Integrating Smallholders into Global Supply Chains
GLOBALGAP Option 2 Smallholder Group Certification Generic Manual:
Lessons learnt in pilot projects in Kenya, Ghana, Thailand and Macedonia
Integrating Smallholders into Global Supply Chains

Margret Will
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Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
</tr>
<tr>
<td>BMZ</td>
<td>Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (Federal Ministry for Economic Cooperation and Development)</td>
</tr>
<tr>
<td>BRC</td>
<td>British Retail Consortium</td>
</tr>
<tr>
<td>BSMDP</td>
<td>Business Services Market Development Project</td>
</tr>
<tr>
<td>CB</td>
<td>Certification Body</td>
</tr>
<tr>
<td>CBA</td>
<td>Cost-Benefit Analysis</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>DFID</td>
<td>UK Department for International Development</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EUREP</td>
<td>Euro-Retailer Produce Working Group</td>
</tr>
<tr>
<td>FPEAK</td>
<td>Fresh Produce Exporters Association of Kenya</td>
</tr>
<tr>
<td>GAP</td>
<td>Good Agricultural Practices</td>
</tr>
<tr>
<td>GfRS</td>
<td>Gesellschaft für Ressourcenschutz</td>
</tr>
<tr>
<td>GIS/GPS</td>
<td>Geographic Information System/Global Positioning System</td>
</tr>
<tr>
<td>GTZ</td>
<td>Deutsche Gesellschaft für Technische Zusammenarbeit GmbH</td>
</tr>
<tr>
<td>HEII</td>
<td>Horticultural Export Investment Initiative</td>
</tr>
<tr>
<td>ICIPE</td>
<td>International Centre for Insect Physiology and Entomology</td>
</tr>
<tr>
<td>ICS</td>
<td>Internal Control System</td>
</tr>
<tr>
<td>IIED</td>
<td>International Institute for Environment and Development</td>
</tr>
<tr>
<td>MAFP</td>
<td>MoA Project EU Approximation and Regional Cooperation in the Agro and Food Sector</td>
</tr>
<tr>
<td>MoA</td>
<td>Ministry of Agriculture</td>
</tr>
<tr>
<td>MOAP</td>
<td>Market Oriented Agriculture Programme</td>
</tr>
<tr>
<td>MoFA</td>
<td>Ministry of Food and Agriculture</td>
</tr>
<tr>
<td>MRL</td>
<td>Maximum Residue Level</td>
</tr>
<tr>
<td>NRI</td>
<td>Natural Resources Institute</td>
</tr>
<tr>
<td>OGS</td>
<td>Outgrower Scheme</td>
</tr>
<tr>
<td>PIP</td>
<td>Pesticide Initiative Programme</td>
</tr>
<tr>
<td>PMO</td>
<td>Produce Marketing Organisation or Primary Marketing Organisation</td>
</tr>
<tr>
<td>PPP</td>
<td>Public-private partnership</td>
</tr>
<tr>
<td>PSDA</td>
<td>Private Sector Development in Agriculture</td>
</tr>
<tr>
<td>PTB</td>
<td>Physikalisch-Technische Bundesanstalt (German National Metrology Institute)</td>
</tr>
<tr>
<td>PVS</td>
<td>Private Voluntary Standards</td>
</tr>
<tr>
<td>QMS</td>
<td>Quality Management System</td>
</tr>
<tr>
<td>SPEG</td>
<td>Seafreight Pineapple Exporters of Ghana</td>
</tr>
<tr>
<td>T-GPEC</td>
<td>Thai-German Programme for Enterprise Development</td>
</tr>
<tr>
<td>TIPCEE</td>
<td>Trade and Investment Programme for a Competitive Export Economy</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
1 Challenge or opportunity?
An introduction to GLOBALGAP Option 2 Smallholder Certification

From challenge …
“Farmers do perceive codes often as … imposed externally … they are required to follow to improve market access. This is understandable as it seems that codes often have been designed with insufficient involvement of farmers and in particular smallholder farmers reflecting on their typical environment” (Opitz et al., 2007)

“The ability of smallholders to access the high-value markets dominated by supermarkets has declined dramatically since the implementation of GLOBALGAP” (Legge et al., 2009)

“One obstacle standing in the way of more extensive dissemination of the certification … are the associated costs for small-scale farmers” (BMZ, 2008)

“Private standards will not go away. Therefore the solution is evolution and adaptation of standards rather than demanding their abolishment” (Wainwright and Labuschagne, 2009a)

“The actual challenge consists of tapping the advantages of GLOBALGAP (good agricultural practices) in such a way that long-term economic sustainability is ensured for goods produced by small-scale farmers …” (BMZ, 2008)

… to opportunity!
“In this globalised world, GLOBALGAP certification provides an opportunity to smallholder groups to play on an equal ground with other bigger suppliers in the world, and be connected to international buyers” (Enomoto, 2009)

“The most successful GLOBALGAP-compliant smallholder schemes are highly committed to a commercial farming approach, well organised in strongly-managed producer groups, and linked to a large, well-resourced export company” (Graffham and Cooper, 2009)

“While the existing literature documents how both the non-recurring and the recurring costs of compliance with GLOBALGAP can be considerable, our results demonstrate that the returns on the associated investments in terms of export sales growth are considerable. … we might reasonably expect appreciable ‘knock-on’ benefits to small producers” (Henson, Masakure and Cranfield, 2009)
Localising global market opportunities means localising global challenges

Overseas markets for fresh and processed high-value agricultural and especially horticultural produce are attractive outlets for many developing countries. Effective exploitation of such opportunities, however, entails the requirement of complying with public mandatory and private voluntary food safety and quality standards ruling market access. These requirements have been considerably tightened during the last decade, mainly for two reasons: firstly, the harmonisation of national regulatory frameworks under the guidance of the World Trade Organization (WTO) aiming at facilitating the internationalisation of trade; and secondly, numerous food hazard incidences and food scandals that forced legislators in industrialised countries to re-visit their national or, in the case of the European Union, their supranational food laws.

Alongside tightening of legal provisions and restructuring of public risk management and food inspection systems, the principle of due diligence was established, placing the primary responsibility for food safety with the business operators along the food supply chain; that is, with importers in the case of foreign country supplies. As a consequence, trade and industry introduced self-regulatory schemes, ranging from legally mandated and publicly inspected hygiene management and quality assurance systems to private voluntary standards (PVS).

Aiming at managing supply side risks in response to due diligence obligations, a plethora of PVS emerged, often going beyond formal market access requirements. At the same time, PVS were introduced for marketing reasons: to homogenise product attributes with a view to making market transactions more transparent and cost-efficient; and to label products as a means to differentiating from the offer of competitors.

In the light of rising concerns over food safety, food security, climate change, growing competition for arable land between food, feed and bioenergy crops, standards will in all probability gain further importance. Especially, if positive impacts can be expected on the sustainable use of water and soil resources, the conservation of biodiversity, the preservation of traditional knowledge and, last but not least, on productivity, farmers’ welfare, workers’ health and consumer protection. Against this background, public mandatory and private voluntary standards are of growing relevance to smallholders in developing countries. Already now, compliance with standards is not anymore an issue only for farmers exporting overseas but increasingly also for smallholders competing for shares in domestic and sub-regional markets.

GLOBALGAP certification, for example, is required by a considerable number of retailers, especially supermarkets, worldwide. On the one hand, this represents a real threat for many farmers in developing countries, as non-compliance may lead to their exclusion. On the other hand, if appropriately managed, compliance does not only offer income opportunities but as well the chance to introducing sustainable agricultural practices with positive impacts on farm economics, the environment and social networks. Various stakeholders report that investments into good agricultural practices (GAP) and quality assurance systems along the food supply chain are justifiable and result in reasonable returns on investment, for example through productivity gains, reduction of production and transaction costs, improved market access, and ultimately, improved consumer protection. However, two questions still remain unanswered: to what extent small-scale farmers in developing countries are likely to be squeezed out of global value chains and which capacities need to be built to enable smallholders to seize opportunities from access to higher value markets ruled by PVS such as GLOBAL-GAP.

In so far, the question of ‘challenge or opportunity’ may have to be changed into the question, on how the challenges posed by standards in general and private voluntary standards in particular can be turned into opportunities for small-scale farmers in developing countries.
Box 1: GLOBALGAP Certification Options

<table>
<thead>
<tr>
<th></th>
<th>Individual Certification</th>
<th>Group Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLOBALGAP</td>
<td>Option 1</td>
<td>Option 2</td>
</tr>
<tr>
<td>Benchmarked Scheme</td>
<td>Option 3</td>
<td>Option 4</td>
</tr>
</tbody>
</table>

- **Option 1 and 3 – Individual Certification:**
  - An individual farmer owns the certificate.
  - Verification of compliance through one external inspection per year.

- **Options 2 and 4 – Group Certification:**
  - A farmer group owns the certificate.
  - Verification through Quality Management System, internal inspections and audits plus one external inspection and audit per year.

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Box 2: Four key requirements for GLOBALGAP Option 2 Group Certification

- The group operates an **Internal Quality Management and Control System (ICS)** consisting of:
  1. a Quality Management System (QMS) with a documented management structure and a written control procedures manual and
  2. a Central Administration and Management of the group responsible for the implementation of the control and sanction system across all member farms.

- Each registered farmer implements a **Farmer Internal Self Assessment**:
  The ICS does not replace the internal self-inspection based on the GLOBALGAP checklist and undertaken by the farmer himself at least once a year. The findings must be available for review by either the internal or the external inspector.

- Qualified staff realises a **Farmer Group Internal Control**:
  Based on the GLOBALGAP checklist, the Farmer Group has to inspect each registered farm and all declared produce handling sites at least once per year. This audit can be realised by qualified staff within the Farmer Group (Internal Farmer Group Inspector) or can be subcontracted to an external verification body as long as it is different from the external Certification Body.

- An external GLOBALGAP approved Certification Body (CB) undertakes an **External Verification**:
  The Farmer Group registers with a GLOBALGAP approved Certification Body (list of approved CB available online at: www.globalgap.org) and signs a sub-licence agreement with the CB. The external verification consists of two parts: the audit of the ICS (‘System Check’) and the inspection of a random sample of farms.

Source: Günther and Neuendorff, 2004
The GLOBALGAP Standard

GLOBALGAP (formerly EUREPGAP) has emerged as the leading private voluntary standard for the access of agricultural products to major import markets. Initiated in 1997 by retailers united in the Euro-Retailer Produce Working Group (EUREP), the pre-farm-gate standard Good Agricultural Practices covers all on-farm processes from inputs through farming until the product leaves the farm. The aim is to establish one global standard for Good Agricultural Practices while providing for specific applications for different product ranges (crops, livestock and aquaculture).

GLOBALGAP certification is required by a considerable number of retailers, especially supermarkets in industrialised countries. GLOBALGAP certificates are issued by more than 130 independent and accredited certification bodies in more than 90 countries. The scheme is open to all producers worldwide (GLOBALGAP, 2009).

While “retailer and supplier representatives are equally responsible for decision making in the different GLOBALGAP committees” (ibid.), GLOBALGAP with support of the UK Department for International Development (DFID) and the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, initiated an ‘Africa Observer’ project in 2007 with a view to also representing the interests of African smallholders in standard setting processes. The Africa Observer furthermore collects global best practices to facilitate standard implementation by small-scale farmers worldwide (see http://www.africa-observer.info).

In addition to its relevance for accessing major export markets, GLOBALGAP gains importance in developing countries’ domestic markets. Kenya may serve as an example, where the private Fresh Produce Exporters Association of Kenya (FPEAK) promotes KenyaGAP, which is fully benchmarked with GLOBALGAP. The Kenyan supermarkets started establishing preferred supplier schemes that oblige farmers to comply with KenyaGAP. Even if the shares of supermarkets in the commercialisation of horticultural produce in most parts of Africa are still small and will not grow fast, without question, there is a trickle-down effect of GLOBALGAP into the local market.

