



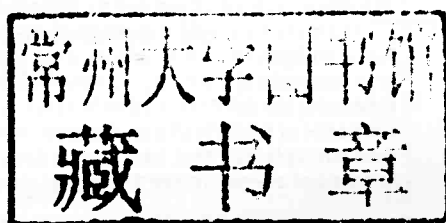
Impact of international voluntary standards on smallholder market participation in developing countries

A review of the literature



Impact of international
voluntary standards on
smallholder market participation
in developing countries

A review of the literature

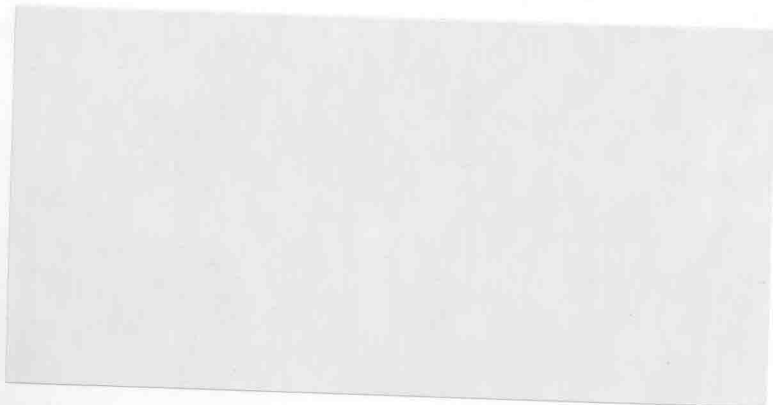


Allison Loconto
and
Cora Dankers

Recommended citation

FAO. 2014. *Impact of international voluntary standards on smallholder market participation in developing countries – A review of the literature*. Rome.

Cover photo: ©FAO/Olivier Asselin



The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

ISBN 978-92-5-108233-1 (print)

E-ISBN 978-92-5-108234-8 (PDF)

© FAO, 2014

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be made via www.fao.org/contact-us/licence-request or addressed to copyright@fao.org.

FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org.

Preface

Over the last two decades global markets have seen a growing supply and demand for food and other agricultural products that possess specific quality characteristics linked to composition, origin, production method or terms of trade. Originally emerging from consumer concerns over food safety, unfair trade practices and environmental degradation, the global agrifood system has developed complex value chains that coordinate this supply and demand through the use of voluntary standards, labels and regulations. Often, though, these standards are stricter than mandatory regulations and concerns have been raised by FAO member states as to the exclusionary nature of these standards, particularly for small-scale producers.

The fate of small-scale producers in highly standardized value chains is of particular concern given their important role in domestic and international markets. Smallholders are recognized worldwide as key producers of food and other agricultural products and are the main providers of certified products in some export countries. At the same time, it is in rural areas and the smallholder sector where high indices of poverty prevail. Therefore, as part of FAO's mandate of achieving food security for all, particularly through inclusive and efficient value chains, it is imperative to add to the body of knowledge that shows how smallholder's ability to participate in markets is affected by voluntary standards.

This publication contributes to the achievement of FAO's Strategic Objective Four: *Enable inclusive and efficient agricultural and food systems*. It sheds light on the determinants of smallholder participation in markets, in particular differentiating between enabling institutional factors and those related to on-farm conditions and value chain contexts. To this aim the study relies on evidence from the most recent empirical literature.

The results of this report will serve to assist policy-makers and practitioners in their decision-making. FAO is confident that this report will contribute to furthering the debate on a topic where mixed results are very much its distinctive feature.

Acknowledgements

The authors would like to thank Florence Tartanac (Rural Infrastructure and Agro-Industries Division, FAO) for her valuable contributions to this study. They also thank the three peer-reviewers, David Neven (FAO AGS), Emilie Vandecandelaere (Food Safety Branch, FAO) and Oliver von Hagen (International Trade Centre), for their feedback and reviews. The authors would like to thank their FAO colleagues – Eva Gálvez-Nogales, Pascal Liu, Irene Hoffman, and Calvin Miller – for their constructive comments on previous drafts. Thanks also go to Larissa D'Aquilio for production coordination, Jim Collis for copy editing, Monica Umena for layout and design, and Lynette Chalk for proof-reading. Finally authors are thankful to Pilar Santacoloma for the technical oversight of the report.

