be geared more toward monitoring sets of activities rather than measuring impact. On the other hand, the objectivity of some of the studies can be called into question when they are sponsored and carried out by the standards organizations themselves. Peer review is a generally accepted form of overcoming

perceived or real lack of transparency. But most of the research on standards carried out by standards organizations has been published by the organizations themselves and are not necessarily peer reviewed, which, for purposes of this research, is taken into account when assessing the quality of the research and can thus leave out relevant and high-quality research that has been undertaken by these organizations.

Still, even accounting for these limitations, we believe the process allows the integration of a large body of research in a way that minimize bias and, by providing a framework and an audit trail, can be modified to incorporate new data as this is uncovered.

## 5. Descriptive analysis of empirical papers (47 studies)

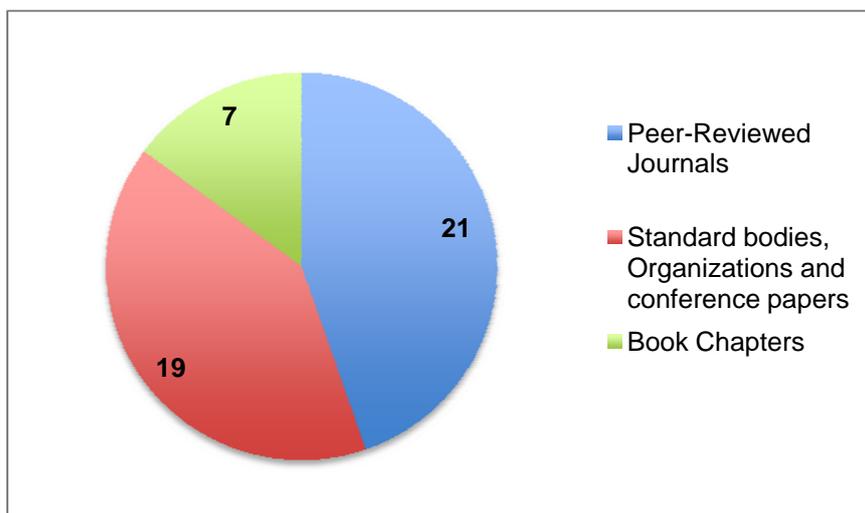
In order to frame the findings of the research, this section presents a descriptive analysis of the research, including the type and timing of publications, the topics and geographies covered, and the methodologies applied.

### 5.1. Articles by type of publication

Most of the papers reviewed were written by academics or researchers commissioned by international organizations. Of the 47 empirical documents that passed the topic and quality screen, academic institutions or peer-reviewed academic publications were responsible for 35 of them, 10 had been undertaken by international development organizations, and the remaining 2 had been published or commissioned by standards organizations.

As Figure 3 illustrates, the majority of the publications (21 articles) that were retained for analysis had been published in peer-reviewed academic journals, followed by other studies published by international organizations, universities or standards bodies (19 articles), and in books (7 chapters). As mentioned before, the most comprehensive part of the search for articles was done through search engines and this helps explain why there is a larger portion of articles sourced from academic journals. As publications in these journals are peer-reviewed, it also gives a higher level of assurance in the solidness of the methodology and results.

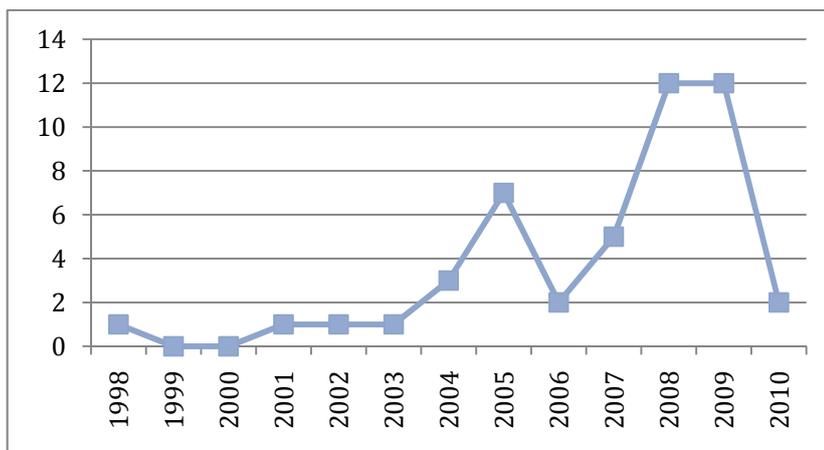
**Figure 3. Articles by type of publication**



### 5.2. Articles by year of publication

The issue of assessing the impact of private standards has received increasing attention over the last five years and the papers that were selected for the review (which had no pre-selected time-frame) were concentrated over this period. As presented in Figure 4, the largest number of publications was published during the last two full years included in the analysis (2008-09).

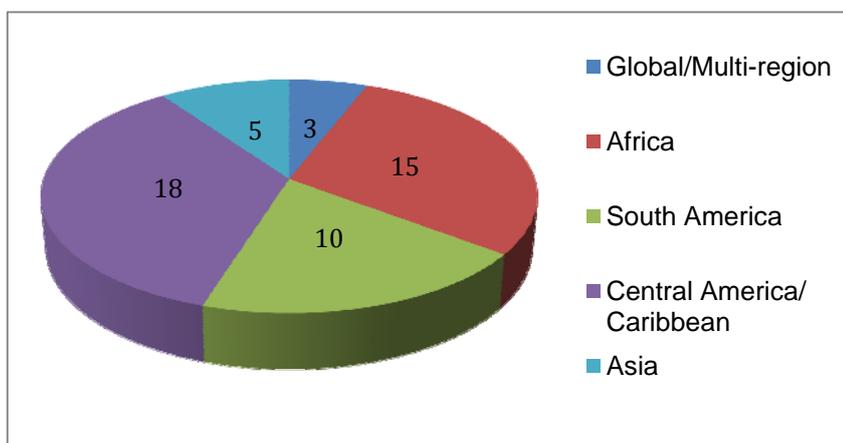
**Figure 4. Articles reviewed by publication date<sup>3</sup>**



### 5.3. Geographical coverage

The majority of the selected papers presented research that had been carried out in Latin America, with 18 papers focusing on Central America or Caribbean countries, and 10 more analyzing impact issues in South America. A further 15 studies addressed issues related to Africa, and only 5 addressed issues related to developing countries in Asia (Figure 5). Costa Rica was most represented with 7 studies, followed by Kenya with 5. A complete list of countries covered by the various documents is presented in the Appendix (Figure 13, p. 8). By designing the review on developing economies, North America, Europe and developed economies in Asia were excluded, even though a number of the studies that had originally been identified in the keyword search did address private standards impact at the producer level in these regions, especially with regards to organic agriculture.

**Figure 5. Reviewed studies by region<sup>4</sup>**



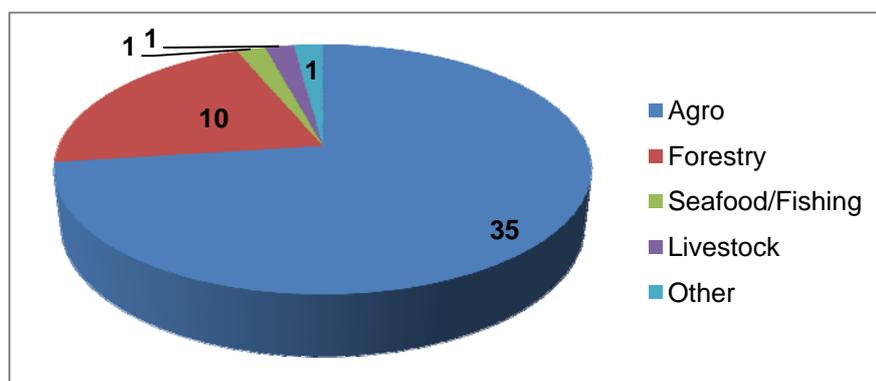
<sup>3</sup> The cut-off date for the review was 30 June 2010, so the last year in the chart shows results only for six months.

<sup>4</sup> As some papers present research carried out in more than one topic or geography, some studies are double counted and the total number in the table surpasses the number of studies reviewed.

#### 5.4. Sectors and products covered

Empirical studies covered a broad range of products, but most were focused on the agriculture and forestry sectors, as shown in Figure 6. Even within these sectors there was a high concentration of studies on coffee (19), followed by forestry (10), herbs and spices (5), and vegetables (4). A complete list of products covered by the review is again included in Appendix I (Figure 12, p.27).

**Figure 6. Reviewed studies by sector**



#### 5.5. Standards covered

Although a wide range of standards was mentioned in the research, the vast majority of studies focused their analysis only on a few of them. The most frequent ones were: Fairtrade, with 26 studies and Organic, 16 studies, followed by the Forest Stewardship Council (FSC) addressed in 8 documents. A series of studies built on strong counterfactual analysis were focused on Fairtrade and Organic certifications. Thus, these were also over represented in Group 1. Articles in Group 2 were still weighted towards these two standards but were slightly more balanced across other ones as well. In both groups, standards were sometimes addressed individually, while in others comparisons were made across different standards or, in some cases, against other development interventions. A complete list of standards covered by the review is included in Appendix I.

#### 5.6. Methods utilized

As mentioned in the Introduction, private standards still constitute a relatively new area of research and there is still significant debate on the methods that should be utilized to assess its impact. On one side, in-depth qualitative research provides richness of data and contextual analysis. However, comparisons and generalizations are not possible in the absence of base-line studies and an appropriate reference point. As the objective of this document is to provide a summary of existing research in the most unbiased way possible, the studies were grouped according to this characteristic and divided into two groups. The ones that used credible counterfactual outcomes were favoured in the aggregation of results - 16 studies classified as Group 1 - and the remaining articles - 28 classified as Group 2 - were used to complement or contrast the aggregated results of Group 1.

Table 1 illustrates the methods utilized, both in Group 1 and in Group 2. In the first group, research is concentrated on survey-based instruments, 16 articles, with 3 additional papers using in-depth qualitative analysis with a valid control group or reference. The articles in Group 2 are weighted towards in-depth exploratory and narrative research, 17 articles, with the remaining ones using in-depth interviews (7) or statistical methods (4) but without the use of strong counterfactuals.

