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EUROPEAN ORGANIC STANDARD SETTING ORGANISATIONS AND CLIMATE-CHANGE STANDARDS

by

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EUROPEAN ORGANIC STANDARD SETTING ORGANISATIONS AND CLIMATE-CHANGE STANDARDS

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Abstract: During the past decade several European organic standard-setting organisations have introduced or considered standards relating to greenhouse gas emissions associated with the supply of certified produce. For the most part, these standards have focused on the transport of fruits and vegetables, and specifically air-freight used in the transport of imports. The focus on air freight is due to its relatively high level of CO₂ emissions. This paper reviews private-sector policies proposed or adopted by organic standard-setting organizations in three European countries: Sweden, Switzerland, and the United Kingdom. For each case study it reviews the main initiatives in terms of the markets and products that they refer to, their proposed aims and coverage, the way that they were developed and designed, the reaction of different groups of stakeholders to them and the responses of their designers to these reactions. Only in one case has a standard actually been implemented, so discussion of outcomes is mainly speculative. Reflecting on the pattern of events uncovered, the paper tentatively concludes that the more prior consultation was involved with stakeholders, the less likely was a standard based on non-scientific principles. It observes, as well, that while the standards in question are usually driven by domestic producer organisations, they directly challenge the interests of large-scale retailers, which is to maximize supply and demand. By disqualifying products from the market, or rather from a growing market segment, they threaten the growth of sales. Retailers' clear lack of enthusiasm tends to leave standards proponents isolated when attacks came from other sources

1. During the past decade several European organic standard-setting organisations have introduced or considered standards based on the greenhouse gases (GHGs) emitted during the production or supply of certified organic produce. The organisations concerned are Bio-Suisse (Switzerland), KRAV (Sweden) and the Soil Association (SA) (UK). In addition, Naturland (Germany) took a decision to develop such a standard, although it remains to be formulated.²

2. These standards primarily, though not only, focus on air freight in the transport of imports. Consumers of organically grown products tend to be more environmentally conscious than the population at large. As public concern over climate change has grown, so has the interest of some organic consumers in the carbon “footprint” of their consumption decisions. The relatively high growth rate of air freight and its related GHG emissions, and the disproportionate contribution of air freight to overall GHG emissions from food distribution, was highlighted especially with the advent in the early 1990s of the notion of “food miles” — the distance that food travels from where it is produced to where it is consumed (Iles, 2005, p.163). Though the “food miles” approach was criticized as overly simplistic and biased against the interests of developing-country exporters of agricultural products, the idea that high carbon emissions were incompatible with the philosophy of organic farming soon took hold among some quarters of the organic

¹ The views expressed in this study are those of the author and do not necessarily reflect those of the OECD or of any of its Member governments. The author would like to thank Ronald Steenblik, and Dale Andrew for comments. Any remaining errors and omissions are the responsibility of the author.

² Naturland established a working group on climate-related standards in 2007 with the aim of writing a draft standard by November 2008. The report of the working group was referred back with a call for further investigation. There is no longer a timetable for this activity (Interview 1).

agriculture community. The result in several countries was the development of standards linked in one way or another to GHG emissions, generally through the disqualification of air-freighted produce from the possibility of being certified and labelled as organic.

3. While all organic products are potentially affected by climate-motivated standards proposed by organic standard-setters, since these standards mostly target air freight the products most affected are fresh fruit and vegetables (FF&Vs). The value of the (potential) loss of market access varies considerably, according to the size of the organic market, the share of imports in this market and the share of produce certified by a particular standard-setter. Another consideration is how demanding is the relevant production standard. If organic production standards pose very high demands in this area, it is unlikely that many exporters in developing countries could conform to them anyway.

4. Table 1 suggests that the largest economic impact of any market-access restrictions affecting imports of organic fresh fruits and vegetables would be in the UK. It further suggests that there may have already been a market access impact in Switzerland on the basis of Bio-Suisse's restrictions on imports.

Table 1. The organic market in selected European countries

	Size of organic food market (€ millions)	Total organic food market share (%)	organic FF&V market share (%)	Imports in organic FF&Vs (%)	Per cent of organic food certified by standard-setter
Germany	5 300	3.0	5.8	50	Naturland 10
Sweden	635	3.5	3	40 (vegetables) 90 (fruits)	KRAV 90
Switzerland	791	4.0	10 (vegetables) 5 (fruit)	15	Bio-Suisse 90
UK	2 645	2.0	4	76	SA 75

Note: Data on organic food market size (absolute and by share in the wider market) is for 2008, except for Germany and Switzerland (2007). Other data are for the latest year available.