Executive summary

This literature review was conducted in response to a request from FAO member countries at the Committee on Agriculture (COAG) in 2010. Member countries specifically asked to be informed of the impact of voluntary standards on the ability of smallholders to participate in markets. The objective is to present an overview of the results of empirical studies conducted by independent researchers to date in the agricultural, fisheries and forestry sectors. The contribution of this study to the literature on the impact of international voluntary standards is twofold. First, it is the most extensive review completed to date (in terms of the breadth of standards included) that focuses specifically on the issue of market access for smallholders in developing countries. Second, the conclusions and recommendations focus specifically on the role that FAO can play in ensuring that international voluntary standards are inclusive and equitable. Policy advisers, academics and practitioners will find these results of interest.

When analysing the impact of voluntary standards and the related certification systems, it is important to highlight the main function of these schemes, as they represent far more than just a written standard. Rather, they consist of a system of activities or functions that must work together to ensure that the best practices embodied in the standard can be implemented and complied with. These standards systems consist of a mix of the following components: standards and standard-setting, private conformity assessment, certification and accreditation, labelling, a premium and scheme services. These components are organized in different ways in each of the standards systems currently in use. The use of particular combinations of components depends on the market in which the standard operates, as well as the contexts of implementation and enforcement.

The evidence base for this systematic literature review consists of 101 studies containing 123 cases. This includes project reports, peer-reviewed journal articles and grey literature. Literature was disaggregated according to the type of study and methodological rigour in order to obtain a broad overview of the existing literature and to give greater weight to the highly rigorous studies. Much of the literature was found to draw upon a core set of empirical studies that focus mainly on three standards (GlobalGAP, Fairtrade and Organic). These studies concentrated on a few popular countries (Costa Rica, Kenya, Mexico, Peru and Uganda) and emerged from key long-term development or donor-funded research projects, or they were commissioned by interested non-governmental organizations. Thus, the focus of these research projects is tied closely to donor objectives. Only a small set of research projects focused on market participation by smallholders. Much of the existing independent academic literature focused on two areas that were not considered in this review: (1) environmental impacts not necessarily connected with the certification mechanism; or (2) standards and certification as systems of governance.

The literature analysis was based on the conceptual framework of an 'impact pathway' where an impact can be analysed in terms of immediate results after certification (outputs), short-term outcomes and long-term impact. This framework illustrates that the impact of a standard will depend on the content of the standard: on the one hand the stringency of its technical requirements for production methods and product characteristics; and on the other hand the organizational demands of the verification system. Another important factor influencing the impact of the standard is whether the standards system has inbuilt support services.

The impact of these characteristics of the standards system also depends on the context in which the standard is implemented. For example, if a producer already uses production methods that conform to the technical requirements, these technical requirements will have no impact as such. However, some impact always occurs when a producer is required to demonstrate compliance. This conceptual framework also recognizes that market participation is an intermediary impact and not a development outcome *per se*. In other words, the authors are not suggesting that market participation is the same as economic development, sustainability or food security. Market participation is just one step on the road to broader and longer-term impacts on development.

A set of variables was identified as important for understanding the impact of voluntary standards on smallholder market participation. One set of variables is adoption determinants – i.e. factors at farmer level such as farm size, household wealth, household size, education or experience, off-farm activities and distance to an urban centre or market – which influence whether farmers adopt the standard. At the farming system level, the study reviewed indicators of economies of scale, group membership and institutional contexts. Profitability outcomes were identified and data was collected on profits, price, yields, quality, knowledge or capacity-building, reputation effects, compliance and production costs.

Finally, the study discussed the way in which the following aspects of voluntary standards can condition smallholder market participation: vertical coordination, smallholder upgrading, rural employment and small farmer and exporter inclusion in certified markets.

The following trends were found in the literature:

1. There is some evidence of economies of scale in certified markets and a tendency for self-selection in these systems as farmers and exporters with the means to make the initial investments are the first to join. Some studies have shown that the ability of exporters and farmers to meet the requirements of voluntary standards depends largely on greater assets, knowledge of certification requirements and pre-existing relationships with certified value chains. Self-selection is strongly related to the evidence of exclusion found in standards that focus primarily on advanced food safety issues.
2. There is evidence that the choices made by retailers, manufacturers and importers regarding types of quality, safety and sustainability standards, as well as the producers they are willing to work with, are fundamental to the ability of voluntary standards to impact smallholder market participation positively. In other words, there is evidence that buyer preferences, pre-existing buyer-supplier relations and producer organizational structures are selection mechanisms for the adoption of standards by small-scale producers.