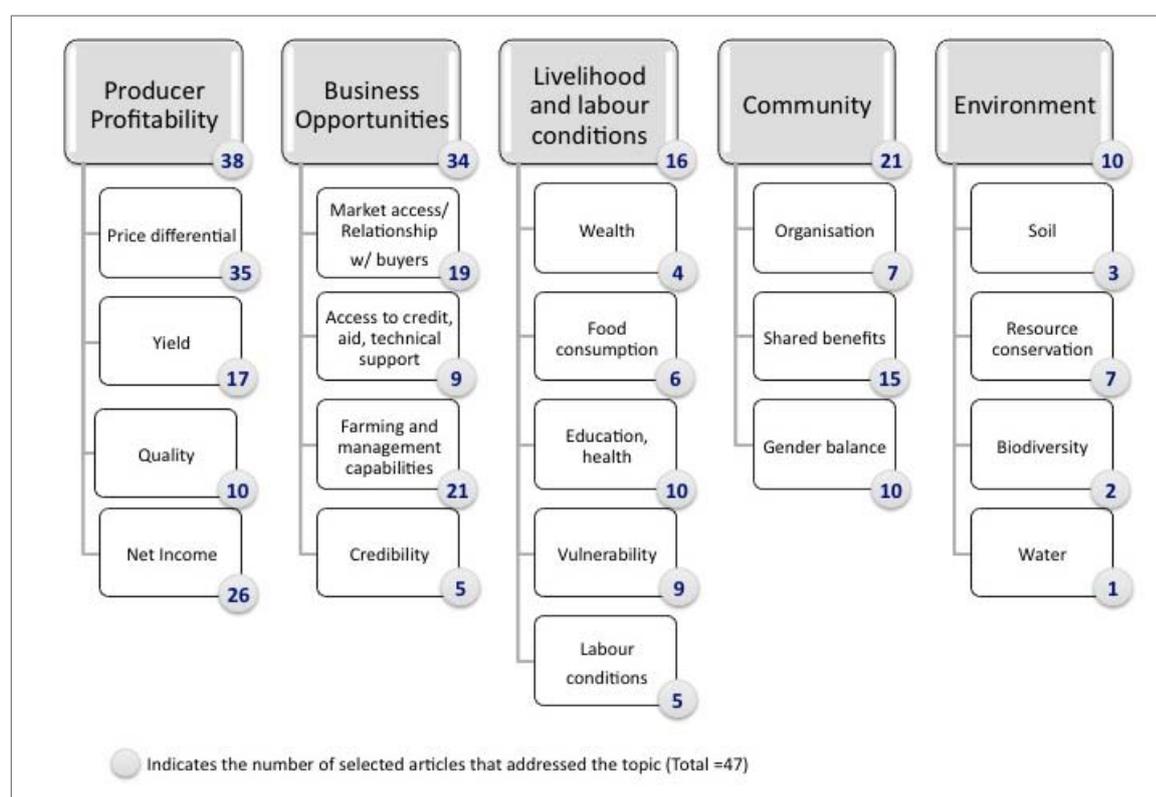
**Table 1. Methodology approach of empirical papers selected**

Method	In depth interview with control or reference	Survey-based counterfactual outcomes	Statistical analysis - no counterfactual outcomes	In-depth interview limited counterfactual outcomes	Exploratory/ Narrative	Total
Studies	3	16	4	7	17	47
	Group 1		Group 2			

### 5.7. Impact focus

All 47 empirical studies selected for the review addressed social or economic aspects of private sustainability programmes. In addition, 12 of them also included an analysis of at least one environmental aspect. Figure 7 lists the specific topics that were covered in the studies analyzed.

**Figure 7. Producer impact - Areas identified in the reviewed literature<sup>5</sup>**



Source: Authors

The economic aspects of differential pricing and profitability for the individual farmer were the topics most widely covered by the studies analysed, with 35 out of the 47 empirical papers addressing pricing and 26 papers studying the effect of private standards on farmers’ net income. Related to the economic effect of standards, many studies address at least one other economic aspect, such as increased market access (19), increased farming or management skills (21) or access to credit and technical support (9).

<sup>5</sup> Numbers do not correspond to the total number of articles reviewed as some studies addressed more than one topic and were double counted in this graph.

Other aspects of producer livelihood and labour conditions were covered by 16 of the 47 papers, most of them addressing issues related to education and health (10) and real or perceived producer vulnerability conditions (9). Community-related issues were also addressed by almost half of the papers reviewed, most of them in relation to the use and relevance of the social premium incorporated in Fairtrade conditions.

Environmental issues were comparatively much less present than social and economic issues, with only 10 studies focusing their analysis on the impact of private standards on the environment - either at a farm level or more broadly from a community perspective. The most frequently addressed topics were related to resource conservation and deforestation (7 studies) and, to a lesser extent, covered soil conservation and biodiversity (3 and 2 respectively), with only 1 study evaluating the impact of standards covering water quality.

## 6. Overview of findings on impact

### 6.1. Introduction

This section reviews the findings of selected papers and, within these, summarizes the results of the 19 papers that contained a counterfactual analysis of the data classified in Group 1, and identifies and comments on the papers from Group 2 that relate to each topic. The structure follows the topics addressed in the literature and presented before (Figure 7, p. 9) namely: producer profitability, business opportunities, producer livelihood and labour conditions, social and economic impacts at community level, and environment impact and is summarized in Table 2.

Before proceeding into the analysis, it is important to put in a word of caution regarding the understanding of the results from the studies. In the interest of providing an overview, findings have been aggregated suggesting a comparability of results. It has to be noted, however, that although the approach allows for the integration of heterogeneous research, findings have to be interpreted carefully as they are based on different theoretical approaches, emerge from diverse methodologies, and have been applied to quite different product and geographic areas.

**Table 2. Studies of impact of private standards on producers in developing countries**

Impact				
Topic	Group 1 – Counterfactual base			Group 2 – Other relevant articles
	+	O or mixed	-	
<b>Price</b>	Arnould et al., 2009; Becchetti and Constantino, 2008; Bolwig et al., 2009; Fort and Ruben, R. 2008a; Fort and Ruben 2008b; Gibbon et al., 2008; Jaffee, 2008; Lyngbaek et al. 2001; Nebel et al., 2005; Setboonsarng et. al., 2006	Akyoo and Lazaro, 2008; Kilian et al., 2006; Mausch et al., 2009		Araujo et al., 2009; Bacon 2005; Bacon et al., 2008; Borot de Bastiti, 2009; Carrera et al., 2004; Consumers International and IIED, 2005; Dolan, 2010; FAO, 2009a; FAO, 2009b; Fermi, 2005; Gibbon et al., 2008; IFAD, 2005; Kollert and Lagan, 2007; Manosalva and Quinteros, 2004; Moberg, 2005; Parrish et al. 2005; Philpott et al., 2007; Raynolds and Ngcwangu, 2010; Raynolds et al., 2004; Ronchi, 2002; Roquigny et al., 2008; Sexsmith and Potts, 2009

Impact				
Topic	Group 1 – Counterfactual base			Group 2 – Other relevant articles
	+	O or mixed	-	
<b>Net Income</b>	Arnould et al., 2009; Bolwig et al., 2009; Fort and Ruben, R. 2008a; Gibbon et al., 2008; Kilian et al., 2006; Louman et al., 2005; Nebel et al., 2005; Setboonsarng et. al., 2006	Akyoo and Lazaro, 2008; Fort and Ruben 2008b; Jaffee, 2008; Mausch et al., 2009	Lyngbaek et al. 2001; Sáenz-Segura and Zuñiga-Arias, 2008	Araujo et al., 2009; Bolwig and Odeke, 2007; Borot de Bastiti, 2009; Consumers International and IIED, 2005; FAO, 2009a; FAO, 2009b; Fermi, 2005; Gibbon et al., 2008; IFAD, 2005; Markopoulos, 1998; Moberg, 2005; Roquigny et al., 2008; Sexsmith and Potts, 2009
<b>Yield</b>	Arnould et al., 2009; Bolwig et al., 2009; Fort and Ruben, 2008a; Jaffee, 2008; Ruben et al. 2009;	Akyoo and Lazaro, 2008; Kilian et al., 2006; Setboonsarng et. al., 2006	Akyoo and Lazaro, 2008; Fort and Ruben 2008b; Lyngbaek et al. 2001;	FAO, 2009a; Gibbon et al., 2008; IFAD, 2005; Moberg, 2005; Philpott et al., 2007; Quispe Guanca 2007;
<b>Quality</b>	Ruben et al. 2009; Setboonsarng et. al., 2006	Kilian et al., 2006 (Fairtrade and Organic);		Borot de Bastiti, 2009; Consumers International and IIED, 2005; FAO, 2009a; FAO, 2009b; Parrish et al., 2005; Reynolds et al, 2004
<b>Business opportunities</b>	Becchetti and Constantino, 2008; Bolwig et al., 2009; Fort and Ruben 2008b; Gibbon et al., 2008; Louman et al., 2005; Ruben et al. 2009; Sáenz-Segura and Zuñiga-Arias, 2008; Setboonsarng et. al., 2006; Zuñiga-Arias and Sáenz-Segura, 2008;	Akyoo and Lazaro, 2008; Fort and Ruben 2008a; Nebel et al., 2005; Sáenz-Segura and Zuñiga-Arias, 2008;		Araujo et al., 2009; Bacon et al., 2008; Bolwig and Odeke, 2007; Borot de Bastiti, 2009; Carrera et al., 2004; Consumers International and IIED, 2005; Dolan, 2010; Ebeling and Yasué, 2009; FAO, 2009a; FAO, 2009b; Fermi, 2005; Manosalva and Quinteros, 2004; Markopoulos, 1998; Moberg, 2005; Parrish et al. 2005; Quispe Guanca, 2007; Reynolds et al., 2004; Ronchi, 2002; Sexsmith and Potts, 2009; Utting, 2009

Impact				
Topic	Group 1 – Counterfactual base			Group 2 – Other relevant articles
	+	O or mixed	-	
<b>Producer livelihoods</b>	Arnould et al., 2009; Becchetti and Constantino, 2008; Fort and Ruben 2008a; Fort and Ruben 2008b; Jaffee, 2008; Kilian et al., 2006; Louman et al., 2005; Ruben et al. 2009; Sáenz-Segura and Zuñiga-Arias, 2008;	Fort and Ruben 2008a; Sáenz-Segura and Zuñiga-Arias, 2008; Zuñiga-Arias and Sáenz-Segura, 2008;		Bacon, 2005; Bolwig and Odeke, 2007; Consumers International and IIED, 2005; Dolan, 2010; FAO, 2009a; FAO, 2009b; Fermi, 2005; Gibbon et al., 2008; IFAD, 2005; Parrish et al., 2005; Utting, 2009
<b>Labour conditions</b>	Nebel et al., 2005;	Ruben and van Schendel, 2008; Setboonsarng et. al., 2006;		Carrera et al., 2004; Consumers International and IIED, 2005;
<b>Community</b>	Kilian et al., 2006; Zuñiga-Arias and Sáenz-Segura, 2008; Fort and Ruben 2008b;	Fort and Ruben 2008a;	Nebel et al., 2005;	Bacon et al., 2008; Bolwig and Odeke, 2007; Consumers International and IIED, 2005; Dolan, 2010; FAO, 2009a; FAO, 2009b; Gibbon et al., 2008; Markopoulos, 1998; Moberg, 2005; Parrish et al. 2005; Raynolds and Ngcwangu, 2010; Raynolds et al., 2004; Ronchi, 2002; Utting 2009
<b>Environment</b>	Jaffee, 2008; Louman et al., 2005; Ruben et al. 2009;	Nebel et al., 2005;	Sáenz-Segura and Zuñiga-Arias, 2008;	Carrera et al., 2004; Consumers International and IIED, 2005; Markopoulos, 1998; Philpott et al., 2007; Quispe Guanca, 2007;

## 6.2. Profitability

An assessment of the profitability or net income effects at the producer level needs to take into account both the increased revenue effects - directly through price premiums and indirectly through increased quality or yield effects – as well as increased costs that producers may incur in order to participate in these standards, both in terms of investments and on-going costs related to certification. These costs can include certification and auditing, as well as additional labour, decreased yield or quality effects and investments in things such as equipment or associated costs. Of the 47 empirical papers reviewed, 38 addressed at least one aspect related to the economic impact for producers supplying companies participating in voluntary private standards. Most of them covered issues related to increased income and higher prices received by producers for their crops. Some, also incorporated variables linked indirectly to income such as yield and quality effects of the introduction of standards.