Sources: Germany: Hamm, U & Gronefeld, F, 2004. *The European Market for Organic Food: Revised and Updated Analysis. Organic Marketing Initiatives and Rural Development, Vol. 5*, University of Wales Aberystwyth.; Zander, K. & Hamm, U., 2008. *Zahlen, Daten und Fakten – Bio in Deutschland*. Bio-Sonderschau Messe, Dusseldorf, September. Sweden: <http://www.ekoweb.nu/?p=10048>, accessed 20-03-09; KRAV (2009). *KRAVs marknadsrapport '09*, Uppsala; US Department of Agriculture, 2004. *Swedish market for organic products*. GAIN Report SW4012, Washington. Switzerland: *Jahrbuch Biolandbau Schweiz 2005: Fakten, Zahlen und Hintergrund*. FiBL and Bio-Suisse. UK: Defra, 2008. *Organic Statistics United Kingdom*, 3 July 2008, York; SA Market Report (2009), Bristol; All countries: <http://www.organic-europe.net/country-reports>; IFOAM, 2008. *The World of Organic Agriculture*; FAO, ITC and CTA, 2001 *World Markets for Organic Fruit and Vegetables*.

5. The aim of this study is twofold. The first is to document the experience of various private-sector organic standard-setting bodies or labelling schemes in trying to add climate-change-related criteria to their existing set of standards, in the hope that similar organizations may avoid making the same mistakes. The second aim is to examine discuss the potential impact that such standards may have on the market-access of developing countries.

6. The paper is organized as follows. The next section briefly describes, as background, the regime under which organic products are regulated and certified in Europe. That is followed by a review of the main initiatives. For each initiative, the paper discusses their proposed aims and coverage, the way in which they were developed and designed, the reaction of different groups of stakeholders to them, and the responses of their designers to these reactions. Only in one case has the standard been implemented, so discussion of outcomes is mainly speculative. The paper concludes by reflecting on the pattern of events uncovered.

Organic standards, public regulation and market access

7. Organic production and trade is governed by both private standards and public regulation. Since its introduction in 1991 the content of the EU regulation (EC 834/2007) has been heavily influenced by European associations of organic producers, gathered under the umbrella of the IFOAM³ EU Group. Hence public regulation mirrors the standards of private organisations, although it has been less detailed and until recently covered only agricultural and livestock production and trade.

8. Most but not all countries in Europe have established national organic regulations based on the EU rules, and require that operators be certified either to this regulation or to the standards of a private body, where these are at least equivalent. Most EU organic farmers who converted in the 1980s and 1990s adhere to private standards, but most converting since 2000 are certified to their respective national regulations. There are exceptions to this pattern. In Sweden there is no national regulation and a private standard-setting body (KRAV) is delegated *de facto* authority. In at least two other countries, while there are national regulations, most operators are certified to a single private standard. This is the case in Switzerland, where 90-95% of operators are certified to Bio-Suisse standards, and the UK, where 63%⁴ of operators are certified to SA standards. Because of the high recognition factor of these private standards, large retailers in these countries encourage labeling of organic products to them. In Sweden, Switzerland and the UK therefore, although organic products from other EU countries technically have free market access, private standard-setters can limit this.⁵

9. Both the SA and KRAV have traditionally attracted criticism within the organic movement for restricting imports. This is because, instead of automatically re-certifying products certified by other EU-approved certification bodies, they required that products meet their own rules or rules equivalent to them. In the case of the SA, automatic re-certification could occur only after a comparison of production rules had led to establishing a “product acceptance agreement”. The *Organic Certification Directory* (OCD, 2008) includes reference to only two organisations with such agreements with the SA (of several hundred listed).

10. Until recently, KRAV also only re-certified on the basis of determinations of equivalence of production rules, although its acceptance of the equivalence of the IFOAM Basic Standard meant access has been broader than in the case of the Soil Association.⁶ The 2009 version of KRAV’s standards relaxes access considerably by stating that KRAV importers can re-certify plant products certified to the EU Regulation, provided they are produced under socially just conditions. Where national governments are ILO Convention signatories this is assumed to be automatic. Where they are not, operators need a written policy reflecting adherence to ILO standards (KRAV 2009, p. 44).

11. The importers’ page on the Bio-Suisse’s website states that re-certification of imports is conditional on more than a determination of equivalence of production rules. Other conditions include

³ International Federation of Organic Agricultural Movements.

⁴ This figure is based on attributing 4 800 licensees to the Soil Association, as stated in the *Organic Certification Directory* (2008).

