

# Cotton subsidies and non-sustainable production in West and Central Africa

*The cotton trade has been characterised as a “success story” in the developmental process of African countries. However, the agricultural subsidies that the developed nations provide to their cotton farmers have global trade-distorting effects. Not only do these subsidies reduce the income of the African cotton producers, but they also force them to use cultivation methods that harm the environment.*

According to estimates of the UN Food and Agriculture Organization (FAO), 100 million rural households derive their income, either directly or indirectly, from cotton production. Ten percent of these households are located in West and Central Africa (WCA). So the cotton market has the potential to lift a large number of people out of poverty. To work towards that goal, the developed nations of the world have committed themselves to create an equitable and fair cotton market by signing the Millennium Declaration, and have repeatedly pledged to reduce the subsidies they provide to their own producers. All this would suggest that the cotton trading market is on track towards becoming equitable. In fact, nothing could be further from the truth.

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## *The economic effects of cotton subsidies on Africa*

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Countries such as the United States (US), China and nations of the European Union (EU) continue to support their cotton sectors with heavy sub-

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### **Nikolaos P. Ziropiannis**

Department of Resource Economics  
University of Massachusetts  
Amherst, MA, U.S.A.  
nziropia@resecon.umass.edu



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sidies that lead to overproduction, since farmers are guaranteed a stable price for their output regardless of the conditions on the global market. This practice tends to suppress global cotton prices to low levels, leading to substantial market losses for developing countries, particularly WCA countries, as they cannot protect their farmers through subsidies.

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## *The environmental effects*

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The economic implications of cotton subsidies for the WCA nations are well documented. Less known are the environmental implications. How have African producers been treating

*Declining cotton prices on the world market are due to heavy subsidies by the Western countries; cotton farmers in Africa are forced to overexploit their land to cope with the contracts they have made.*

the environment in their effort to survive in an international market?

Cotton is the main agricultural commodity providing export revenues for WCA countries. WCA ginneries, the majority of which are still controlled by the public sector, sign contracts with overseas spinners. The African ginneries guarantee to provide a fixed amount of ginned cotton each year. As prices decline due to

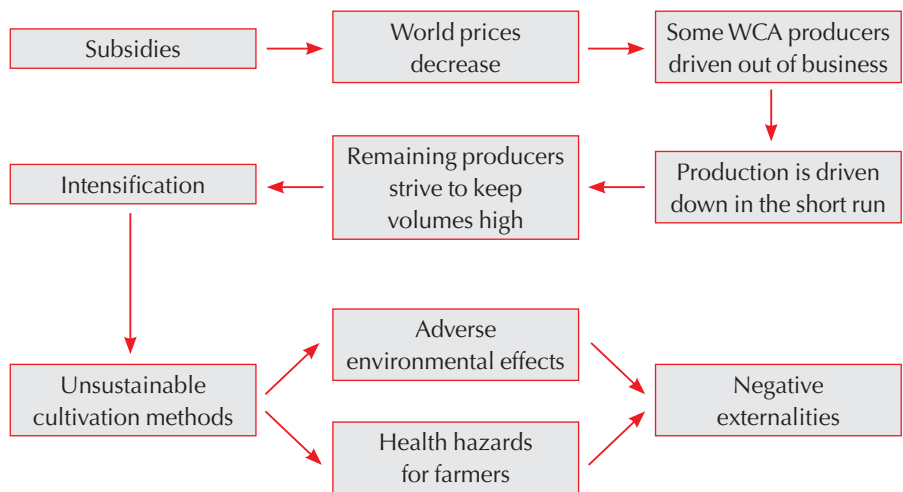
# INTERNATIONAL PLATFORM

subsidies provided by the US, EU and China, a number of WCA producers are driven out of business because cotton production is rendered unprofitable for them. Consequently, production is driven down. However, given the importance of cotton exports for African nations and the contracts that have been signed with the spinners, the state encourages the remaining cotton farmers to increase their production to make up for the withdrawal of the farmers driven out of the market. The farmers still in business must intensify their production. To obtain higher yields, they use cultivation methods that rely heavily on chemical inputs, expand their land usage and adopt genetically modified (GM) varieties. All of this creates hazards, either directly or in the future, and could inhibit the sustainable growth of cotton production in WCA. The Figure illustrates this theoretical framework, which yet needs to be verified by empirical results.

## Effects on land

In their effort to increase production WCA cotton farmers resort to marginal land that may require large amounts of fertiliser in order to provide satisfying yields. Concurrently, fallow periods are reduced. Such practice entails a risk of soil nutrient

**In the long run, African cotton farmers are encouraged to increase their output when world cotton prices fall.**



depletion and often leads to soil acidification and degradation.

Moreover, studies have demonstrated a direct link between expansion of cotton fields and deforestation in many parts of WCA. As cotton needs abundant sunshine and does not tolerate shade, farmers cut down trees to ensure high yields.