### 6.2.1. Price

A large number of Group 1 studies (13 of a total of 19) covered price in their analysis of impact of private standards. Of these, 10 found a positive impact on the absolute price received by producers compared to the control group, while 3 others found mixed or no effects). But these premiums were comparable, in 3 cases, to those obtained by organic certification in two coffee studies and one banana study (Jaffee, 2008; Fort and Ruben, 2008a; Fort and Ruben, 2008b). Not surprisingly, 5 of the 6 studies that looked at Fairtrade certification identified a positive effect on price received by producers, as this certification is one of the few that includes an explicit reference to a minimum price. However, positive effects on prices were also found in one forestry study, stating that a 5-51% surplus was paid for the majority of certified products (Nebel et al., 2005). Although the premium had a positive impact on net income, this would also need to be compared to other possible sources of premium. For example, in a study of coffee standards in Costa Rica, Killian et al. (2006) conclude that surplus attributed to certification was less relevant than premium associated with superior coffee quality.

**Table 3. Price impact**

Product	Standard	Price				
		Total	Cover	+	Neutral or mixed	-
Coffee	Fairtrade	5	4	3	1	
Coffee	Organic	3	3	2	1	
Banana	Fairtrade	4	1	1		
Forestry	FSC	2	1	1		
Herbs/spices	Fairtrade	1	1	1		
Herbs/spices	Organic	2	2	1	1	
Rice	Organic	1	1	1		
Carpets	Social standards	1	0			
<b>Total</b>		<b>19</b>	<b>13</b>	<b>10</b>	<b>3</b>	<b>0</b>

In the broader group of studies, price was also frequently addressed, with 22 studies from Group 2 covering the subject. The results of the Group 2 studies are in line with those of the initial group, finding evidence for price premiums, particularly for Fairtrade, but also highlighting the role (in some cases more predominant) that quality can have on prices achieved. For example, in a study on the impact of FSC certification on wood prices from Malaysia, Kollert and Lagan (2007) state that certified high-quality hardwoods obtained a 27% to 56% premium, while lower quality timber premiums range from 2% to 30%.

### 6.2.2. Yield and quality

Factors such as yield or quality were identified in almost half the studies as areas where private standards had an impact, although there was not a uniform conclusion in terms of private standards being a positive or a negative influence. Of the 19 Group 1 studies, 11 assess the impact on yield and labour productivity (Table 4) and, among these, 5 found evidence of positive impacts, while the other 6 resulted in neutral, mixed or negative impact. The transition to organic farming is usually linked to a change in yield, but this could be associated with the type of crop and the farming practices in place before the introduction of the organic scheme. For example, in some cases, the use of organic practices led to increases in yield in a situation where farming practices were less efficient before (Bolwig et al., 2009) but were associated with lower yields, at least during transition, in coffee farming in Central America (Fort and Ruben, 2008a; Kilian et al., 2006). In a study on coffee and Costa Rica, Lyngbaek et al. (2001) found that higher prices for organic coffee compensated some for lower yields, but that price premiums would have to increase to 38% in order to equal net income from conventional coffee.

**Table 4. Yield and quality impacts**

Product	Standard	Yield (land, labour)					Quality			
		Total	Cover	+	Neutral or mixed	-	Cover	+	Neutral or mixed	-
Coffee	Fairtrade	5	4	2	1	1	1		1	
Coffee	Organic	3	3	1		2	1		1	
Banana	Fairtrade	4	2	2			1	1		
Forestry	FSC	2	0							
Herbs/spices	Fairtrade	1	0							
Herbs/spices	Organic	2	1		1					
Rice	Organic	1	1		1		1	1		
Carpets	Social standards	1	0							
		<b>19</b>	<b>11</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>0</b>

Quality, as the study of Killian et al. (2006) referenced before states, may actually have a more significant impact on determining net income, independent of the existence of private sustainability standards. But private standards can also have an influence on quality. Of the 19 counterfactual studies, 4 addressed this issue and were equally divided, with two finding positive impacts on banana production quality in Ecuador (Ruben et al., 2008) and rice farming quality in Thailand (Setboonarng et al., 2006) and no influence on the other two cases in coffee analysed by Kilian et al. (2006).

Quality and yield were also addressed in the remaining (Group 2) studies, with 6 publications covering the impacts of private standards on yields and 6 documents addressing the relationship between quality and private standards. Among these, in an UNCTAD study on the impact of organic conversion on yields, Gibbon et al. (2008) point out that, in contrast to the experience in developed countries, 'organic conversion in tropical Africa has been associated with increased rather than reduced yields and that the absence of yield loss was probably related to the pre-existing low-input characteristics and general low productivity of conventional farming on the continent' (Gibbon et al., 2008, p. 4). A study on organic agriculture in China and India also finds evidence for increased yield among organic farms cultivating rice and soy, while results were mixed for sugar cane and bananas in selected locations in these countries (IFAD, 2005).

### 6.2.3. Net income

Integrating impacts on price, costs and changes in yield, 26 out of the 47 studies reviewed provide an assessment of the impact of private standards on overall economic profitability for producers involved. Among the 14 studies in Group 1 that covered the subject, 8 found evidence to assert that, in the cases that were analysed, there had been a positive effect on the net income received by producers participating in private standards. Four other studies found mixed or no evidence of a positive impact and 2 concluded that the net impact had actually been negative, as presented in Table 5.

**Table 5. Net income impact**

Product	Standard	Net Income				
		Total	Cover	+	Neutral or mixed	-
Coffee	Fairtrade	5	3	1	2	
Coffee	Organic	3	3	2		1
Banana	Fairtrade	4	3	1	1	
Forestry	FSC	2	2	2		
Herbs/spices	Fairtrade	1	0			
Herbs/spices	Organic	2	2	1	1	1
Rice	Organic	1	1	1		
Carpets	Social standards	1	0			
Total		<b>19</b>	<b>14</b>	<b>8</b>	<b>4</b>	<b>2</b>

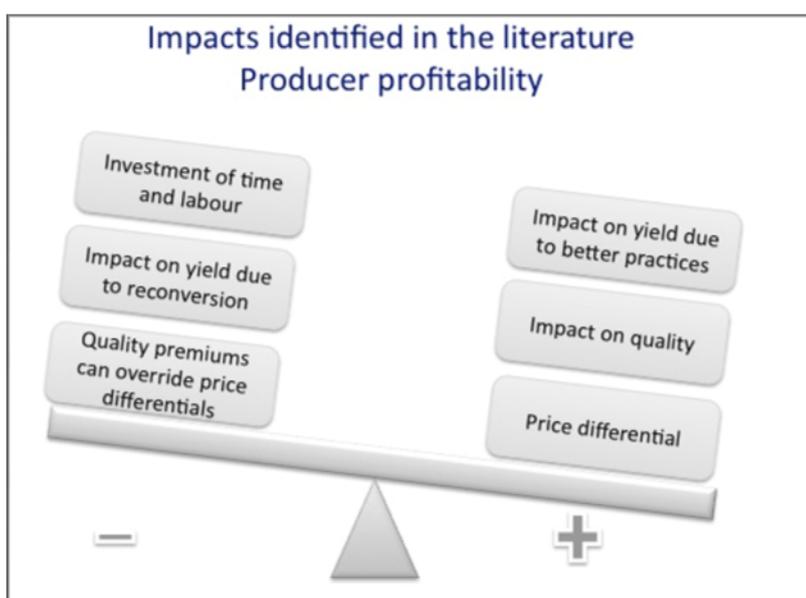
Most of the positive reviews in this group regard higher prices as the main factor influencing an increased net income for producers. This was found to be the case in sectors such as organic cocoa in tropical Africa (Gibbon et al., 2009), organic bananas in Peru (Fort and Ruben, 2008b) and smallholder organic coffee in Uganda (Bolwig et al., 2009). In this last study, the authors find an increase in net coffee revenue of around 75% of the average priced, equivalent to 12.5% of the mean (total) household income. More moderate results are found by Killian et al. (2006) that, as noted before, associate higher net income to differences in quality being stronger rather than differences due to certification. The time dimension may also be important as the certification markets mature. On this, Nebel et al. (2003) caution the fragility of a higher net income in forestry that may be temporarily important but may disappear as the market develops and offer of certified products increases.

The impact of private standards on profitability for producers is also quite extensively covered in Group 2, with 13 of the 28 studies addressing the issue. Although most of these studies do not quantify the impacts or only do so for a single case, the research also regards increased premiums as an important component of increases in producer profitability, especially in Fairtrade and in Organic coffee (Bolwig et al., 2008; Bolwig and Odeke, 2007; Consumers International, 2005), indicating that differences in yield and quality might contribute to this increased profitability (Sexsmith and Potts, 2009). In forestry and fishery, however, Sexsmith and Potts (2009) found that expectations for economic benefits through increased premiums were not materialized but that market access and market security were valuable for producers' income stability. This was also echoed in forestry studies that addressed the topic (Araujo et al., 2009; Fermi, 2005).

Several studies (Consumers International, 2005; IFAD, 2005; Sexsmith and Potts, 2009) point to the role of donors in bearing the costs of some certification schemes. Although this has contributed to the attractiveness and expansion of the schemes, it also distorts the assessment of the profitability at the producer level. In Organic and GlobalG.A.P. certification, there is also an option for the certification holder to be a different entity than the producer. Exporters or NGOs can pay for the certificate and thus shield the producer from some of the costs or risks associated with the certification programme. However, this can also mean that the benefits related to profitability or market access are less transparent or directly applicable to the farmers involved (IFAD, 2005; Markopoulos, 1998; Sexsmith and Potts, 2009).