⁵ Since 2007, KRAV’s monopoly in Sweden has begun to decline. A EU organic label can now be offered and the supermarket chain ICA has ceased to require KRAV labeling for organic products. Nonetheless, in early 2009 probably 90% of the products sold on the Swedish market were still certified by KRAV.

⁶ About one in ten of organic certification bodies are accredited to certify to the IFOAM Basic Standard.

absence of domestic supply and absence of processing abroad. The page states that fresh fruit and vegetables from outside the Mediterranean area will not be re-certified at all (Bio-Suisse, 2009).⁷

Case studies

12. The remainder of this paper considers only standards published in draft or final form — that is, those of Bio-Suisse and Migros in Switzerland, the SA in the UK and KRAV and partners in Sweden. Only in the case of the SA's option for a ban on air-freighted products was an economic impact study carried out for any of the (proposed) schemes described. However, some anecdotal material is available on the impact of the ban on Swiss consumers and on exporters serving this market, while written records of the SA and KRAV-Svenskt Sigall consultations provide material on perceptions of impacts by different stakeholders, as well as their reactions. However, since there are no recorded stakeholder responses to the Bio-Suisse or Migros schemes, only those relate to the schemes proposed by the SA and KRAV a.p. are discussed.

Bio-Suisse and Migros Bio

Aims and coverage of the schemes

13. Bio-Suisse had an informal ban on certifying organic products imported by air from the 1970s to 1999. This was formalised early in 1999 and is incorporated into Article 5.10 of its current standards. No statement is available setting out the ban's aims. It covers all imported organic products, although there is a provision for making exceptions. Currently, the only exception that has been allowed applies to vanilla, on the grounds that it is normally imported in quantities less than a container load and is more prone to theft if transported by modes other than air freight. Bio-Suisse staff state they are open to certifying air-freighted imports of other herbs and spices under similar circumstances, but have received no requests to do so (Interview 2).

14. The second largest Swiss supermarket chain, Migros, incorporated an identical ban in its standards for the private organic label "Bio", launched in 2003. Its transport standard reads "Rail and sea transport should be prioritised. Road transport is tolerated. Road transport should conform to at least national legal emissions limits. Air transport is forbidden." No exceptions are referred to, and hence the coverage is general to organic products (Migros Bio, 2007).

Development of the schemes

15. The Bio-Suisse air-freight rule emerged in the context of discussions of more general restrictions on imports in 1996, following Bio-Suisse's commissioning of a study of the preferences of Swiss "ethical consumers". This study⁸ found high levels of preference for local products, based mainly on assumptions about their superior food-safety attributes, as well as demand for more accurate information about where products originated. The study recommended that Bio Suisse devise standards that were seen to secure food safety in a sincere and trustworthy way. Giving explicit preference to local products could meet these concerns (Interview 4).

16. The more specific proposal to formalise the ban on air freight was taken in response to the adoption of the UN Framework Convention on Climate Change in Kyoto in December 1997. "It was clear

⁷ Naturland's (2008, p. 8) rules contain a milder version of the same rule: "regional produce shall be preferred wherever possible".

⁸ By Thomas Dyllik of St. Gallen University.

that it would harm the image of our label to do nothing. We were very concerned about our label's image" (Interview 2). Both proposals were developed, refined and agreed using Bio-Suisse's internal standard-setting procedures. No independent studies were carried out and stakeholders outside the organisation do not appear to have been consulted.

17. Migros's rules, including on air freight, emerged during the launch of its organic own-label scheme. The standards broadly reflect those of Bio-Suisse. The general background was Migros's decision to raise its organic profile, in a context where its rival Coop had traditionally dominated this market segment. The decision was a commercial one and again no discussion appears to have occurred with other stakeholders.

Scheme design

18. The standards relating to imports generally, and air freight specifically, cover only the transport stage of the supply chain. No carbon accounting method or other scientific work has been used in their development or is cited in their support.

19. In the case of both standards, certification occurs as part of an overall assessment of conformity to production and import rules. Bio-Inspecta is the main certification body accredited to certify to Bio-Suisse standards. Bio Test Agro is also accredited to certify Bio-Suisse producers in Switzerland, while IMO and Procert are also accredited to certify Bio-Suisse processors and traders in Switzerland. According to Bio-Suisse (2009) Bio-Inspecta and the US-based ICS/FVO are the only bodies accredited to certify Bio-Suisse producers outside Switzerland, although the *Organic Certification Directory* (2008) lists a further 10 certification bodies in seven countries also reporting such accreditation. Bio-Inspecta, Procert and IMO are accredited to certify to Migros standards (Migros Bio, 2009). The main organic certification bodies operating internationally, like IMO and Ecocert, usually use local certification agencies for inspection purposes. This reduces costs of certification to a degree, but probably not as much as would occur should local bodies themselves be accredited by the standard-setters discussed here.

