

## Greening the tobacco supply chain in Africa bears fruit

It is critical to ensure that tobacco production is as environmentally sustainable as possible as supports the livelihoods of thousands of small-scale farmers in Africa. The tobacco industry purchases most of its tobacco supplies from smallholder farmers. Improving the sustainability of tobacco farming will require assisting these farmers by providing support, advice and information on how to improve farming methods and protect the environment.



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Many farmers can benefit from advice not only on how to improve soil conservation and fertility, manage water usage and recycle waste but also on how to manage fuel sources sustainably.

Helping farmers to adopt extensive good agricultural practices (GAP) such as effective farming techniques; safe storage and use of crop protection agents; water and waste management, and energy efficiency can help them establish a consistent source of income, while simultaneously reducing the impact on the environment.

### **Making the curing process greener**

Tobacco production, as with many other agricultural crops, is a resource-intensive process. Tobacco growing, harvesting and curing can account for approximately 40% of the carbon emitted in the cigarette supply chain, out of which more than half comes from the fuels used to cure certain types of tobacco.

For this reason, tobacco companies such as Philip Morris International (PMI) are also focusing on making the curing process greener.

Some types of tobacco require that it be cured in heated barns, which are often made of bricks. Converting conventional curing barns using improved furnace, insulation, chimney and flue modifications helps to reduce the amount of fuel needed to cure tobacco and improves overall energy efficiency.

PMI is also moving towards more sustainable curing fuel sources and encourages switching to less polluting fuels such as the use of biomass – wood and crop residues such as nut shells and tree prunings – as an

alternative fuel where appropriate. The potential of new technologies, such as solar energy in curing barns also being explored.

By 2020, the company aims to have zero coal usage for tobacco curing and ensure no deforestation due to the growing and curing of the tobacco purchased.

## **Tackling the deforestation issue**

Tackling the issue of deforestation in Africa though requires a multi-pronged approach.

Apart from improving curing barn design and technologies to make the process more efficient, planting trees to replenish deforested areas; implementing track and trace systems to ensure traceable sources of wood fuel, as well as assisting farmers to set up small-scale forestry operations are some of the ways companies are combating deforestation to actively reforest areas to replenish stocks.

In 2015, PMI and its suppliers planted more than 29 million trees and implemented programmes to increase the total fuel consumed for tobacco curing from renewable energy sources.

## **Green tobacco supply chain bears fruit**

Further along the supply chain, each factory and facility uses different environmental approaches adapted according to local circumstances. For example, prioritising water conservation for facilities in water-scarce regions or first investing in renewable energy where it's available, cost-effective and provides supply security makes sense.

This integrated approach to greening the tobacco supply chain is bearing fruit. The sustainable use of natural resources has become a top priority for the tobacco industry.

Of more than a thousand of the world's largest companies assessed in detail by the CPD last year, the emissions from PMI's own operations were only 700,000 metric tons, well below the average footprint of 1.5 million metric tonnes.

In sub-Saharan Africa, farming represents a subsistence lifestyle for millions of people. In recent years though, the development of farming into an economic activity has made a real change in the way the land is used in providing for the needs of the population. Not only is the land able to provide food security, crops can be used to generate much-needed income to improve living conditions and provide for education.

## **Promoting good agricultural practices**

Each year, Philip Morris International purchases 400,000 tonnes of tobacco leaf from about 500,000 farmers in over 30 countries. The majority of the tobacco is grown on small-scale farms of two hectares or less. This makes it one of the largest tobacco purchasers globally.

In Southern Africa, most of the tobacco is sourced and purchased in Malawi, where Philip Morris South Africa has been promoting the growth of high-quality tobacco under conditions which protect the environment and which encourage sustainable agricultural practices. To help achieve these goals, PMI developed the good agricultural practices (GAP) programme to assess the processes on farms from which it sources its tobacco and to identify opportunities for improvement.

PMI is committed to promoting GAP that supports the growing of tobacco in a sustainable manner while benefiting the communities involved and managing the natural resources responsibly.

These GAP standards are organised around three focus areas: crops, environment and people. In Africa, PMI sources tobacco through leaf suppliers which are independent companies that have supply contracts with the farmers. The suppliers have structures in place to support and guide the farmers in line with the GAP standards and the implementation of those guidelines is compulsory for the suppliers.

The relationship between the suppliers and the farmers is known as the Integrated Production System (IPS) which in effect gives the farmers a commitment by the suppliers to purchase their volumes at an agreed price. Part of the process includes advice on agricultural practices, access to fertilisers and certified seed and food packages. At the same time, the system addresses the issue of child labour and environmental stewardship and sustainability.

The benefits of this system are that smaller farmers have improved income and food security as they get access to credit and cash advances so that growers can buy maize before the tobacco crops are sold.

### **Examples of how tobacco farming can be conducted to improve agronomy practices**

Mthunduwatha Joshua, an IPS farmer in Kasungu in Malawi explains, “being productive is all that one needs to succeed.” She started production in 2007 and has managed to construct a house with electricity from the proceeds of selling ten bales of tobacco of 100kg each.

In addition to a small collection of livestock, and the 20 kg maize seed package of four bags of fertiliser, she was able to produce enough maize for all of her family. “In this village, I believe I am an example to other women,” she adds.

In the village of Mchinji, Gilberta Chimtowe explains how she makes use of “live barns.” With live barns, the upright poles used in the construction are replaced by live trees, which are grown in situ, on the farms. This reduces the deforestation pressure on forests, reduces wood use, and barns undergo annual repairs rather than annual replacement. She currently maintains a forest of more than 200 trees.

The projects in Africa are an illustration of how tobacco farming can be conducted to improve agronomy practices, provide opportunities for better food security, and to enhance farmers' productivity.