The GLOBALGAP Option 2 Group Certification

With a view to easing compliance for small-scale farmers, GLOBALGAP offers an option for group certification. The advantage compared to individual certification (Option 1) is that under group certification (Option 2), qualified staff within the farmer group (optionally a subcontracted service provider) acts as internal auditor of the individual group members. The task of external certification is hence reduced to examine the proper working of the group’s Internal Quality Management and Control System (ICS) accompanied by an external inspection of only a random sample of farmers. This ‘System Check’, which nevertheless remains the major recurrent cost factor, allows the external Certification Body to certify the entire group rather than each individual farmer.

Compared with individual certification, a group certificate under Option 2 implies some advantages: auditing costs and centralised investments (e.g. pesticide store) can be shared among group members; exchange of information and capacity building can be delivered more straightforward through the groups; and, the motivation to comply is boosted by the groups’ peer pressure on members since failure of one member would affect the entire group. It can well be assumed that group certification is more feasible for small-scale producers and can hence contribute to reducing the risk of smallholders’ exclusion from (global) value chains.

The challenges

Even though small-scale farmers contribute major shares to fresh produce destined for export and for the local processing industry in many developing countries and even if they derive significant levels of income in return, smallholders are especially challenged with achieving GLOBALGAP certification. The main concern is that the costs of compliance render smallholder production unfeasible. As a consequence, customers who previously bought from small-scale farmers, may switch to either sourcing from larger farms or from fully-integrated own production. The special challenge of Option 2 certification is to build the necessary technical and managerial capacities within farmer groups and to generate the financial means for realising necessary investments and perhaps subcontracting service providers capable of supporting the operation of the ICS.
Challenges and opportunities! The GLOBALGAP Smallholder Pilot Project

Box 3: The GLOBALGAP Smallholder Pilot Project

The Generic GLOBALGAP QMS Smallholder Manual

The generic manual provides a compilation of all information relevant for farmer groups to prepare and achieve GLOBALGAP certification under Option 2 (see attached CD-Rom); gives guidance on how to set up and document an Internal Control System and provides a generic handbook for a Quality Management System (OMS); and can be used by smallholder farmer groups for creating their own Quality Management System by adapting procedures and forms to the specific situation of their groups and members.

Localising the Generic GLOBALGAP QMS Smallholder Manual

In view of the final objective to support smallholder groups in designing their own group-specific OMS, the Smallholder OMS guidelines had to be adapted to the prevailing conditions of the smallholder groups in the pilot countries. The development of these local generic OMS manuals was guided by the following tasks:

- Definition of methods for risk assessments
- Definition of the organisational and administrative set-up
- Development of a quality policy
- Development of standard operating procedures
- Development of recording forms (templates, e.g. model contracts and control sheets)

After validation by international experts and AfriCert as the Certification Body involved in the entire process, the draft local generic OMS manuals were discussed with the end users (growers, exporters) in the four pilot countries whose feedback was taken into consideration for the development of the respective final versions.

Implementation steps

- Group profiling and selection of farmer groups according to pre-established eligibility criteria (see below)
- Assignment of a local coordinator for managing the pilot project and group instructors for assisting the farmer groups in adapting the groups' OMS Manuals and ICS to their specific situation
- Kick-off workshop implemented by GTZ with development partners, the local coordinator, the farmer groups' managers, the instructors aimed at introducing the stakeholders to the Smallholder Manual
- Group work implemented by the management of the farmer groups with assistance by the group instructors and accompanied by a training needs assessment and tailor-made training courses
- Mid-term review jointly implemented by GTZ, GLOBALGAP, development partners, the local coordinator, the farmer groups' managers and the instructors to review the draft group OMS manuals
- Implementation of the ICS by the groups (mainly training of farmers, internal inspections, pesticide testing scheme, produce handling) to test, review and finalise the documented group OMS manuals
- Final workshop jointly implemented by GTZ, development partners, the local coordinator, the farmer groups' managers and the instructors to feed the practical experiences into the final version of the documented OMS of the farmer groups to be submitted to the Certification Body

Eligibility criteria for the selection of pilot groups:

Selection criteria specified by the pilot project:

- The group shall be a smallholder group as defined below.
- The group wishes to apply for certification under Option 2 of GLOBALGAP.
- The group shall be a legal entity.
- The group must be large enough to sustain a viable ICS (minimum of 30 to 50 smallholders).
- The group shall have sufficient human and financial resources to maintain the ICS.
- The group shall share all experiences in an open and transparent way internally and with the technical advisors who will assist them in adapting their ICS documentation.

The ICS Guidance Document of the EU Commission (2000) defines smallholder farmer groups as follows:

- The cost of individual certification is disproportionally high in relation to the sales value of the product sold (higher than 2% of their sales).
- Farm units are mainly managed by family labour.
- There is homogeneity of members in terms of geographical location, production system, size of holdings and common marketing system.
- Only smallholder farmers shall be members of the group. Under certain conditions, larger farmers, processors and exporters can be part of the structure of the group.
The objectives of the Pilot Project

The overall objective of the Smallholder Pilot Project was to identify ways, in which the GLOBALGAP standard can become more inclusive for smallholder farmers in developing countries and to assist GLOBALGAP to develop new and adjust existing technical standards and tools appropriate for smallholder certification. In more detail, the pilot project was designed to realise the following specific objectives:

- Public and private sector stakeholders are sensitised on the GLOBALGAP scheme and challenges for smallholder certification in general as well as on opportunities and necessary processes for group certification according to GLOBALGAP Option 2 in particular.
- A ‘GLOBALGAP Smallholder QMS Manual’ is developed serving smallholder producer groups to lower the costs for creating their own Internal Quality Management and Control System (ICS) as the main prerequisite for getting certified under GLOBALGAP Option 2.
- The ‘GLOBALGAP Smallholder QMS Manual’ is pilot-tested in four countries, thereof two in Africa and one country each in Asia and South East Europe, with the purpose of:
  - identifying critical aspects of success and failure in GLOBALGAP Option 2 group certification and developing practical solutions;
  - adapting the generic manual to local conditions to develop a simple public-domain local shareware QMS manual readily usable for adaptation by smallholder groups; and
  - developing standard training packages and qualifying local public and private service providers for training and auditing of farmer groups.
- The ‘GLOBALGAP Smallholder QMS Manual’ is made available as public shareware to any interested party (see attached CD-ROM).

The partners of the Pilot Project

The GLOBALGAP Smallholder Pilot Project was jointly implemented by the sector project Agricultural Trade of the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH and the Gesellschaft für Ressourcenschutz (GfRS) in cooperation with GLOBALGAP (by then still EUREPGAP) and various programmes implemented by GTZ, DFID and USAID in the four pilot countries.

The GLOBALGAP QMS Smallholder Manual

The ‘Smallholder Manual’ serves as a practical guidance on how to make the complex system requirements for certification as laid down in the GLOBALGAP General Regulations for Fruit and Vegetables manageable for smallholder groups. The generic guidance document provides a systemised compilation of all information relevant for farmer groups to prepare and achieve GLOBALGAP certification under Option 2.

In detail, the ‘Smallholder Manual’ introduces the GLOBALGAP scheme, explains the certification process, discusses critical success factors for group certification and imparts practical guidance to group representatives on how to establish and document an Internal Control System in full compliance with the General Regulations of GLOBALGAP. The manual provides a template of a handbook for a Quality Management System (QMS) including standard operating procedures and recording forms modelled for a fictional farmer group.

Not to be understood as a one-size-fits-all solution, the applicant smallholder groups can use this practical guide for creating their own QMS by adapting procedures and forms to the specific situation of their groups and members. The manual does not give guidance on how to implement the GLOBALGAP standard at farm level, but leaves this task intentionally to the group managers, to expert farmers, extensionists or other specialists who are familiar with the specific crops as well as the local production systems and farming practices.
## Box 4: Overview of the GLOBALGAP Smallholder Pilot Projects

### The Kenya Pilot Project

<table>
<thead>
<tr>
<th>Crops and target markets</th>
<th>French beans destined for exports as fresh and canned produce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of farmer groups</td>
<td>9 farmer groups, thereof 6 certified by October 2006</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partners</th>
<th>455 farmers, 3 exporters, 1 PMO*, service providers (AfriCert, Standards and Solutions, Agribusiness &amp; Allied Ltd. and Quest Labs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private sector</td>
<td>Ministry of Agriculture (MoA) extension services, ICIPE (research centre)</td>
</tr>
<tr>
<td>Public sector</td>
<td>GTZ/PSDA, DFID/BSMDP</td>
</tr>
<tr>
<td>Dev. partners</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>

| A glance on the way forward | “The process of benchmarking KenyaGAP to EurepGAP (GLOBALGAP) is the unique opportunity for our smallholders to demonstrate that they are world class producers” (Shah, 2005). |

* PMO = Produce Marketing Organisation or Primary Marketing Organisation

### The Ghana Pilot Project

<table>
<thead>
<tr>
<th>Crops and target markets</th>
<th>Pineapples* destined for exports as fresh and fresh-cut produce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of participating groups</td>
<td>6 farmer groups, all certified by mid 2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partners</th>
<th>142 farmers; no linkage to exporters or other buyers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private sector</td>
<td>Ministry of Food and Agriculture (MoFA) with different departments</td>
</tr>
<tr>
<td>Public sector</td>
<td>GTZ/MOAP, USAID/TIPCEE, MoFA/HEII (World Bank financed)</td>
</tr>
<tr>
<td>Dev. partners</td>
<td>1 University as service provider (Kasetsart University)</td>
</tr>
</tbody>
</table>

| A glance on the way forward | “Ghana must face the challenges of quality … This development must be seen as part of a full-service marketing proposition, which would stem from its current position of low-cost spot supplier to the European … market” (Danielou and Ravry, 2005). |

* Variety MD2, newly introduced in parallel to the implementation of the GLOBALGAP Option 2 Smallholder Pilot Project

### The Thailand Pilot Project

<table>
<thead>
<tr>
<th>Crops and target markets</th>
<th>Asparagus exported to Japan/Taiwan/EU; Durian exported to China/ASEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of participating groups</td>
<td>6 farmer groups, thereof 3 certified by 2007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partners</th>
<th>240 farmers, 1 exporter/2 collectors (asparagus), 1 association (durian)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private sector</td>
<td>1 University as service provider (Kasetsart University)</td>
</tr>
<tr>
<td>Public sector</td>
<td>GTZ/T-GPEC</td>
</tr>
<tr>
<td>Dev. partners</td>
<td>-------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>

| A glance on the way forward | “We need to think about how we can focus on globalisation, yet remain locally accountable” (Thai Deputy Prime Minister Kosit Pupienmrat, 2007 www.globalgap.org/cms/front_content.php?idart=372&idcat=46&lang=1&client=1). |

### The Macedonia Pilot Project

<table>
<thead>
<tr>
<th>Crops and target markets</th>
<th>Fruit and vegetables (pepper), partly destined for exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of participating groups</td>
<td>2 farmer groups, both certified in 2006</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partners</th>
<th>125 farmers, 1 consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private sector</td>
<td>Ministry of Agriculture (MoA)</td>
</tr>
<tr>
<td>Public sector</td>
<td>GTZ-MAFP, USAID/Land O’Lakes</td>
</tr>
<tr>
<td>Dev. partners</td>
<td></td>
</tr>
</tbody>
</table>

| A glance on the way forward | In Macedonia, the “greatest food system weaknesses [are rooted in the] inadequate supply of uniform quality primary products for the fresh and processed product markets” (Scott, 2006). |
The four pilot projects in Africa, Asia and Europe
The draft version of the ‘Smallholder Manual’ was tested with several smallholder farmer groups in four countries of three continents: in Africa (Kenya, Ghana), Asia (Thailand) and Europe (Macedonia). In all four countries, pilot testing of the manual complemented activities of development programmes implemented by GTZ, DFID and USAID respectively, aiming at integrating smallholder farmers into food supply chains (usually referred to as ‘value chains’ in the development context). Pilot testing was implemented in a stepwise action-oriented approach (see above) to provide for evaluation and reflection loops allowing the project partners to adapt the implementation to the progress of farmer groups and group instructors involved in advice and training.