Perceived and actual impacts and stakeholder reactions

20. Air freighted organic fruit, though possibly not air-freighted vegetables, continues to be available to Swiss consumers. Gibbon and Bolwig (2007) interviewed one developing-country exporter air-freighting 1.3 tonnes of organic exotic fruit to Switzerland per week. It is actually unclear whether the two largest supermarkets, Coop and Migros, supply no air-freighted organic produce at all, or whether they simply supply none carrying the Bio-Suisse or Migros Bio labels. Overall though, it seems that air-freighted products represent a significantly lower share of organic fresh produce imported into Switzerland than in other countries.

According to one observer, exporters' complaints about the Bio-Suisse ban are mainly in terms of price rather than market access. Bio-Suisse-labelled products carry a premium on the Swiss market over those certified to the Swiss national regulation. This constitutes a disincentive to market produce air-freighted produce in Switzerland (Interview 6).

The Soil Association

21. In May 2007, the SA launched a consultation on the use of air freight for importing organic products. In a "Green Paper" (SA, 2007) three main arguments were advanced for taking action on air freight. These referred to the relatively high growth rate of air freight and its related GHG emissions, the disproportionate contribution of air freight to overall GHG emissions from all food distribution, and the alleged long-term unsustainability of air-freighted imports as fossil fuels became exhausted and therefore more expensive. In addition to the option "Take No Action", the Green Paper proposed four standards-

based options: a general ban on air freight in relation to organic products, a selective ban, a requirement for labelling, and a requirement for carbon offsetting (by whom was not specified). In a press announcement issued to coincide with the launching of the consultation, the chair of the Soil Association Standards Board, Anna Bradley, explained “As awareness of climate change has grown, concerns have been raised about the damage caused to the environment by air freight. However, when reducing our impact on the world's climate, we must carefully consider the social and economic benefits of air freight for international development and growth of the organic market as a whole. Through a public consultation, the Soil Association Standards Board is taking a lead role in tackling this complex issue.”⁹

22. The SA was later to shift from this stance, in two phases. In the first phase (October 2007-May 2008) the proposal for an outright ban was dropped in favour of a selective one. If exporters using air freight achieved certification to either the SA’s Ethical Trading standard or an “equivalent” Fair Trade one, then their products could be certified. However, in most cases there would also have to be a detailed plan for reducing air-freight dependence. These proposals were submitted to a second round of consultation, at the end of which (in October 2008) they were shelved. Only a requirement to monitor the amount of air freight used in transporting products remains.

Development of the scheme

23. The environmental impact of air freight had been subject to public discussion in the UK since the publication of a Defra report on “food miles” in 2005. Among other things, this compared the environmental costs and benefits of organic farming with those of using various means for transporting food. A decision to propose a SA standard in the area was taken in January 2007. At the same time, the SA’s Standards Board followed a suggestion from a recent internal Governance Review to conduct its consultation on the subject in a pro-active way — i.e., to actively engage a range of stakeholders.

24. In setting out the options referred to earlier, as well as a default option of “taking no action”, the SA Green Paper provided extensive background information. This included an outline of the current extent to which the SA licensees used air freight, and their reasons for doing so; a review of existing responses to the air freight issue; and a list of some risks and benefits associated with the different options.

25. The consultation involved a call for written submissions, meetings between the SA and different stakeholders, including importers and retailers, and two public seminars at which opponents of the proposal were able to make their case. In addition, the SA cooperated with an independent assessment of the economic impact of an outright ban on air-freighted produce, commissioned by the International Trade Centre (ITC) in Geneva.¹⁰ Over 200 written submissions were received during the consultation, which engaged almost all relevant stakeholders, although a “feedback statement” published at its conclusion (SA, 2007b) observed that fewer than expected supporters of an outright ban had participated.

⁹ “Soil Association looks at options to tackle the impact of organic air freight”, Press Release 01 June 2007 (version 1), www.soilassociation.org/web/sa/saweb.nsf/89d058cc4dbeb16d80256a73005a2866/5802f04d76e0a88c802572ed00329610!OpenDocument. Earlier in 2007, Patrick Holden, SA Director, had remarked that “This initiative wouldn’t have been taken if there wasn’t a pretty strong chance that the Standards Board would eventually decide on a total ban”. BBC Radio 4 “Today” programme 25-01-07, www.which.co.uk/news, accessed 26-01-07.