3. The institutional contexts within which smallholders operate are important. Recent research has begun to pay attention to institutional contexts in order to understand how standards interact with pre-existing norms of production and trade. A necessary but insufficient condition for increasing smallholder participation in markets is national institutions to support compliance by farmers with standards that reflect a market demand.
4. In most sectors and countries, compliance with standards and certification does increase costs, but also increases farmgate prices. Some evidence of increased profitability was found for Fairtrade and Organic certification, but the evidence is not conclusive.

There is evidence of rural employment in certified value chains. However, the literature suggests that this may be the result of a shift from smallholder agriculture to employed labour in certified farms. In addition, there is insufficient literature to provide an aggregate picture of the influence of certified agriculture on rural employment trends. The results of this study provide evidence for the following conclusions.

The evidence of the impacts of voluntary standards is still weak. Overall, there is a significant amount of repetition in recent literature reviews, with many reviews consistently drawing upon the same studies. This limits the current knowledge base and the ability to draw meaningful generalizations. There is a clear need to conduct new empirical studies in order to avoid further repetition.

The impact of voluntary standards is very context-specific. The differences in standards systems and the geographic, institutional and value-chain differences of each product demonstrate that the way in which standards influence smallholder market participation is extremely context-specific. It is therefore difficult to draw general conclusions about the exclusionary or inclusionary nature of a particular standard, as the literature shows evidence of both tendencies.

Smallholders need to be organized in commercially viable arrangements to be able to participate in certified value chains. The most strongly supported conclusion from this study is that smallholders can access certified markets only through group certification. They need to form associations or cooperatives, or be part of an outgrower scheme in a contract farming situation. Future research or interventions might seek to support these initiatives in order to achieve more equitable outcomes for smallholders.

Governments can provide services that make participation easier. Contrary to earlier studies, recent empirical studies and comprehensive literature reviews have recognized that there is indeed a role for governments in voluntary standards. There has been a shift in the literature from referring to voluntary standards as purely private mechanisms to a recognition of synergies and hybrid models of governance that include voluntary standards in relation to public institutions. It is suggested that the most positive impacts are to be found when public and private initiatives interact.

Based on the above conclusions, the following recommendations for FAO are proposed.

1. FAO should collaborate in ongoing efforts to improve impact assessment.
2. FAO should focus on the impact of voluntary standards by exploring the extent to which they can promote the uptake of agricultural, manufacturing and management good practices that are known to help improve market access for smallholders.
3. FAO should facilitate research and public-private interventions that focus on smallholder organization in order to achieve more equitable outcomes for smallholders in certified value chains.
4. FAO should collaborate with other United Nations organizations to provide advice to member governments on when and how to engage voluntary standards and on which services to provide to improve smallholder market participation.
5. FAO could provide an intersectoral forum where existing and new work programmes on international voluntary standards can be discussed and developed.

Abstract

Over the past twenty years, international voluntary standards have gained prominence in global trade. These standards are developed and used by both private and public actors to ensure quality, food safety, social protection and environmental conservation that go beyond mandatory regulation. Concerns have been consistently raised about the ability of international voluntary standards to increase the market access of small-scale producers and exporters in developing countries. This publication presents the results of a literature review conducted by FAO in 2012 on the impact of voluntary standards on smallholders' ability to participate in markets. The results are based on an analysis of 101 studies containing 123 cases. Cumulatively, these cases presented evidence for 19 voluntary standards that were implemented in 14 commodity sectors and in 40 countries. Despite this broad scope, the authors find that the majority of the empirical evidence for impacts comes from studies of just three standards: GlobalGAP, Fairtrade and organic. Moreover, most studies focus on two commodities: coffee and horticulture products. While there is a decent range of geographic cover, the majority of studies focus on a handful of countries: Mexico, Kenya, Peru, Costa Rica and Uganda. This study adopts an impacts pathway model to organize and analyse the trends found in the empirical evidence. The results can be summarized as follows: first, equitable and sustainable supply chain linkages, increased access to assets, and support for cooperative development are incentives for complying with standards. Second, both public and private actors have comparative advantages for supporting voluntary standards and are most effective when combined. Finally, governments can provide services, for example infrastructure and proper legislation, which facilitate the inclusion of smallholders in certified value chains. The study concludes by making policy recommendations on how the public sector can mediate the effects of voluntary standards.

