

Cotton: What could a Doha deal mean for trade?

1. Introduction

Cuts to developed country cotton subsidies could increase world prices, boosting production and exports in a number of developing countries including some of the poorest producers in Africa. This information note examines how different countries could be affected by greater or smaller reductions in subsidies as part of the WTO's Doha Round, in addition to looking at what would happen if countries cut subsidies that were deemed unlawful by the WTO's dispute settlement panel.

2. Cotton: a pivotal trade conflict

Developed country subsidies for cotton, which depress world prices, have kept trade negotiators and lawyers busy from Bamako to Brasilia since the start of the Doha Round in 2001. Lower costs of production in some countries have frustrated the efforts of cash poor governments seeking a fairer trading system. Given the Doha Round's mandate, many WTO members believe that any deal must address the development concerns embodied in domestic support for cotton.

Brazil recently received a final ruling in its eight year old row with the United States from the WTO Dispute Settlement Body (DSB). The US, a major subsidizer of cotton, had failed to comply with rulings of the DSB in the *Upland Cotton* case. An arbitration ruling, valued at approximately US\$830 million, allows Brazil to retaliate at its borders against US imports with higher duties and a waiver of intellectual property restrictions on certain goods.¹ A later Memorandum of Understanding between the US and Brazil proposed that a US\$147 million fund be created to compensate Brazilian cotton farmers affected by artificially low prices. In order to avoid an interruption in the flow of goods and services with its sixth largest trading partner, the US has tentatively agreed to compensate losses suffered by Brazilian farmers by allowing some previously prohibited Brazilian meat into its borders and to reform the offending farm legislation on subsidies after its expiration in 2012.

A finalized settlement between the US and Brazil would still leave the needs of cotton dependent economies unaddressed. Cotton is

¹ Brazil, *US Strike Framework Deal in Cotton Dispute*. *Bridges Weekly Trade News Digest*. Vol. 14. No. 23. <http://ictsd.org/i/news/bridgesweekly/78816/>



the most important source of agricultural export earnings for LDCs as a group, as shown in Figure 1 and Figure 2. Benin, Burkina Faso, Chad and Mali, West African cotton exporters known as the Cotton Four, proposed in 2006 that domestic support for cotton be cut more deeply and at a

faster rate than spending on other goods.² Wholly supported at its outset by the African Group and well received by other WTO members, such as the EU and Brazil, the proposal has failed to garner a response from the largest subsidizers in intervening years.³

Box 1: US-Brazil Upland Cotton Dispute

Concern over cotton subsidies and an explosion in US exports led Brazil to take the issue to the WTO's Dispute Settlement Body (DSB) in 2002. Focusing on six specific claims relating to US payment programmes, Brazil argued that the US had failed to abide by its commitments in the Uruguay Round Agreement on Agriculture (AoA) and the Agreement on Subsidies and Countervailing Measures (SCM).

The dispute dragged on for nearly eight years, with the WTO DSB ultimately ruling in Brazil's favor on nearly all claims. The case weighed in on export subsidies, classification of domestic spending in WTO terms and even the *peace clause*. The DSB and subsequent appeals to the Appellate Body (AB) found that US spending on cotton, nearly US\$3 billion in 2005, exceeded the limit set under the SCM's peace clause which allowed signatories to continue paying their farmers until domestic policies could be reformed. The DSB and AB also clarified that US government loans that offered favorable terms to cotton exporters were an export subsidy violating previous agreements. Moreover, the dispute process revealed that some US cotton support that was notified under WTO 'Green Box' spending was incompatible with those rules. If the US abides by the DSB's ruling, such spending may be reclassified under other areas with limits on support under WTO rules, changed or other WTO members may choose to seek clarification.

The US attempted to reform domestic legislation to bring its cotton support in line with WTO rules and Brazil's complaint during the dispute settlement process. Since the WTO arbitration authorized retaliatory measures in 2009, Brazil and the US have attempted to reach a settlement that would satisfy the domestic constituencies most affected.

The Cotton Four (C-4) proposal called for Amber Box spending on cotton, considered to directly distort trade and production, to be cut by a third of the percentage difference between the agreed overall cut and the complete elimination of support entirely. This would ensure that cotton gets the deepest cuts in support while favoring a large cut in overall subsidies. Seeking swift results, the group anticipated that the cuts would be phased over one third of the time allotted to other goods. The C-4 also called for Blue Box spending on cotton, often viewed as less trade and production distorting than Amber Box support, to be capped at a third of the final ceiling for such subsidies. In the absence of any alternative proposals, the most recent blueprint for a final

agreement on agriculture, the Revised Draft Modalities for Agriculture, simply includes the C-4 proposal verbatim.⁴ Officials from countries expected to offer counter proposals have insisted on the need to finalize negotiations in other areas before making a commitment on cotton.

Trade negotiators at the WTO have thus far failed to respect trade ministers' 2005 injunction that cotton be addressed "ambitiously, expeditiously and specifically" within the agriculture negotiations. Moreover, major subsidizers have demonstrated a poor record of reforming their policies without an external stimulus. The 2003-04 reform of the EU Common Agricultural Policy (CAP) and the 2008 US Farm Bill did little to cut the level of

² Proposed Modalities for Cotton Under the mandate of the Hong Kong Ministerial Decision, TN/AG/SCC/GEN/4, 1 March 2006

³ Members React To Cotton Four Domestic Support Proposal. Bridges Weekly Trade News Digest. Vol. 10. No. 12. <http://ictsd.org/i/news/bridgesweekly/7387/>

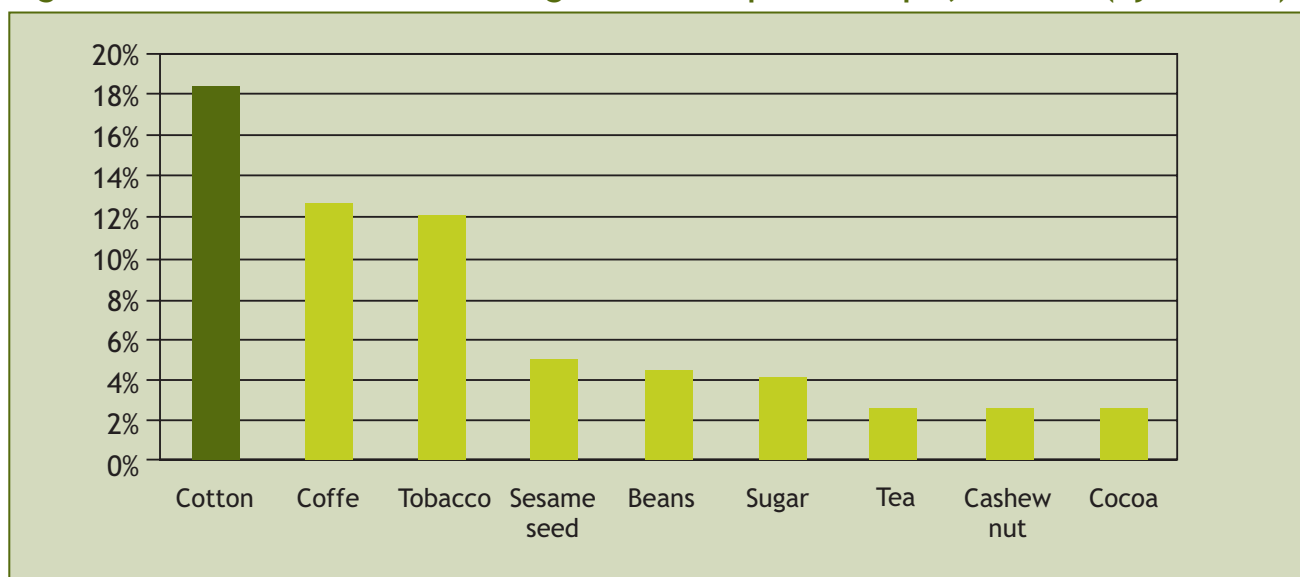
⁴ WTO Revised Draft Modalities for Agriculture, TN/AG/W/4/Rev.4, 6 December 2008

support provided. A Doha Round conclusion and a change in domestic support policies hinge in many ways on resolving the differences that remain between developed and developing countries on cotton. The analysis found below explores the available options.