¹⁰ The ITC is a joint agency of the World Trade Organization (WTO) and the United Nations Conference on Trade and Development (UNCTAD). Its overarching goal is to help developing countries to achieve sustainable development through exports; activating, supporting and delivering projects with an emphasis on competitiveness.

26. When the SA Standards Board eventually approved standards proposals, these were submitted to a second public consultation. Participation in this was lower than in the first round, particularly from members of the public and NGOs, although there was a higher level of involvement from importers and exporters (Interview 5). An important event was a visit by the SA representatives to Kenya, at the invitation of the Kenya Organic Agricultural Network (KOAN). Here the SA representatives met the sector organisation representing all fresh produce exporters, FPEAK.¹¹ The second public consultation ended with a revised proposal from the Standards Board, and the publication of another feedback document.

Scheme design

27. All the options provided in the SA Green Paper (2007) referred to standards for the transport part of the supply chain only. The second consultation made proposals retaining conformity assessment in relation to transport for some air-freighted imports, while partially waiving it for others in favour of conformity assessment of the social conditions under which production and trade occurred.

28. Background material in the Green Paper cited in support of action on air freight borrowed from findings of a paper by Sim et al. (2007) which uses LCA to compare the GHG emissions from production and transport of green beans for UK consumption, originating in field production in Kenya, Guatemala and the UK respectively. Studies comparing GHG emissions for the whole supply chain of air-freighted fresh produce from developing countries with those from the whole supply chain of fresh produce produced in heated greenhouses in the EU (Vringer and Blok, 2000; Williams, 2007) have been ignored. The carbon accounting method used by the IPCC for calculating CO₂-eq is referred to in a text box, but it cannot be said that a carbon accounting method has entered into the design of any of the options proposed.

29. SA Certification Ltd. (SACL) carries out certification to the SA standards in the UK. Besides listing the two product-acceptance agreements referred to earlier, the *Organic Certification Directory* (2008) lists eight certification bodies in seven countries accredited to certify to the SA's standards. These include the two largest international organic certifiers, IMO and Ecocert, suggesting that certification to SA standards is possible in a large number of countries.

Perceived and actual impacts and stakeholder reactions

30. Gibbon and Bolwig's (2007) study for ITC of the impact of a total ban on certifying organic air-freighted imports to the UK makes the assumption that, in the event of a ban, UK importers with the SA certification would remain certified to the SA standards rather than circumventing the ban by re-certifying to the UK Defra Regulation.

31. In this scenario, the impact on consumers would have been to remove 5 000 tonnes of organic fresh vegetables and 1 300 tonnes of organic fresh fruit from the market annually, at least in the short- to medium-term. This represented 1.9% of organic fresh produce imports by volume (but 8% by value). Under these circumstances, consumers were likely to switch to conventional fresh fruits and vegetables or simply to reduce their expenditure. Probable indirect effects identified included depressing demand for organic fresh fruits and vegetables when they were available.

32. These changes would have involved a direct retail sales loss of £42.6 million (€62.3 million at 2007 exchange rates), while the authors estimate the indirect effects as leading to a loss of a further £4.9 million (€7.2 million at 2007 exchange rates) in sales. The impact on importers, particularly specialised organic importers, would be negative and substantial, since a much larger proportion of FF&V imports than total sales were made up of air-freighted produce.

¹¹ The Fresh Produce Exporters Association of Kenya.

33. The study calculated that 79% of all air-freighted organic imports to the UK in 2006 originated in low- or lower-middle income countries. It also underlined exporters' limited possibilities to use other transport modes. Assuming that exporters would shift production mainly to the conventional market rather than simply closing operations, the study estimated that the livelihoods of about 21 500 people in developing countries would be severely compromised.

34. A number of exporters using air freight adopted a high-profile stance during the first consultation, emphasising the negative developmental consequences of an outright air-freight ban. Their arguments were supported by the International Trade Centre, the UK government development agency DFID, the UK Minister for Trade and Development (Gareth Thomas) and some development NGOs. The perceived impacts of proposals made during the second round of the SA proposals, and responses to them, are discussed below.

Responses by scheme sponsors to concerns raised by stakeholders

35. Whereas the SA responded to stakeholder concerns at the conclusion of the first consultation by drafting proposals to restrict, rather than ban, air freight, at the conclusion of the second consultation it responded to fresh concerns by withdrawing all proposed restrictions.