About the authors

Allison Loconto holds a Ph.D. in Sociology from Michigan State University, United States of America. She is a researcher at the French National Institute for Agricultural Research (INRA), Science in Society laboratory (INRA-SenS) and the French Institute for Research, Innovation and Society (IFRIS) at the University of Paris-Est Marne-la-Vallée. She is currently a Visiting Expert at FAO Rural Infrastructure and Agro-Industries Division.

Cora Dankers holds an M.Sc. in Tropical Agronomy from Wageningen University, The Netherlands. She has been working for FAO since 1999 on projects facilitating farmer-market linkages in the Plant Production Division, the Trade and Market Division and the Rural Infrastructure and Agro-Industries Division and also conducted research on voluntary standards for FAO. She is currently Agribusiness Economist at FAO Rural Infrastructure and Agro-Industries Division.

Acronyms

AOC	<i>Appellation d'origine contrôlée</i> (controlled appellation of origin)
ASI	Accreditation Services International
B2B	Business-to-business
BCI	Better Cotton Initiative
BMC	Botswana Meat Council
BRC	British Retail Consortium
CAC	Codex Alimentarius Commission
CAFE Practices	Starbucks Coffee and Farmer Equity Practices
CmiA	Cotton made in Africa
COAG	Committee on Agriculture
DOCG	<i>Denominazione di origine controllata e garantita</i> (controlled and guaranteed denomination of origin)
ENTWINED	Environment and Trade in a World of Interdependence
EPOPA	Export Promotion of Organic Products from Africa
ETI	Ethical Trading Initiative
FFP	Fair Flowers and Plants
FFV	Fresh fruit and vegetable sector
FLO	Fairtrade International
FLO-CERT	Fairtrade Labelling Organizations International Certification Body
FLP	Flower Label Programme
FMI	Food Marketing Institute
FSC	Forest Stewardship Council
GAP	Good Agricultural Practices
GEF	Global Environment Facility
GI	Geographical indications
GIZ	<i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i> GmbH (German Agency for International Cooperation)
GlobalGAP	Global Good Agricultural Practices (formerly Euro-retailer Produce Association Good Agricultural Practices - EurepGAP)
HACCP	Hazard Analysis and Critical Control Points

HLPE	High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security
ICC	International Code of Conduct for Cut Flowers
ICS	Internal control systems
IFOAM	International Forum of Organic Agriculture Movements
IIED	International Institute for Environment and Development
IISD	International Institute for Sustainable Development
ILO	International Labour Organization
IOAS	International Organic Accreditation Service
IP	Intellectual property
ISEAL Alliance	International Social and Environmental Accreditation and Labelling Alliance
ISO	International Organization for Standardization
ITC	International Trade Centre
MSC	Marine Stewardship Council
NGO	Non-governmental organization
NRI	National Resources Institute
OECD	Organisation for Economic Co-operation and Development
ONAPES	<i>Organisation Nationale des Producteurs – Exportateurs de Fruits et Légumes du Sénégal</i>
PEFC	Programme for the Endorsement of Forest Certification
PGS	Participatory guarantee systems
PMO	Produce Marketing Organizations
RA	Rainforest Alliance
RSPO	Roundtable on Sustainable Palm Oil
SA8000	Social Accountability 8000 standard
SAAS	Social Accountability Accreditation Services
SAI	Social Accountability International
SAN	Sustainable Agriculture Network
SCS	Scientific Certification Systems
SEPAS	<i>Sénégalaise d'Exportation de Produits Agricoles et de Services</i>
SPP	<i>Símbolo de Pequeños Productores</i> (Small Producers' Symbol)
SQF	Safe Quality Food
SQFI	Safe Quality Food Institute
SSI	State of Sustainability Initiatives

STAP	Scientific and Technical Advisory Panel
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
VICOFA	Vietnamese Coffee and Cocoa Association
WHO	World Health Organization
WWF	World Wildlife Fund