Figure 8 summarizes the key elements found in the literature impacting producer profitability. Overall, the positive impacts – mainly around price premiums but also increased yields or better quality - appear to exceed the increased costs involved in participating in private sustainability certification programmes for producers, but more research is needed to make any further conclusions.

**Figure 8. Impacts on producer profitability**



Source: Authors

### 6.3. Business opportunities for producers

Beyond direct economic impacts on revenue and profitability, most studies also assessed one or more aspects of the impact private standards have on the ability of producers to enhance their business opportunities. Although this is a vast area, in this document we include in this category the areas more frequently addressed in the reviewed literature, such as: impacts on market access relationship with buyers, commercial credibility, access to credit or training, changes in farming practices and product variety.

As summarized in Table 6, of the 19 Group 1 studies, 13 addressed one or more issues related to business opportunities, with 9 among these concluding that private standards had a positive impact on the business opportunities for producers, 4 claiming neutral or mixed results and none finding that the producer was left worse off in terms of business opportunities as a consequence of participating in these schemes.

**Table 6. Impact on business opportunities**

Product	Standard	Enhanced business opportunities				
		Total	Cover	+	0 or mixed	-
Coffee	Fairtrade	5	3	2	1	
Coffee	Organic	3	1	1		
Banana	Fairtrade	4	3	2	1	
Forestry	FSC	2	2	1	1	
Herbs/Spices	Fairtrade	1	1	1		
Herbs/Spices	Organic	2	2	1	1	
Rice	Organic	1	1	1		
Carpets	Social standards	1	0			
<b>Total</b>		<b>19</b>	<b>13</b>	<b>9</b>	<b>4</b>	<b>0</b>

Although profitability was generally the first key benefit addressed in most studies as a, the research results showed that, in many cases, other business conditions were significantly enhanced and they possibly even outweighed direct and immediate monetary benefits. For example, in a previously cited study of coffee and Fairtrade in Peru (Fort and Ruben, 2008a), the authors found no significant direct effect on net income for producers associated with the standard. However, the same study showed that farmers were more satisfied than the control group in terms of the technical assistance and agricultural inputs that had been included as part of the programme, as well as with trade management practices. They also perceived their land to have a higher value than before entering the scheme. Ruben et al. (2008) support this view, finding that in banana production in Ecuador Fairtrade-associated farmers perceived a positive impact through receiving better and more technical assistance, access to credit and were able to make investments that improved infrastructure conditions. Other studies that also support this conclusion find positive impacts associated with increased credit opportunities or technical assistance (Zuñiga-Arias and Sáenz-Segura, 2008; Becchetti and Costantino, 2008; Louman et al., 2005), enhanced market visibility and reduced uncertainty about market conditions (Bolwig et al., 2009; Gibbon et al., 2009; Setboonsarng et al., 2006).

One of the few areas within this category that showed mixed results was that of lower crop diversification for farmers engaged in private standards (Fort and Ruben, 2008b; Sáenz-Segura and Zuñiga-Arias, 2008). This can be partly a factor of the success of these standards. As certified crops can carry higher prices and enhanced market access, producers expand the certified area covered by the crops, thus lowering the area dedicated to other crops. A second area that was also questioned in some studies was that of the incremental benefit of expensive private certifications when compared to other development options. For example, Louman et al. (2005) questioned the incremental impact of international forest certification compared to other national policies already in effect (Louman et al., 2005). Nebel et al. (2005) also

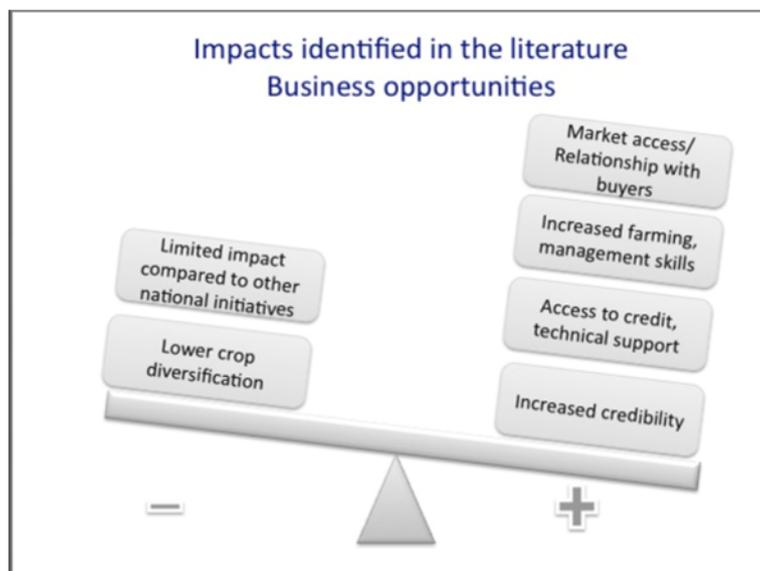
concluded that forest management in Bolivia had developed on externally supported law principles. As the legislation is influenced by FSC criteria, when fulfilling the law, FSC principles and criteria were largely met and little improvement was obtained through the certification itself.

Beyond the studies considered in Group 1, 20 additional documents in Group 2 also addressed issues related to producer business conditions, focusing on one or more of the following areas: market access opportunities (14), farming management practices (15), access to technical training or assistance (8), availability of credit (5) and increased business credibility (3). The conclusions of most of these studies are aligned with those reached by Group 1, providing supporting evidence that the implementation of certification requirements can contribute to enhancing producers' market access situation (Raynolds et al., 2004; Raynolds and Ngcwangu, 2010; Lyons and Burch, 2007), as well as implementing better farming practice and gaining increased access to credit (Borot de Battisti et al., 2009).

Across both groups, the research also revealed that positive impacts of private standards on business conditions may occur indirectly. When certification results in a higher net income for the producer, additional revenues can be invested in productive infrastructure, lead to better access to credit and technical improvements, and ultimately result in higher productivity (Fort and Ruben, 2008b; Nelson and Pound, 2009).

Overall, the evidence on impact on business opportunities for producers was predominantly positive, as represented in Figure 9. Enhanced market access, improved relationships with buyers, better management and farming skills, and enhanced access to credit and technical support were all mostly positive outcomes for producers participating in private sustainability certification schemes. Limitations on this area include lower crop diversification that may result as a consequence of more land being dedicated to certified crops. It has also been noted that, although the impact on business opportunities is significant, there are other programmes based on alternatives to private certification programmes that can also achieve similar results.

**Figure 9. Impacts on producers' business opportunities**



**6.4. Impact on producers' livelihoods**

A large proportion of the articles reviewed addressed issues related to the overall standard of living for producers. The main areas identified in the literature reviewed related to the impact on: wealth, food consumption, security of land tenure, vulnerability, education and health, and gender balance.

Although this topic was less covered in the research than producer profitability or business conditions, 15 out of the 47 articles selected addressed one or more of these issues. Among the 19 studies in Group 1, 12 covered at least one of these issues. As presented in Table 7, the results were mainly positive, with 9 finding evidence of increases in the livelihoods of producers participating in private standards, 3 concluding that the impacts were null or mixed, and none showing a decrease of conditions for producers.

**Table 7. Impact on producers' livelihoods**

Product	Standard	Livelihoods				
		Total	Cover	+	0 or mixed	-
Coffee	FairTrade	5	5	4	1	
Coffee	Organic	3	1	1		
Banana	FairTrade	4	3	1	2	
Forestry	FSC	2	1	1		
Herbs/Spices	FairTrade	1	1	1		
Herbs/Spices	Organic	2	1	1		
Rice	Organic	1				
Carpets	Social standards	1				
<b>Total</b>		<b>19</b>	<b>12</b>	<b>9</b>	<b>3</b>	<b>0</b>

The more common positive effects on producer livelihoods were found on the variety and total amount of food consumption (Jaffee, 2008; Becchetti and Costantino, 2008), on health and education (Kilian et al., 2006; Sáenz-Segura and Zuñiga-Arias, 2008; Arnould et al., 2009), and a real or perceived increased value of household assets (Fort and Ruben, 2008b; Becchetti and Costantino, 2008). These positive effects were generally a consequence of higher incomes being available through premiums or increased productivity or quality. Some of these effects were also attributed to an increase in programmes oriented to promote sustainability. The study comparing alternative forestry programmes, such as certification and payment for forestry protection (Louman et al., 2005), found that land tenure security increased in situations where both the payment programme and certifications were in place, but that each of these programmes did not show evidence of increased security relative to the reference group.

The only area that received mixed results in the Group 1 studies was the one on gender balance, where some studies found that female participation in farm activities and decision-making was actually less in farms associated with private standards than in the control group (Fort and Ruben, 2008b; Sáenz-Segura and Zuñiga-Arias, 2008) or that their participation in household income was reduced (Zuñiga-Arias and Sáenz-Segura, 2008). The results of the literature review resonate with research on this topic conducted by Taylor (2005), who concludes that gender might not be an important internal issue in communities where men appear to dominate in decision-making around coffee production. And standards have not yet had a noticeable impact regarding this situation. Also on coffee farms, Lyon argues that 'the fair-trade network is falling far short of its goal to promote gender equity' (Lyon, 2008 p. 258). In one of the studies selected for the review, Bolwig and Odeke (2007) caution that results may be heavily influenced by the local context and type of commodity, citing the example of Uganda, where their research found that the distribution of additional costs and benefits was much more biased against women in the case of coffee than it was in the cultivation of pineapples.

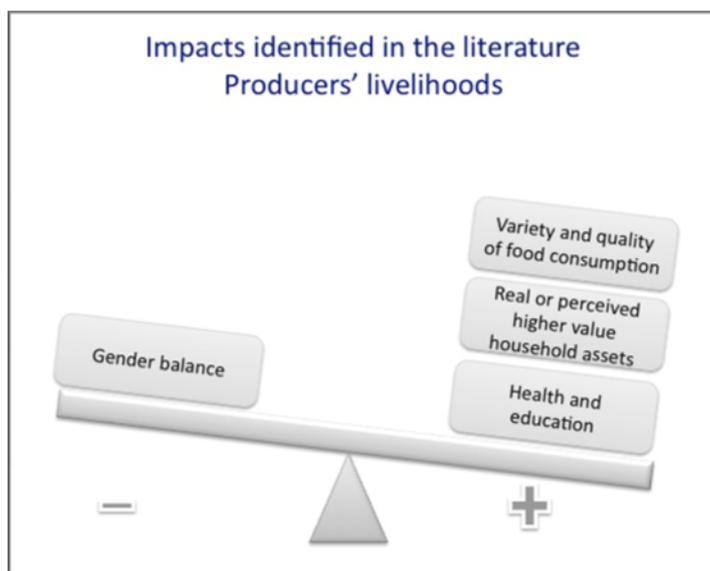
A total of 11 studies in Group 2 covered aspects related to living conditions and producers' livelihoods, with 7 of them addressing issues related to vulnerability and living conditions and the remaining ones addressing quality and quantity of food consumption, education and health. As was the case with Group 1 studies, those in the second group also found evidence of enhanced living conditions for producers participating in private standards. Some also proposed possible connections among these variables and other aspects of certification programmes. For example, the sense of vulnerability was lower in studies that found a better or more stable relationships with customers in the Organic and Fairtrade movement (Parrish et al., 2005; relationships with living conditions (Bacon, 2005; Becchetti and Constantino, 2007; Dolan,

2010). Also, studies in Group 2 attributed the effect of an increase in food consumption, health and education to increased revenues (FAO, 2009a; FAO, 2009b) and to risk-management tools that reduced input costs, diversified production and improved local food security (IFAD, 2005).