36. According to a representative of the SA, "...we recognised that a total ban was disproportionate about half way through the first consultation..." (Interview 5). By this stage, the SA had been forced onto the defensive by attacks from development organisations. At the same time, a way out of the mire was presented to them by these same organisations' suggestions for use of social justice criteria. But to the SA's surprise, proposals based on these suggestions were also received critically. While NGOs' complaints were largely absent in the second consultation, the voice of "the trade" grew louder. In particular, exporters in Kenya and Ghana repeated the complaints they had raised in the first round: "... our communication (especially) with the Kenyans remained unconstructive" (Interview 5). The SA representatives were invited to Nairobi where they were told that most exporters in FPEAK were already following codes that were more demanding than the SA's Ethical Trading standard, and that any requirement to follow the latter would be discriminatory and uninformed (Interview 6).

37. At the same time, "the trade" more broadly complained that a requirement for air-freight reduction plans was superfluous and burdensome. Operators' transport decisions were always based on assessments of costs and benefits, and given the high unit cost of air freight, it would always be avoided unless there were no alternative.

38. Decisions were taken by the SA Standards Board at its October 2008 meeting to substitute the requirement for a reduction plan with one for monitoring and reporting, and to withdraw that for ethical or Fair Trade certification. In the latter case, the Board noted that the SA and its African partners had committed to "explore options for addressing climate change and development issues by recognising and supporting wider adoption of good environmental and social practices ..." (SA, 2008b).¹²

KRAV and partners (henceforth KRAV a.p.)

39. In Sweden a project for climate labelling of food has been supported since 2007 by KRAV and a number of partners, principally the main quality-assurance scheme for conventional farmers, Svenskt Sigall. The aim was to create incentives for food-sector operators to switch rapidly to climate-friendly

¹² The Standards Board paved the way for this decision at an earlier meeting in July 2008 when it was agreed "that more work was needed on the proposals (to)...ensure that ethical trade should not be a prohibitive burden, nor a barrier to trade" (SA, 2008a).

methods at each stage of the supply chain (Interview 3). This aim influenced the principles guiding the standard-setting process through prioritising a system for certifying production rather than products. Certifying products would necessarily entail the lengthy and costly process of conducting large numbers of product-specific LCAs, and keeping them updated. Certifying production would simply require making obligatory the adoption of proven climate-friendly best practice (or avoidance of bad practice), except in the case of transport where chain segment-specific LCAs are easier to perform and standards could be expressed in terms of GHG emission limits. These choices were inextricable from another, to provide a simple, non-graded label that operators could use to improve their competitiveness.

40. The product coverage of the proposed standard to date is grains and oilseeds, fruit and vegetables and products of aquaculture. It is envisaged that standards for meat and dairy products will follow. Only products produced in Sweden (and other Nordic countries in the case of fish) are covered by the scheme. Rules for imports will be submitted for consultation in the summer of 2009.

41. When the standard-setting project started it was envisaged that the standards would be applied in a supplementary label for products already certified under the KRAV and Svenskt Sigall systems. In 2009 KRAV decided that they should be included within its organic standards, rather than being associated with a supplementary label on organic products. Svenskt Sigall has yet to decide whether it will do the same.

Development of the scheme

42. A project group reporting to the project partners is developing KRAV a.p.'s standards. The project group consists of representatives of KRAV and Svenskt Sigall, together with the Swedish Institute for Food Research and Conlogic, a logistics consultancy company. Expert groups advise the project group in relation to specific production areas.

43. By 2009 a number of new partners had joined the project: Sweden's largest grain marketing co-operative (Läntmännen), the Swedish National Farmers' Union (LRF), two of Sweden's three largest dairies (Milko and Skånemejerier) and the country's largest meat producer (Scan). Partners must make a contribution in cash (minimum €18 000) or in the form of scientific research findings or work hours. Development of the standard has also benefitted from public financial support, which means that all project documents enter the public domain.

44. The first stages in the standard's development were the formulation of a set of principles referring to the scheme's basic aims and coverage, and their submission to consultation. Every consultation incorporates opportunities for written responses and a public hearing. Following re-formulation and another consultation, the adopted principles were used to write proposed standards for selected product groups (production of grains and oilseeds, fruit and vegetables and aquaculture products) and supply-chain steps (simple processing, transport and storage). These were submitted to consultation in May 2008 and a second draft was published in late March 2009. Draft standards for other product groups and supply-chain steps including imports will follow later in 2009. Draft rules have been available both in Swedish and English, together with background documentation.

45. On the project website, all written submissions made during the draft standards consultation were published. Of the 34 written submissions made during the consultation on standards, 11 were from producers or producer organisations, 7 from government agencies and 6 from retailers or retailer organisations. Large Swedish grocery retailers import on their own account, so importer interests were represented through this route. However, no exporter outside of Sweden made a submission. Submissions were all made in Swedish and have since been withdrawn from the public domain, following an overhaul of the project's website.

