

**Private standards, exporting countries and producers :**

**A comparative analysis**

**Persillet Vanessa, Latouche Karine**

INRA, UR1134 LERECO, Rue de la Géraudière, 44316 Nantes, France.

[vanessa.persillet@nantes.inra.fr](mailto:vanessa.persillet@nantes.inra.fr); [karine.latouche@nantes.inra.fr](mailto:karine.latouche@nantes.inra.fr)



**2èmes journées de recherches en sciences sociales**

**INRA SFER CIRAD**

11 & 12 décembre 2008 – LILLE, France

# Private standards, exporting countries and producers: a comparative analysis

Vanessa Persillet\*, Karine Latouche\*

## Abstract

Private voluntary standards are increasingly impacting international trade. They are becoming more established in many industrialized countries and are also shaping the export supply chain for fresh fruit and vegetables in some developing countries. Such standards as GlobalGap are imposed by retailers through contracts with producers or exporting firms. They may distort the institutional framework and governance characteristics applied to trade and that appear as a new source of fragmentation for exporters. As GlobalGap is achieving greater importance, this article compares and analyses two different ways producers can deal with standards: i) they can work to comply with GlobalGap; or ii) as in a French case to be studied, producers can initiate and specify their own standard leading to more feasible, realistic, and affordable requirements. In this case, French potato producers chose to adopt a collective norm: AFNOR NF V 25-111 which is different from most private voluntary standards in term of elaboration, objectives, implementation and recognition. A literature review shows that drawbacks remain especially for small-scale growers in some developing countries choosing to comply with GlobalGap. The NF V 25-111 norm is currently covering half of the production of “late season fresh” potatoes production in France and is a driving factor for France to be the largest exporter of late season fresh potatoes in the European Union in 2007.

*Keywords: Developing countries; France; Private voluntary standards; Collective norm; Fresh fruit and vegetables; Potatoes; Supply-chain.*

---

\* INRA, UR1134 LERECO, Rue de la Géraudière, 44316 Nantes, France.  
Contact: [vanessa.persillet@nantes.inra.fr](mailto:vanessa.persillet@nantes.inra.fr); [karine.latouche@nantes.inra.fr](mailto:karine.latouche@nantes.inra.fr)  
Thanks to Monique Harel who manages French custom databases.

## 1 Introduction

Private voluntary standards (PVS) are increasingly impacting trade (Garcia *et al.*, 2004). They are becoming more established in many industrialized countries and have non negligible impacts on developing countries. Most of these PVS are initiated by retailers from industrialized countries, especially from European markets. In Europe, retailers are highly concentrated with an average market share of 70 per cent (the five largest retailers represent a market share ranging from 36 % in Italy to 80 % in the UK or 89 % in Finland). The various configuration of private standards have evolved in response to regulatory developments<sup>1</sup> and, more directly, to consumer concerns. For retailers, such standards may function as a way to position themselves competitively in markets for high value agricultural and food products (World Bank, 2005 in Thankappan S., Marsden T., 2006). They are typically introduced by the major buyers in a market and fall within a particular contractual context. The obligation of compliance with PVS included in a contract signed between a retailer and suppliers (whatever their nationality) is an efficient way to ensure that: i) regulation targets are achieved, and ii) suppliers are capable of producing the specified (agreed upon) products. Since each retailer can formulate PVS to meet its specific needs, this can lead to a large heterogeneity of requirements addressed to suppliers.

Given the high concentration of retailers across European markets, compliance with PVS appears as a mandatory condition to access European markets from a supplier's point of view. In this paper, we will focus on fruit and vegetables suppliers and two selected ways they can deal with retailer requirements. One way is *via* an international PVS and GlobalGap is the main private standard in this sector. Suppliers may view a partnership with GlobalGap as an initial condition to contract with most European retailers. In this context, can fresh fruit and vegetables suppliers avoid such a constraining compliance? Are alternatives available to access retailer supply chains? More precisely, could regional or national food quality assurance schemes be viable alternatives?

As a representative example of such an alternative, we will present the French norm NF V 25-111<sup>2</sup>, a collective norm initiated by French producers of potatoes in 2000 and implemented by

---

<sup>1</sup> Since a decade, the European Union (EU) and international authorities aim at harmonising the European and international rules to promote trade. There is a strong move toward modernizing legislation into a coherent and transparent set of rules, reinforcing controls from the farm to the fork, and increasing the capability of the scientific advice system, so as to guarantee a high level of human health and consumer protection (Garcia, 2006).

<sup>2</sup> Full french name: “*Bonnes pratiques de la production de la pomme de terre de conservation destinée au marché du frais, compatibles avec les objectifs de l’agriculture raisonnée*”.

Papier présenté aux 2èmes journées de recherches en sciences sociales,  
INRA SFER CIRAD, Lille, décembre, 2008.

the French Standard Association (AFNOR). This norm currently encompasses half of the late season fresh potatoes<sup>3</sup> market in France and gives the opportunity for French producers to export to major European retailers, without complying with Globalgap requirements.

The paper is structured as follows. The second section proposes a comparison of the GlobalGap standard with the French norm NF V 25-111 in term of elaboration, objective, implementation and recognition by retailers. Then the consequences of both systems are discussed. The third section deals with the impact of compliance with Globalgap for developing countries. A growing literature now exists showing both some important benefits and some huge drawbacks that also emerge. The fourth section presents an overview of the evolution of French exportation of potatoes illustrating the increasing benefits of the French norm enforcement. The last section concludes.