## The use of pesticides

Cotton accounts for the highest amounts of insecticide application compared to any other agricultural product. Although only 2.4 percent of the world's arable land is cultivated with cotton, this crop accounts for

24 percent of the insecticides and 11 percent of the pesticides used worldwide. In Africa, 80 percent of all pesticides are used in cotton growing.

Most of these pesticides are classified by the World Health Organisation as "moderately hazardous". The FAO advises avoiding the use of these chemicals in developing countries in particular, as many farmers still do not take the necessary precautions or follow safety instructions when applying pesticides on their fields.

The hazards of pesticide use in WCA cotton fields have been illustrated by several studies. One of them states more than 240 cases of health problems

in Benin during the 2000/2001 season due to pesticide use, 24 of which were fatal.



Photo: Iain

*Decision-makers must realise that the poverty-alleviating potential of cotton lies in a free and fair global market.*

Most of these incidents were related to consumption of contaminated food. Cotton farmers may not be aware of the danger that the highly toxic pesticides used in cotton production pose when used in food production.

## Genetically modified cotton

The economic risks associated with cotton production in WCA have opened the door to the adoption of GM cotton in many countries of the region. A number of studies have demonstrated great benefits for producers, the most important being:

- reduction in use of pesticides and subsequent economic savings
- increased yields due to the plants' resistance to pests and diseases.

Beside the advantages GM cotton offer to farmers, there are some risks to be taken into account. So far, farmers are reusing seeds they have saved from the yield for the next cropping season. Since GM cotton is subject to patent law, the seeds have to be bought from the seed producing companies each year.

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## The role of the WTO

In 2002, Brazil appealed to the WTO against the subsidies by the US government to American cotton producers. The WTO ordered the US to remove those subsidies that are violating international trade agreements.

Furthermore, in 2003 four WCA countries submitted a set of suggestions on the issue of cotton to the WTO. Their proposal urged the international community to take specific steps towards the liberalisation of the cotton market and the removal of domestic and export subsidies. The WTO responded by forming the "Cotton Sub-Committee", which addresses issues concerning the international cotton market.

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## What needs to be done

Most of the WCA cotton-producing countries are under the macroeco-

nomical surveillance of organisations such as the World Bank or the International Monetary Fund (IMF). The structural adjustment programmes implemented in the region do not allow for protectionist economic policies. The WTO could play an important role by convincing the IMF and the World Bank to allow African nations to provide subsidies as long as developed nations are doing the same. That, of course, would not constitute a long-term solution but could help WCA producers to stay in business.

WCA governments also have another important role to play. They are responsible for the protection of their natural resources. Education and training of cotton farmers in natural resource conservation is of paramount importance. Furthermore, governments should ensure that a framework is in place to rationalise and monitor the use of chemical inputs. Given that WCA governments provide their farmers with free cotton seed, research geared towards the development of improved varieties should be funded so as to generate seeds that are better suited to the climatic and soil conditions of WCA.

A new approach in cotton production should therefore be developed. Research is needed on the effects of GM cotton cultivation in WCA, to assess whether GM cotton has a beneficial potential for African producers. Results should be compared with the benefits of organic cotton cultivation. A case-by-case and country-by-country analysis should be carried out and tailored to the needs of each WCA nation.

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## Conclusion

Decision-makers must realise that the poverty-alleviating potential of cotton lies in a free and fair global market; one that will consider the threat that intensified cotton cultivation poses to the environment; one that will weigh up the use of GM varieties primarily on the basis of what is best for developing

## Zusammenfassung

Der Baumwollhandel wird gerne als „Erfolgsgeschichte“ in der Entwicklung afrikanischer Länder bezeichnet. Jedoch wird der globale Handel durch die Agrarsubventionen der Industrienationen an ihre Baumwollherzeuger massiv verzerrt. Sie führen zu rückläufigem Einkommen der afrikanischen Baumwollherzeuger und zwingen sie zu umweltschädlichen Anbaumethoden.

## Resumen

El comercio de algodón ha sido caracterizado como una "historia de éxito" en el proceso de desarrollo de los países africanos. Sin embargo, los subsidios agrícolas que las naciones desarrolladas otorgan a sus agricultores algodoneiros tienen un efecto de distorsión sobre el comercio global. Reducen el ingreso de los productores algodoneiros africanos y los fuerzan a implementar métodos de cultivo nocivos para el medio ambiente.

countries; one that will be designed to allocate cotton production to regions that are best suited for the crop; one that will provide a price reflecting all aspects of production, be they pollution from pesticides and subsequent health impacts, organic methods of cultivation, presence of subsidies or social parameters (access of women to production, use of child labour). Only under these circumstances can we hope to give the impoverished nations of the world a fair chance to rid themselves of the anathema of poverty.

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*The author is a graduate student at the Department of Resource Economics of the University of Massachusetts, Amherst. This article draws largely from the author's Master's thesis entitled "Government support in cotton production: Implications for sustainable development", submitted to the University of Edinburgh in 2006. A full list of references can be obtained from the author.*