46. A consumer survey (Toivonen, 2007) was undertaken to complement the process. Although completed after the formulation of the draft principles, it can be seen as providing support for subsequent decisions to explicitly and implicitly favour local production¹³ (see below).

47. KRAV has now resolved that standards agreed within the project be incorporated into its own (organic) standards. This will entail further consultation carried out according to KRAV's internal rules. This raises the question of whether a common standard will emerge or not at the end of the process.

Scheme design

48. All stages of the supply chain — from primary production to arrival in shops — are covered in the proposed standards. Except for transport, the standard takes the form of production and processing rules for each stage. These rules take two forms. First, there are prescriptions (positive and negative, and absolute or in the form of maximum limits) concerning infrastructure, inputs and emissions. Second, there are requirements for plans to replace the use of non-renewable inputs, and timetables for the implementation of these plans.

49. In the draft standards of 2008, operators were required to carry out a transport LCA (from primary production to shop¹⁴) for each product type they supplied. Operators also had to provide training in emission-reducing driving techniques to lorry drivers involved in the transport of the produce. The standard proposed two options for maximum GHG emission limits for plant products, as well as stricter rules for those plant products that could be produced in Sweden for at least four months a year.

50. The options given for maximum limits were 200g and 300g of CO₂-eq per kilogramme of finished plant product. It was acknowledged that a 200g limit would exclude transport of products by truck from southern Europe and transport by ship from “the northern part of South America”. A 300g limit would permit most transport of these kinds, but exclude imports of any kind from Asia and Oceania. For those plant products that can be produced in Sweden for at least four months a year, a limit of 100g CO₂-eq/kg was proposed for the Swedish production season. It was acknowledged that this would permit only Swedish products to qualify during this period. A further rule was proposed for the transport of fish products, with a maximum limit of 250g CO₂-eq/kg. This rule was acknowledged to permit transport only from the Nordic countries.

51. The carbon accounting methodology used excluded emissions of nitrous oxide and methane, but allowed to be taken into account whether refrigerated or frozen transports were used, differences in infrastructure (type of vehicle used, road maintenance level) and differences in diffuse leakage of coolants. The formula used was distance · mass flow · climate impact of the vehicle (in grams per tonne-kilometres) + supplement for refrigerated or frozen transports + supplement for infrastructure, with the climate impact of the vehicle differentiated in terms of product density within the vehicle. To ease the calculations for Swedish operators, reference values were given for transport routes between each of the main producing areas and the main areas where distribution centres are located.¹⁵

52. When the carbon-footprint standards become incorporated into KRAV's organic standards, certification to them will occur as part of organic certification. Apart from KRAV's daughter certification

¹³ “Much of the focus of consumers’ response was on transport and the importance of buying locally produced foods. Many respondents regarded (provision of information on) these issues as the most important aspect of climate labeling...” (author’s translation, Toivonen p. 2).

¹⁴ Not including transport packaging, transport of additives and transport within the primary production phase.

¹⁵ See <http://klimatmarket.hemsida.eu/wp-content/uploads/2009/01/transporter-underlag-090213.pdf>.

body Aranea, only four certification bodies (one each in four countries) are listed in the *Organic Certification Directory* (2008) as accredited to certify to KRAV standards. These include Ecocert and IMO, meaning again that certification to KRAV standards may be geographically quite widely available.

53. Svenskt Sigall is the only other project partner with its own certification system. It has accredited Aranea, Sanko-Dekra and SMAK to certify grains and SMAK to certify fruit and vegetables. Sanko-Dekra and SMAK are also both Swedish organisations.

Perceived and actual impacts and stakeholder reactions

54. As noted, KRAV a.p. provided indicative estimates of the impact of the transport rules embodied in the first draft of its standards. Regardless of what type of transport is used, no exports of fresh fruit or vegetables to Sweden could qualify for labelling during the Swedish spring and summer, and no exports from Asia or most of Latin America could qualify for labelling at any time. If a maximum limit of 300g CO₂-eq/kg had been adopted, exports of some products from southern Europe, some of Latin America and most of Africa should have qualified for labelling, at least counter-seasonally, provided they used road or sea transport. Should these rules have been incorporated into KRAV's organic standards, then availability of organic fresh vegetables would probably have fallen by 20% and availability of organic fresh fruit by 30%.

55. Critical responses to the proposals were made by a number of Swedish stakeholders, notably consumer organisations, "the trade" and government agencies. The main complaint from both consumer organisations and retailers concerned the confusion that a supplementary label, sponsored by two different existing labelling organisations, would introduce amongst Swedish consumers. This was raised collectively by retailers in a letter to the KRAV board, as well as in their individual submissions to the consultation.