The results (impacts)
In summary, the pilot project attained significant impacts with regard to building technical and managerial capacities of farmers, group managers and service providers as well as institutional capacities of farmer groups to jointly manage GLOBALGAP Option 2 certification. 17 pilot farmer groups achieved certification, representing 75% of all groups having participated in the pilot project. While some weaker smallholders dropped out of the programme there is evidence from a recent post-pilot evaluation in Ghana that the majority of pilot farmers increased their incomes through increased productivity, reduced production costs and rejects and that the membership in several pilot groups increased (trickle-down effect).

The generic ‘Smallholder Manual’ has been revised in the light of the experiences gained from the pilot projects. The Manual is now available as a public shareware (see attached CD-Rom).

Furthermore, the lessons learnt in elaborating the generic QMS Manual and implementing the pilot project have fed into the GLOBALGAP Africa Observer project, which represents the interests of the smallholder farmer community in and beyond Africa, and the GLOBALGAP Smallholder Task Force. As a major result, initial steps have been taken to make the standard as well as the conformity assessment more smallholder-friendly.

The main lessons learnt
While the pilot cases clearly suggest that small-scale farmers are capable of achieving GLOBALGAP certification under Option 2, it became obvious that the viability and sustainability of group certification depends on several key conditions: together with technical capacities, due attention needs to be paid to developing group structures, management capacities and leadership skills in order to achieve and sustain group cohesion, an indispensable precondition for maintaining group certification; simplified handouts have to be developed to adapt the generic QMS to the capacities of smallholder farmers; depending on the previous technical knowledge, management skills and group performance, sufficient time needs to be provided to enable farmer groups to adopt relevant technologies as well as attitudes necessary for achieving compliance. A major issue in the promotion of GLOBALGAP certification is that the benefits are difficult to predict while costs incur immediately. However, aspiring to promote certification, it is necessary to inform farmers on probable benefits and costs of group certification to assist them take informed business and investment decisions. This especially holds true for resource-poor and risk-averse smallholders.

The way forward and the objective of this paper
While the pilot project without doubt achieved some remarkable results, the actual impact will only be measurable in a couple of years. Are the smallholder groups capable of maintaining certification? Can the groups sustain their ICS without external (donor) support? Has certification contributed to better access to markets for small-scale farmers? Do smallholders benefit from certification and integration into the food supply chain? Is the ‘Smallholder Manual’ updated and available as free shareware? Is the ‘Smallholder Manual’ being used by farmer groups, exporters, service providers (trainers), as a component in benchmarked national schemes, or otherwise? Has the generic localised ‘Smallholder Manual’ been taken up by local institutions to replicate the approach for supporting GLOBALGAP Option 2 certification of smallholder groups?

Even if these questions cannot be answered right now, this brochure is meant to share lessons learnt, success factors and pitfalls and to encourage replication of the good practices developed.
The GLOBALGAP Smallholder Pilot Project –
The case studies

3.1 The Kenya pilot project

Box 5: Characteristics of the pilot schemes in the Kenya Pilot Project

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Outgrower scheme</th>
<th>PMO scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market linkages</td>
<td>Outgrower farmer groups contracted by exporters who supply fresh produce to</td>
<td>Farmer groups contracted by PMO, which supplies a processor of canned beans in Nairobi who exports under a leading European label</td>
</tr>
<tr>
<td></td>
<td>markets in the European Union</td>
<td></td>
</tr>
<tr>
<td>Starting point</td>
<td>• Exporter procures up to 60% of overall intake from smallholders.</td>
<td>• The PMO supports more than 12,000 farmers organised in groups.</td>
</tr>
<tr>
<td></td>
<td>• Exporter implements and controls own QMS at farm group level.</td>
<td>• Several schemes are managed as individual farms certified under Option 1.</td>
</tr>
<tr>
<td>Exporters/PMO tasks</td>
<td>Embedded services of exporter:</td>
<td>Embedded services of PMO:</td>
</tr>
<tr>
<td></td>
<td>• Training, extension, spraying, management of QMS</td>
<td>• Training, extension, supervision of farmers, management of QMS</td>
</tr>
<tr>
<td></td>
<td>• Financing major parts of compliance costs (analyses, certification)</td>
<td>• Granting credits and co-investments (inputs, grading sheds, etc.)</td>
</tr>
<tr>
<td>Farmers’ tasks</td>
<td>• Adopting GAP in land preparation and field management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Investing into part of GLOBALGAP compliant infrastructure and equipment</td>
<td></td>
</tr>
<tr>
<td>Price agreements/Cost recovering</td>
<td>• Exporter apparently pays higher farm gate prices (price premium).</td>
<td>• PMO pays price premium as reward for quality.</td>
</tr>
<tr>
<td></td>
<td>• Cost recovering for embedded services is not transparent.</td>
<td>• Cost recovering is reported to represent up to 50% of farmers’ proceeds.</td>
</tr>
<tr>
<td>Peculiarities</td>
<td>Farmers encouraged to save 2 KES* per kg sold for future investments</td>
<td>PMO trust-building/training of farmers/pre-financing over several years crucial</td>
</tr>
</tbody>
</table>

* EUR 1 = KES 111,382 (November 2009)

Box 6: Success and risk factors in the Kenya Pilot Project (1)
(key success and risk factors in bold)

Economic environment

Success factors
• Strong position of Kenya as supplier in leading import markets
• Prime importance of smallholder production within the vegetable industry
• Profitability of French beans for smallholders who are integrated in supply chains
• Pro-active development of KenyaGAP as ‘domesticated’ GLOBALGAP
• Leading role of high value horticultural export industry in the national economy

Risk factors
• Misconceptions on costs and benefits of compliance with GLOBALGAP
• Rushed/partly forced introduction of GLOBALGAP at smallholder level

Stakeholder environment

Success factors
• Early adoption of GLOBALGAP and other standards by major exporters
• Partly good selection of farmers capable to adopt necessary technologies
• Partly existing linkages between smallholder groups and exporters/PMOs
• Existing local Certification Body, offering more affordable certification
• Cost-sharing between farmer groups, exporters/PMO, development partners

Risk factors
• Partly insufficient capacities of service providers to support groups
• Wrong expectation to obtain price premiums for certified produce
• Uptake of non-certified produce by exporters in years with low harvest
• Wrong expectation that Option 2 certification means autonomy from exporters
• Costly, inadequate laboratory services (no international accreditation)
• Bias of public sector/development partners in the selection of farmer groups
• Inadequate farming practices not compliant with GLOBALGAP control points
Economic environment
Kenya’s exports of flowers, vegetables and fruit have shown dynamic development over the past nearly three decades. With about USD 1 billion (2007), horticulture is the second largest foreign exchange earner after tourism and, following South Africa, Kenya is the second largest Sub-Saharan African supplier of overseas markets with horticultural products. French beans are the country’s most important export vegetable with Kenya representing 30% of EU imports. Out of the roughly 1.5 million farmers engaged in horticulture, about 10% are involved in exports with smallholders accounting for around 47% of fruit and vegetable exports (Jaffee, 2003). The industry’s voice FPEAK (Fresh Produce Exporters Association of Kenya) assumes that expansion of horticultural production is most feasible through collaboration of large farms with small growers (Mbithi, 2008).

Stakeholder environment
Reasons for the often cited success story of the Kenyan horticultural industry may be attributed to: clearly defined roles of the private and public sectors, especially a dynamic private sector rapidly responding to market trends; a tourism industry that made Kenya a regional transport hub facilitating transport of fresh produce to major European destinations; a government granting an enabling environment while reducing interventions to a minimum; mutually beneficial smallholder-exporter linkages; and last but not least “the adoption of many internationally recognised standards by both large and small producers such as GLOBALGAP, Fairtrade, BRC [British Retail Consortium] and individual customers’ standards …” (Minot, Ngigi, 2006 and Steglich et al., 2009, cited in: Wainwright and Labuschagne, 2009b).

Since long, major exporters are at the forefront of introducing GLOBALGAP in Kenya. “Exporters in the vegetable sector depend on small-scale producers” (BMZ, 2008), since small-scale growers often produce labour-intensive vegetables and fruit at lower costs. At the same time, smallholder farmers aspiring to benefit from access to potentially lucrative overseas markets need assistance from supply chain partners to achieve compliance with international standards. Consequently, exporters are committed to support compliance of their suppliers with GLOBALGAP and hence facilitate smallholder participation in global value chains. However, while large exporters have been successful in assisting their suppliers to achieve and maintain certification, medium and small exporters are often not capable of providing the necessary support.

For the pilot project, 9 smallholder groups (455 farmers) were selected, some of them linked as outgrowers to 3 large scale exporters, others contracted by a medium scale Produce Marketing Organisation (PMO) supplying one of the leading Kenyan processor-exporters of canned French beans (for characteristics of the pilot schemes see box 5). Further to the farmer groups and their business partners as well as GLOBALGAP and the GTZ sector project Agricultural Trade (technical backstopping), the following stakeholders were involved in the pilot project:
• as development partners, the programme Private Sector Development in Agriculture (PSDA), jointly implemented by GTZ and the Government of Kenya Ministry of Agriculture (MoA) and the Business Services Market Development Project (BSMDP) implemented by the UK Department for International Development (DFID);
• as private service providers, Agribusiness & Allied Ltd. (manual adaptation and technical trainings), AfriCert (certification), Quest Labs (laboratory analyses) and Standards & Solutions (monitoring); as public service providers, the International Centre for Insect Physiology and Entomology ICIPE (management of the pilot project, manual adaptation) and MoA extension services (training in farming as a business and group development); and
• the private sector Fresh Produce Exporters Association of Kenya (FPEAK) as promoter of the GLOBALGAP-benchmarked domestic standard KenyaGAP.

Key success and risk factors in the economic and stakeholder environment are summarised in box 6.
<table>
<thead>
<tr>
<th>Local adaptation of the manual</th>
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<tr>
<td><strong>Success factors</strong></td>
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<td><strong>Risk factors</strong></td>
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<th><strong>Implementation</strong></th>
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<tr>
<td><strong>Success factors</strong></td>
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<td><strong>Risk factors</strong></td>
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</table>
Local adaptation of the generic QMS Manual

The Kenya pilot project was the first to customise the generic GLOBALGAP QMS Smallholder Manual to local conditions. Earlier experience of exporters/PMOs and development partners (especially DFID) with company-owned QMS and GLOBALGAP certification, both on exporters’ own farms and among smallholder suppliers, would certainly have been an asset for adapting the 'Smallholder Manual' to the prevailing circumstances. However, the project manager did not search collaboration with FPEAK and/or individual exporters and the consultant responsible for drafting the manual finally spent an entire year with repeated loops of adaptation of contents to the smallholder reality in the country and commenting by international experts. Contents and forms of the adapted local generic manual vary from the original GLOBALGAP Smallholder Manual. For example, the chapter introducing GLOBALGAP was left out, while technical Control Points and Compliance Criteria (CPCC) and supporting templates were added. Furthermore, some minor changes have been made such as the translation of warning signs into vernacular Swahili. However, the contract forms have not been adapted to the standard contracts used in the horticultural sector in Kenya.

It can be concluded that the Kenyan experience blazed the trail for the other pilot countries. However, being the very first manual to be localised, there is still room for improvements to make the manual easier to be understood, adapted and adopted by smallholder groups.