Still, some authors cautioned that the effects may have been positive but were still limited in terms of making a significant difference. Bacon et al. (2008) found that households connected to Fairtrade cooperatives experienced positive impacts in education, infrastructure, investment and monetary savings but that important insecurities such as low incomes, high emigration and food insecurity persisted among small-scale producers. Bolwig and Odeke (2007) also found that increased labour efforts, generally by women, were used to maintain the production of regular food crops alongside certified crops.

Figure 10 summarizes the findings on the impact of private standards on producers livelihoods across the studies reviewed, showing a moderate positive impact, driven by an increase in variety and quality of food consumption, a real or perceived higher value of household assets and by investments in health and education. However, the issue of gender balance still appears to be largely independent of private standards efforts in this area and to be driven by other factors.

**Figure 10. Impacts on producers' livelihoods**



### 6.5. Impact on labour conditions

Although most of the studies reviewed deal with the producer as a self-employed individual and with producer cooperatives, 3 of the 19 documents in Group 1 addressed the relationship between private sustainability standards and labour conditions. Of these, one found positive impacts for workers in terms of wages and conditions (Nebel et al., 2005) and the remaining two concluded there were mixed or limited effects (Ruben et al., 2009; Chakrabarty and Grote, 2009), represented in Table 8. Nebel et al. (2005) found a positive impact by FSC certification on improving labour conditions, but these were in line with the local regulations when the regulations were followed. That is, FSC certification did not necessarily contribute more than what local regulations stipulated but ensured that these regulations were actually complied with.

**Table 8. Impact on labour conditions**

Product	Standard	Labour conditions				
		Total	Cover	+	0 or mixed	-
Coffee	Fairtrade	5				
Coffee	Organic	3				
Banana	Fairtrade	4	1		1	
Forestry	FSC	2	1	1		
Herbs/Spices	Fairtrade	1				
Herbs/Spices	Organic	2				
Rice	Organic	1				
Carpets	Social standards	1	1		1	
		<b>19</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>0</b>

In the study of banana production in Ecuador, Ruben et al. (2009) concluded that mixed effects occur when comparing the wages received by workers involved in Fairtrade to those of a private company. Although wage income was lower for Fairtrade producers, they enjoyed more free time and received higher income from other sources, as well as higher job security and higher job satisfaction than the private company option. Also with mixed results, Chakrabarty and Grote (2009) identify a positive link between social standards and the removal of child labourers for households that were above subsistence level (defined as a minimum calorie intake per household member), but no significant influence on households below this level.

Beyond this group, three other studies in Group 2 addressed the issue of labour conditions. A study by Consumers International (2005) on coffee growing regions in South America and Asia pointed to large companies in Brazil taking measures to meet the social requirements of certification schemes and improve basic working conditions for their employees, including job security, medical and hospital treatment with the on-site presence of a nurse and social workers, although the impact is not measured in the study. In the study of forest certification in Guatemala, Carrera et al. (2004) observed an increase in the use of labour contracts, safety equipment, the availability of first-aid kits and overall increased camp conditions. Bechetti and Constantino (2008) also found that Fairtrade workers in Kenya had a higher level of income satisfaction due not only to higher earned income, but also to a relatively lower desired income, likely to be determined by a higher supply of free or easily accessible goods such as technical assistance and lower trade risk.

Still, a common critique of the design of a lot of the standards today is their requirements to refer to permanent hires, while for many agricultural crops *seasonally* hired labour can represent an important part of the labour force. Requirements of most standards do not generally cover issues regarding these labourers (Valkila 2009).

## 6.6. Community

Besides labour rights and working conditions, some private sustainability standards aim to extend their impact beyond individual producers, generating positive change at the local community level. Some private certifications, such as Fairtrade, explicitly address this topic and stipulate that part of the Fairtrade premium should be invested in a 'communal fund for workers and farmers to improve their social, economic and environmental conditions' (Fairtrade Labelling Organizations, 2010).

The areas related to community that were addressed in the research included the uses of funds as well as the role of cooperatives. As Table 9 indicates, only five articles in Group 1 addressed community level issues. Among these, three found positive impacts while the remaining two were neutral or negative in their assessment. The positive aspects were centred on a positively perceived use of the societal premium that is part of the Fairtrade standard system, as this was used for health services and infrastructure (Fort and Ruben, 2008a; Kilian et al., 2006) and local projects (Zuñiga-Arias and Sáenz-Segura, 2008). Among the

more critical analyses, Fort and Ruben (2008b) presented the case of a coffee producer in Peru where community discontent had arisen from the use of the premium only for the workers' welfare, rather than being invested in the community.

In forestry, critics also point out to the potential bias in possibilities of participation. In a study on Bolivian forestry, Nebel et al., (2005) found that large enterprises that were already performing well also held the certifications, while small-scale and community-based enterprises had difficulties in getting certified. The benefits, in this case, would be accrued by the larger companies rather than small-scale enterprises, limiting the positive effect on the community conditions.

**Table 9. Impact on community conditions**

Product	Standard	Community impact				
		Total	Cover	+	0 or mixed	-
Coffee	Fairtrade	5	2	2		
Coffee	Organic	3				
Banana	Fairtrade	4	2	1	1	
Forestry	FSC	2	1			1
Herbs/Spices	Fairtrade	1				
Herbs/Spices	Organic	2				
Rice	Organic	1				
Carpets	Social standards	1				
		<b>19</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>1</b>

In addition to these 5 articles, 14 other publications among those in Group 2 also addressed community benefits. Mostly positive aspects were identified in this group, such as greater participation by community and private users in decision-making (Carrera et al., 2004), an increased role of co-operatives in the community (Utting, 2009) and an opportunity to address weaknesses in social and institutional relations in the community (Markopoulos, 1998). Two independent field research projects sponsored by FAO (2009a, 200b) pointed to the positive indirect effect on communities of new jobs being generated in agriculture, opening employment opportunities, especially for youth, offering an alternative to emigrating to the cities. A more critical view is put forward by Dolan (2010), who acknowledged the role of the social premium present in Fairtrade, but observed that this is the only characteristic, in a case of Fairtrade tea in Kenya, where Fairtrade differentiates itself from other relationships, as being carried out as a very asymmetric transaction rather than a balanced partnership with the involvement of cooperatives and communities. Contrasting this view, Reynolds and Ngcwangu (2010), presented a case of Fairtrade Rooibos tea in South Africa where commitment and engagement between mission-driven distributors and farmers associations had led to two cooperatives upgrading into processing and packaging with additional value being created and retained at origin.

Across both groups, the role of cooperatives was one of the areas that received mixed reviews across different studies. Cooperatives have long been perceived as instruments for development with an economic and social function for small farmers. They have been linked to economies of scale, improved competitiveness, cost sharing possibilities and improved access to credit and buyers (Reynolds, 2002). Requiring smallholder producers to organize in cooperatives or other democratically controlled producer organizations, Fairtrade aims to improve the potential benefits for farmers provided by this form of organization. Yet, in reviewing the evidence, it remains unclear whether cooperatives always manage to improve producers' situation and be effective in delivering services to farmers. Examples of positive outcomes include Fairtrade coffee cooperatives in Mexico successfully implementing quality improvement and infrastructure projects (Reynolds 2002) but critics point to mixed evidence suggesting that outcomes may largely depend on producer specific factors such as experience, and external circumstances (Sáenz-Segura and Zuñiga-Arias, 2008).

## 6.7. Environment

Broader environmental impact of private standards was the area that received the least coverage among the articles reviewed, a result that is also observed in other reviews on the topic (Blackman and Rivera, 2010; Ruben et al., 2009). This could be related to the fact that much of the literature thus far has been focused on evaluating impacts of Fairtrade and that this is a system that has traditionally been more focused on social and economic aspects. But it could also suggest that thus far, the debate on environmental conditions has been largely maintained independently of the debate on private standards, at least from an impact assessment perspective.

Table 10 summarizes the results of studies from Group 1 that analysed the evidence base focusing on environmental aspects. Only 5 studies in this group addressed one or more environmental issues: conservation of native vegetation, soil conservation, biodiversity, resource management (including deforestation) and water quality.

**Table 10. Impact on environment**

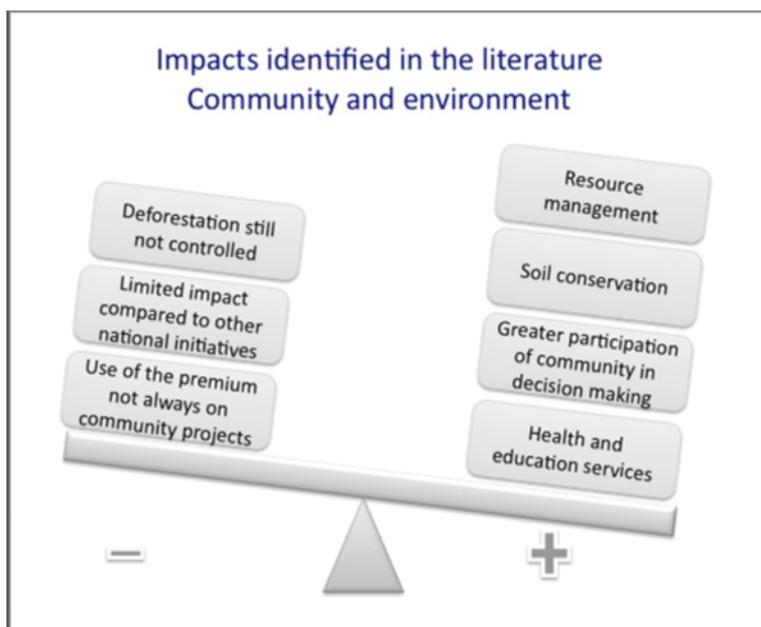
Product	Standard	Environment impact				
		Total	Cover	+	O or mixed	-
Coffee	Fairtrade	5	2	1		1
Coffee	Organic	3				
Banana	Fairtrade	4	1	1		
Forestry	FSC	2	2	1	1	
Herbs/Spices	Fairtrade	1				
Herbs/Spices	Organic	2				
Rice	Organic	1				
Carpets	Social standards	1				
		<b>19</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>1</b>