56. The retailers ICA and Kung Markatta and the trade organisations Svensk Handel and Svensk Dagligvaruhandel also complained that the labelling system was a disguised mechanism to limit market access. Firstly, LCA analysis was applied only to the part of a product's life cycle wherein products from competing countries are at greatest disadvantage, and secondly qualification requirements were explicitly varied according to whether Swedish products were available on the market. This analysis was supported by the National Board of Trade (Kommerskollegium), who stated: "The transport rules seem aimed at giving Swedish products a competitive advantage rather than at helping Swedish consumers make the most climate-friendly choice ..." (author's translation). The National Board of Trade further observed that, because the Swedish government was a party to the scheme, cases against it could be brought under WTO and EU single-market rules.

Responses by scheme sponsors to concerns raised by stakeholders

57. Following the first consultation on standards, the project group published a response to some of the issues raised (KRAV a.p. Project Group, 2008). This did not include a response to contributions on the transport rule, but it provided further reasons for the project's focus on production rather than product standards. Here, both science-based arguments, and arguments combining (or possibly confusing) scientific and commercial arguments were used.

58. The science-related justification used was that, unlike a standard based on a products' global warming potential, "a production label...allow[ed] one to draw on a wider range of knowledge about climate change (than an LCA-based approach alone), on the basis of identifying a range of factors with great influence on the climate ... including biodiversity and the farm landscape (*odlings landskabet*)."

59. The other justification noted is that "we want to present a climate alternative within each food category One (reason for this) is that the larger part of our financiers' customers come from animal

production. Within animal production one finds the main (agricultural) sources of climate change, hence it's important to address these This is the reason that financiers with a relation to animal production have joined the project ... ” (author's translation).

60. In the second half of March 2009, a different set of rules were published on the project website and most existing documentation was withdrawn. As of May 2009, these rules were still in the form of proposals. The transport rule is radically different from what had been proposed previously, with only the requirement that operators train their drivers in emission-reducing driving methods remaining from the 2008 version. Alongside this, it is stated that “operators shall adopt their sector organisation's system for climate labelling or environmental analysis of transport, where such a system exists” (author's translation). According to KRAV a.p., the 2008 rules have not been withdrawn; rather, the website is publishing an alternative option.

Discussion and Conclusions

61. This paper has reviewed the development of climate-related standards by organic standard-setting organisations. In all three cases where there is sufficient knowledge to reach a conclusion, standards were drafted that either concentrated exclusively on transport or approached transport on the basis of a different method from that used for framing standards in other areas. In one case no scientific work was referred to at all, while in a second case scientific findings and methods were referred to only selectively. In the third case, where LCA analysis was adopted to help measure GHG emissions, provisional LCA results are combined with maximum limit levels justified on non-scientific grounds.

62. As a result of these characteristics, where the proposals have raised criticisms, they have been hard to defend publicly. And, except in the Bio-Suisse case, internal and external criticisms have indeed been plentiful. While in some cases these have focused upon the probable confusion the standards would create among consumers, most such criticism concerns the market access and developmental implications of the proposed standards.

63. Against this background, all of the proposed standards except the Bio-Suisse one have been dropped or are now being considered as only one option among others. It seems likely that lack of good scientific justification has played some part in this outcome, but that other factors are also at play. Among these is that, while the standards in question are driven by producer organisations, they directly challenge the interests of large-scale retailers in maximising supply and demand. By disqualifying products from the market, or rather from a growing market segment, they threaten the growth of sales. This is not to say that retailers block the adoption of these standards. But their clear lack of enthusiasm tends to leave standards proponents isolated when attacks came from other sources (for example, domestic or overseas' producer associations who themselves experience them as burdensome).

64. Elsewhere (Gibbon, 2008) the current author argues that retailers have studiously refrained from shaping organic standards since they feel this can detract from the standards' credibility. However, such restraint applies only when standards cover production issues. When they stray beyond production, then corporate interests can be mobilised to over-ride those of organic “experts”. Retailers' preferred discourse, nonetheless, is also an expert one, combining appeals for greater consumer information with inputs from development specialists.

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Interviews

Interview 1: Christina Reifenrath, Naturland, 12-03-09

Interview 2: Hans Ramseier, Bio-Suisse, 05-07-07

Interview 3: Johan Cejie, KRAV, 17-03-09

Interview 4: Max Eichenberger, Bio Suisse, 02-07-07

Interview 5: Kenneth Hayes, Soil Association, 18-03-09

Interview 6: Britta Wyss, IMO, 11-07-07

Interview 7: Susie Wren, KOAN, 16-03-9