Table 1: Cotton Specific Language in WTO texts

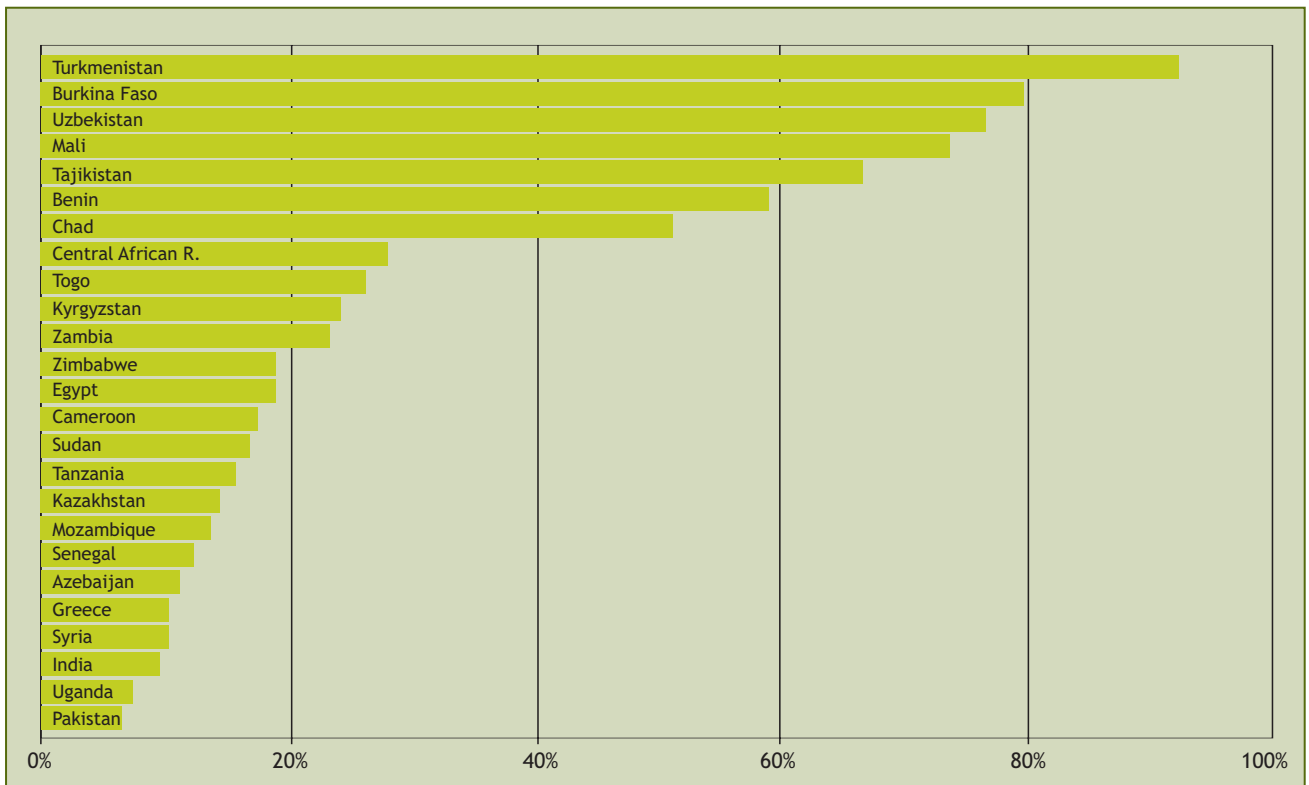
| | Market Access | Domestic Support | Export Competition |
|----------------------------------|--|--|---|
| Doha Ministerial 2001 | - | - | - |
| Hong Kong Ministerial 2005 | Provide Duty Free and Quota Free access to LDCs from start of Doha implementation period | Reduced at a greater and faster rate than overall cut | Export subsidies eliminated in 2006 |
| Cotton Four 2006 | - | Amber Box: Cut by 1/3 of percentage difference between the agreed overall cut and a complete elimination of support entirely. Blue Box: Capped at a third of the of the final overall ceiling. All cuts phased over one third of the time allotted to other goods. | - |
| Upland Cotton DSU Case 2002-2009 | - | Eliminate prohibited subsidies under AoA and SCM rules. Programmes affected: <ul style="list-style-type: none"> • User Marketing Payments (Step 2) • Supplier Credit Guarantee Programme (SCGP) • Marketing loan programme payments (MLP) • Market Loss Assistance Payments (MLA) and • Counter-Cyclical Payments (CCP) | U.S. export credit guarantees found to be a prohibited export subsidy. Programme affected: <ul style="list-style-type: none"> • Intermediate Export Credit Guarantee Programme (GSM 103) |

Figure 1: Shares of LDC combined Agricultural Export Receipts, 2004-07 (by Product)



