

# PIP - REPORT

November 2011



## Climate change, from food miles to sustainable farming practices:

Turning carbon footprinting into an opportunity for the ACP horticultural industry





Created in 1973, the COLEACP is an inter-professional association that represents and defends the interests of African, Caribbean and Pacific (ACP) producers/exporters and European importers of fruit, vegetables, flowers and plants.

Through the PIP Programme, funded by the European Union and implemented since 2001 at the request of the ACP Group of States, the association encourages and helps its members and other private sector stakeholders (e.g. retailers) ensure that the horticultural trade contributes towards achievement of the Millennium Development Goals. Horticultural exports help to reduce poverty, especially among disadvantaged groups such as smallholders or rural women whose opportunities for income generation are limited. **Furthermore, developments in the horticultural export sector in ACP countries have a knock-on effect, also benefiting production for local and regional markets.**

## Food miles vs. fair miles

The matter of the food industry and its impact on the environment and climate change entered the public eye during the decade 2000-2010 with the concept of “food miles”. This became the vehicle through which EU retailers and consumers voiced their concerns about the globalization of supply chains, and the environmental impacts of long-distance transportation. Imports from distant and often developing economies were seen as unsustainable and damaging. In 2007, reacting to growing consumer concerns about climate change and food miles, a race to the top began among leading UK retailers eager to demonstrate their environmental credentials. Many pledged for more local sourcing, and for the introduction of labels on products air freighted to the UK.

As a result of intense and effective lobbying by a number of stakeholders, the food miles concept was brought back into perspective. Limiting the assessment of environmental impact to CO<sub>2</sub> emissions from air freight alone was demonstrated to be too simplistic, not scientifically rigorous, and risked biasing decision-making by EU buyers. Evidence showed that out-of-season products grown in Europe were not as carbon friendly as they claimed to be, and when looked at in context, the air freight of imported fresh produce was shown to make a very low contribution to an EU country’s total Greenhouse Gas (GHG) Emissions. The ethics of this policy were also challenged; fresh horticultural produce is an important source of income for some of the world’s poorest countries and people, whose own GHG emissions are a fraction of those in Europe. The debate shifted to consider also the positive developmental impacts of horticultural exports, and the concept of “fair miles” instead of “food miles” began to gain ground.

## Carbon footprinting standards

As the food miles debate evolved, the methodologies used for “carbon accounting” also developed at a fast pace. They began to take into account the complete life cycle of agricultural products, from raw material acquisition to disposal and recycling, allowing total GHG emissions arising from one product over its lifetime to be quantified. This measurement is referred to as “carbon footprinting”, and the method applies Life Cycle Analysis (LCA) techniques, but limited to GHG emissions.

Towards the end of the decade, in the lead-up to the Copenhagen Conference, climate change maintained a high public profile among EU countries and consumers, and the environmental policies of the major food industry players remained focused on food miles. However, the environmental impacts of agriculture go well beyond climate change. There are other interlinked aspects to consider: soil, biodiversity, waste, water, and non-renewable energy, among others. The rapidly developing approaches and methods for carbon accounting did not sufficiently address these, or the fact that strategies designed to minimize GHG emissions could be offset by other negative environmental impacts, some of which (such as water scarcity) could pose a bigger threat in the short-term.

The methods for carbon footprinting continued to develop and improve, but difficulties were encountered that are still evident today. Standards require heavy data collection, and can be complex and costly to apply, particularly in a developing country context. In addition, different players developed different approaches, and while all calculate a figure expressed in CO<sub>2</sub>

equivalents, there is no agreement on a common methodology. Some standards (e.g. PAS 2050) are now gaining more acceptance internationally, but it is nevertheless still the case that food industry players around the world apply different methods (which are not specified) and carbon figures displayed on products are rarely comparable and not easily understood.

## Sustainable farming practices

In 2008, West Africa Fair Fruits (WAFF) in collaboration with the Sea-Freight Pineapple Exporters of Ghana (SPEG), undertook studies on carbon footprinting on a pineapple farm in Ghana<sup>1</sup> using PAS 2050<sup>2</sup>. Their findings showed that the main option for reducing carbon emissions on small farms is by reducing the use of inorganic fertilizer. This can best be achieved by adopting improved agronomic practices such as incorporating crop residues, organic fertilizers, green manures and mulches, N-fixing crops, urease inhibitors, microbial products that increase crop growth and fertilizer N-uptake efficiency (FUE), etc... In addition to reducing overall carbon emissions by cutting inorganic fertilizer use, these practices will promote carbon sequestration by increasing soil carbon and organic matter content. They also provide important benefits in terms of increased soil biodiversity, fertility, and water storage capacity, as well as reduced erosion, all of which ensure greater sustainability of the cropping system.