## 2 What strategy for producers to gain export markets?

This section aims to describe two tools available for fresh fruit and vegetables producers. The first one considers the compliance with GlobalGap to access European retailers' supply chains. The second one considers a French collective approach leading to the implementation of a quality assurance scheme.

### 2.1 Two available tools: GlobalGap or a collective approach

It is worth noting five distinctive points between GlobalGap certification and the collective norm: the first three are fundamental characteristics; the two others arise from specificities of the collective norm.

Firstly, GlobalGap is ranked in the category of private standards which are introduced by clients on their suppliers like BRC or IFS<sup>4</sup> whereas the NF V 25-111 norm belongs to the category of collective norm (Latouche *et al.*, 2007). Regarding private standards, their elaboration is based on the points of view of private players: only those who take the initiative are involved in their elaboration. Integration of other users of the arrangements only occurs later and *a posteriori*. GlobalGap was formulated by the downstream supply-chain: agro-food industries and big retailers mainly located in North Europe (Netherlands, Germany,

---

<sup>3</sup> Among potatoes that are fresh market oriented, our study will focus on late season potatoes (or "conservation potatoes" planted in april-may period and harvested four or five months later) supply-chain. The others "fresh" potatoes like early and new potatoes (planted on winter period and harvested three months later, before maturity for new potatoes) depend on others kind of approach such as Appellation of Controlled Origin for instance.

<sup>4</sup> British Retail Consortium initiated in 1998 by English retailers and International Food Standard initiated in 2002 by German retailers.

Papier présenté aux 2èmes journées de recherches en sciences sociales, INRA SFER CIRAD, Lille, décembre, 2008.

Switzerland, United Kingdom, Italy, Belgium, Austria, Ireland, Spain and Sweden). The aim of the GlobalGap initiators was to make this standard accepted around the world and to create more transparency between buyers and suppliers. In January 2005, members of GlobalGap's initiative (i.e. main European retailers) made certification mandatory for suppliers including all small scale growers of fruit and vegetables from developing countries. Due to the market power of major European retailers it's difficult to export fruit and vegetables to these markets without GlobalGap certification.

From a retailer's point of view, numerous advantages result from a certification favoured by customers and enforced by a contract. This led to commercial (reassuring purchasers, accessing new markets provided certification is well-known), organisational (streamlining the supply-chain and defining the role of each stakeholder) and qualitative (food quality and safety) advantages, traceability and lasting improvement. More precisely, standards such as GlobalGap minimise risk, provide a reference frame for fresh produce (or food) trade, streamline and improve many aspects of production and supply, help to maintain quality and increase business efficiency (streamlining supply-chains, reducing information barriers and guaranteeing supply...) (NRI, 2008). PVS have also distinct characteristics that set them apart from technical regulations, they are arguably more flexible, more dynamic and predominantly process-based (Henson *et al.*, 2005).

From a producer's point of view, the situation is different. On the one hand, when selling to multiple retailers, producers may avoid multiple audits, each checking different criteria every year. On the other hand, the GlobalGap certification requires huge investments from producers, especially at the farm level. A detailed analysis of the advantages and drawbacks of this certification on producers will follow in section°3.

Regarding the French collective norm NF V 25-111, the elaboration was different. It is based on a collective approach dealing with quality and environmental issues in potato production. Due to its particular history and organisation, the French potato supply-chain sought to implement an innovative approach for the agricultural sector. This stemmed from the lack of a Common Market Organisation (CMO) for potatoes. Sustained by the Interprofessional National Centre for Potatoes (CNIPT), producers started to work on the development of new requirements in 1992. The first « good practices guide » emerged in 1994 and was formalized in 2000 with the enforcement of the AFNOR NF V 25-111 norm whose requirements go from the plot choice to the sale. Not only producers but cooperatives and traders are also

concerned. Moreover, as big French retailers' expectations match the norm requirements, they don't ask for additional specifications.

**Box 1: Specificities of the fresh fruit and vegetables supply-chain organisation in France**

On the whole, the different kinds of French quality management approaches for fruit and vegetables supply-chain organisation are classified either by nature of requirements (healthy, organoleptic, or nutritional quality), or by the way requirements are structured and required (Good agricultural practices, products specifications or quality/environmental system management), or by the type of the need to satisfy.

Two approaches to developing norms are identified. Firstly, the "systemic approach", that can be individual (i.e. ISO 9001, 14001, HACCP...) or collective (i.e. Agri-confiance), refers more to societal concerns such as environmental issues, workers' security, etc. It aims to help producers buy their equipment, to make organisational choices... Nevertheless, it doesn't directly take into account the final quality of the products.

Secondly, the "product-approach" mainly aims at satisfying purchasers expectations. This kind of approach can also be individual (i.e. Organic Agriculture, Product Certification for Conformity or the NF V 25-111 norm), or collective (i.e. Protected Geographical Indication, Red Label, Appellation of Controlled Origin...). In contrast to the systemic approach, product-approaches define production tools and methodologies needed to implement purchasers' specifications on quality. In order to comply, different kinds of technical commitments (i.e. traceability, harvest, storage, hygiene...) are required, certain data are needed at the production and storage levels, and a quality internal audit is mandatory.

The product approach can be combined with the systemic approach because they are complementary. If the production is both fresh market and processed market oriented, a combination of the NF V 25-111 norm, Global Gap and processing industries' requirements is frequent.