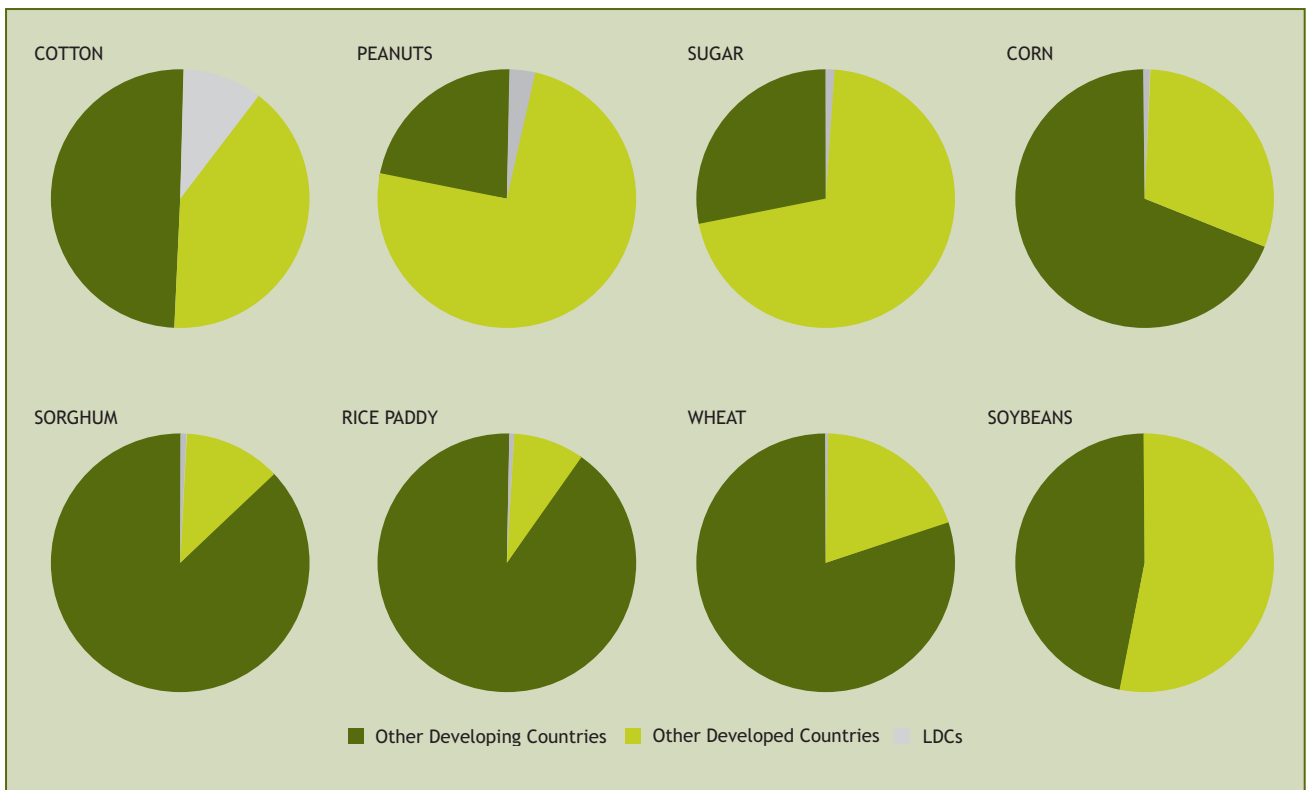
Source: Jales M (2010). *How would a WTO Agreement on Cotton Affect Importing and Exporting Countries?* ICTSD Programme on Agricultural Trade and Sustainable Development Issue Paper No.26. International Center for Trade and Sustainable Development. Geneva. Switzerland. Based on FAO data.

Figure 2: Share of Cotton in Total Agricultural Export Receipts 2004-07 Average (by country)



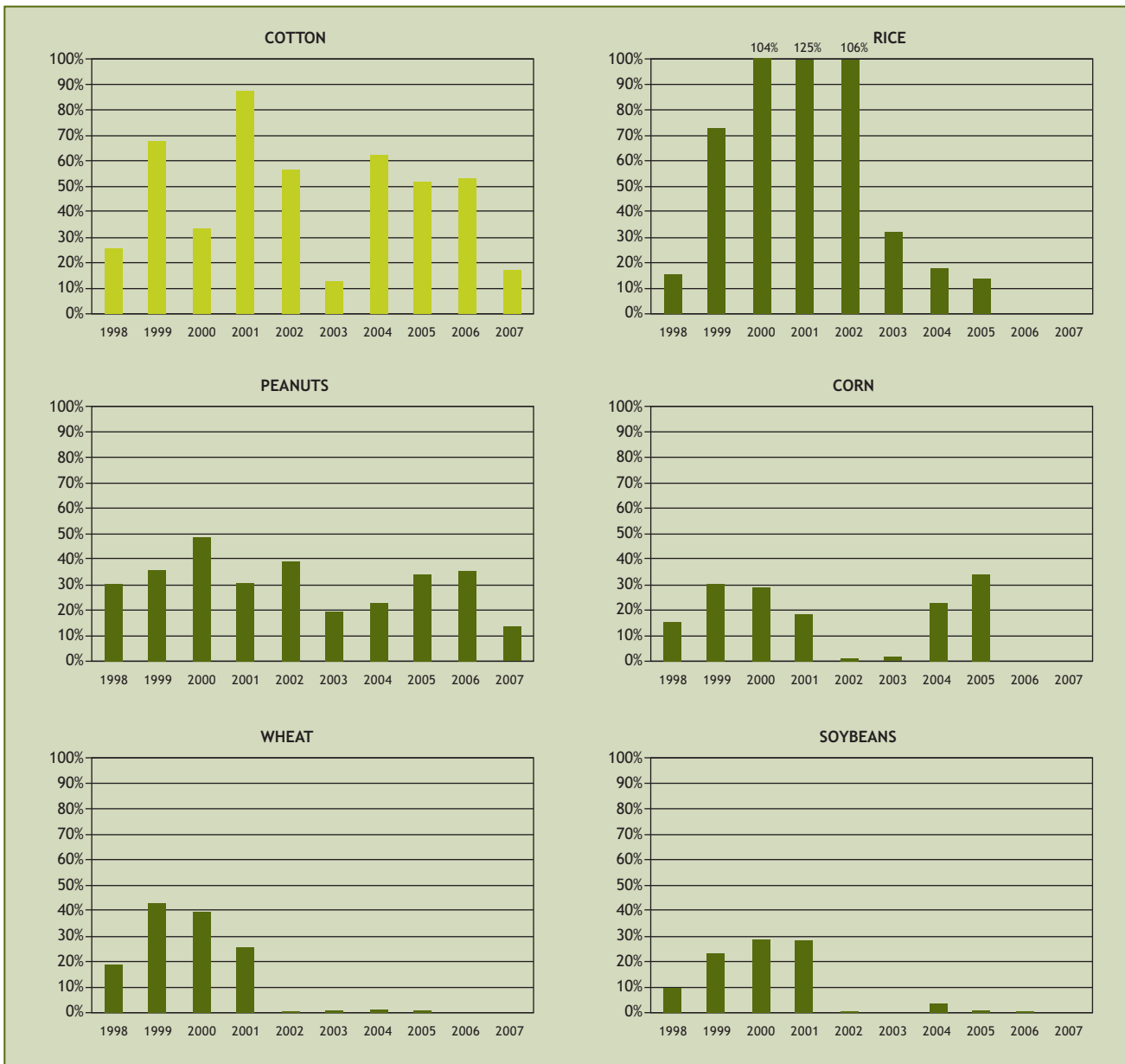
Source: *Ibid*

Figure 3: Shares of World Export Quantities, By Product and Country Category, 2003-07 (1995-1007 averages by source of elasticities)