Implementation

Following a pre-selection by the two programmes GTZ/PSDA and DFID/BSMDP, farmer groups were profiled along the eligibility criteria mentioned above. Already at this early stage it became obvious that several issues further to the adaptation of the QMS handbook and the establishment of the groups’ ICS needed to be addressed, namely: the wrong expectations of many farmers that certification would result in the payment of price premiums and enable farmers to seize best-priced spot market opportunities; the inappropriate legal entity of some groups (registered as self-help groups with the Ministry of Culture and Social Affairs) and the question of how to manage the certification of splinter groups of cooperatives; the poorly conceived business models of most groups (direct link to one or several exporters, to small or large exporters or to an intermediary PMO); the frequently weak linkages to buyers (exporters/PMO); the largely unknown risks in production, harvesting and packaging relevant to GLOBALGAP; the challenging question of how to finance necessary investments into infrastructure and equipment; and last but not least the significant training needs of farmers and group managers, ranging from group management to entrepreneurship training, appropriate farming practices and the like. Additionally, more convincing cost-benefit arguments needed to be identified and communicated since farmers did not take GLOBALGAP for serious after exporters bought non-certified produce in 2005 when international markets were short of supplies and farmers who had earlier invested in GLOBALGAP compliance, felt cheated.

As regards services relevant for achieving standard compliance, the pilot project could draw on competent in-country consultants, trainers and a local Certification Body. However, costly overseas pesticide residue analyses had to be financed since laboratories in Kenya are neither adequately equipped nor accredited according to target-market standards. Furthermore, financing of necessary infrastructure, equipment and sustained certification was only secured for those farmer groups, which were embedded into a long-term contractual relationship with an exporter/PMO.

Impacts achieved and way forward

Six farmer groups were certified by AfriCert in October 2006 and the Kenya Generic QMS Smallholder Manual was approved by GLOBALGAP in November 2006. GLOBALGAP-relevant capacities of farmer groups and support staff of exporters/PMO have been built and one farmer group even further subcontracts the service provider for managing its QMS. As a result of the pilot project, the groups apply good agricultural practices and benefit from increased productivity and reduced input costs owed to a more careful use of pesticides and fertilizers.

To further promote group certification, it is necessary to identify (i) convincing incentives by analysing realistic cost-benefit ratios and (ii) solutions for sustainable financing of initial investments and recurrent costs of compliance. However, with the benchmarking of KenyaGAP with GLOBALGAP, with FPEAK promoting KenyaGAP and local supermarkets requiring smallholder suppliers to at least comply, if not certify with KenyaGAP, group certification is likely to gather way.
### 3.2 The Ghana pilot project

#### Box 8: Characteristics of the pilot schemes in the Ghana Pilot Project

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Cooperative scheme</th>
<th>Individual group scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market linkages</td>
<td>Weak market linkages following the breakdown of the Smooth Cayenne market and management failure within the cooperative</td>
<td>Spot market sales</td>
</tr>
<tr>
<td>Starting point</td>
<td>The majority of cooperative members participating in the pilot project disposed of basic knowledge on GLOBALGAP.</td>
<td>The majority of farmers was newly introduced to GLOBALGAP by the pilot project</td>
</tr>
<tr>
<td>Exporter/PMO tasks</td>
<td>No exporter/PMO linkages</td>
<td>No exporter/PMO linkages</td>
</tr>
<tr>
<td>Farmers’ tasks</td>
<td>Adopting GAP in land preparation and field management</td>
<td></td>
</tr>
<tr>
<td>Price agreements/ Cost recovering</td>
<td>No exporter/PMO linkages</td>
<td>No exporter/PMO linkages</td>
</tr>
<tr>
<td>Peculiarities</td>
<td>MoFA and development partners provided funds for:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• investments into infrastructure and equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• training and extension services, subcontracting for internal auditing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• certification through an external Certification Body</td>
<td></td>
</tr>
</tbody>
</table>

#### Box 9: Success and risk factors in the Ghana Pilot Project (1)

(key success and risk factors in bold)

**Economic environment**

**Success factors**
- Leading role of pineapple within non-traditional export products in Ghana
- Significance of smallholders’ shares in exports prior to appearance of MD2*
- Growing interest of (a few) exporters to re-establish outgrower schemes (OGS)
- Growing interest of processors to establish OGS for assuring volumes/quality

**Risk factors**
- Dual burden of investments into MD2 production and certification
- Inability to pro-actively manage market trends (breakdown of pineapple exports)
- Higher investment needs for MD2 than for Smooth Cayenne
- Former focus of Ghanaian exporters on the low-price segment in the EU market

**Stakeholder environment**

**Success factors**
- Demand of EU importers is twice the exporters’ current supply potential
- Reduced certification costs by commissioning AfriCert
- Excellent relevant expertise within SPEG and with local consultant
- Building on formerly successful smallholder-exporter linkages (OGS)
- Embedding into development partners’ value chain development projects
- Apt group profiling providing realistic view of capacities and needs for upgrading

**Risk factors**
- Fragmented smallholder-exporter linkages (frequent contract breach)
- Fragile farmer groups, especially regarding joint commercial activities
- Groups of 8 members cannot manage the ICS and bear certification costs*
- Missing ownership due to donor/public sector driven approach
- Dual challenge of building capacities for MD2 production and certification
- Doubts of many exporters on smallholders’ capacities to produce MD2
- Inadequate competence of service providers to assist group certification

* MD2 is a pineapple variety, which rapidly captured major shares in leading import markets by ousting the traditional fresh market variety Smooth Cayenne after having been introduced by a multinational company producing in Costa Rica.

* Since only groups with a maximum of 8 members were eligible to receiving public support for starting up MD2 production (access to suckers and extension), many existing groups split and some ‘artificial’ groups emerged (e.g. larger farmers declaring workers to fellow group members, or extension agents forming groups with client smallholders).
Economic environment
In a bid to diversify from their traditional export commodities, cocoa, minerals and timber, the government of Ghana promotes the development of non-traditional products, among which horticulture plays a prominent role. This is one of the main reasons why Ghana experienced sizeable growth in fruit and vegetable exports since the mid 1990s with pineapples accounting for more than half of the country’s horticultural production mainly destined for exports to Western European low-price discounters. Ghana became the third supplier of fresh pineapples to the EU after Costa Rica and Côte d’Ivoire, although with a sizable space in terms of volumes and values.

However, Ghanaian producers and exporters were seriously taken by surprise when the new variety MD2 was introduced by a multinational company sourcing from their own farms in Costa Rica. The MD2 variety, being sweeter and more savoury and having a longer shelf-life than the former export varieties, rapidly captured major shares in leading import markets. Benefitting from the multinational’s integrated and particularly efficient supply chain and a massive marketing campaign, the MD2 ousted the traditional fresh market variety Smooth Cayenne grown in Ghana. Aspiring to regain its lost market position, Ghana now faces a dual challenge: firstly, the need to comply with GLOBALGAP, increasingly demanded even by discounters; and secondly, the need to catch up with the production of MD2, which is more demanding with regard to production as well as transport and logistics handling technologies than Smooth Cayenne.

Stakeholder environment
In Ghana’s horticultural industry, smallholders play a major role, also in supplying export markets. In contrast to Côte d’Ivoire or Costa Rica, where large foreign-owned farms dominate the horticultural sector; in Ghana, local medium-scale integrated producer-exporters formerly complemented own farm production with supplies from company-managed outgrower schemes or by purchasing smallholder supplies on the spot market. Up to the early 2000s, smallholders were hence benefitting from the rapid expansion of Ghana’s horticultural export industry, either through contractual integration into, or arms-lengths connection to export supply chains. It is estimated that 5,000 smallholders and their families are directly dependent on pineapple production, contributing about 45% to pineapple exports. However, the smallholder supplier-to-exporter linkages collapsed with the breakdown of the Smooth Cayenne export market.

Over the last few years, producer-exporters and the Government of Ghana through the Ministry of Agriculture and Food (MoFA) invested into setting up production of MD2-seedlings (so-called suckers) followed by heavy private sector investments into production of the new variety with a view to recapturing export market shares. At the same time, a multinational company relocated from civil war-stricken Côte d’Ivoire to Ghana and became the largest producer of the MD2 variety in the country. In light of these developments, the public sector does its best to assist smallholder production of MD2. However, industry players suspect that small growers will not be capable of acquiring the necessary technical and managerial skills both, for producing MD2 and in parallel achieving GLOBALGAP certification. Against this background and from a development perspective, it is certainly desirable to link small growers to MD2 markets. However, viable solutions need to be found to facilitate sustainable integration of smallholders into the MD2 export supply chain.

Six groups (142 farmers) participated in the pilot project. While all are producing independent from exporters, some are integrated into a cooperative network striving towards coordination of members’ exports (but facing severe management problems). Further to GLOBALGAP and the GTZ sector project (technical backstopping), the following stakeholders participated in the pilot project:

- as development partners, the Market Oriented Agriculture Programme (MOAP), jointly implemented by GTZ and the Ministry of Food and Agriculture (MoFA) and the Trade and Investment Programme for a Competitive Export Economy (TIPCEE) financed by USAID;
- as private service providers, the technical advisor of the business association Seafreight Pineapple Exporters of Ghana (SPEG) and a University of Ghana plant pathologist acting as consultants and trainers; and as public service providers, various departments of MoFA including the Horticultural Export Investment Initiative (HEII), an integrated World Bank financed project.
### Box 10: Success and risk factors in the Ghana Pilot Project (2)

(key factors in bold)

#### Local adaptation of the manual

<table>
<thead>
<tr>
<th>Success factors</th>
<th>Risk factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Theoretical knowledge/practical experience of the consultants involved</td>
<td>• Neglect of promoting institutional ownership of the generic manual</td>
</tr>
<tr>
<td>• Availability of the Generic Manual as basic document</td>
<td>• Weak institutional capacities for further developing GhanaGAP</td>
</tr>
<tr>
<td>• Documentation of crop-specific technologies available from different sources</td>
<td></td>
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</tbody>
</table>

#### Implementation

<table>
<thead>
<tr>
<th>Success factors</th>
<th>Risk factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Prospective qualification for integration into upmarket supply chains</td>
<td>• Failing to involve exporters as the groups’ buyers (‘industry buy-in’)</td>
</tr>
<tr>
<td>• Participatory approach to adapting the generic manual to group needs</td>
<td>• … resulting in weak market linkages of farmer groups.</td>
</tr>
<tr>
<td>• … resulting in strong ownership of the QMS manuals by the groups</td>
<td>• Failing to develop exporters’ embedded service systems</td>
</tr>
<tr>
<td>• Development of complete training packages integrating relevant subjects</td>
<td>• Insufficient accompanying capacity building right from the onset</td>
</tr>
<tr>
<td>(e.g. specific MD2 GAPs, integrated pest management, ICS management)</td>
<td>(especially organisational development of groups, business skills)</td>
</tr>
<tr>
<td>• Appropriate didactical methods and materials</td>
<td>• Costs for running the ICS discouraging farmers</td>
</tr>
<tr>
<td>(field-training; training material for illiterates/technically less educated)</td>
<td>• Need for external technical support for up-dating of group manuals</td>
</tr>
<tr>
<td>• Innovative lower-cost infrastructure and ICS management systems</td>
<td>• Need for external financial support for covering part of recurrent costs</td>
</tr>
<tr>
<td>• Development of templates shaped to prevailing farming/marketing systems</td>
<td>• Difficulties in managing internal control procedures and keeping records</td>
</tr>
<tr>
<td>• Adaptation of the CPCC to the crop and production systems</td>
<td>• Underestimation of the space of time necessary for achieving certification</td>
</tr>
<tr>
<td>• Innovative tools developed for mapping farms/developing traceability systems</td>
<td></td>
</tr>
</tbody>
</table>
Local adaptation of the generic QMS Manual
The Ghana Generic Smallholder Manual was developed by a Technical Task Force made up by experts assigned by the partner organisations. The two consultants/trainers from SPEG and the University of Ghana proved to be a real think tank on GLOBALGAP, integrated pest management and pineapple/MD2 production systems, capable of combining theoretical knowledge and field-experience to guide the development of the Ghana manual. Largely based on the Kenya manual, more templates were built into the generic manual shaped to the needs of smallholder MD2 production. Furthermore, the technical CPCC have been tailored to the crop and the prevailing smallholder farming systems based on technologies developed and field-tested by SPEG and the ‘MD2 variety production handbook’ developed by the Pesticide Initiative Programme (PIP).