Collective norms such as NF V 25-111 norm are developed by standardisation organisations (ISO; national standards association like AFNOR in France); all partners involved, public and private, affected by these standards are invited to participate in their preparation. It is worth underlining that the AFNOR platform's main objective is to allow partners and especially producers and upstream operators to control their quality and environmental management systems on French farms. Currently, it is one of the major reasons for supporting the French norm in the late season fresh potatoes sector instead of implementing a standard harmonisation through GlobalGap.

Secondly, developments over recent years in the food safety field have clearly been the driving force behind the changes that have been made to all these arrangements. Even if the two approaches seem to be close in spirit, fundamentally their objectives differ. When collective norms are being written, the aims are precise: to generate reference documents containing solutions to the technical and commercial problems that arise between players; facilitate trade (transparency and harmonisation); rationalise, develop and adapt production methods and company organisations; and follow the provisions under public regulation. Standards imposed by clients on suppliers, as GlobalGap, serve to build confidence amongst

Papier présenté aux 2èmes journées de recherches en sciences sociales,  
INRA SFER CIRAD, Lille, décembre, 2008.

partners in respect to the finished product, within a contractual relationship, especially if the client accepts liability for the finished product<sup>5</sup>.

Thirdly, distinction may also be made between the various standardisation arrangements by examining the way they are applied. The implementation of norms<sup>6</sup> is voluntary whereas standards imposed by clients on suppliers including GlobalGap certifications are usually covered by contractual terms. Compliance with GlobalGap certification is mandatory and controlled by certification bodies (frequency: once/twice a year). In the case of NF V 25-111, despite its voluntary characteristic, an internal audit made by an external body is also mandatory but only every three years.

In addition, two specificities of the French norm are to be drawn. The first one is that the French norm provides a certification at the farm level whereas GlobalGap certifies only the produce. The second one is that GlobalGap doesn't provide consumer recognition because there is no related label visible on the final product. On the contrary, since 2005, the NF V 25-111 norm allowed producers to apply the label "Pommes de terre de France – Qualité, Environnement" directly on the product which is visible and recognisable by the consumers.

## 2.2 Export market recognition: a common key point for export success

As said before, GlobalGap certification is required by most of European retailers. Hence the compliance of a product with this certification implies its recognition by these retailers. Regarding the implementation of the French potato norm, this recognition is not automatic but this issue was clearly included in the initial work on this norm. The French norm was built in order to be compatible with the equivalent standards existing in other European countries<sup>7</sup>. This norm is currently recognised in the main importing European countries (Spain, Italy, Germany and Belgium). In terms of strategy, it would be more profitable to enlarge the acceptance of the norm rather than to implement a double certification for every producer.

In our case, AFNOR has engaged the mutual recognition to three main EU markets: Germany, Belgium and Spain. That means that if the retailers of those countries ask their national

---

<sup>5</sup> These standards are directed at the relationship of mutual confidence between buyers and suppliers; three elements are required: the content, the inspection protocol and the qualification of the inspector (or the auditor where the inspection is allocated to a third party organisation).

<sup>6</sup> For official standards, implementation may also be made mandatory by the regulations.

<sup>7</sup> The mutual recognition principle has originally been developed in the EU policy (New Approach), which aims to harmonise national member state legislation. In this context, this principle guarantees free movement of goods and services without the need to harmonise Member States' national legislation. Goods which are lawfully produced in one Member State cannot be banned from sale on the territory of another Member State, even if they are produced to technical or quality specifications different from those applied to its own products. The only exception allowed – an overriding general interest such as health, consumer or environmental protection - is subject to strict conditions.

Papier présenté aux 2èmes journées de recherches en sciences sociales, INRA SFER CIRAD, Lille, décembre, 2008.

suppliers for a national norm and if the NF V 25-111 norm is officially recognized by proper authorities (AFNOR's counterparts) as equivalent to that national norm, French producers complying with the NF V 25-111 norm can supply German, Belgians or Spanish retailers.

In Germany, the specifications of the QS<sup>8</sup> standard applied to potatoes are similar to those included in the French norm. Only some differences about control remain. QS is a voluntary quality assurance system relevant for each level of the supply chain. It was founded in 2001 by participants in the food chain. Formerly established for the meat sector, the system was expended to the area of "fresh fruit, vegetables and potatoes" in 2004. A key feature of the QS system for fresh fruit, vegetables and potatoes is QS Residue Monitoring. The main goal is to determine whether the maximum residue level may have been exceeded. The specialised company "Obst-Gemüse-Kartoffeln GmbH" was founded allowing, via its advisory board, representatives from production, product marketing organisations and food retailers to develop the content of the QS system.

Mutual recognition is also occurring between the French norm and the Belgian Integrated Chain Quality Management (ICQM) standard which was recently created (2006) and corresponds to a guarantee for basic quality in a broad sense (food safety, traceability, environment and technological quality) at the level of the arable crop and horticulture sector (from "farm to fork"). The Concertation Platform for the Processing of arable Crops (CPPC<sup>9</sup>) aims to develop these standard and Végaplan deals with its administrative management.

Moreover, there is a possibility of mutual recognition with the fresh fruit and vegetables standard of the Spanish Association for Standardisation and Certification (AENOR) in Spain, equivalent to the AFNOR in France. They are both full members and representatives of International and European standardisation bodies (ISO and CEN<sup>10</sup>), enabling French and Spanish experts to participate in these bodies. This undoubtedly gives an additional strength to the collective norm compared to the private standard. The first is more compatible with European and international standardisation policies and technical harmonisation in particular.

Lastly, it is important to note that the French NF V 25-111 norm was originally elaborated taking into account the GlobalGap requirements. In 2003, a working group was created in order to translate the manual in French and to find compliance criteria between national

---

<sup>8</sup> Qualitätssicherung: Quality assurance in German.