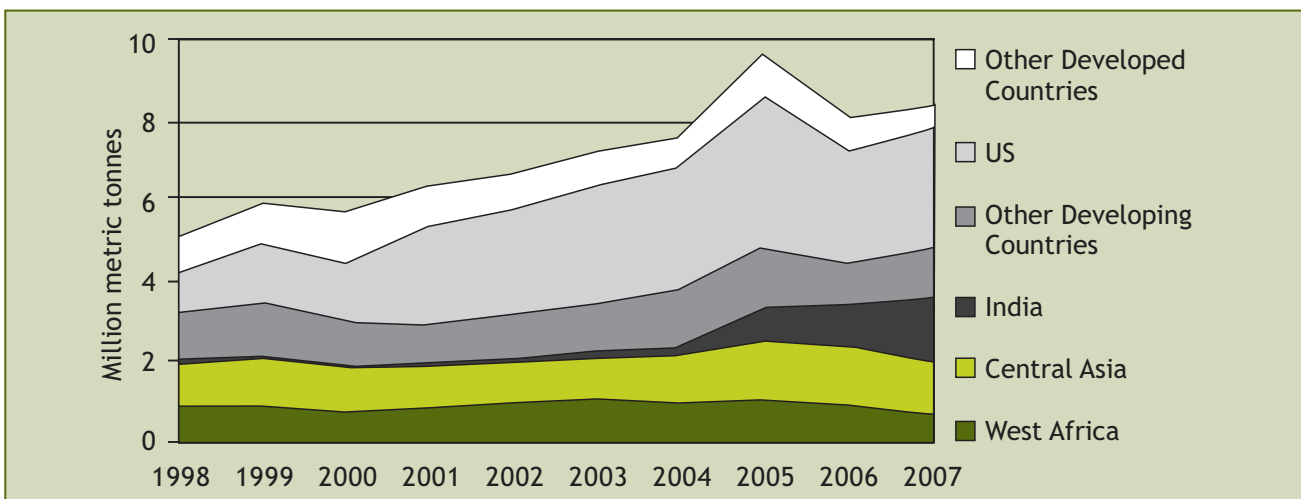
Source: *Ibid*

Figure 4: US Trade Distorting Support* as a Share of Production Value, 1998-2007



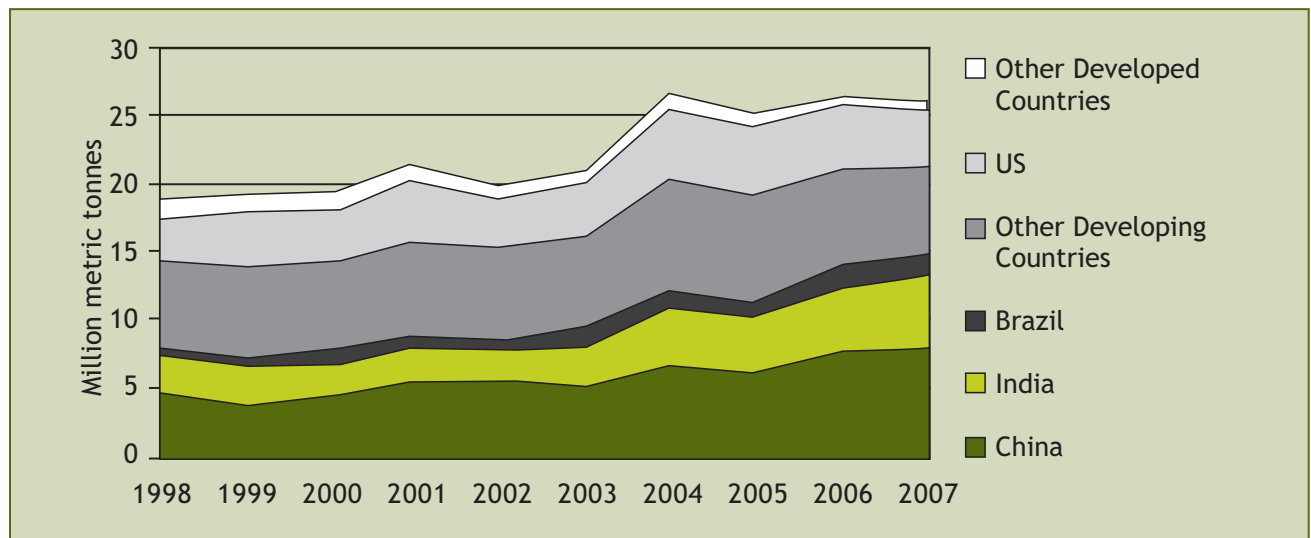
* Trade Distorting Support: Notified AMS or de minimis plus Market Loss Assistance (MLA) payments and Counter-cyclical Payments (CCP).
 Source: Ibid. Based on WTO Notifications and USDA.

Figure 5: Composition of World Cotton Exports, 1998-2007



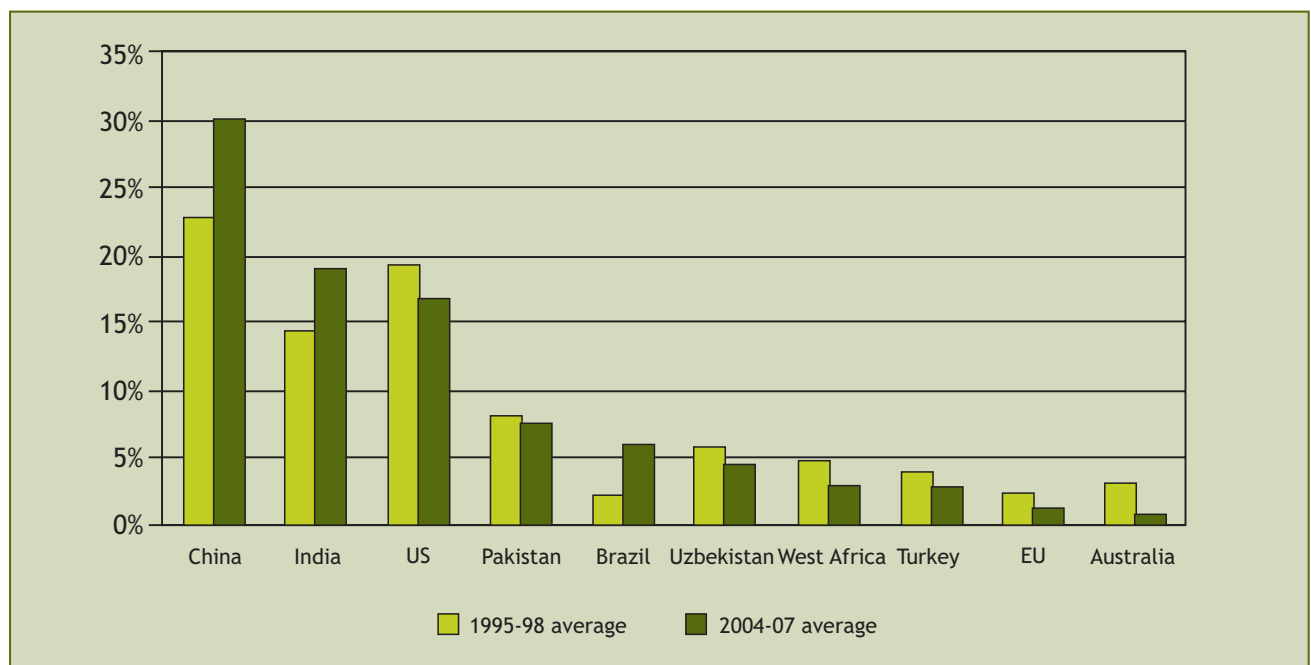
Source: Ibid.