Implementation
Ten groups were pre-selected by the MoFA/HEII MD2 support programme. Through group profiling, a comprehensive documentation of the group’s technical and managerial capacities and training/advisory needs was made available. Already at this point in time, the multiple challenge for the groups and their members became obvious: the need to adopt various new technologies and to invest scarce financial resources as well as limited time into: (i) setting up a new farming system for MD2, (ii) adopting GLOBALGAP compliant good agricultural practices, (iii) establishing traceability and record-keeping systems, (iv) setting up a group-based Internal Control System; and additionally the need to (v) strengthening business skills both at farmers’ and group levels and (vi) developing capacities within the groups to assure leadership, cohesion and efficient management not only of the joint certification but as well for accompanying joint commercial activities. Following the profiling, four out of the ten pre-selected groups were excluded, mainly because of weak group structures due to group splitting and formation of new groups with a view to meeting the eligibility criteria established for participation in the MD2 smallholder promotion programme.

Having these challenges in mind, obviously insurmountable for smallholder farmers on their own, the partner organisations developed a stepwise approach both for adapting the Ghana Generic Manual to the groups’ needs and for developing methodologies and material for training, coaching and supervision. This excellent approach, which was especially strong in creating ownership through involvement of the groups’ managers in a participatory way, can serve as a model for approaches to supporting smallholder group certification. Since the good practices developed in Ghana form the basis for the GLOBALGAP ‘Smallholder Guide’ (Enomoto, 2010), this brochure forebears from further elaborating on this good practice.

The Ghana pilot also developed low-cost infrastructure (e.g. pesticide stores) and organisational innovations (e.g. exchange of internal auditors between groups). Furthermore, a farm mapping tool was developed based on simplified Geographic Information Systems/Global Positioning Systems (GIS/GPS). Since mapping is a condition for certification and the tool is suitable for operating traceability systems, the mapping tool can contribute to up-scaling group certification.

Impacts achieved and way forward
The Ghana Generic QMS Manual was published in 2007. All six groups achieved certification by mid 2007. A good step forward for re-integrating smallholders into Ghana’s pineapple export chain. Especially since customers estimate that Ghana could double its current exports, provided logistics are improved and GLOBALGAP standards are met. One major lesson learnt in the Ghana pilot, however, is the need to build farmer group capacities and involve exporters as the groups’ business partners right from the onset.

An ex-post analysis currently underway unveils that the majority of farmers having participated in the pilot project increased their incomes and were hence able to re-invest and enlarge their MD2 production areas. And, while the membership in the groups declined prior to the first post-pilot certification due to the dropout of weaker members (−14% for all pilot groups together), it increased considerably in the following year (+52% from 2008 to 2009) with new members being attracted by the groups’ success (increased productivity, reduced rejects, better income). It is expected that membership will further augment in 2010 and, for certain, the number of certified group members will follow suit.
### 3.3 The Thailand pilot project

#### Box 11: Characteristics of the pilot schemes in the Thailand Pilot Project

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Cooperative scheme (Durian)</th>
<th>PMO scheme (Asparagus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market linkages</td>
<td>Contract relations of individual farmers with local or regional collectors; umbrella association does not act as PMO.</td>
<td>Contract relations exist (i) between farmers and collectors (acting as PMO) and (ii) between collectors and exporter.</td>
</tr>
</tbody>
</table>
| Starting point | - GLOBALGAP is not yet necessary for the regional export market.  
- Farmer group interested to prepare for future higher access requirements in China (ChinaGAP), Japan (J-GAP) and other regional markets. | - The exporter used to run an Option 1 scheme.  
- Owing to strong farmer linkages, the exporter was interested in Option 2.  
- GLOBALGAP opens access to the local Tesco Lotus retail markets. |
| Exporter/PMO tasks | - Collectors buy fruits ‘on the tree’ i.e. harvesting is done by collectors.  
- Although not acting as PMO, the association manages the QMS. | - Collectors act as PMO, manage the handling facility (collection/pre-grading) and sell rejects to the wet market.  
- The exporter manages the QMS with own staff and bears large part of the compliance costs. |
| Farmers’ tasks | - Adopting GAP in land preparation and farm/orchard management  
- Sharing costs for GLOBALGAP-compliant infrastructure and equipment |  |
| Price agreements/Cost recovering | - Collectors usually pay a pre-harvest deposit of 10 to 20% of the expected overall revenue.  
- Recovering of the deposit is done at the end of the season. | - The exporter grants collectors a purchase guarantee for defined grades and pays a premium price for grade 1/GLOBALGAP quality.  
- The collectors grant farmers a full purchase and a price guarantee (i.e. collectors bear the full marketing risk). |

#### Box 12: Success and risk factors in the Thailand Pilot Project (1)

(key success and risk factors in bold)

**Economic environment**

**Success factors**
- Expectation of stricter market access requirements in sub-regional markets via benchmarking with GLOBALGAP (e.g. China, Japan, Malaysia)
- Given the scarcity of arable land in Thailand, exporters depend to a certain extent on sustainable linkages with smallholder farmers.
- Private-public partnership project for the development and benchmarking of ThaiGAP with GLOBALGAP

**Risk factors**
- Limited exports to markets requiring GLOBALGAP (EU, United States)
- Recent introduction of other public mandatory (O-GAP) and private voluntary standards (e.g. Tesco Nature’s Choice) kind of competing with GLOBALGAP
- Limited importance of high-value, labour-intensive horticulture in Thailand

**Stakeholder environment**

**Success factors**
- Trustful long-term relations exporter–collector–farmer groups (asparagus)
- Parallel efforts to strengthening the country’s quality infrastructure
- Long-term business strategies preparing for the probable future introduction of GLOBALGAP benchmarked standards in the regional market (durian groups)

**Risk factors**
- Limited knowledge of service providers specific to GLOBALGAP Option 2 certification and limited number of service providers in general
- Partly inappropriate group selection, especially with regard to the market access requirements of the product range (for Durian so far no need for certification)
- Low interest of other donors to support smallholder group certification
Economic environment

The agricultural sector plays an essential role in the Thai economy with regard to employment, national income and export earnings. However, high-value labour-intensive fruit and vegetable production only occupies 1.4% of total agricultural land involving an estimated 300,000 households. With a share of 90%, fruit and vegetables are predominantly consumed in the local market. Even if also exporting to the United States (about 7% of overall fruit exports) and the European Union (roughly 5% of fruit and 25% of vegetable exports in 2007), Thailand mainly supplies regional markets such as China, Hong Kong, other ASEAN countries and Japan.

The lack of internationally recognised quality infrastructure has been identified as one of the main reasons why Thailand’s exports of horticultural products dropped by 20% following the introduction of GLOBALGAP (by then EurepGAP) and traceability requirements. Thailand’s inability to meet public mandatory and private voluntary standards hinders the country to expand its market shares in leading import markets. This is for example true for China, where legal requirements are becoming stricter in a bid to improve consumer protection. And, with the rapid growth of hypermarkets and the expansion of international retail chains not only into China but as well into Thailand and other ASEAN-countries, private voluntary standards gain importance in sub-regional markets. With ChinaGAP, J-GAP (Japan), Malaysia’s good agricultural practice standard SALM or the domestic ThaiGAP aspiring to achieve equivalence with GLOBALGAP, Thai growers and exporters have to catch up with international standards, not only with a view to expanding exports to the EU and the United States but as well to assuring future access to the markets in the sub-region.

In 2007, a private-public partnership project was initiated to develop ThaiGAP as private voluntary standard. With public funding from the Office of Small and Medium Enterprises Promotion, the Thai Chamber of Commerce and the Thai Fruit and Vegetable Producers’ Association in cooperation with the Kasetsart University, the National Bureau of Agricultural Commodity and Food Standards as well as the Ministry of Agriculture with the Departments of Agriculture and of Extension developed the ThaiGAP standard with a view to achieving international recognition through benchmarking with GLOBALGAP (applicant status as of November 2009).

Stakeholder environment

240 farmers participated in the pilot project. The situation in the two schemes (1 cooperative/durian, 1 PMO/asparagus), was quite dissimilar, not only due to the different target markets (durian/regional, asparagus/global) and the resultant varying pressure for certification (currently only asparagus) but as well with regard to the different embedding of the producer groups into the supply chain. While the asparagus groups’ certification efforts built on established contractual linkages with collectors (acting as PMO) and an exporter who in turn contracted the collectors, the durian farmers sold their produce individually by frequently changing collectors from one season to the other (spot market). As a consequence, the asparagus farmer groups enjoyed better financial and non-financial support services, embedded into the supply chain relation. As an example, the exporter bears a large share of the non-recurrent and recurrent certification costs and manages the QMS with own staff. On the other hand, right from the onset, the durian farmers were better informed and more entrepreneurial than the asparagus farmers and were hence capable of taking the business/investment decision to pro-actively go for certification in preparation for the day when regional importers (e.g. China) may require so.

In Thailand, the pilot project was embedded into a set of activities aimed at strengthening the country’s quality infrastructure implemented by the Thai-German Programme for Enterprise Development (T-GPEC/GTZ) in cooperation with the German National Metrology Institute (Physikalisch-Technische Bundesanstalt PTB). As part of related activities in the agribusiness sector, T-GPEC aimed at supporting smallholders’ access to higher value markets worldwide by strengthening relevant training, advisory and certification services.

The pilot project contracted lecturers from the Kasetsart University as service providers who were experienced trainers in Thai Q-GAP and organic standards. The consultants passed the GLOBALGAP compulsory train-the-trainer programme within the framework of the pilot project, making them the first official GLOBALGAP trainers in the country.
### Box 13: Success and risk factors in the Thailand Pilot Project (2)
(key success and risk factors in bold)

<table>
<thead>
<tr>
<th>Local adaptation of the manual</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Success factors</strong></td>
</tr>
<tr>
<td><strong>Risk factors</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Implementation</th>
</tr>
</thead>
</table>
| **Success factors** | Asparagus: High commitment of exporter, collectors and farmer groups  
Price grid with a price premium for grade 1/GLOBALGAP quality  
Ownership of the QMS and professional ICS management by the exporter  
Interest of growers, collectors and exporter to target the EU/US markets  
Durian: Interest to prepare for future higher market access requirements  
General: Contract fulfilment seems to be quite common.  
Simple traceability system developed facilitating management by groups  
Pictogram system developed for easier record-keeping |
| **Risk factors** | Insufficient number and not enough practical experience of consultants with GLOBALGAP in general and smallholder certification in particular  
Insufficient participation of farmers/farmer groups in QMS development impeding ownership  
High non-recurrent and recurrent costs of compliance  
Missing innovative approaches to reduce costs and find financing solutions  
Inadequate training packages, approaches and material  
Inability of farmers to contract service providers supporting ICS management  
Inability of farmers to sustainably update the QMS without external support  
Weak cohesiveness of groups in general; farmers prefer to operate individually. |
Local adaptation of the generic QMS Manual
The Thai Generic Smallholder QMS Manual is a translation of the original Generic Smallholder Manual prepared by GTZ and GfRS. However, to facilitate implementation, two editions have been developed, one comprehensive version available to trainers, consultants and QMS managers and a simplified guidance book for farmers.