<sup>9</sup> A Belgian platform founded in 2000, in which most sectors and companies that process raw materials derived from crops are represented.

<sup>10</sup> International Standardisation Organisation and European Standardisation Committee.

Papier présenté aux 2èmes journées de recherches en sciences sociales, INRA SFER CIRAD, Lille, décembre, 2008.

quality management schemes (including NF V 25-111) and GlobalGap. However, the benchmarking is a complex process which is not currently completed.

The two following parts will describe the main consequences of the two strategies, GlobalGap on the one hand (section 3) and the French norm on the other hand (section 4).

### 3 Producers and quality requirements in developing countries: a review of literature

Fresh produce (essentially fruits and vegetables) exports from developing countries have indisputably increased since the end of the 1990s despite the imposition of more stringent public and private standards on safety and quality. In the UK, 60 per cent of fresh fruit and vegetables are sold by retailers (NRI, 2008). The remaining 40 per cent are oriented toward wholesale and food services sectors. Fresh fruit and vegetables imports grew by an estimated 6 per cent per annum from 1996 to 2004. Supermarkets are the key end markets for all air-freighted, high-value fresh produce that are imported to the UK from Sub-Sahara Africa essentially (650,000 tons in 2005).

It's worth noting that this expansion likely follows from the increased importance of PVS<sup>11</sup> (GlobalGap covered more than 81,000 certified producers in 80 countries in 2007 against 18,000 in 2004) and the arrangements it can provide. For instance, there is a benchmarking process that enables existing national or regional farm assurance schemes to be recognised as an equivalent to GlobalGap (ChileGap, ChinaGap, KenyaGap, JapanGap...). This system aims at qualifying and harmonising different standards around the globe in order to facilitate access to the European markets. And the number of farmers exporting to developed countries markets has grown despite of major disadvantages in term of infrastructure, rural education and geography, and the high level of compliance they have to reach. Nevertheless, PVS like GlobalGap are also claimed to have disadvantageous aspects.

#### 3.1 Benefits

On the whole, GlobalGap's greatest reported benefit for small-scale growers (NRI, 2008) is the opportunities it provides for preferential market access. For many developing countries, trade is essentially gravitating toward markets where clients and consumers can pay a

---

<sup>11</sup> Almost 70 per cent in European countries and 16.3 per cent in African countries (included 11.6 per cent for Mediterranean countries; among African countries South Africa and Madagascar represent 70 %). South America (7.5 %), Asia and Oceania (6 %) and North America (0.5 %) are less concerned (at least in terms of certification) by this standard.

Papier présenté aux 2èmes journées de recherches en sciences sociales, INRA SFER CIRAD, Lille, décembre, 2008.

premium for increased value-added. This includes access to produce markets, credit, and quality inputs. In addition, there are considerable perceived 'non-financial' benefits including production of quality produce, improved field hygiene, better knowledge of pesticide use, and wider farm management benefits. This is particularly obvious for developing countries in Africa (Kenya, Uganda, Zambia, Madagascar...) (Jaffee, Masakure, 2005; Minten *et al.*, 2006; Maertens, 2006; NRI, 2007; Okello, Swinton, 2007; UNCTAD, 2008) but it extends also to South America (Chile, Peru...) (OCDE, 2006; UNCTAD, 2007b) and Asia (Malaysia, Thailand and Viet Nam) (UNCTAD, 2007).

As a noteworthy African example of increasing preferential market access, during the 1990-1998 period, the UK was the destination for about 55 per cent of Kenya's vegetable trade. In recent years, this share has increased to over 70 per cent. For Kenya's vegetable sector, the profitability of trade in bulk produce had sharply declined by the early 1990s (Jaffee, Masakure, 2005) due to competition between Kenyan companies and other exporting countries (Mediterranean countries). There was a shift in product mix and market segment focus, trade in labor intensive products (French beans, runner beans, snow peas and snap peas) and in selected prepacked vegetables (mixed salads, assortments of cut vegetables...) has become the primary source of profits for the leading firms.

The Peruvian case (Jaffee and Masakure, 2005) shows that accessing the markets of developed countries can be achieved with the coordinated work between the industry and government. For one defined product, asparagus, they have worked together to market and maintain the quality of national products through the adoption of national and international standards (mainly HACCP and EurepGap). With some investments to expand cultivation and improve infrastructure, the increasing production<sup>12</sup> of high-quality Peruvian asparagus has led to increased local incomes and decreased unemployment in some of Peru's poorest regions.

Relatively low labour costs have been one of the primary sources of competitive advantage. Nonetheless, new investment, quality assurance, and food safety management systems have been necessary for those repositioning. Exporting companies provide considerable help at every production stage. This scheme spurs many farmers to comply especially when the local markets are too limited for such high-care products. Furthermore, during the mid-1990s, several firms began to experiment programs involving smallholders. Henson *et al.* (2005) pointed out that despite two or three years of learning (a steep learning curve) for certain

---

<sup>12</sup> In 2003, Peru was the largest exporter of asparagus and accounted for 22 per cent of the world value of exports.

Papier présenté aux 2èmes journées de recherches en sciences sociales, INRA SFER CIRAD, Lille, décembre, 2008.

crops (Mangetout (peas) or fine beans), small-scale producers consistently attain export quality standards as well as large producers. In the case of baby corn, small-scale producers significantly out-perform large-scale producers in some years. In addition, provided they have joined or formed farmer's groups, compliance with standards was even more beneficial. Formation of a group enabled them to achieve economies of scale and collectively insure against risks.