Figure 6: Composition of World Cotton Production, 1998-2007



Source: *Ibid.*

Figure 7: Share of World Cotton Production, 1995-98 and 2004-07 averages



Source: *Ibid.*

3. Understanding possible trade outcomes

Five policy reform scenarios can provide a yardstick for measuring negotiating outcomes.⁶ Two of these scenarios are variations of reform packages in the Doha Round and the following three are based on domestic policy reforms with which the potential outcomes of Doha can be contrasted:

A. Draft Doha deal - incorporating the C4 countries' cotton proposal

B. Draft Doha deal, but without special treatment for cotton

C. Effect of the US implementing the WTO DSB findings

D. Effect of the more modest measures the US actually implemented in response to the DSB findings

E. Internal policy reforms in the US and EU

⁶ The analysis in this information note is based on an ICTSD study by Mario Jales, "How Would A Trade Deal On Cotton Affect Exporting And Importing Countries?" The study is online at <http://ictsd.org/i/publications/77906/>

Box 2: Methodology

The model used by Mario Jales estimates prices and quantities for each scenario that would have been obtained in a given base year, had the policy reforms been implemented at that time. The results of this model help demonstrate how each scenario could affect the world price of cotton, the volume and value of cotton production, and cotton trade between countries.

The years between 1998 and 2007 are used as a base period. Using this range helps illustrate the cyclical nature of the cotton industry and gives a clearer understanding of each scenario's possible implications over time.

The five scenarios examined were analysed with two different sets of supply elasticities - i.e. the responsiveness of supply to price changes - which yield results of different magnitudes for these scenarios and showed the same relative trends.

Scenario A: December 2008 Revised Draft Modalities examines the effect of a trade deal based on the C4 West African countries' cotton proposal - currently the basis of the draft Doha deal prepared by the chair of the agriculture negotiations, the December 2008 revised draft agricultural modalities text. The draft modalities aim to reflect possible areas of agreement among WTO members: in the absence of any counter-proposal from the US, the C4 countries' proposal has for the moment been replicated directly in the chair's draft. This contains a number of provisions specific to the cotton sector which are more stringent than those reforms applied to the agricultural sector as a whole.

Scenario B: Cotton treated as a standard product, while based on the same modalities draft, does not have cotton-specific provisions, instead subjecting cotton to the same rules as the rest of the agricultural sector. Doha Round reforms are likely to be more ambitious than this scenario.

Scenario C: Hypothetical full implementation of DSB recommendations models what might have occurred had the US actually implemented the DSB recommendations that came from the *US Upland Cotton* dispute. These recommendations included the US withdrawing prohibited subsidies and removing the adverse effects of marketing loan programme payments (MLP) and countercyclical payments (CCP).

Scenario D: Actual insufficient implementation of DSB recommendations models the effects of the measures that the US actually did take in response to the DSB recommendations, which were far less stringent than what the DSB had asked of them. The US partially withdrew the prohibited subsidies, and did nothing about the latter recommendation.

Scenario E: Recent internal reforms in the US and EU focuses primarily on internal policy reforms in the US and EU - specifically, the effects of the 2008 US Farm Bill, when applied retroactively, and the effects of the 2003-04 EU CAP reform.

4. Analysis

Price Impact

Scenario A showed the largest increases in world prices, followed by **Scenarios B** and **C**, with negligible price effects for **D** and **E**. The results show substantial variation on a year-by-year basis,

as many cotton subsidies are counter-cyclical: they increase when prices are low, and fall again when prices are high. Figure 8 illustrates these results over the range of the years studied (1998-2007). Implementing the draft Doha agriculture deal with the special cotton provisions had the greatest effect on increasing world price, in individual years and when measuring the average across all years.

Figure 8: Estimated Impact of Alternative Scenarios on the Cotton World Price, 1998-2007 (percentage increase)



Source: *Ibid.*

Production Impact

The results showed production impacts to be greatest in **Scenario A**, with smaller effects in **Scenarios B and C**, and negligible effects in the last two scenarios. However, changes in production volumes and production values varied depending on the country involved and the world price of cotton in any given year.

For instance, in **Scenario A**, US and EU cotton production would have fallen by 9 and 24 percent, respectively - yet this drop would be almost fully

compensated by production increases elsewhere, such as in Australia, Brazil, and the C-4 countries.

US production decreased the most under **Scenario A**, and also fell under **Scenarios B and C** - although by smaller amounts. Production in other countries increased under **Scenarios B and C**, but only by a limited amount. The impacts on production volumes in **Scenarios D and E** were again negligible, with the exception of the EU in **Scenario E** - where output would have dropped by 20 percent. The 2008 Farm Bill had no noticeable impact. Figure 9 illustrates the production impacts described above by scenario.

Figure 9: Estimated Impact of Alternative Scenarios on Cotton Production Quantities (1998-2007 averages and ranges)