Implementation
In the asparagus case, participation in the pilot project was initiated by the exporter who also contributes the largest share of investment costs, operates the QMS and bears most of the recurrent costs. The collectors act as intermediaries between the farmer groups and the exporter and cover major shares of the farmers’ investment costs, assign staff for the development of the groups’ QMS and support the farmer groups with advice and record-keeping. In the durian case, the groups were drawn from the network of farmer groups the consultants from the Kasetsart University have been working with earlier. In contrast to the asparagus farmers, the durian groups did not enjoy a similar level of technical, managerial and financial support. According to Kersting (2009), the durian groups had to bear far larger shares in non-recurrent costs of compliance (roughly 60% compared to 4% for the asparagus groups) and in recurrent costs in the first year as well (more than 65% compared to less than 5%).

With regard to adapting the Thai generic manual to the needs of the groups’ QMS and the capacities of the groups’ management, the Kasetsart University created new templates while the exporter of asparagus adapted some forms and the file reference system he has been using previously for GLOBALGAP Option 1 and other standards respectively. In a bid to making required documentation easier to manage by smallholders, the asparagus exporter in cooperation with the consultants developed a record-keeping system based on pictograms and a simple traceability system.

A major drawback was the fact that the training approach, packages and style were neither oriented to the education level and absorption capacities of the group managers and farmers respectively (literacy level, adult learning style) nor to the prevailing situation of the groups (crops, farming systems and group performance). Furthermore, the trainers did not possess enough theoretical knowledge on and practical experience with GLOBALGAP in general and smallholder certification in particular resulting in repeated need to rectify information and advice given in earlier training sessions.

Impacts achieved and way forward
While the asparagus group achieved certification, the durian group is principally capable of complying with the GLOBALGAP standard but did not get certified.

In the asparagus case, ownership of the Option 2 certificate stays with the exporter. Given the exporters business interest on the one hand and the market access as well as financial and non-financial embedded services he is granting collectors and farmer groups on the other hand, make this business model for Option 2 certification a win-win situation for the contract partners and presumably sustainable. The introduction of grades and a related price grid enables the exporter to pay a price premium for grade 1/GLOBALGAP quality, a major incentive for the farmer groups to get certified. Farmers and collectors mentioned the establishment of useful infrastructure and the knowledge transfer on integrated pest management (both provided by the exporter) as the most important benefit of their participation in the pilot project.

Despite the comparably high education level of the farmers and officials of the durian group, ownership of the QMS is weak. This has to be attributed to the fact that the ICS has not really been adapted to the group’s situation and requirements (procedures and forms) and that the market does not yet require certification. As a consequence, record keeping, internal inspection and other tasks to be managed by the group are not sufficiently understood and appropriately implemented. However, given the fact that certification is not yet a must for accessing the group’s target markets in the sub-region, the durian producers have already taken a major step to fulfil the GLOBALGAP requirements. It will hence not need a major effort to achieving compliance, once GLOBALGAP or equivalent standards will become a market access requirement.
### Box 14: Characteristics of the pilot scheme in the Macedonia Pilot Project

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Cooperative scheme (farmers' association)</th>
</tr>
</thead>
</table>
| Market linkages | • Farmer groups are members of an umbrella association.  
                  • Farmer groups are contracted by an exporter.  |
| Starting point  | • GLOBALGAP not yet a prerequisite for regional exports/supplies to processors  
                  • Farmer groups are nevertheless interested in improving market access.  |
| Exporter/PMO tasks | • Embedded services provided by the umbrella association:  
                            extension, supervision/backstopping, ICS management, record-keeping, etc.  
                            • Embedded services provided by the exporter:  
                              input supplies on credit, logistical infrastructure, electronic traceability system  |
| Farmers’ tasks | Adopting GAP in land preparation and farm management |
| Price agreements/ Cost recovering | The entire costs of compliance were covered by the Ministry of Agriculture and development partners. |

### Box 15: Success and risk factors in the Macedonia Pilot Project

(key success and risk factors in bold)

**Economic environment**

| Success factors | Rising demand of fresh produce exporters and processors for certified produce  
                  • Approximation of domestic mandatory standards to the EU food law |
| Risk factors | Rivalry among buyers for supplies reduces the pressure for certification |

**Stakeholder environment**

| Success factors | Supply chain relationships were already operational and efficient with the exporter committed to  
                  provide key embedded services.  
                  • Capacities of the association to steer the pilot and provide services  
                  • Interest of other development partners to replicate  
                  • Previous knowledge on GAPs and business-orientation of farmers  
                  • Attention from/support by the Ministry of Agriculture and development partners |
| Risk factors | Strongly public sector/development partner driven approach  
              • Opportunistic behaviour of farmers (side-selling/breach of contract) due to the rivalry between buyers (demand outstrips supply volume) |

**Local adaptation of the manual**

| Success factors | Functioning communication between farmers, master trainers and association  
                  • Adaptation of templates to group-specifics and CPCC to crop-specifics |
| Risk factors | none identified |

**Implementation**

| Success factors | Certification perceived as benefit for business links with EU retailers |
| Risk factors | Limited commitment of farmers due to full-coverage of costs by third parties  
                  • Inability of the smaller group (25 members) to cover the recurrent costs and renew the certification |
Economic environment
Macedonia is a traditional producer and net-exporter of fresh fruit and vegetables, situated at the crossroads of continental and Mediterranean climates in South Eastern Europe. The country has furthermore got a large fruit and vegetable processing industry requiring reliable supplies of raw material. Hence, competition for fruit and vegetable supplies is quite fierce, not only between the local fresh market, fresh produce exports and domestic processing but as well with processors in the sub-region procuring raw material from Macedonia (especially Albania, Bulgaria, Greece, Serbia and Turkey). This is already true in years with regular production and more so in quite periodic dry years. Given this rivalry and the resulting ready markets, farmers do not yet really need to comply with challenging private voluntary standards. However, with changing market access requirements within the region for fresh produce and the requirements of the processing industry for consistent supplies of qualities meeting export requirements of dried, fresh-cut and canned fruit and vegetables, the pressure on growers to meet GLOBALGAP or similar standards is on the rise.

Stakeholder environment
Two groups with 125 farmers participated in the pilot project. The groups are members of an umbrella association (cooperative-type), providing services to its member groups (extension, record-keeping). The association also assumes ownership of the GLOBALGAP certificate. An efficiently working supply chain was already in place before the pilot project started. The exporter established a strong relationship with the producers before and is very much committed to supporting upgrading of their production systems. The exporter was not involved in the pilot project, despite the significant embedded services provided to the farmers.

The Ministry of Agriculture and development partners were already previously involved in funding and supporting introduction of standards, largely in the field of mandatory food standards within the framework of approximation to EU laws and regulations. The pilot project was implemented in cooperation with the bilateral GTZ/Ministry of Agriculture Project EU Approximation and Regional Cooperation in the Agro and Food Sector (MAFP) and an USAID-funded Land O’Lakes project. Costs of compliance were covered by the government and development partners.

Local adaptation of the generic QMS Manual
The Generic QMS Smallholder Manual was translated and modified, mainly with regard to adapting technical procedures and control points to crop-specifics. While additional templates were developed to suit the needs of the farmers and supply chain partners, parts of the generic manual that were not esteemed relevant, were cut short.

Implementation
Every farmer received a copy of the groups’ QMS and a booklet specifying the Control Points and Compliance Criteria (CPCC) in a simplified way. Both documents were produced by a GTZ-MAFP consultant who also implemented train-the-trainers programmes. The farmer groups appointed their village leaders as master trainers, who in turn trained the farmers on-farm during the cropping season. This practice-oriented on-the-ground training proved to be especially appropriate, since farmers firstly already applied farming practices close to GLOBALGAP standards and secondly farmers were closely backstopped by the association’s staff. Assuming ownership of the certificate and running the ICS, the association is also responsible for key functions such as internal audits and record-keeping.

Impacts achieved and way forward
Both groups were certified in 2006. With the ownership of the certificate staying with the association, further support to farmers’ compliance with GLOBALGAP regulations and maintenance of the certification (including up-dating of the groups’ manuals) seems to be secured. Furthermore, the exporter is committed to maintaining the relationship with the groups while new potential buyers showed up rapidly expressing their interest in buying certified produce from the two groups.
4.1 Results achieved

<table>
<thead>
<tr>
<th>Overall results</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 smallholder farmer groups achieved GLOBALGAP Option 2 certification, representing 75% of all groups together having participated in the pilot project. Lessons learnt in the pilot project fed into the process to making the standard and conformity assessment more smallholder-friendly (see sections 4.3 and 4.4).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Positive results according to sustainability criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economic viability</strong></td>
</tr>
<tr>
<td>Achievements:</td>
</tr>
<tr>
<td>• Productivity increased; input costs and rejects reduced; income stabilised/increased*</td>
</tr>
<tr>
<td>• Crop risk (yield fluctuations) reduced through application of GAP/better quality inputs</td>
</tr>
<tr>
<td>• Market/price risks (volatility) reduced for groups that are integrated into supply chains</td>
</tr>
<tr>
<td>• Access also improved to local, regional upmarket segments not requiring certification</td>
</tr>
<tr>
<td>• Financial assets generated enabling farmers to re-invest and to access (trade) credits</td>
</tr>
<tr>
<td>• Infrastructure improved on farms and at group level</td>
</tr>
<tr>
<td>• Capacities of service providers (extension/training) improved</td>
</tr>
<tr>
<td>• Access to a more reliable supply of required qualities improved for PMOs/exporters</td>
</tr>
<tr>
<td><strong>Environmental sustainability</strong></td>
</tr>
<tr>
<td>Achievements:</td>
</tr>
<tr>
<td>• Protection of natural resources improved through reduced use of chemicals</td>
</tr>
<tr>
<td>• Efficiency of the use of natural resources increased through reduced waste (rejects)</td>
</tr>
<tr>
<td><strong>Social advancement</strong></td>
</tr>
<tr>
<td>Achievements:</td>
</tr>
<tr>
<td>• Management/technological capacities for compliance/QMS management built among farmers and group managers; with positive effects on wider farm/group management</td>
</tr>
<tr>
<td>• Farmer groups strengthened (growth in membership e.g. in Ghana; even if this is also owed to longer-term (post-pilot) assistance in farmer group development)</td>
</tr>
<tr>
<td>• Supply chain governance** has become more transparent and trustful with more equitable relationships assuring fairer compensation for smallholders.</td>
</tr>
<tr>
<td>• Farm worker and family health improved through improved handling of pesticides and better knowledge on food safety and hygiene issues</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Negative unintended results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economic viability</strong></td>
</tr>
<tr>
<td>Unsatisfactory first-time certification/retention rates*** in some pilot projects, mainly due to:</td>
</tr>
<tr>
<td>• weak groups (partly in Kenya)</td>
</tr>
<tr>
<td>• wrong groups not (yet) requiring certification (durian group in Thailand)</td>
</tr>
<tr>
<td>• wrong expectations about price premiums paid for certified produce</td>
</tr>
<tr>
<td>• inadequate approaches for building required farmer and group capacities</td>
</tr>
<tr>
<td>• insufficient time for training of smallholder farmers not meeting their requirements</td>
</tr>
<tr>
<td>• insufficient/lacking group-exporter linkages, partly too donor-driven</td>
</tr>
<tr>
<td>• questionable ownership and hence sustainability (especially in Thailand)</td>
</tr>
<tr>
<td><strong>Social advancement</strong></td>
</tr>
<tr>
<td>Dropout of weaker group members prior to the first post-pilot certification in most cases (e.g. -14% in Ghana); however, this decrease was at least in Ghana more than compensated by an increase in group membership of +52% one year later (retention rate and membership are expected to grow further).</td>
</tr>
</tbody>
</table>

* Evidence mainly anecdotic (due to short observation period), apart from the on-going post-pilot evaluation in Ghana, which confirms assumptions made in numerous recent publications.
** Supply chain governance: power relations, information exchange/transparency and distribution of gains between operators along the supply chain.
*** Retention rate: rate of satisfaction with and renewal of the certification.
The GLOBALGAP Smallholder Pilot Project – results intended … results achieved …

The pilot project attained noteworthy results (impacts) at the smallholder level as shown in the box on the opposite page. Furthermore, the generic ‘Smallholder Manual’ has been revised in the light of the experiences gained. Additionally, the lessons learnt have fed into the GLOBALGAP Africa Observer project and the GLOBALGAP Smallholder Task Force; both established to promote inclusiveness of GLOBALGAP for smallholder farmers (see also section 4.3).