Okello and Swinton (2007) also demonstrated that small (and even all sizes) farmers in Kenya could safeguard their specialized medium and long-term investments by using contracts. For the Zimbabwean fresh produce sector (Jaffee, Masakure, 2005; Henson *et al.*, 2005), smallholder export-oriented production was expanded under contract farming arrangements with private companies. As in the previous Kenyan case, prices and purchases were guaranteed, leading to less uncertainty for producers. The exporting company has been able to establish long-term and clearly defined relations with its supply base of almost 4,000 producers. The producers under contract are dependent on the company to obtain a viable return from a product for which there is little or no local market. At the same time the company's ability to fulfil customer orders at any point in time is reliant on the integrity and efficacy of a relatively small group of producers. This means that the relationship is more secure for both parties.

A study on small farmers in Madagascar (Minten *et al.*, 2006) producing for European supermarkets pointed out that given the right incentives and contracting systems, small farmers in developing countries - and in Africa in particular - can successfully participate in these emerging high value chains. Contracts offer them access to a source of income during the lean period, inputs on credit, and learning of new technologies. They also get a stable income during the year.

### 3.2 Drawbacks

The previous section shows there is evidence that successful exporters, mainly large export companies, provide positive incentives to small-scale growers for supplying under contract to European retailers. Accordingly, for producers and especially small-scale producers, the capability to comply with such PVS is extremely low without outside investments. On average, farmers paid 36 per cent, exporters paid 44 per cent, and donors paid 20 per cent of the cost to get GlobalGap certification (Graffham *et al.*, 2007).

Papier présenté aux 2èmes journées de recherches en sciences sociales, INRA SFER CIRAD, Lille, décembre, 2008.

It's worth noting that the export development failures are more often associated with smaller companies who lack the necessary resources to operate an efficient and sustainable GlobalGap compliant scheme (NRI, 2008). That's even more obvious when taking into account that donor support has been a significant factor in encouraging attempts to comply with GlobalGap. Smaller export companies especially, have relied heavily on donor support amounting to 40-100 per cent of establishment costs as compared to 15-28 per cent for the larger companies. Some of these small companies recognized that they cannot maintain the system once donor support is withdrawn.

The need for producer investments to comply with PVS requirements raises the question of the economic dependence of developing countries, as highlighted by Chemnitz *et al.* (2007). More precisely, several studies indicate that the economics of the system are currently pushing small-scale growers away from the supermarket-driven horticultural marketing and trade and especially from export markets that demand GlobalGap compliance (Minten *et al.*, 2006; Henson *et al.*, 2005; OCDE, 2006; NRI, 2007; NRI, 2008).

In the Kenyan case, UK supermarkets have been buying increasingly from estates instead from smallholders (Minten *et al.*, 2006; Jaffee, Masakure, 2005; Okello, Swinton, 2007). In 2003, when GlobalGap implementation started, exporters sourced produce from 9,342 small-scale producers (and 45,000 dependents: family and waged labour) but by 2006, 60 per cent of these growers had been dropped (or had excluded themselves) due to problems with implementation of the standard (Jaffee, Masakure, 2005; Okello, Swinton, 2007; Graffham, 2007; NRI, 2008). The primary and predominant reason given for exclusion was more due to financial viability (high investment and operating costs and lack of or inadequate price premium for certified crops) rather than technical ability to meet the standard. In addition, the most common reason for individual grower withdrawals from GlobalGap was an inability to deal with complexities of the standard.

Some authors also briefly raised the issue of the procurement of the local market (Jaffee, Masakure, 2005; Minten *et al.*, 2006; Okello, Swinton, 2007; NRI, 2008). The shift towards production of high value products in developing countries could threaten local supply. In a context of food crisis, the impact of such structural change in production organisation in developing countries should be deepened.

Concerning PVS more precisely, studies in several countries point out the considerable operational changes and costs required to comply with food safety and quality requirements

Papier présenté aux 2èmes journées de recherches en sciences sociales, INRA SFER CIRAD, Lille, décembre, 2008.

that are subject to on-going change<sup>13</sup>, and the associated risks for small-scale producers (Henson *et al.*, 2005; OCDE, 2006; NRI, 2007; NRI, 2008).

There are costs to be borne and these are usually paid by the supply chain participants (often the last among the chain) rather than the retail organisations (NRI, 2008). The required “up front” investment is prohibitive in many cases, especially when the producer is unable to access formal credit institutions (Henson *et al.*, 2005). Moreover, the entire cost structure of production can be changed by high-value inputs for example such as agro-chemicals and fertilisers.

Furthermore, there is an economic threshold for the size of a smallholder scheme (NRI, 2007; NRI, 2008) that exporters are willing to work with, related to the perceived high cost of technical support per farm. And as the standards became stricter, a company is forced to increase the level of oversight by employing more staff at its centres where producers are grouping. At that time, controls are reinforced and penalties for non-compliance are more severe. As a result, the numbers of producers and collection centre staff decline, the cost per producer increases and the company’s competitiveness relative to other exporters (inside the country or with other exporter country) decreases.

Moreover, although companies bear much of the risk along the supply chain (fluctuations in input costs, output prices and air transport rates), there is also a risk for small-scale producers (Henson *et al.*, 2005). Fluctuations in crop yield and quality can leave them with a debt equal to the cost of inputs provided under credit. The level of risk has increased for both parties over time in line with the imposition of stricter food safety and quality standards. That means that producers are screened to ensure that they have the required resources (mainly land, labour and water), abilities, and commitment to supply under the strict production standards. This creates significant challenges in managing new producers and integrating them into the supply chain.