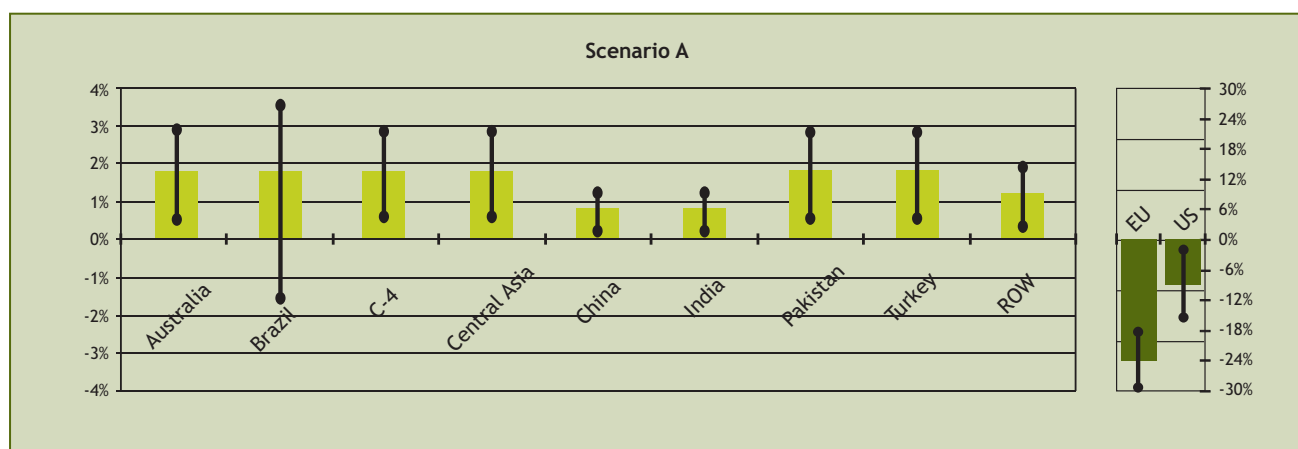
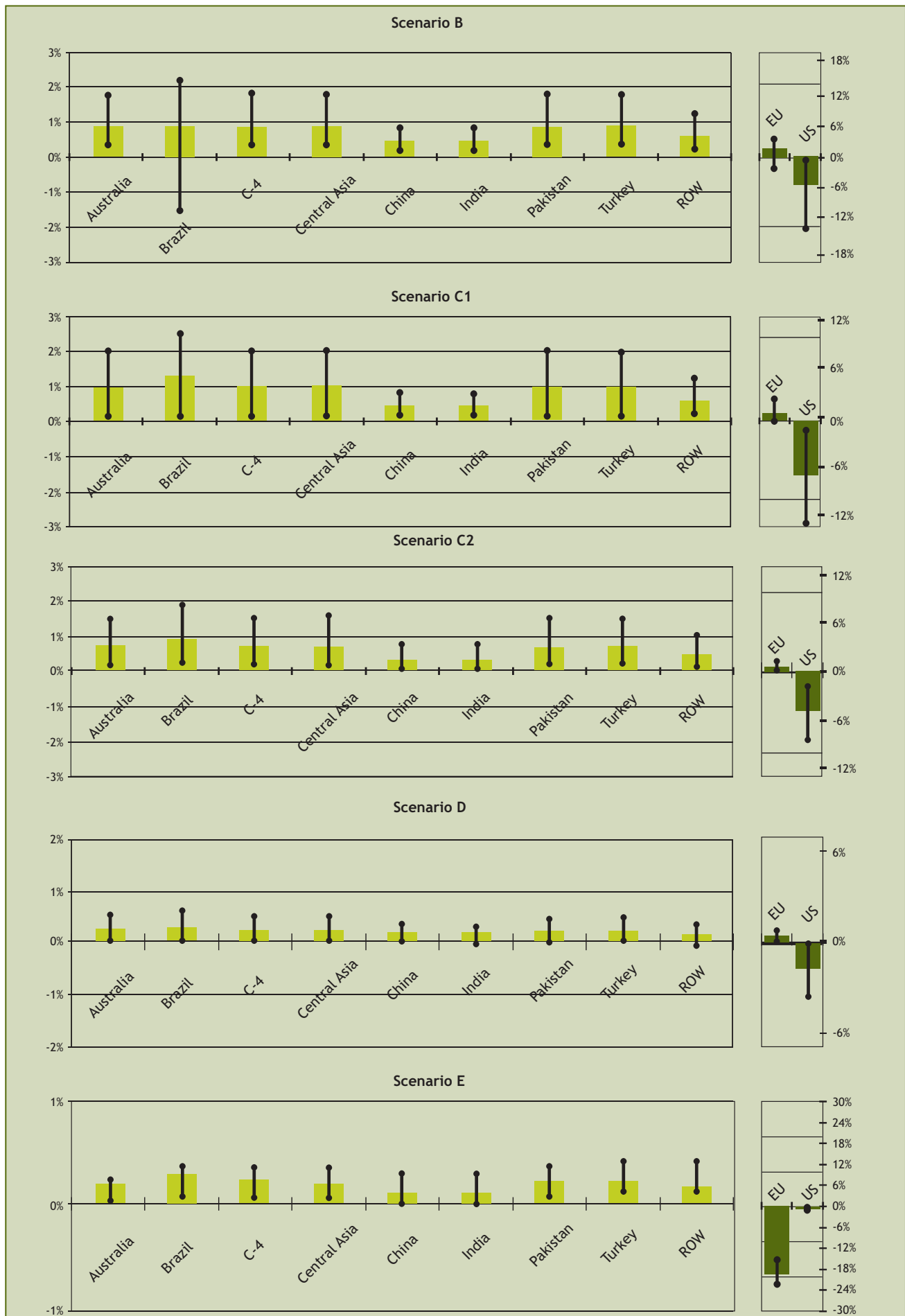


Figure 9: Continued



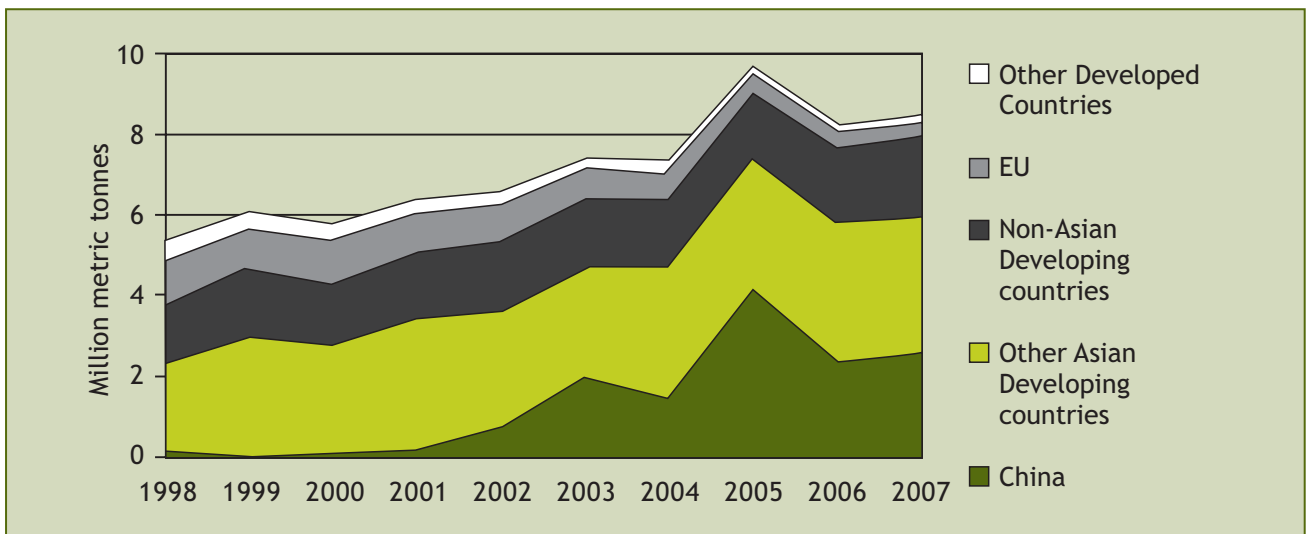
Trade Impact

In each scenario, export volumes would have fallen in the US, while increasing elsewhere (Australia, Brazil, the C-4 countries, Central Asia and India) - again, shifting the overall balance from developed countries to developing countries. This result, coupled with the increase in world prices, would have led to a rise in the value of exports for all net exporters, with the exception of the US. The magnitude of this change would have been largest in **Scenario A**, moderate in **Scenarios B and C**,

and small or negligible in **Scenarios D and E**. In addition, countries with large textile manufacturing sectors, such as India and Brazil, would have experienced a relatively greater expansion in their cotton exports.