Of these studies, three identified positive impacts, one found mixed results and one concluded that the net impact of private standards on the environment was actually negative. Among the positive reviews, the aspects highlighted were increased soil conservation on coffee plots (Jaffee, 2008) and enhanced resource management (Ruben and van Schendel, 2008; Louman et al., 2005). The study conducted by Nebel et al. (2005) presented a critical view of forest management in Bolivia where they found limited improvement due to certification and where deforestation was still found to be unabated. Sáenz-Segura and Zuñiga-Arias (2008) found that through the intensity of farming practices, soil erosion had actually increased in Fairtrade coffee plantations, although they caution that their findings include differences in soil composition of Fairtrade plots to start with. Beyond this group of studies, 5 documents in Group 2 also covered environmental issues, with two of these addressing biodiversity in conjunction with soil conservation or resource management, two addressing resource management (including deforestation) and the remaining one studying the impact of voluntary standards on water quality and availability. In this group, environmental benefits included reduced or better managed use of agro-chemicals and restoration of native vegetation and recycling of water used for processing (Consumers International, 2005). However, as was the case with other areas of impact, questions also arose among this group of studies as to the advantages of certification against other efforts, including legislation. For example, research analysing deforestation in the state of Acre, in Brazil, de Lima et al. (Barbosa de Lima et al., 2009) noted a positive overall impact on the environment although this impact would not be significant compared to a control group of forest operators that were already using local forest management practices. Again, questions also arose as to the incremental role of private certifications that can be regarded as 'filling the gap when governments were not willing and/or able to regulate' (Visseren-Hamakers and Glasbergen, 2006, p.10).

Figure 11 summarizes the main impacts identified in the literature, both on social aspects as well as environmental ones. With a very limited base of studies covering these issues, only very tentative conclusions can be reached. Still, the limited evidence found is slightly positive, especially in terms of

improved health and education services and in terms of greater participation of local communities in decision-making processes. On the environment side, there was evidence found on better soil conservation and resource management. Still, as in other areas analysed, questions remain about the comparative advantage of private sustainability standards when compared to other local or governmental programmes and the ability of these schemes to actually make a significant contribution to effectively combat deforestation without other mechanisms being in place as well.

**Figure 11. Impacts on community and environment**



## 7. Conclusions and needs for future research

### 7.1. The impact of private standards on producers: Cautiously positive

Analyzing the literature using a systematic review approach helps 'locate studies, select and evaluate contributions, analyse and synthesise data. It also helps report the evidence in such a way that allows reasonably clear conclusions to be reached about what is and is not known' (Denyer and Tranfield, 2009). As was pointed out before, great caution has to be taken when comparing across different theoretical approaches as diverse methodologies are applied to also very different commodity and geographic contexts. Still, when observing the conclusions arrived at by the studies reviewed in this research, certain implications emerge for producers, exporters and for the institutions that support private sustainability systems.

**Producers tend to be better off financially when participating in private standards:** Overall, the direct impact of participating in private standards in terms of price and profits received by producers tended to be positive, even when compared to alternatives. However, this was not a uniform conclusion. A number of studies also found mixed evidence on the net income for producers and some even found a negative impact on net income for producers, where the increased earnings did not compensate for the additional costs and increased labour involved in complying with standards requisites (Jaffee, 2008).

The overall net impact, however, may or may not be completely visible for the producer when exporters, donors or NGOs temporarily cover certification costs. Lastly, as markets mature, there is a risk that increased supply of certified products may create increased competition to find buyers, certifications become 'commoditized' and premiums diminished or eliminated (Nebel et al., 2005). Questions about the

allocation of costs and benefits across the commodity chains must also be asked. In Part 1 of this series (von Hagen and Alvarez, 2011) a systematic review of literature on the topic concludes that research on revenue distribution is relatively comprehensive and outlines that (i) compliance with standards increases revenues along the value chain, (ii) but additional revenues are mostly distributed unevenly along the value chain to the benefit of the retailer and (iii) value chain structures and governance play a significant role in how revenues are distributed.

This is an important topic and needs to be further understood, as farmers living at subsistence level and barely covering their costs of production are already in a difficult situation, unprepared to make additional investments with uncertain payoffs.

**Indirect positive effects can outweigh direct financial impact of private standards:** In much of the reviewed research, other business conditions for producers were significantly enhanced, possibly outweighing direct and immediate monetary benefits. Better relationships with buyers, marketing guarantees, enhanced quality and increased yields were all positive impacts identified in multiple cases in the research. In addition, technical support and training, as well as increased access to credit were found to be important positive effects of the participation of producers in private standards.

**Relationship-based buyer-seller interaction linked to better results than transaction-based interaction:** Reynolds and Ngcwangu (2010) distinguished between mission-driven and market-driven buyers. This, indeed, appears to be an important element in the relationship between standards and impact. In the case they present of Fairtrade Rooibos tea in South Africa, commitment and engagement between mission-driven distributors and farmers associations had led to two cooperatives upgrading into processing and packaging with additional value being created and retained at origin. This was echoed in other studies reviewed (Fort and Ruben, 2008a, Bolwig et al., 2009; Gibbon et al., 2009) that established a better relationship with buyers and distributors as a factor enabling technical upgrade and market visibility. Private certification programmes, with the aim of increasing scale and efficiency, have sometimes been criticized for replicating existing 'conventional' commodity chains, arguing that with the exception of a social premium there can be no difference in the structure (actors, institutions, regulations and activities) of conventional trade and that of sustainable certifications (Dolan, 2010; Smith and Barrientos, 2005), limiting also the potential impact at the producer level.

**Private standards are one tool in a broader set of voluntary and regulatory options:** Linked to the previous conclusion, programmes that address multiple areas such as technical support, training and pre-financing were consistently linked to better results at the producer level. Ultimately, as it was identified in some of the articles reviewed, improvements in yield and in quality led, in some cases, to higher financial rewards than private certification premiums did. In forestry, a focus on environmental issues showed that there could be limited incremental effects when comparing private standards to other effective local forest management practices (Barbosa de Lima et al., 2009). There were also strong similarities between the standards and 'the letter of the law' and Visseren-Hamakers and Glasbergen (2006, p.10) found that the most valuable contribution of forest standards with regards to conservation 'has been filling the gap when governments were not willing and/or able to regulate'. A closer linkage with other development programmes as well as national regulations is thus important to generate broader systemic results more efficiently than what is achieved today. This brings also the question of the role that international private sustainability standards should play vis-a-vis other local and national initiatives in developing countries. As of today, most of these operate independently of each other. Integrating these approaches could result in lower inefficiencies and, ultimately, a more integrated approach to supporting sustainable development.

**Research on the impact of private standards is still focused around the individual producer:** Most of the research reviewed focused on the impact at producer level. Thus, meso- and macro-level issues such as social and environmental impact coverage were very limited and even within this limited coverage attention was divided on different topics, making it difficult to venture any overarching conclusions. Still, a warning sign was presented by some of the articles that addressed gender balance, pointing out that the issue may still be influenced by current practices and that these conditions still have a much larger effect on the possibilities available to women than those resulting from compliance with standards (Gibbon et al., 2008).

**Is it sufficient?** The review of the evidence gathered so far by researchers points to private standards having the potential to contribute positively to the economic and social well-being of producers in developing countries. However, a broader question arises when reviewing the research. Is this enough? Can private standard systems make a significant contribution in key issues such as helping farmers out of

poverty and in reversing deforestation? Although premiums associated with private standards can increase the price received for crops, structural factors such as small farming plots may mean that the income generated by the farm is still not comparable to minimum wages and may alleviate but not reverse the poverty trap in which farmers can be immersed. Forest conservation and increased biodiversity may also require broader efforts than enforcing current regulation or private certification programmes. Studies like that of Nebel et al. (2005) presented a critical view of forest management in Bolivia where they found limited improvement due to certification and where deforestation was still found to be unabated.

## 7.2. What's next?

Across all areas that were analysed, the studies found greater evidence of positive net impacts than mixed or negative effects for producers and their surrounding environments. But an overarching conclusion that also arose from reviewing the evidence is that the knowledge base that exists today in this area is still very thin, sparse and fragile in terms of scope, method and depth of coverage. The studies on which most research is based focused mostly on Fairtrade and Organic standards, and even these are generally heavily influenced by local conditions, making it difficult to make conclusions beyond the specific cases being covered. Many of the studies in the field also still lack a convincing and consistent methodology. After a comprehensive scan for relevant research, only 47 studies based on a solid and credible methodology were identified. Among these, only 19 had a strong counterfactual component. This is definitely too limited a base to form any overarching conclusions or to make informed decisions on this topic, and it requires a critical ability to differentiate between contingent conclusions, heavily dependent on the context studied, and those that are more universal and can be applied across contexts.

Encouragingly, growing interest in the topic is evidenced by the increased number of publications over the last five years. There have also been calls to action from academics, institutions and engaged buyers requesting a more solid knowledge base on which to act (Blackman and Rivera, 2010; Ruben et al., 2009; Giovannucci and Potts, 2008). Initiatives such as those currently underway by the global association for social and environmental standards (ISEAL) on defining relevant indicators, that pursued by the Committee on Sustainability Assessment (COSA) ([www.iisd.org/standards/cosa.asp](http://www.iisd.org/standards/cosa.asp)) on measuring impact, and the International Trade Centre's Trade for Sustainable Development (T4SD) Standards Map ([www.standardsmap.org](http://www.standardsmap.org)) provide promising approaches to increasing knowledge in this area. These initiatives are welcome contributions in a field that holds promise for contributing to sustainable development but where investments and risks are significant and where informed choices for producers, buyers and for development organizations are urgently needed.