---

<sup>13</sup> Version 3 of GlobalGap introduced in 2007, sets the bar higher: additional labelling, testing of water, facilities and certificated training for workers, more stringent worker conditions, record keeping and product recall systems (NRI, 2008).

## 4 French producers of potatoes: a collective initiative to increase exports

One of the main objectives of French producers of potatoes during the 1990's was to build a norm to guarantee market access. With their collective approach, they seem to have succeed in maintaining and developing their production and exports without the compliance with GlobalGap.

### 4.1 French production of potatoes: overview

Potato is currently the fourth highest valued agricultural product in the world consumption, just behind maize, rice and wheat. On the whole, world potato production increased 12 per cent during the last ten years (and 25 per cent in 16 years). In 2007, China was the first producer in the world with 72 million tons (FAOSTAT, 2008). Russia produced 36 million tons and India, 26 million tons. In this context, it is worth underlining that the 27 EU member-states produced 62.5 million tons. Ultimately, Asia and Europe supply 80 per cent of the world potato production. Nevertheless, the trend of production of last years has been characterized by a shift from developed to emerging countries: Asia, Africa or Latin America. While the production in developed countries has decreased 11 per cent in the last ten years (and -15 per cent in 16 years), production in emerging countries has increased 52 per cent over the same period (and twice as much in 16 years).

In 2005, owing to Chinese and Indian growth, the production of developing countries overtook that of developed countries. Despite this significant change, European yields (17.28 tons/hect.) and especially North American yields (36.78 tons/hect.) are higher than the bulk of emerging countries (16.64 tons/hect.). There was also a shift in terms of world consumption. Although it remains higher in developed countries with a 78 kg average per habitant per year (the highest is in Europe with 96.15 kg/hab/year), it is growing very fast for developing countries: doubling in 15 years to reach 23.3 kg/hab/year (the highest is in Asia/Oceania with 25.83 kg/hab/year).

French potato production is consumed through four outlets: starch factories (23.2 %), agrofood industries (frozen french fries, chips...) (25.3 %), exportation (38.5 %) and fresh markets (13 %). Production and especially yields consistently rose between 1995 and 2005 (respectively +6 per cent and +32 per cent) (ONIFHLOR, 2000; VINIFHLOR, 2006). Nevertheless, French producers were not spared by the diminution of the potato land area in

Papier présenté aux 2èmes journées de recherches en sciences sociales, INRA SFER CIRAD, Lille, décembre, 2008.

Europe and the number of concerned agricultural farms<sup>14</sup> were half their 1995 level in 2005 (46,200 in 1995 and 22,917 in 2005). In 2007, starch and late season fresh potatoes represented almost 90 per cent of French potato production. Late season fresh potatoes, which is the production covered by the collective norm, represented 71 per cent of the production (5.2 million tons; yield: 478q/ha) and 62 per cent of the whole exported volume. On the contrary to the general trend of the sector, land area allocated to late season fresh potatoes grew by 9 per cent during the 1995-2007 period.

In France, potato consumption is currently about 30 kg/hab/year for fresh market and 25 kg/hab/year for processed products. It is worth noting that the quantity purchased by household decreased since 2000 (5 per cent in volume<sup>15</sup>) (CNIPT, 2006; VINIFLHOR, 2006). However, the value has increased consistently over the last 15 years. Households expenditure rose by 9 per cent in five years.

#### Box 2: Common Market Organisation

At the European common agricultural policy level, there is no existing Common Market Organisation for potatoes except for the starch industry. Historically, no subsidies were allocated to potato production except for starch. More precisely, the application of the exclusion principle was applied in order to avoid distortion of competition between producers.

In order to control the risks linked to price and yield volatility, growers are hedging on the futures market in Hanover (Germany). Apparently (UNPT, 2008), contracts concerning potatoes valued through fresh markets are less interesting than those of potatoes for industries. It is worth reminding that the lack of Common Market Organisation was a leading motivation to build quality management systems for fresh potatoes sector (NF V 25-111, A.O.C.).

## 4.2 High value products for export markets

Like Greece, Belgium, United-Kingdom and Germany, potato consumption is declining in France. In order to maintain their level of production in the fresh potato sector (early, new and late season fresh potatoes), French producers took the opportunity to develop their strengths on the national and export market especially the expanding ones: Spain and Italy.