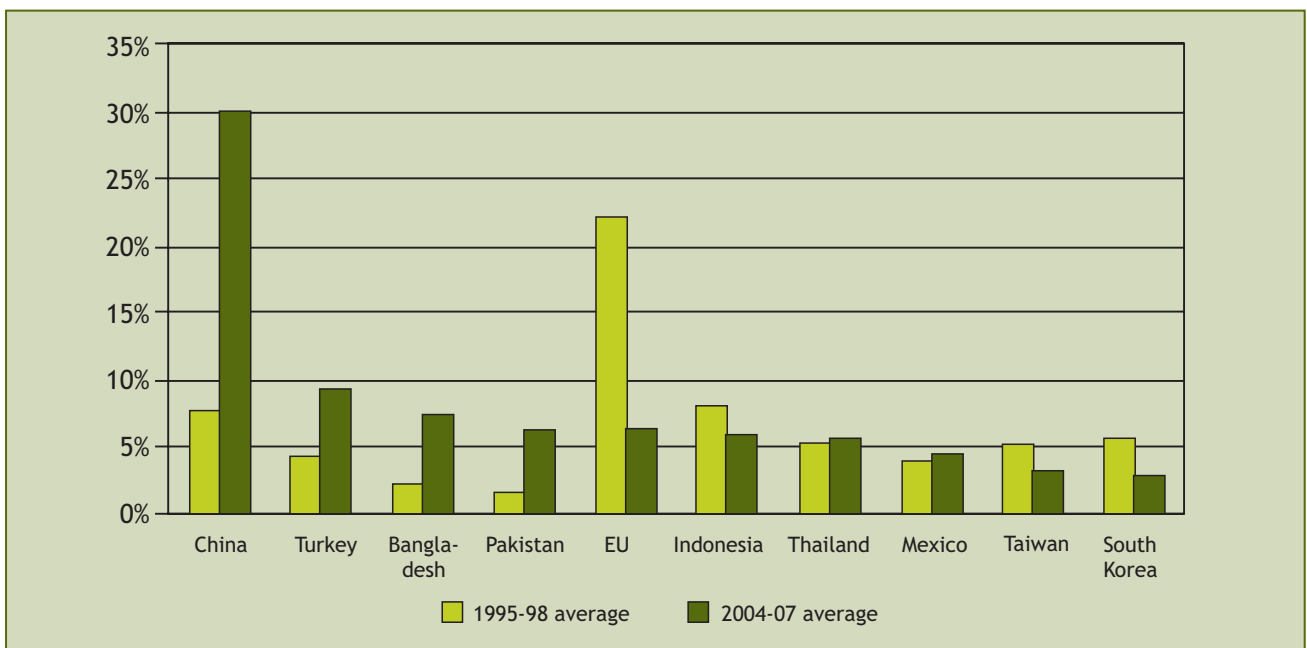
These five scenarios would also have an impact on world cotton imports. Figures 10 and 11 illustrate the historical composition of world imports, showing how China has grown to be the world's largest cotton importer, while the EU has experienced a significant decrease in its share of world imports.

Figure 10: Composition of World Cotton Imports, 1998-2007



Source: *Ibid.*

Figure 11: Share of World Cotton Imports, 1995-98 and 2004-07 averages



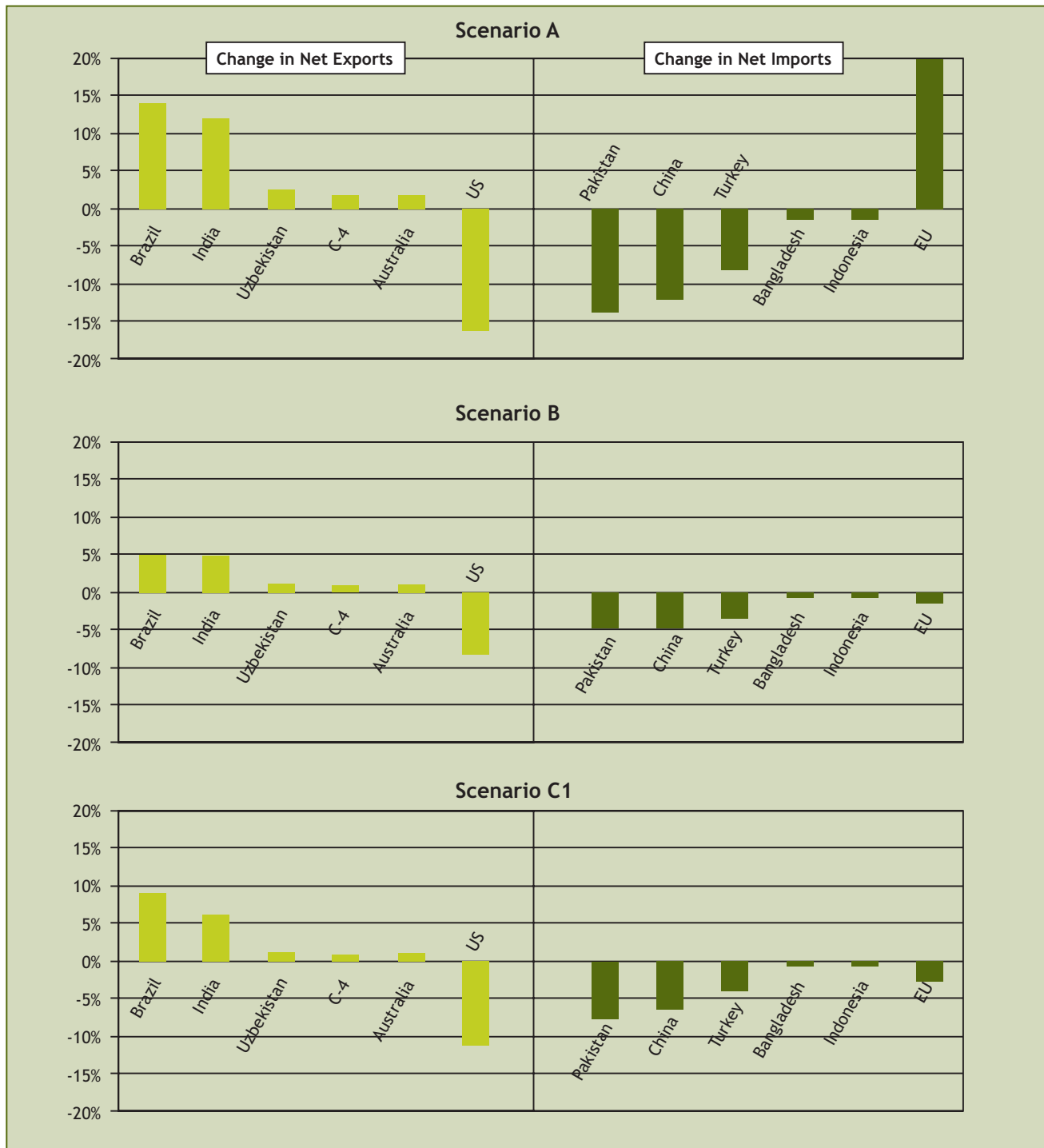
Source: *Ibid.*

The analysis shows that cotton imports would decline in major net cotton importers, such as Bangladesh, China, Indonesia, Pakistan and Turkey, as these countries become able to increase their domestic output and also experience a drop in domestic demand. Given that decreases in import quantities help determine world price increases, the estimated costs of these imports would also have fallen - another benefit of these reforms.

The magnitude of these import changes mirrors those seen with exports. EU import quantities and costs would have increased in the scenarios where EU production fell (A and E), and remained mostly unchanged otherwise.