In well-managed schemes, opportunities outweigh challenges of GLOBALGAP certification

The pilot projects in Kenya, Ghana, Thailand and Macedonia confirm that costs of compliance with GLOBALGAP are usually considerable. But at the same time, certification offers a wide range of economic and social benefits to smallholder farmer groups and their trade partners seeking to maintain and expand market shares in an ever-more competitive global market.

In addition to the broad range of economic impacts attained, which directly or indirectly translate into financial benefits, farmer groups also realised considerable non-financial benefits. As reported in other studies, benefits of GLOBALGAP “include the production of quality produce, improved field hygiene, better knowledge of pesticide use, and wider farm management benefits. In truth, many of these so-called non-financial benefits are quantifiable; access to trade credit or higher quality inputs will improve farm efficiency and yields” (IIED/NRI, n.d.).

Furthermore, "many farmers said that they were using [GLOBALGAP] records to understand their financial viability and run their farms more commercially. Proper handling of pesticides and improved food safety and hygiene had health benefits on the farms, and in addition most farmers said that they had transferred hygiene messages to the homestead with positive implications for family health. … Further benefits have been gained through supply chain relationships that might accompany [GLOBALGAP] certification. For example, contracts enable some [smallholder groups] to access trade credit through designated input sellers for seeds, fertiliser or chemicals” (ibid.)

From a smallholder-centred to a supply chain-oriented perspective of costs and benefits

To assess the overall benefits of GLOBALGAP certification, costs and benefits need to be measured along the entire supply (value) chain since costs and returns on investments into compliance accrue at all nodes of the supply chain. Just like their suppliers, PMOs, exporters and retailers have to invest into managing quality with major costs incurred when procuring from fragmented supplier networks, namely the costs for training, advice and supervision of smallholder groups.

It is obvious that, where firms procure from smallholders, a fair share of returns on smallholder compliance should trickle down to the farmers as incentive to renew the certification and maintain long-term and reliable contract relations. In many cases, this fair share of returns on investments is already realised at the farm level through the increase in yields and reduction of input costs thanks to the application of GAP; in other cases, where the returns on smallholders’ investments into certification are mainly or only realised at the downstream end of the supply chain, PMOs, exporters and in some instances retailers may consider paying price premiums for certified produce (e.g. in the case of asparagus in Thailand). In cases where demand outstrips supplies of certified produce, buyers may also pay premiums (e.g. pepper in Macedonia). However, reality shows that the potential for premium prices paid to smallholder farmers usually pales in comparison to the benefits achieved through the income increased thanks to increased yields, reduced input costs and reliable market access.

A positive result – but only achieved through the commitment of diverse stakeholders

In summary, the GLOBALGAP Smallholder Pilot Project achieved its intended results, even if it took longer than initially planned. This was mainly due to the ignorance of the comprehensive needs for capacity building and change of attitudes among farmers (technical and entrepreneurial), groups (general group and specific QMS management, leadership, cohesion and joint commercial activities) and their buyers (contractual relations and embedded services). Furthermore, the need to orient certification efforts to market opportunities; the importance of reducing transaction costs through the promotion of consistent and reliable supplier-buyer linkages; and the complexity of the supply chain systems, into which the smallholder groups have to integrate were initially largely underestimated.
4.2 Critical success factors (lessons learnt)

“The most successful GLOBALGAP-compliant smallholder schemes are highly committed to a commercial farming approach, well organised in strongly-managed producer groups, and linked to a large, well-resourced export company” (Graffham and Cooper, 2009).

Box 17: Critical success factors in GLOBALGAP Option 2 Group Certification

**Smallholder capacities sufficient to achieve group certification:**
- Group performance:
  - Group cohesion
  - Capacities for ICS/OMS management
  - Exporter/PMO linkages
- Farmers’ skills:
  - Technological skills (e.g. GAP)
  - Financial assets

**Issue: How to up-scale capacity building to achieve broad impact**

**Market prospects promising for certified smallholder supplies:**
- Market potential:
  - Market volume and growth
  - Lucrative price segments
  - Significance of smallholder shares in overall supplies
- Distribution systems:
  - Supply chain organisation
  - Transport/logistics capacities

**Issue: How to up-scale marketing skills of smallholders**

**Supply chain governance conducive for smallholder integration:**
- Fair partnership:
  - Mutual trust/contract-abiding
  - Fair distribution of profits along the supply chain
- Industry commitment:
  - Contracting farmer groups
  - Supporting certification (e.g. through embedded services)

**Issue: How to promote CSR for fair partnerships in local firms**

**Promising product features for GLOBALGAP certification*:**
- **High-value**
- **Low-cost**
- **Labour-intensive**
- **Existing demand**

**Incentives evident for the commitment of supply chain partners:**
- Income generation:
  - Profitability for all supply chain partners
  - Fair distribution of gains along the supply chain (win-win)
- Broad understanding of benefits:
  - Cost cuts, productivity gains
  - Worker and consumer health

**Issue: Which cost-benefit ratio irrespective of pilot conditions**

**Financial viability/financing for sustaining certification:**
- Access to finance via:
  - Industry embedded service
  - Private financial sector
  - Government/donor funds
- Low-cost solutions for:
  - Initial investments (infrastructure, training, certification)
  - Recurrent compliance costs

**Issue: Which solutions for smallholder low-risk attitudes**

**Adaptation to smallholder capacities as precondition for up-scaling:**
- Adaptation of the standard:
  - Simplified traceability
  - Simplified record-keeping
  - Risk-based CCPCs
- Certification costs:
  - Solutions for CB costs
  - Revision of standard fees (see sections 4.3, 4.4)

**Issue: How to assure food safety while adapting to smallholders**

**Support services competent and affordable for farmer groups:**
- Embedded services for:
  - Training/advice/supervision
  - OMS management
  - Financing
- 3rd party public/private services:
  - Extension/Training
  - Laboratories/CBs
  - Financing

**Issue: How to build viable and accountable service systems**

**Framework conditions enabling smallholder compliance:**
- Enabling policies and legislation:
  - Conducive sector policies
  - Adequate food/company laws
- Reliable/unbiased enforcement (e.g. inspections, contracts)
- Appropriate infrastructure (roads/logistic centres; public utilities such as water/power)

**Issue: Which strategic partners to advocate for necessary changes**

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*This list of promising product features for GLOBALGAP certification does not imply that other products cannot or should not be certified. However, the first three product features represent typical competitive advantages of smallholder over large-scale production systems. The fourth product feature may not be relevant in cases where supply chain operators intend to diversify products or markets respectively and prospects are promising for creating demand.*
Critical success factors – need for a multi-stakeholder and system’s approach

The results achieved illustrate the ambiguous effects inherent to smallholder group certification: compliance with GLOBALGAP can advance the integration of responsive farmer groups into global supply chains but may drive weaker small-scale farmers out of export markets. "In principle, smallholders … recognise the need to adhere to international market standards because this enhances trade confidence with their buyers. In particular, GLOBALGAP has shown to enhance market access, especially for producers in [countries] where official control (government) systems are under-developed and hence less assuring. … [However,] the main concerns on GLOBALGAP … are the high cost of certification and the complexity of implementation” (Mbithi, 2009). There is no simple solution to these two critical issues. Rather, the following success factors illustrate the need for a situation-specific (country, supply chain, groups, products) system's approach to promoting smallholder group certification (see also box on opposite page).

Smallholder capacities (group performance and farmers' skills): "The social cohesion of the … groups involved in group certification is one key success factor for sustainable certification and concurrently one of the core challenges for group certification … Hence, capacity development is essential. A common need must be identified within the group … This can be common marketing, common production, common training – but never certification as the only purpose … The most important challenges identified are capacity development at both individual farmer level and farmer group level … and strong engagement in group cohesion … Therefore, for sustainable group certification the focus … [needs to be] placed on group selection and group development” (GTZ 2008).

Incentives, financial viability and market prospects: For up-scaling group certification, it is necessary to identify (i) realistic incentives based on a cost-benefit analysis along the entire supply chain to convince supply chain operators to committing required resources; (ii) viable solutions for sustainable financing of initial investments and recurrent costs of compliance; and (iii) buyers (exporters or PMOs) capable to assuring access to markets, committed to contracting smallholder farmer groups and willing to supporting certification through embedded services.

Supply chain governance (fair partnership and industry commitment): Given that "GLOBALGAP certification can hardly be achieved by smallholder groups alone …, intense support from exporters is one core element of success. [Furthermore,] … the advantages of strong exporter support are that standard implementation is performed quickly and effectively” (GTZ, 2008). In the same line of thinking, IIED and NRI (n.d.) argue that there is a “… need to rethink the concept of ‘costs’. On average, farmers pay 14 per cent of recurrent costs associated with [GLOBALGAP] and exporters (and/or) donors pay the rest. Rather than labelling exporter investments as unsustainable, it can be argued that this illustrates a healthy and functioning system with the two private sector investors sharing the costs and benefits as part of a sustainable business model.”

Adaptation to smallholder capacities (standard complexity and certification costs): Experience shows that the main challenges are more related to certification than to compliance as such. Hence, it will be essential to find ways of adapting the costs of certification and the implementation of the CCPCs to the capacities of smallholder groups without compromising essential GLOBALGAP requirements. “On the cost, it is true that the main part (at least 85 %) … is audit fees paid to CBs [Certification Bodies], with the rest being standard fees. In order to enhance more compliance amongst smallholders, it will be necessary to initiate discussions with CBs on how credible but cost effective audit structures can be implemented. On complexity, apart from reducing CPCCs, GLOBALGAP will need to work with farmers … and other organisations to translate/simplify implementation of the standard” (Mbithi, 2009). In this context, the establishment of AfriCert, a Kenya-based/Ghana-represented CB is worth mentioning. As a local CB, AfriCert cannot only bring down costs but its inspectors also have a better understanding of how CCPCs can be reached under local conditions.

Support services and framework conditions: Last but not least, the public and private sectors play a crucial role in, firstly, establishing (public task) and lobbying for (private task) enabling framework conditions (policies, legislation, enforcement, appropriate infrastructure) and, secondly, offering appropriate, competent, affordable and accountable financial and non-financial services.
4.3 Improving the smallholder-orientation of Option 2 certification

Box 18: Joint GLOBALGAP, DFID and GTZ initiative: GLOBALGAP Africa Observer/Smallholder Ambassador project and Smallholder Task Force

Initiators
Established in 1997 by GLOBALGAP with support from DFID and GTZ

Smallholder Task Force
Six experts from different organisations in Africa and Europe representing initiatives aiming at strengthening smallholders’ compliance with the GLOBALGAP standard

Smallholder Ambassador
Dr. Stephen Mbithi, Nairobi/Kenya
CEO Fresh Produce Exporters Association of Kenya

Objectives
Collect stakeholder views and concerns related to GLOBALGAP implementation in smallholder agriculture worldwide and develop options for the GLOBALGAP standard revision.