Contents

PREFACE	v
ACKNOWLEDGEMENTS	vi
EXECUTIVE SUMMARY	vii
ABSTRACT	xi
ABOUT THE AUTHORS	xii
ACRONYMS	xiii
CHAPTER 1	
Introduction	1
1.1 Background	1
1.2 Purpose and scope of the study	2
1.3 Existing FAO studies on the impact of voluntary standards	2
CHAPTER 2	
Methodology	5
2.1 Attributing impact and constructing the evidence base	7
2.2 Descriptive statistics of the evidence base	9
2.3 Impact pathways	11
CHAPTER 3	
Overview of standards and certification systems	15
3.1 The key functions of standards, certification and labelling	15
3.2 Summary of voluntary standards systems	20
3.3 Trends in standards requirements and their certification systems	30
CHAPTER 4	
Results of the literature review	33
4.1 Other recent literature reviews	33
4.2 Antecedent variables	36
4.3 Costs and benefits for participating farmers: smallholders experience increases in both	44
4.4 Evidence of smallholder market participation	50
CHAPTER 5	
Conclusions and strategic recommendations for FAO	55
5.1 The evidence of the impact of international voluntary standards is relatively weak	56

5.2 The impact of voluntary standards on smallholders is case-specific	58
5.3 Smallholders need to be organized to be able to participate in certified value chains	59
5.4 Governments can provide services that make participation easier	60
5.5 Lessons and ways forward	61
ANNEX 1	
Potential objectives of impact assessment	63
ANNEX 2	
Concepts and approaches used in the literature	65
ANNEX 3	
Evidence base	67
ANNEX 4	
FAO publications containing information on impacts of standards	75
Other research, unpublished	77
Other FAO references used in the text	77
ANNEX 5	
References (not FAO)	79
TABLES	
1. Most cited studies	6
2. Validity and reliability of empirical studies	9
3. Standards systems characteristics	16
4. Country shares of world coffee production and of three types of certified coffee 2009	42
FIGURES	
1. Evidence base by year and rigour	10
2. Studies by sector or commodity	11
3. Geographic distribution of cases	12
4. Proposed generic framework for analysis by FAO of the impact of voluntary standards on the participation of smallholders in the chain	13
5. Standards systems	17
6. Number of cases by standard	20
7. Correlation between standard and adoption determinants at farmer level	37
8. The importance of group membership – 51 cases	39
9. Importance of institutional context (63 cases)	41
10. Costs and Benefits (29 highly rigorous cases)	45
11. Smallholder market participation (49 cases)	51

Chapter 1

Introduction

1.1 BACKGROUND

Since the 1980s there has been growing consumer demand for food and other agricultural products with specific characteristics linked to composition, origin, production method or terms of trade. This led to the emergence of numerous voluntary standards, labels and regulations associated with such products, which impact domestic and international markets.

FAO has been providing member countries with information and technical support on a variety of voluntary standards and certification schemes for the past decade. In 2007, the 20th session of the Committee on Agriculture (COAG) stated the need for FAO to provide policy advice and capacity-building support relating to industry standards and requirements, and not only with respect to official and international standards. In response to this request, FAO officers established an informal interdepartmental contact group on voluntary standards and schemes for specific quality food and agricultural products. In 2009 the group prepared a resource paper on voluntary standards and schemes for specific quality products. Since that time, the group has not been active in a collective capacity, but its members have continued to be involved in technical and project work related to standards at department level.

At the 32nd session of the Codex Alimentarius Commission (CAC), FAO and the World Health Organization (WHO) presented a submission to CAC focusing on raising awareness and orienting discussions on private standards. One of the recommendations was that FAO engage with the organizations that establish private food safety standards and play a constructive role in ongoing debates about the legitimacy and impacts of these standards (Henson and Humphrey 2009).

More recently, the 22nd Session of COAG (June 2010) recommended that the FAO Secretariat undertake *a study of the impact of private standards on smallholder market participation*. Smallholders are important for the production of food and non-food products. Smallholder agriculture is considered to be the largest provider of non-marketed food and raw materials at a global level and it is also the leading source of employment in rural areas (HLPE 2012). In some key export markets for certified products, smallholders are the predominant group of producers. For example, smallholders are responsible for more than 60 percent of tea production in Kenya (Kinyili 2003) and around 70 percent of coffee worldwide is produced by smallholders (Potts *et al.* 2010). However, smallholders are often disadvantaged and rural poverty accounts for about 75 percent of world poverty (FAO 2012). When market conditions are favourable, the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security (HLPE 2012) found that smallholders can respond positively. This includes innovation, organization