## Appendix I Additional descriptive information on the studies selected

Figure 12. Focus of the research by product

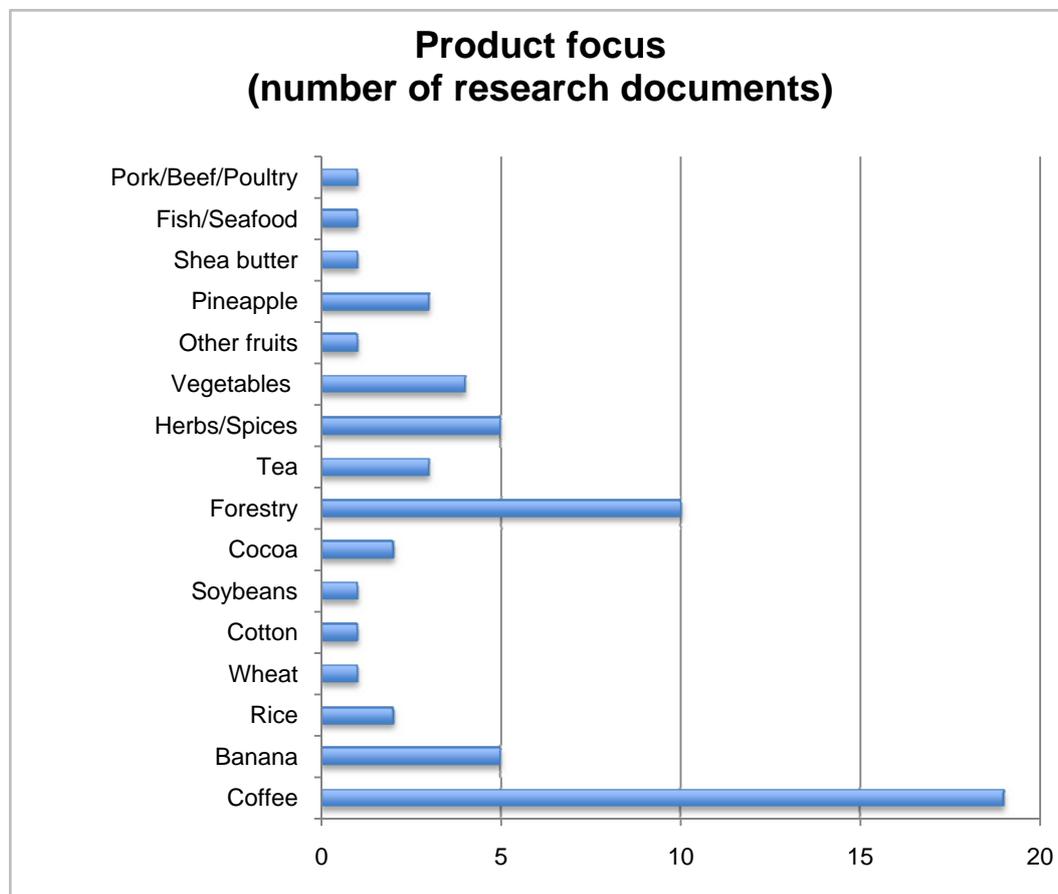
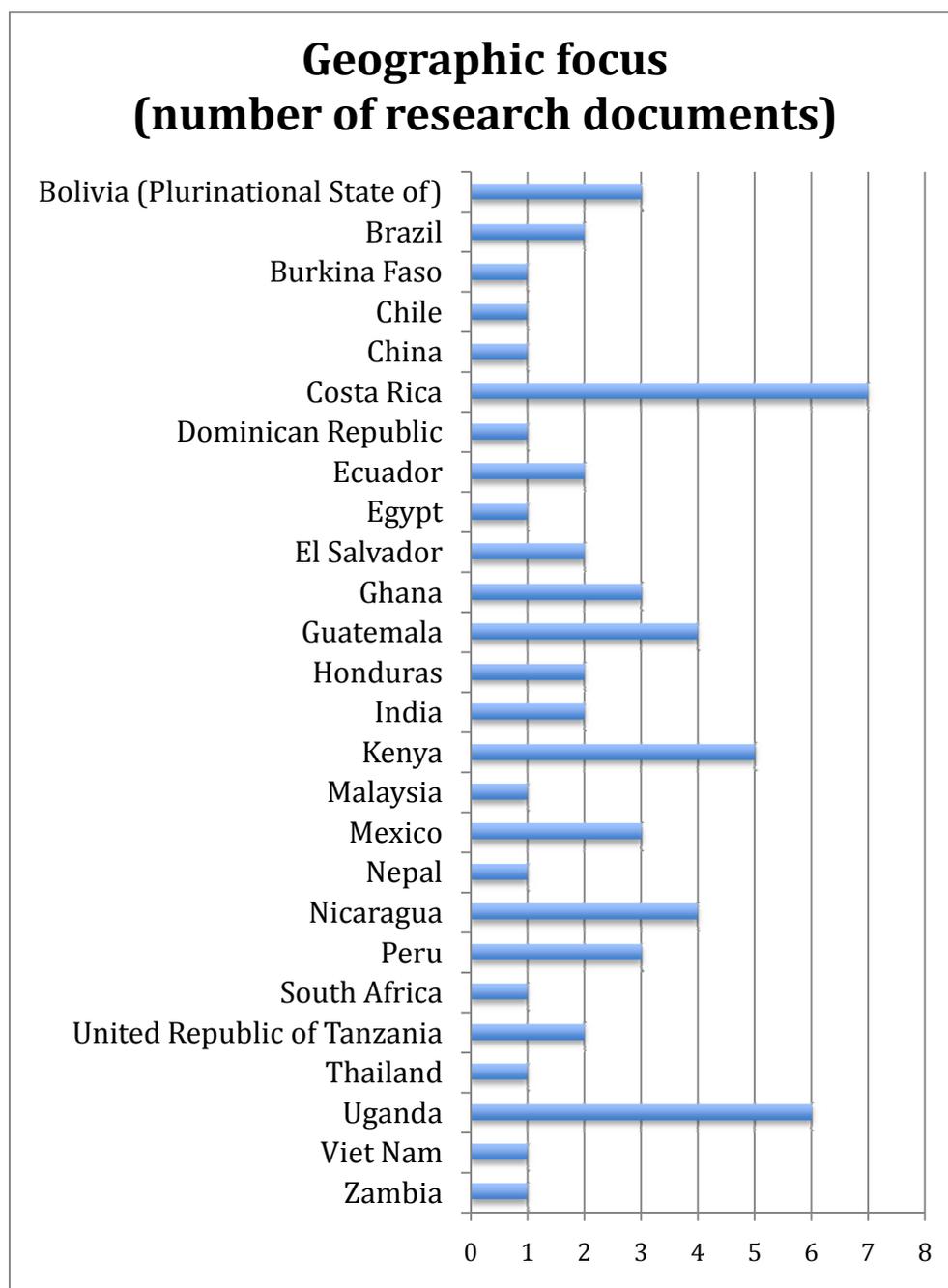


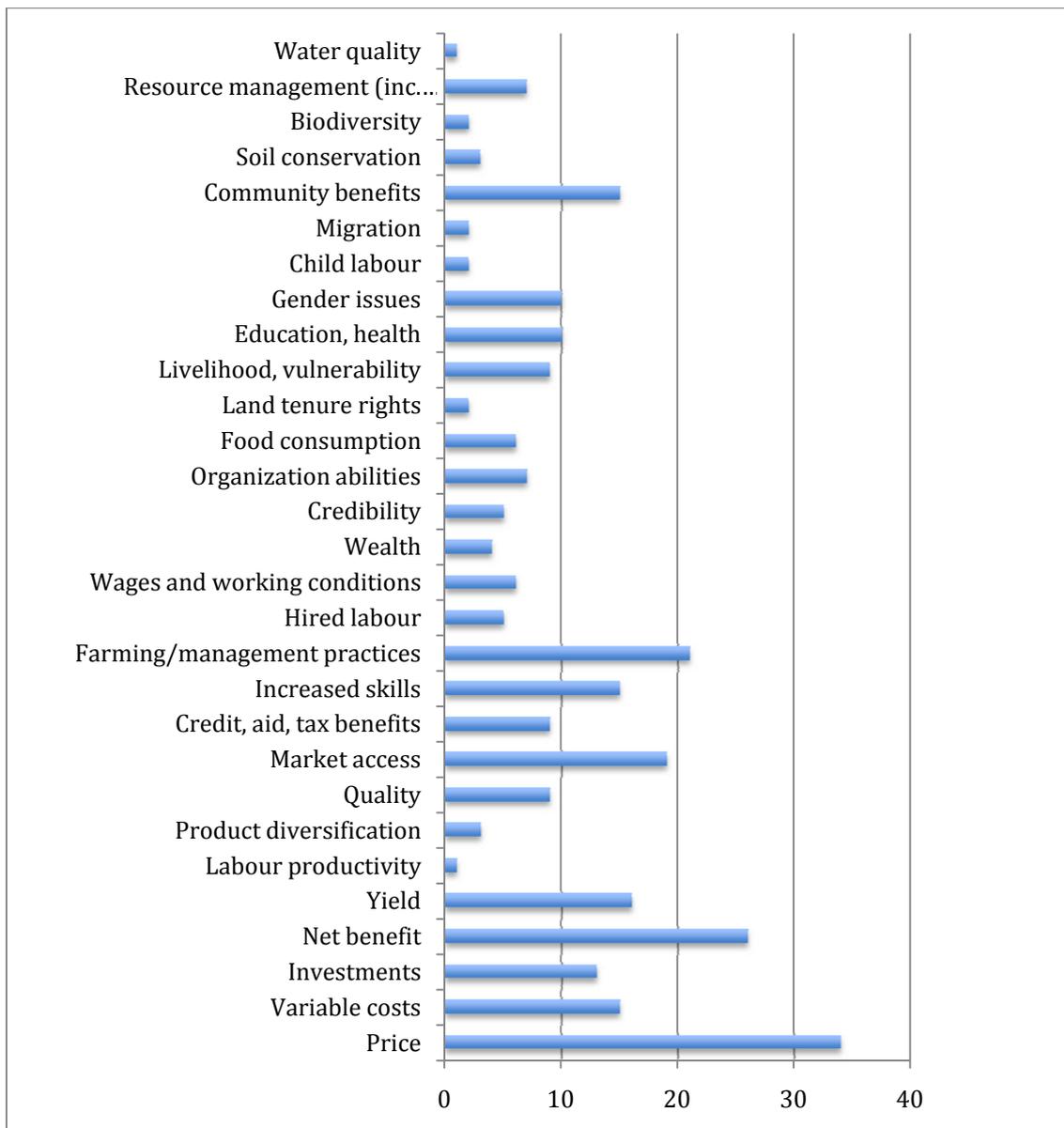
Figure 13. Focus of the research by geography



**Table 11. Focus of reviewed research by standard**

Fairtrade	Organic	Rainforest Alliance	Utz Certified	CAFE (Starbucks)	Smart Wood by RFA	FSC	GlobalG.A.P.	ISO 14001	ISO 9001	MSC	PEFC	Other
26	16	3	6	1	1	8	2	2	1	1	1	2

**Figure 14. Research by area of impact covered**



*Note: As many studies covered more than one issue, the total number exceeds the total number of studies.*

## Appendix II Additional information on the review process

### Sources of literature

Three main sources of literature were used in our research:

- Three electronic databases - EBSCO, Science Direct and ISI Web of Knowledge - were used for the review. EBSCO and Science Direct were used due to their comprehensive coverage of business research and ISI Web of Knowledge was used to search key journals that have not been covered by the other databases.
- Additional sources included previous literature reviews, research institutes, think tanks and international organizations working on private standards.
- Lastly, cross-references providing background information on specific topics, such as conceptual approaches applied in research, were identified, checked for relevance and quality and included in this work.