Soil carbon flux is currently excluded from the main carbon footprinting standards because of a lack of data and common calculation methodology. The use of these standards to assess and demonstrate reduced GHG emissions is thus problematic as it does not encompass some of the most important options open to small-scale growers in developing countries to reduce their GHG emissions. The adoption of the sustainable farming practices outlined above would enable producers to reduce GHG emissions in a more holistic way that also considers other environmental impacts, for example water and soil degradation, as well as the long-term cropping system. **Sustainable farming practices provide thus an opportunity to promote and reward the adoption of practices that not only reduce GHG emissions, but also provide wider benefits in terms of the environment, farm incomes, food security, and long-term sustainability.**

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1. Case study of one farm considered typical of the bulk of fresh exports by sea in Ghana.

2. This project was planned and commissioned by WAFF which is an organization that is promoting the development of sustainable agricultural value chains. GiZ, HIVOS and Taste were co-founders of the study. The project was implemented by ADAS, an independent provider of environmental consultancy.

## The position of COLEACP – PIP

COLEACP-PIP helps ACP exports reach their full potential by enabling producers and exporters meet the demands of the EU market. Increasingly EU buyers are demanding more evidence of sustainability, and soon suppliers that conform to better environmental practices should benefit from a buying preference. It is crucial therefore that the methods and approaches used by EU retailers are fair, practical and beneficial for producers and exporters in developing countries.

In order to efficiently target its support towards ACP players in meeting the climate change issue, the programme strategy is designed around 4 areas:

- **Identify, understand and anticipate requirements from the European market:**

COLEACP - PIP needs to follow the evolving trends in the European market in order to understand what is being asked for today, what will be asked for in the near future, and what type of initiative undertaken by ACP suppliers of fresh produce will be considered as acceptable by EU retailers. In order to gain a better understanding of these issues, PIP recently commissioned a survey among major EU retailers.

- **Adapt and modify carbon requirements:**

COLEACP - PIP is participating in the adaptation of PAS 2050, now one of the major international carbon footprinting standards. The objective is to establish a specific set of modified requirements and guidance (in accordance with the global standard) for the horticultural industry. While not aimed directly towards developing countries, it is expected that the work will facilitate the implementation of the standard by ACP companies.

- **Building capacities of ACP companies and service providers:**

the major principle guiding COLEACP-PIP support to service providers and companies is to build capacities in generic competences. Since it is still unclear how the European market will evolve regarding the climate change agenda for ACP suppliers, COLEACP - PIP is concentrating on aspects valid for any environmental impact assessment, namely life cycle assessment techniques and data collection.

- **Promote the acceptance and use of sustainable farming practices:**

COLEACP-PIP is becoming active in lobbying standard-setters as well as EU buyers in order to ensure that the rapidly developing arena of carbon footprinting does not put ACP suppliers at a disadvantage. This means ensuring that they understand the impact of their decisions on developing country players, on poverty alleviation, and on achievement of the millennium development goals. Within this context, the programme is promoting dialogue on the use of sustainable farming practices rather than focusing on current carbon footprinting standards.

Climate change and the sustainability agenda in general are presenting new and fast-moving challenges to accessing the European market. Unless managed carefully, maintaining small-scale farming at the centre of horticultural value chains could become increasingly difficult. **Smallholders have a key role to play in horticultural production for local as well as export markets, for food security as well as income generation, and for ensuring the sustainability of production through good practice.** It is essential that the policies of EU markets support, encourage and reward sustainable farming, and do not adopt practices that exclude or disadvantage smallholders.

In the short-term, water may become the biggest and most important environmental impact to be considered for horticultural businesses. The effects of water scarcity on businesses are tangible and, in many cases, devastating. Many initiatives are currently emerging to accompany businesses in better managing their water footprints. Similarly to carbon footprinting, the major issue is the lack of common landscape which prevents organizations from around the world to use the same definitions, criteria and reporting/communication tools in order to ensure full transparency and comparability between their claims.

As our society witnesses every year the devastating consequences of food shortages, malnutrition and famines, the need to increase productivity rates while preserving natural resources and habitats has never been more urgent. It will however imply strong changes in agricultural practices. Without being exhaustive in the list of environmental impacts caused by modern agriculture and their interdependence, one can easily perceive that there is no easy answer to the issue of sustainability and agriculture although being strongly linked to each other. Local conditions and various types of crops will require different innovative solutions. Overall, there is no “one size fits all” solution to a truly sustainable agriculture and farmers and businesses involved in the agro-food supply chain will not be able to tackle all these issues at the same time. There is thus a need for prioritization before engaging on a step-by-step approach towards sustainable farming practices.

With the right support and appropriate technical solutions, these challenges can be turned into opportunities for small-scale farmers; **advances made in the horticultural export sector also benefit production for local and regional markets, and food security.** As the “sustainability agenda” develops, this moment in time represents a major opportunity for the horticultural industry to promote and support the adoption and dissemination of sustainable agriculture, as well as contributing to the achievement of the millennium development goals. COLEACP-PIP is committed to working with the key EU and ACP stakeholders to ensure that these opportunities are maximised.



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