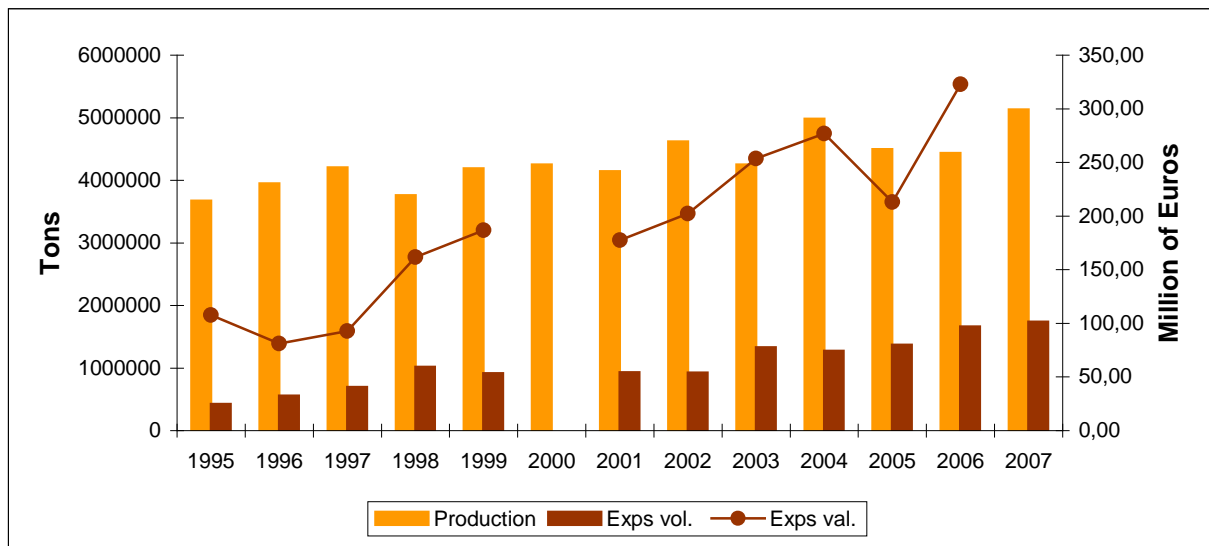
In 2007, among EU member states, France became the fourth largest producer and the first exporter of fresh potatoes. In 15 years, exportation increased from 400,000 tons to 1.8 million tons, which currently represents 38.5 per cent of fresh potato production (UNPT, 2008). It is worth stressing that the exportation increase is overwhelmingly due to the late season fresh potatoes category (1.7 million tons) where half of the production is covered by the NF V 25-111 norm. In 2006, late season fresh potato export volume grew by 42.3 per cent in

<sup>14</sup> The average of farm-size is almost 7 ha.

<sup>15</sup> Comparison between 2006 and the average of the four former years (2002 to 2005).

comparison to the five previous years (2001 to 2005) (see figure 1). It is noteworthy that over the same period, imports decreased by 68 per cent. Even more relevant to illustrate the recognition and the enhancement of the norm is the growth per unit value in exports which has risen by 43.7 per cent in 2006 relative to the average of the five previous years (2001-2005).

**Figure 1: Production and exportations of French late season fresh potatoes (1995-2007)**



Source: ONIFLHOR, 2000; VINIFLHOR, 2005; VINIFLHOR, 2006; UNPT, 2008.

In comparison, the production of early and new potatoes decreased by 27 per cent between 2001 and 2006 (from 420,480 to 307,219 tons). Over the last years, they were designated essentially by a “Controlled Appellation of Origin”. The strategy was not as beneficial as expected inside the national market. Moreover, early or new potato exports decreased by 20.8 per cent and imports increased by 10.5 per cent at the same time.

Not surprisingly, 90 per cent of French exporters of late season fresh potatoes supply the European market. According to their growing demand, Spain and Italy are currently the leading EU purchasers. They import more than the half of French exports (respectively 37 % and 16.5 %). With Belgium (15 %) and Portugal (12 %), these countries are the main outlets for French exports of late season fresh potatoes (UNPT, 2008).

Given the export trend (French customs, 2000-2005), it is relevant to underline that the growth rate was higher for exports to Germany, Spain and Belgium which engaged the mutual principle of recognition. It is not so much the increases in volumes but rather the increased prices per unit (euros) which reflect the growing interest for French products. Export values are three times higher for Germany and almost two times higher for Spain and Belgium in

Papier présenté aux 2èmes journées de recherches en sciences sociales, INRA SFER CIRAD, Lille, décembre, 2008.

2005 with respect to 2000. Moreover, results are even more noteworthy taking into account that Germany is not a leading purchaser, it is even considered as a declining market. Furthermore, the growth of the average per unit value for Italy or Portugal is not as high as the three previous countries (respectively 45 % and 18.5 %). And for the other importing countries such as United Kingdom, the growth is very low (7 %).

While French export volumes of fresh potatoes have increased by 34 per cent over the six years, it was less than 10 per cent for the Netherlands, Belgium and Spain and even a decrease for Germany and Italy (FAOSTAT, 2000-2005)<sup>16</sup>. With a growth of 17 per cent, the United Kingdom seems to be the only exception. French exports registered also the highest growth per unit value (71 per cent) over the period. In addition, it is worth underlining that the French balance of trade is characterized by a strong surplus in volume (601 %<sup>17</sup>) whereas all the other countries have a deficit except Germany (266 %). More precisely, French late season fresh potatoes surplus was 449 per cent in 2007 (French Custom, 2008).

Regarding these results, one can assume that the quality management strategy of French producers played a main role in export development. Nevertheless, only a deep analysis of data concerning certified producers and exporters (not available yet) could clearly confirm these results.

## 5 Conclusion

Given the structure of their supply-chain organisation and with no European support by CMO, French growers of potatoes took the opportunity to build a personalized standard and to keep control of their quality and environmental management system. Compared to private voluntary standard like GlobalGap, the NF V 25-111 norm provided them at least three main advantages. First, stakeholders that are mainly concerned with the implementation of the certification were directly involved in requirements, objectives, and elaboration of the norm. The second advantage is a more realistic and feasible standard in terms of production methods and that is the direct result of the elaboration process. Lastly, the French norm is more affordable in financial terms and audit frequency than GlobalGap.

Accredited by a normalisation body, the collective norm consequently matches European and International standardisation policies. Big issues raised in recent years in order to rule on

---

<sup>16</sup> In order to obtain harmonised data for all EU exporting countries, the following results include all fresh potatoes categories.