### Keywords and search terms

The definition of search terms followed two principles: the terms had to be (i) wide enough to make sure not to miss any reference on the topic and (ii) precise enough to limit search results to a manageable quantity. With inconsistent terminology in this area, this process proved complex. For example, several terms are used to refer to the nature of standards under review, including private standards, voluntary standards, sustainability standards, and certifications, among others. As the literature on standards and their impacts on value chains is relatively young and limited, it was decided to make the search as broad as possible by defining more general keywords. See Table 12 for an overview of search terms used in each category.

**Table 12. Search term by category**

Sustainability		Certification	Market	Operations	Impact	Meso-Macro
Sustainab*	<b>A N D</b>	Certif*	Market	Yield	Impact	Policy
Environment*		Standard*	Buyer	Product*	Income	Govern*
Ethic*		Regulat*	(Supply OR Value OR Commodity) AND Chain	Quality	Effect	MDGs OR (Millennium AND Development AND Goals)
Social		Label*	Consumer	Control AND system	Premium	Development
Responsib*			Governance		Price	Poverty
			Power		Surplus	Community
			Trade		Outcome	Gender
			Stakeholder		Cost	
			Market AND (Share OR Participation)		Risk	
			Stakeholder		Livelihood	

### Related journals and influential authors search

Related journals that were not covered by the EBSCO and Science Direct electronic databases were searched for separately in the ISI Web of Knowledge database. For a list these publications see Table 13. Influential authors were searched for separately in the ISI Web of knowledge electronic database.

**Table 13. Additional sources by publications and authors**

Publications	<i>Academy of Management Review, Business and Politics, Consumer Policy Review, Corporate Governance Journal, Cultural Sociology, Environment, Development &amp; Sustainability, Forest Trend, GlobalEDGE Business Review, Human Organization, International Journal of Consumer Studies, International Journal of Sustainability, Journal of Business Ethics, Journal of Public Policy and Marketing, Journal of Strategic Marketing, Review of International Political Economy, Small-scale Forestry, Small Enterprise Development, Sustainable Development International, Social Enterprise Journal.</i>
Authors	Bacon, Christopher; Bolwig, Simon; Cashore, Benjamin; Daviron, Benoit; Giovannucci, Daniele; Graffham, Andrew; Henson, Spencer; Humphrey, John; Jaffee, Steven; Kilian, Bernard; Linton, April; Liu, Pascal; Mudarian, Roldan; Murray, Douglas; Nelson, Erin; Pelupessy, Wim; Ponte, Stefano; Potts, Jason; Raynolds, Laura T.; Taylor, Peter Leigh

### Search strings and electronic search engines

The selected keywords were then used to construct strings with Boolean connectors (AND, OR, AND NOT) searching the electronic databases. The strings were used to search in titles and abstracts for the EBSCO database and also included keywords for *Science Direct*. In the *ISI Web of Knowledge* database the search strings were applied to search for selected journals not covered by the other two databases.<sup>6</sup> Only scholarly (peer reviewed) journals in databases and no particular timeframe have been selected for searches. In EBSCO, selected databases included *Academic Search Premier* and *Show all Environment Complete*.

The total number of articles found in the initial search was 7,536 in EBSCO, over 380,000 in Science Direct and 5,603 in ISI Web of Knowledge. Due to the high numbers of results, the search strings were amended adding new keywords, removing some of the very general keywords and adding exclusion criteria. Re-running searches with the new search strings significantly lowered returns to 2,187 papers in EBSCO, still 130,000 papers in Science Direct and no major change in the ISI database. As even the exclusion of a number of subjects<sup>7</sup> did not significantly reduce results and due to the fact that the search in Science Direct showed high overlap with the search in EBSCO, it was decided to focus further screening on the two other databases.

<sup>6</sup> Journals include: *Academy of Management Review, Business and Politics, Consumer Policy Review, Corporate Governance Journal, Cultural Sociology, Environment, Development & Sustainability, Forest Trend, GlobalEDGE Business Review, Human Organization, International Journal of Consumer Studies, International Journal of Sustainability, Journal of Business Ethics, Journal of Public Policy and Marketing, Journal of Strategic Marketing, Review of International Political Economy, Small-scale Forestry, Small Enterprise Development, Sustainable Development International, Social Enterprise Journal.*

<sup>7</sup> This led to the exclusion of the following subjects: Arts and Humanities, Biochemistry Genetics and Molecular Biology, Chemical Engineering, Chemistry, Computer Science, Decision Sciences, Earth and Planetary Sciences, Engineering, Immunology and Microbiology, Materials Science, Mathematics, Medicine and Dentistry, Neuroscience, Nursing and Health Professions, Pharmacology, Toxicology and Pharmaceutical Science, Physics and Astronomy, Psychology, Veterinary Science and Veterinary Medicine.

Additional sources included research institutes, international organizations and further bodies involved in research relating to private standards, and other literature reviews. The search for relevant papers consisted in screening these organizations' websites and checking cross-references. The documents were screened using the research questions and an additional 874 papers (previous literature reviews) and 4,142 papers (research institutes, etc.) were identified and included in the subsequent phase of the research. Another source of literature was derived from cross-references in articles.

A total of 12,806 papers were included in the screening process.

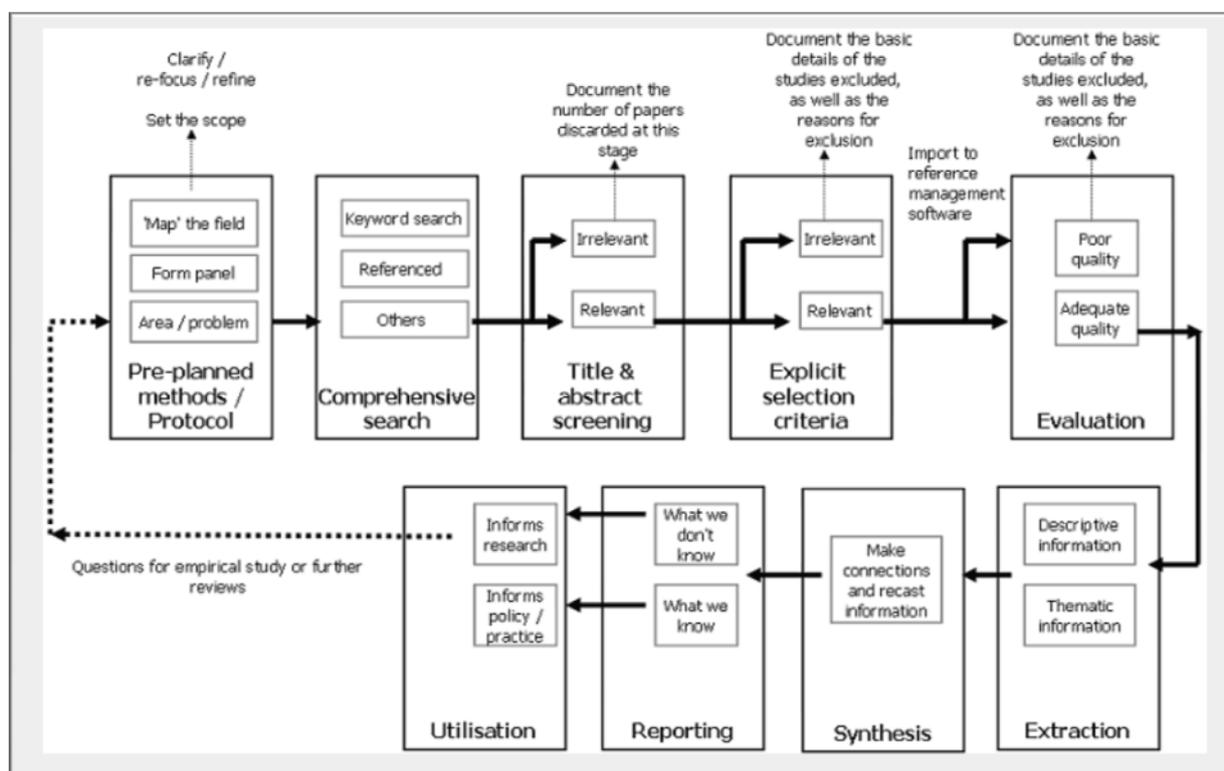
### Systematic review methodology and screening process

Figure 15 provides an overview of the systematic literature review process. The screening process entails three steps: a title review, the review of abstracts and the full paper review. Before each step inclusion and exclusion criteria had been defined to ensure transparency and the ability to replicate the process.

The *title review* has been carried out according to predefined keywords that led to the exclusion of papers and reduced the amount of articles to more manageable numbers. For the EBSCO search results there was a remainder of 450 papers, for the ISI database 385 papers remained, 788 references from the literature reviews were kept for the abstract screening and screening the research institutes resulted in 1,642 papers kept.

The next step consisted in the *abstract review* according to predetermined topics instrumented through keywords. It was decided to keep 80 papers for full screening from EBSCO, 165 papers from ISI, 779 papers from the literature reviews, and 391 from research institutes and other organizations.

Figure 15. Steps in a systematic literature review



Source: D. Denyer, Cranfield School of Management

Papers have been dismissed in the process of abstract screening when dealing with: corporate social responsibility (CSR) issues that are not related to standards//Environmentally friendly or sustainable investments//Socially friendly investments//Voluntary standards in developed countries//Ethical trade issues other than standards//Sustainable development issues other than standards//Other kinds of certification, e.g. land certificates//Sustainability economics//Geographical indicators//Consumer behaviour issues//Voluntary initiatives to foster 'ethical' corporate behaviour or projects other than standards, e.g. codes of conduct//Private standards for non-export products, e.g. milk//Ethical behaviour of employees or managers//Public-private partnerships//UN Global Compact

Out of all papers kept for full screening we included those that deal with the question of this report, namely how standards impact on global value chains; 114 papers were found to deal with this issue and were kept for full screening.

Lastly, in a final screening step full papers were reviewed according to defined selection criteria, such as their contribution to research, clarity of data collection and sampling methods, or the linkage between the methodology used and conclusions reached. This screening exercise resulted in 47 papers that were analysed for this literature review. A summary of this process is presented in Table 14.

**Table 14. Screening results Part 2: Producer impact**

Screen	Papers
Identified papers	
Papers after abstract screen	159
+ Cross-Ref	16
- Weak, unclear or not appropriate methodology	11
- Not specific topic	101
- Only overview	4
- Other (not found, included in another format, etc.)	3
= Selected papers	56
Method only	6
Lit reviews	3
Analysed papers	47



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