Activities
With a view to facilitating standard implementation by smallholders worldwide, the Africa Observer project/GLOBALGAP Smallholder Task Force fulfil the following tasks:
• to represent smallholder interests in the standard setting process
• to evaluate relevant tools, guidelines and global best practices
• to initiate the setup of National Technical Working Groups in 4 African countries
• to channel the inputs from smallholders to the standard setting/revision committees

Link
http://www.africa-observer.info/index.html

Box 19: International Workshop, Frankfurt/Main, Germany, 28-29 April 2008 – GLOBALGAP Group Certification: A challenge for smallholders in Europe and developing countries

Organisers
GTZ, GLOBALGAP and Marktkontor Obst und Gemuse Baden

Participants
More than 60 representatives from African and European PMOs, GLOBALGAP, governmental and non-governmental organisations as well as development agencies

Objectives
• Exchange of experiences in GLOBALGAP group certification accumulated in pilot projects in Europe, Africa, Asia and Latin America
• Development of recommendations for the ‘Implementation/Interpretation Guidelines for Smallholders’ for the forthcoming 2011 GLOBALGAP standard revision

Results
Recommendations developed for:
• the reflection of the smallholder reality/risks in the General Regulations and CCPCs
• the reflection of smallholder group capacities in the OMS requirements
• the development of approaches to building smallholders’ capacities for compliance

Link
http://www.africa-observer.info/docs_sub1.html
GLOBALGAP Option 2 Certification – challenge and opportunity for smallholder inclusion!

Until recently, discussions on the effects of standards on small-scale farmers centred on the risks of exclusion, nurtured by figures from Kenya showing dramatic declines in smallholder participation in vegetable exports. But evidence is growing that compliance with GLOBALGAP can as well enhance competitiveness of smallholders and support their participation in global supply chains. Even if data are not yet available, reports on increased productivity as well as reduced input costs and rejects are not any more only anecdotic. These findings of the pilot project can be confirmed by recent studies reporting for example that “… the returns on the associated investments in terms of export sales growth are considerable. … Given that firms in the survey tended to procure a significant proportion … from small outgrowers, … we might reasonably expect appreciable ‘knock-on’ benefits to small producers.” (Henson, Masakure and Cranfield, 2009)

“While standards compliance (or non-compliance) can bring about changes that harm the livelihoods of the poor, advantages may accrue to those able to participate in evolving supply chains. This can certainly apply to smallholders, especially those operating in suitable locations with adequate infrastructure and in the context of effective producer organizations and long-term relationships with buyers. Smallholder farmers can frequently adopt the necessary technical measures and investments to comply with emerging standards. A key challenge is thus to reduce, through collective action, the transaction costs associated with monitoring and certifying compliance. Public policy and investment can make a difference in the pattern of ‘winners’ and ‘losers.’” (Jaffee, 2005).

Concluding, group certification is not an easy process and the pilot project has shown that smallholders cannot achieve certification on their own. The main issue is not whether small-scale farmers are able to achieve certification and integrate into up-market supply chains; the question is rather how the weak service sector and business environment can be compensated for so as to enable smallholders to achieve certification without compromising supply chain competitiveness.

Experience suggests that (i) standard regulations have to be adapted to the actual risks of smallholder production; (ii) technical and managerial capacities need to be built; and (iii) initial investments as well as recurrent costs of compliance need to be made affordable for smallholders or, at least partly, be borne by business partners reaping fruit from smallholders’ low-cost, labour-intensive production or by other stakeholders committed to integrating smallholders into food supply chains.

Selected initiatives supporting better smallholder-orientation of GLOBALGAP Option 2 …

• GLOBALGAP Africa Observer/Smallholder Ambassador project: A GLOBALGAP initiative supported by DFID and GTZ for strengthening the representation of smallholder interests in standard setting processes (see box on opposite page).
• International Workshop “GLOBALGAP Group Certification: A challenge for smallholders in Europe and developing countries” (see box on opposite page) and GLOBALGAP Tour 2009 (http://www.tour2009.org/): Initiatives for assuring stakeholder participation in standard revision.
• GLOBALGAP Smallholder Support Kit: A GLOBALGAP initiative for making the best practices developed in capacity building for QMS development and management as well as good agricultural practices available to the public.
• Strengthening the national quality infrastructure through the establishment of local Certification Bodies: A GTZ (Ghana) and AfriCert (Kenya) initiative for opening a branch office of AfriCert in Ghana with a view to reducing certification costs.
• Up-scaling KenyaGAP in the local market: An initiative of the Fresh Produce Exporters Association of Kenya (FPEAK) in cooperation with supermarkets for upgrading local market supplies to the (‘domesticated’) GLOBALGAP-benchmarked KenyaGAP standard.

... and the key role of standard owners

A regular update of the generic manual by the standard owner to follow both, the revision of the GLOBALGAP standard and developments in production systems and local framework conditions will be of essential help for any smallholder farmer group interested to establish a Quality Management System for Option 2 certification.
4.4 Recommendations for a practical approach to up-scaling group certification

Box 20: Possible interventions to up-scale GLOBALGAP Option 2 Smallholder Group Certification
(to be adapted case by case to the prevailing country, supply chain and smallholder group features)

Adapt the GLOBALGAP standard to smallholder capacities and risk profiles (Mbithi 2009)

<table>
<thead>
<tr>
<th>GLOBALGAP reference</th>
<th>Taskforce suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traceability</td>
<td>Allow group level tracing with simple systems for product segregation</td>
</tr>
<tr>
<td>First aid</td>
<td>Scale the standard’s first aid check-list to the level of risk</td>
</tr>
<tr>
<td>Worker housing</td>
<td>Establish reasonable criteria for basic needs at small-scale farm level</td>
</tr>
<tr>
<td>Worker toilets</td>
<td>Consider substitution of field toilets when fields &lt; 500 m from farm house</td>
</tr>
<tr>
<td>Water requirements</td>
<td>Scale down the complex calculation method to the smallholder level</td>
</tr>
<tr>
<td>Risk assessment (land)</td>
<td>Consider possibility of area-based risk assessment (instead of farm-based)</td>
</tr>
<tr>
<td>Risk assessment (store)</td>
<td>Consider group-based risk assessment if group practices are homogenous</td>
</tr>
<tr>
<td>Risk assessment (MRL)</td>
<td>Consider group-based risk assessment if group practices are homogenous</td>
</tr>
<tr>
<td>CPCCs (number)</td>
<td>Reduce checklists (avoid repetition and leave aside CPCCs not applicable)</td>
</tr>
<tr>
<td>CPCCs (audit level)</td>
<td>Determine CPCCs to be audited at QMS instead of individual farmer level</td>
</tr>
<tr>
<td>CPCCs (environment)</td>
<td>Consider adaptation of the CPCC-list to smallholder risks/capacities</td>
</tr>
<tr>
<td>Standard fees</td>
<td>Develop a proportional fee structure based on unit area certified</td>
</tr>
</tbody>
</table>

Identify crops with promising market potential for Option 2 certification

- Identify crops for which smallholder groups have a competitive advantage over larger-scale production
- Assess market potential and access barriers (growth trends, market access requirements, etc.)
- Map the organisation of the supply chain, the distribution, transport and logistics systems

Identify incentives facilitating investment decisions/commitment of farmers and their buyers

- Develop simple tools for cost-benefit analyses (CBA) to minimise smallholders’ investment risks
- Identify economic and social benefits along the entire supply chain (see section 4.1 for a list of benefits)
- Support exporters’/PMOs’ supply sourcing through mapping of smallholder production areas (GIS/GPS)

Promote supply chain governance conducive for smallholder integration into supply chains

- Widen the perspective from a narrow smallholder to a supply chain focus to assist contract relations
- Promote fair supply chain partnerships, also in the sense of Corporate Social Responsibility (CSR)
- Build capacities in buyer firms for relevant embedded services (technical, managerial, financial)
- Promote industry self-regulation/arbitrage to reduce deceptive practices (side-selling, contract breach)

Develop viable financing mechanisms for initial investment costs and maintenance of certification

- Identify sources of financing (embedded, private financial sector or government/donor funding)
- Develop innovative solutions for reducing non-recurrent and recurrent costs of compliance:
  - Discuss credible but cost effective audit structures with Certification Bodies
  - Develop low-cost equipment (e.g. hand-washing facilities) and infrastructure (e.g. chemical stores)

Build capacities of smallholder farmers and farmer groups to achieve and maintain certification

- Adapt training to smallholders’ capacities (e.g. material for illiterates, didactics for adult learning)
- Improve farmer groups’ cohesion and management through training and participatory QMS development
- Assist farmer groups to adapt their business strategies/production ranges to market trends

Build capacities of private and public service providers to support smallholder group certification

- Build capacities of private (in-firm embedded or stand-alone) and public (extension) service providers
- Upgrade the national Quality Infrastructure (e.g. internationally accredited laboratories and CBs)

Create enabling framework conditions for smallholder group certification

- Establish public-private forums to identify areas for public investment
- Ensure conducive policies/legislation/administration (e.g. food inspection, contracts, dispute settlement)
- Upgrade infrastructure (road and communication networks, export facilities, access to water and energy)
Complex challenges for smallholder group certification

As the critical success factors suggest, smallholder group certification is subject to multifaceted challenges. Accordingly, quite complex strategies have to be developed depending on the prevailing situation with regard to the access requirements in target markets, the governance structures in the supply chain, the features of the smallholder groups, the performance of the service sector as well as the in-country and export market framework conditions.

Different roles of the private sector, the public sector and development partners

Obviously, the private sector, the public sector and development partners play critical roles in promoting a better market-integration of smallholders without compromising supply chain competitiveness. Roles and responsibilities have to be defined to foster synergies and avoid inefficient isolated approaches: “The private sector drives the organization of value chains that bring the market to smallholders and commercial farms. The state – through enhanced capacity and new forms of governance – corrects market failures, regulates competition, and engages strategically in public-private partnerships to promote competitiveness in the agribusiness sector and support the greater inclusion of smallholders and rural workers” (The World Bank, 2007).

Private sector leadership will be essential: with farmers committing resources to the certification process and owning the QMS and with PMOs, exporters and processors respectively playing a key role in supporting their supplier networks. Despite the important responsibilities the public sector and development partners assume in fostering smallholder integration, both have to abstain from distorting existing private initiatives and commitment since they cannot replace the actual business partners of smallholders in the supply chain. Public-private partnerships (PPP), though, can serve as an appropriate tool for promoting smallholder inclusion into global supply chains by adding public (governments, donors) value to private initiatives.

Highlights on some key recommendations

Following the logic of the lessons learnt recommendations for up-scaling Option 2 certification can be grouped into eight intervention areas as suggested in the list in the box on the opposite page. The following considerations highlight some key recommendations:

- **Group certification has to be profitable** bearing clear economic and/or social incentives for: (i) small-scale farmers in order to minimise investment risks of the resource-poor; and (ii) buyers (PMOs, exporters and/or processors) in order to motivate them to establishing contracts with farmer groups and committing resources to support the groups in achieving certification.

- **A supply chain perspective has to be adopted:** (i) for assessing costs and benefits of smallholder group certification since costs may be incurred at one stage of the supply chain while benefits may accrue at other stages; and (ii) for analysing challenges and opportunities related with access to input and output markets, farming contracts and embedded services.

- **Farmer groups need to have a good understanding** of the standard requirements and a clear interest in achieving certification right from the onset. Furthermore, the group members already have to basically master the production; the groups have to be sufficiently well organised and cohesive and should have some experience in common commercial activities.

- **Farmer groups have to be linked to business partners** in the supply chain who are willing to support their smallholder suppliers during the certification process (embedded non-financial and/or financial support) and to take up the produce. Business relations are important both for short-term success (first certification) and long-term sustainability (retention of the certificate).

- **Viable financing mechanisms need to be developed** to enable farmer groups or their buyers (e.g., in an out-grower system) respectively to bridge the financing gap between short-term compliance and certification costs and medium- to long-term return on investments. Government or donor funding (subsidies) may come in, however as a solution of last resort only.

- **Sufficient resources and time are required** for broad-scale upgrading of necessary capacities of smallholder groups and group members and for promoting reliable, consistent, trustful and equitable supplier-buyer linkages. Government or donor support programmes certainly play a role, especially in supporting the upgrading of capacities.


**GTZ (N.D.):** GLOBALGAP Smallholder QMS Set-up Guide – How to establish QMS in your group. Based on: GLOBALGAP IFA Ver. 3.02 QMS checklist_Mar 08, English Version. CD-ROM attached.


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