<sup>17</sup> Exports/Imports\*100

Papier présenté aux 2èmes journées de recherches en sciences sociales, INRA SFER CIRAD, Lille, décembre, 2008.

private standards inside the organisation of the international trade framework. The World Trade Organisation (WTO) is still dealing with the question of the responsibility of each of its members states (Art. 13 SPS Agreement) concerning the implementation of private standards for products entering their markets. In that way, there is currently no evidence concerning private standards accordance with at least international standards like sanitary and phytosanitary (SPS) requirements enforced by the WTO.

In this article, we assume that alternative approaches like the collective initiative we described should be further investigated in order to be adapted to other products, other countries and other institutional contexts. Undoubtedly, two postulates remain, on the one hand, such an alternative asks growers to be organized and to support the elaboration and on the other hand, purchasers, mainly industries and retailers, recognition remain both the main and the most difficult objective to reach. Nevertheless, we provided results showing that NF V 25-111 has been a successful initiative in terms of production, exported volumes and values. In addition, producers kept control of their production practices and on the way they chose to bring out their products. Investments of local or international governments on that issue would give the opportunity to get around the drawbacks from implementing private standards especially in developing countries.

## 6 References

Chemnitz C., 2007. The compliance process of food quality standards on primary producer level: A case study of the EurepGap standard in the Moroccan tomato sector, Humboldt Universität zu Berlin, Working Paper, **81**, 31 p.

CNIPT, 2006. Evolutions du marché de la pomme de terre de consommation, Présenté au congrès UNPT, Amiens, 2 février 2006.

Garcia Martinez M., Poole N., Skinnen C., Illes C., Lehota J., 2006. Food safety performance in EU access countries: benchmarking the fresh produce import sector in Hungary, *Agribusiness*, **22** (1), 69-89.

Garcia Martinez M., Poole N., 2004. The development of private fresh produce safety standards: implication for developing Mediterranean exporting countries, *Food Policy*, **29**, 229-255.

Graffham A., Cooper J., Wainwright H., MacGregor J., 2007. Small-scale farmers who withdraw from GlobalGap: Results of a survey in Kenya, *Fresh Insights*, **15**, 40 p.

Papier présenté aux 2èmes journées de recherches en sciences sociales, INRA SFER CIRAD, Lille, décembre, 2008.

Henson S., Masakure O., Boselie D., 2005. Private food safety and quality standards for fresh produce exporters: the case of Hortico Agrisystems, Zimbabwe, *Food policy*, **30**, 371-384.

Jaffee S., Masakure O., 2005. Strategic use of private standards to enhance international competitiveness: vegetable exports from Kenya and elsewhere, *Food Policy*, **30**, 316-333.

Latouche K., Friant-Perrot M., Persillet V., 2007. Le développement hétérogène des référentiels privés en Europe : Etat des lieux et conséquences sur les échanges, Présenté au colloque SFER, 13-14 décembre, 21p.

Maertens, M., 2006. Trade, food standards and poverty: The case of high-value vegetable exports from Senegal, Poster paper prepared for presentation at the International Association of Agricultural Economists Conference, Gold Coast, Australia, August 12-18, 10 p.

Minten B., Randrianarison L., Swinnen J.F.M., 2006. Global retail chains, international trade and developping country farmers : Evidence from Madagascar. Presented at the Summer Symposium of the International Agricultural Trade research Consortium (IATRC): "Food regulation and trade: Institutional framework, concepts of analysis and empirical evidence", Bonn, 28-30 May 2006.

NRI, 2008. Small-scale producers and standards in agrifood supply chains: Key findings and policy recommendations, april, 22 p.

NRI, 2007. Costs and benefits of EurepGap compliance for African smallholders: A synthesis of surveys in three countries, *Fresh Insights*, **13**, 21 p.

OECD, 2006. Private standard schemes and developing country access to global value chains: challenges and opportunities emerging from four case studies, AGR/CA/APM(2006)/20, 88 p.

Okello J., Swinton S., 2007. Compliance with international food safety standards in Kenya's green bean industry: Comparison of a small and a large-scale farm producing for export, *Review of Agricultural Economics*, **29** (2), 269-285.

ONIFHLOR, 2000. Chiffres clés : Fruits et légumes frais et transformés.

Thankappan S., Marsden T., 2006. Private standards driving the agri-food supply chains: what role do global organisations play?, Brass Centre, Working Paper, **40**, 43 p.

UNCTAD, 2007b. The implications of private-sector standards for good agricultural practices: Exploring options to facilitate market access for developing-country exporters of

Papier présenté aux 2èmes journées de recherches en sciences sociales,  
INRA SFER CIRAD, Lille, décembre, 2008.

fruit and vegetables – Experiences of Argentina, Brazil and Costa Rica.  
UNCTAD/DITC/TED/2007/2, 63 p.

UNCTAD, 2007. Challenges and opportunities arising from private standards on food safety and environment for exporters of fresh fruit and vegetables in Asia: Experiences of Malaysia, Thailand and Viet Nam, UNCTAD/DITC/TED/2007/6, 102 p.

UNCTAD, 2008. Private sector standards and national schemes for good agricultural practices, implications for exports of fresh fruit and vegetables from sub-Saharan Africa: Experiences of Ghana, Kenya and Uganda, UNCTAD/DITC/TED/2007/13, 110 p.

UNPT, 2008. L'Union nationale des producteurs de pommes de terre : Rapport d'activité, Chartres, 5-6 février 2008.

VINIFHLOR, 2006. Chiffres clés : Fruits et légumes frais et transformés.

VINIFHLOR, 2005. Chiffres clés : Fruits et légumes frais et transformés.