

Pakistan's Cotton and Textile Economy

Intersectoral Linkages and Effects on Rural and Urban Poverty

Caesar B. Cororaton and David Orden

Pakistan's economy relies heavily on its cotton and textile sectors. The cotton-processing and textile industries make up almost half of the country's manufacturing base, while cotton is Pakistan's principal industrial crop, supplying critical income to rural households. Altogether, the cotton-textile sectors account for 11 percent of GDP and 60 percent of export receipts. The future of this vital component of the national economy is uncertain, however. These industries face the challenges of unstable world prices and increased competition resulting from global liberalization of the multilateral textile and clothing trade. At the same time, Pakistan's macroeconomic situation is volatile. Given such challenges and volatility, this study investigates what the future might hold for Pakistan's cotton and textile industries and its implications for rural and urban poverty reduction in the country.

The study uses a computable general equilibrium (CGE) model calibrated to a 2001–02 social accounting matrix of the Pakistan economy to conduct experimental simulations of possible economic changes. The CGE model results are linked to the nation-wide 2001–02 Pakistan Household Integrated Economic Survey to examine the implications the simulated developments have for Pakistani poverty.

Simulation 1 examines the effects of a doubling of foreign capital inflows, as occurred from 2002 to 2006, before a subsequent financial crisis emerged in 2008. Simulation 2 analyzes the counterfactual effects of an increase in world prices of cotton lint and yarn and/or textiles which would have offset declines experienced in the late 1990s and early 2000s. Pakistan's strong textile association motivates Simulation 3, which examines the effects of a 5-percent increase in government production subsidies to the industry. Simulation 4 uses a dynamic-recursive version of the model to analyze the short- and long-run effects of a 5-percent increase of total factor productivity (TFP) in cotton, lint and yarn, and textile production.

FINDINGS

The main findings from the four simulations are as follows:

- Simulation 1: An increase in foreign capital inflows leads to an improvement in overall investment and an increase in household income. Both urban and rural poverty decrease as the result of higher incomes and due to lower consumer prices from appreciation of the exchange rate. There is also a net reduction in exports and increase in imports in textiles and other sectors because of the appreciation, but this is offset by a movement of labor and other resources to the construction-related and service sectors.
- Simulation 2: Increased world prices for cotton lint and yarn increase farm wages and returns to land, raising incomes among farmers, especially those involved in cotton production. The higher prices for lint and yarn make its export relatively attractive. Textile manufacturing suffers as a result and incomes among urban households and rural non-farmers tend to decrease. By contrast, increased world textile prices lead to a corresponding increase in Pakistan's fabric exports and substantial appreciation of the exchange rate, with a net reduction in total demand for Pakistani raw cotton. The income of farmers falls, while that of other household groups rises. A simultaneous increase in cotton lint and yarn and textile prices results in the greatest increase of income and poverty reduction among the price-change scenarios. Production and export of these products go up but there is a reinforced exchange rate appreciation. This has negative price effects on tradable sectors outside the cotton-textile value chain and on household income from abroad. Rural poverty declines but offsetting effects leave urban poverty essentially unchanged.
- Simulation 3: While a textile production subsidy lowers prices for consumers and increases industry income, its cost leads to an overall decrease in national welfare. If

the subsidy is financed through an additional consumption tax, the upward taxation effect on consumer prices increases poverty. If the financing is through an income tax, the burden of additional taxation falls on urban non-poor households and poverty is reduced.

- Simulation 4: Improvements in TFP are welfare-increasing, with the dynamic effects depending on which of the highly interdependent cotton-textile sectors experiences a productivity gain. An improvement only in cotton production results in decreased farm-level prices for several years due to bottlenecks in ginning and spinning. The most positive scenario, with least adjustment costs, involves higher productivity in all three cotton-related sectors. Reduction in their cost of production makes both cotton lint and yarn and textiles more competitive in the export markets, with a sustained increase over the long run in exports of these sectors.

POLICY IMPLICATIONS

The different effects demonstrated in the scenarios from this study inform policymakers of the complexities involved in assessing the performance of the cotton, cotton-processing, and textile sectors and their impacts on employment and poverty given the volatility of foreign capital inflows or given liberalized world trade rules. Simulations 1 and 2 demonstrate different effects arising from largely external shocks. Simulations 3 and 4 are relevant to policymakers who have

limited fiscal resources to channel into capacity-building public investments but who face calls for more direct support from industry lobbies.

While a surge in foreign savings or improvement in remittances are positive developments for Pakistan, the strengthened currency has negative effects on the competitiveness of the tradable sectors, including the cotton-textile industries. Effort to diversify Pakistan's limited industrial/manufacturing base could be hampered if the appreciation is sustained. An improvement in the world prices of either cotton lint and yarn or textiles has positive effects on that sector and households that depend on it for their incomes. However, there can be adverse effects on other closely related sectors in the cotton-textile chain.

The fear of loss of international competitiveness has motivated discussions of subsidies or investments to aid the domestic industries in Pakistan. Rather than protecting competitiveness through subsidies, which are welfare-reducing, policymakers should promote competitiveness through improved productivity. These improvements are important because the international markets for textiles and clothing are becoming more price sensitive with liberalization. Under the new international trading arrangements, suppliers that lose competitiveness can expect to suffer losses in market shares, which Pakistan can ill-afford. The results from this study imply that investments to raise productivity would be a far better use of scarce resources than supporting the industry through production subsidies.

Copyright © 2008 International Food Policy Research Institute. All rights reserved.

IFPRI gratefully acknowledges unrestricted funding from the following financial contributors and partners: Australia, Canada, China, Finland, France, Germany, India, Ireland, Italy, Japan, Netherlands, Norway, South Africa, Sweden, Switzerland, United Kingdom, United States, and World Bank.

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE • 2033 K STREET, NW • WASHINGTON, DC 20006-1002 USA
T: +1-202-862-5600 / Skype: ifprihomeoffice • F: +1-202-467-4439 • ifpri@cgiar.org • www.ifpri.org

Download or order online: www.ifpri.org/pubs/pubs.htm#rreport

To order by post, please fill out and send this coupon to Publication Services at IFPRI.

Please send me a copy of Research Report 158:

Pakistan's Cotton and Textile Economy: Intersectoral Linkages and Effects on Rural and Urban Poverty, by Caesar B. Cororaton and David Orden.

Name/Title _____

Organization _____

Address _____

If your order is not received within 2 weeks (USA) or 6 weeks (outside USA), please let us know.