

Challenge of improving Cotton competitiveness in a distorted market: Analysing the role of crop protection in Francophone Africa

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From the perspective of the Least Developed Countries (LDCs), the WTO Ministerial Meeting in Cancun in September 2003 was dramatic in the sense that a few of these countries spoke for the first time in the arena of international negotiations of trade. Four Francophone African cotton producing countries (FACCs) - Benin, Burkina Faso, Chad and Mali - protested against the subsidies in a few countries or regions that had in effect pushed the world cotton price down. This approach of international protest captured the attention and energies in and out of the related countries, but no complementary actions were taken to gain competitiveness and enable them to be less dependent on the good will of the super powers. The exclusive focus on international protest is furthermore debatable as there has been no progress on the Doha negotiations since July 2006. Many actions could be contemplated to improve field productivity and product competitiveness, in various areas, e.g. soil fertility and fertilizing, tolerance to unfavourable climatic trend, cultivation practices in better controlling plant growth. In this paper, we focus on the possible contribution of crop protection.

Although the improvement of field productivity calls upon, *in fine*, new or adjusted techniques, the conditions of its implementation depend on the prospects of world market price and the evolution of the cotton trade at international level. However, in contrast to the implicit assumption of the FACCs in their protest before WTO, the abolition of cotton subsidies will not increase the world price substantially, and will not increase it for long. There is no reason to think that the imbalance between offer and demand would not remain erratic. So globally, low and volatile prices will remain however effective the correction of the current cotton subsidies will be. Consequently, for resource-poor and risk-adverse smallholding growers, productivity gain should not be contemplated at any cost or at any financial risk.

In the area of commodity trade, there is no unique price, but differentiated prices. Price differentiation does not only lie on objective and measurable criteria. On one side, owing to the general phenomenon of market concentration, one can fear that price differentiations would become less objective, less transparent and less favourable to selling countries. On the other side, the increasing sensitiveness of consumers to the environment implies that the modalities of crop protection could impact on price differentials between cottons or producing countries. Market premium offered to organic cotton or fair-trade cotton is quite illustrative of this phenomenon. Thus improvement of crop protection would not only impact on cost reduction, but also on the value of the cotton product, provided that publicity is made to show how and why techniques are implemented, and whether there is an improvement on environmental impact.

The progress of cotton production in the FACCs is commonly regarded as a rare "success

story" in Africa, these countries combined have attained over the last fifteen years third place rank in exporting cotton to the world market. Many factors have contributed to this achievement, in particular a commendable attention to crop protection by all cotton growers. The rather limited extent of cropping intensification implies a competitive production cost at the field level, but the gap between the production cost and at the point of export is far larger than in competing countries because of the well-known lack of infrastructures in LDCs. Hence, progress in productivity at the field level, for instance from improved crop protection, will correspond to smaller gains in competitiveness at the export position. Besides, in the FACCs, the cost to control cotton pest represents only one third of the total cash expenses of cotton growers, this means that the reduction of this cost would have a diluted effect on the total production cost.

Progress on crop protection must really be substantial to impact on productivity and competitiveness in the FACCs and there are reasonable prospects for substantial progress. Because current crop protection in LDCs is far from being optimal to reduce yield losses improvement in crop protection will lead to cost reduction and yield improvement, through a kind of "lever effect" of crop protection which is seldom emphasized. Improvement of cotton crop protection could result from several complementary methods. First, reform of the cotton sectors in several countries has led to less efficient implementation of crop protection (issues of insecticide supply, of technical assistance...) requiring new rules and responsibility sharing to recover the former efficiency. Secondly, the implementation of chemical controls based on scouting or threshold basis is showing great potential to achieve higher efficiency in adjusting the chemical use to various cotton cropping practices.

Horticulture production development in many countries uses insecticides similar to those on cotton, leading to continuous cropping and pest pressure which threatens the onset of insecticide resistance. Adaptation of pest control on cotton is needed and could be a source of better effectiveness. The advocates of organic production have merit by warning against the exclusive and blind reliance on chemical control. From economic perspectives, one can hardly recommend the total shift of the FACCs cotton to organic production; some ideas and tools of organic production could nevertheless be worth consideration in formulating a more effective and sustainable protection program. This approach of integration will be challenging to cotton researchers.

The interest of GM cotton to improve crop protection and profitability remains a matter of controversy. When considering as many of the results currently available as possible, it appears that cost reduction in controlling pests is not systematic, it depends on the initial number of sprays prior to GM introduction and the increase of the seed cost. The advantages and shortfalls of GM cotton use are not the same in DCs and LDCs. In LDCs, yield gains recorded were the highest, hence demonstrating the above mentioned "lever effect", but the use of GM seeds implied a great increase in cash expenses early in the cropping season. The potential benefit of using GM cotton to control pests, hence, depends on the economic conditions of using GM seeds. These conditions are far more diversified than those criticized by the opponents to GMO; there is a challenge for the FACCs to bargain the most adapted and reasonable conditions. The use of GM cotton cannot be profitable for every grower or every plot because there is and there always will be part of the cotton plots which are not in optimal conditions for satisfactory yield. Partial use of GM cotton should make sense, but it implies serious challenges in adjusting seed distribution and variety co-existence.