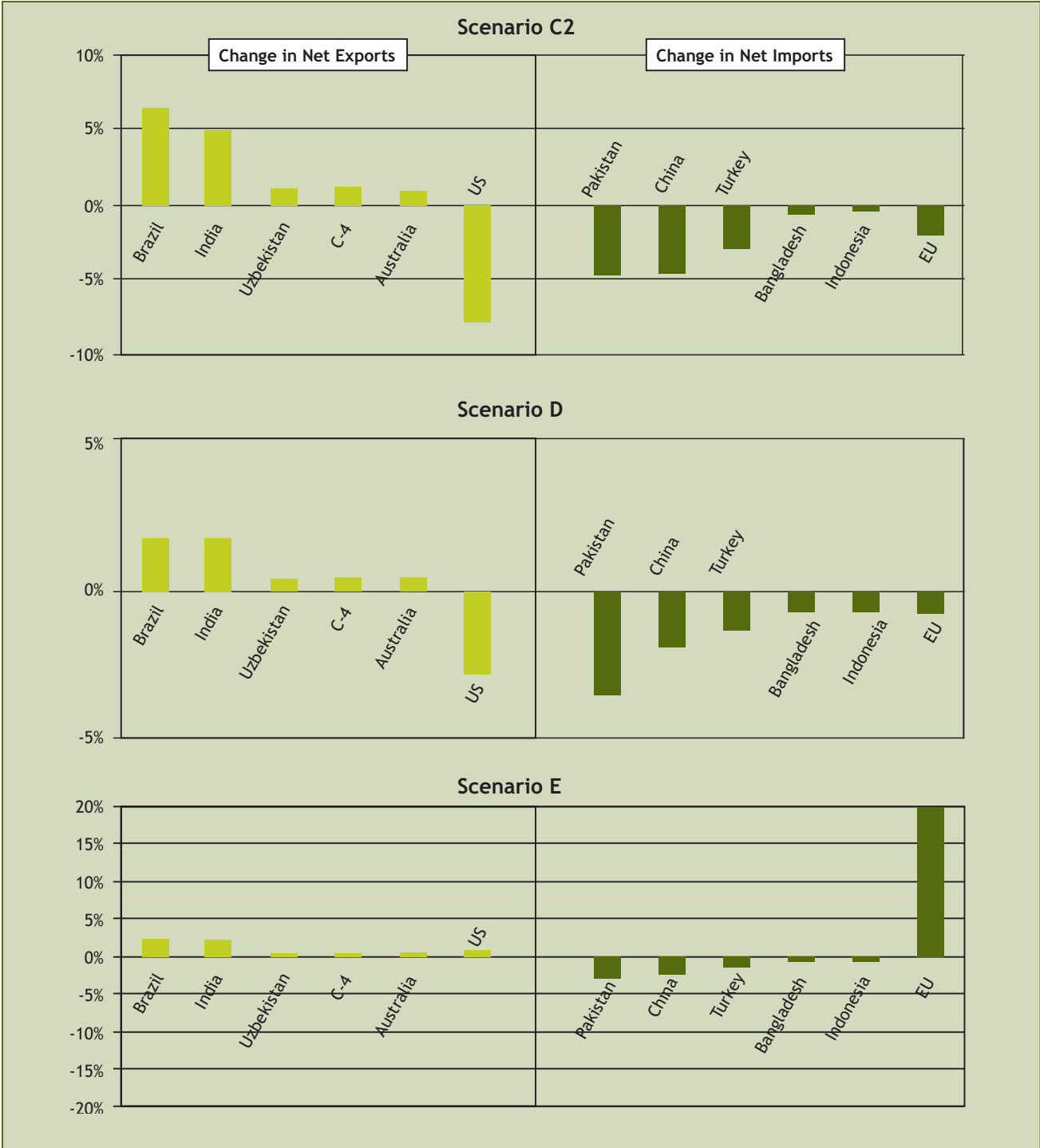
Figures 12 and 13 show these predicted changes, for exports and imports, with both the actual volume of cotton being traded (Figure 12), and the actual value of that cotton (Figure 13).

Figure 12: Estimated Impact of Alternative Scenarios on Cotton Net Trade Volumes (percentage change) (1998-2007 averages)



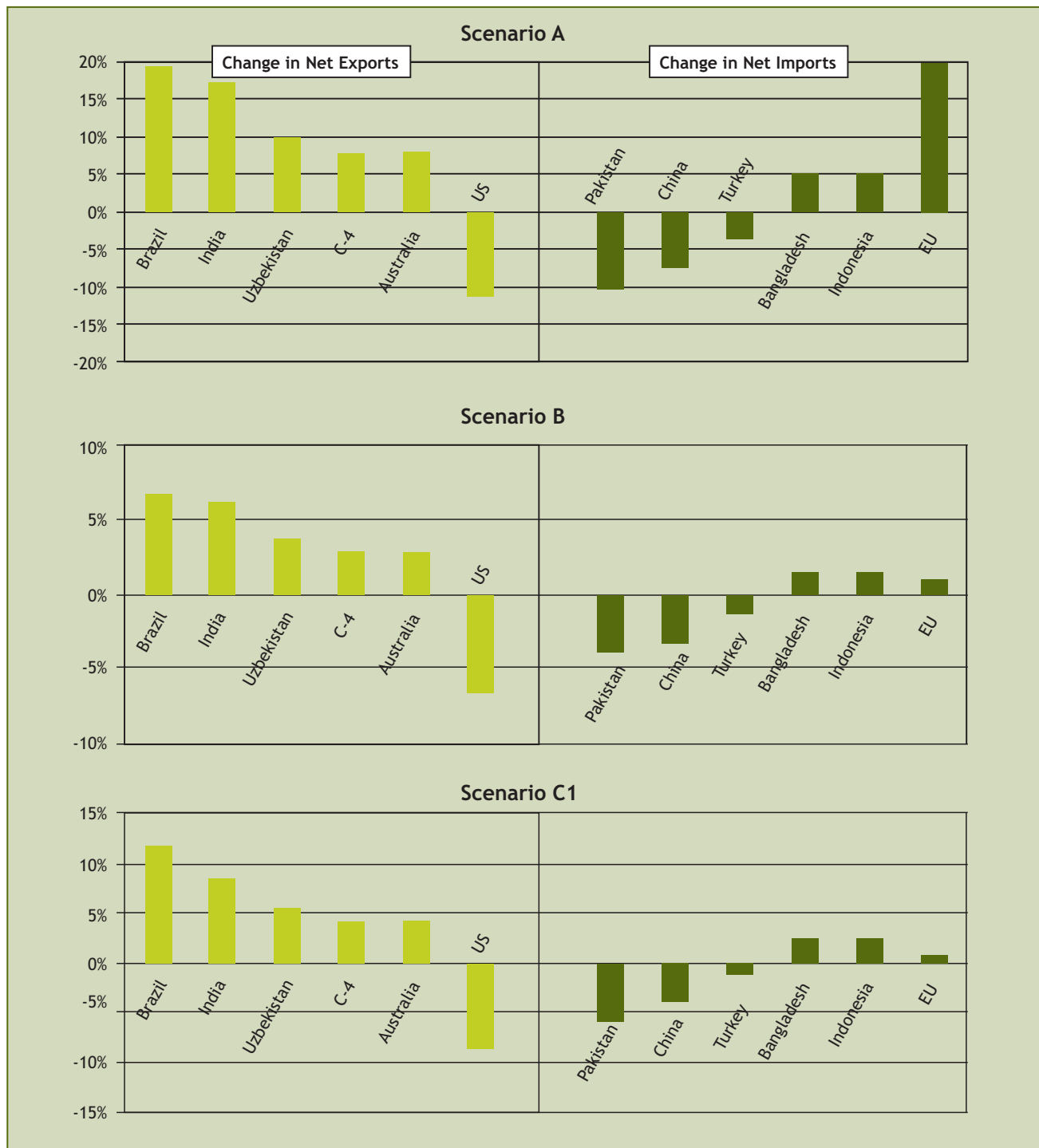
Source: Ibid.

Figure 12: Continued



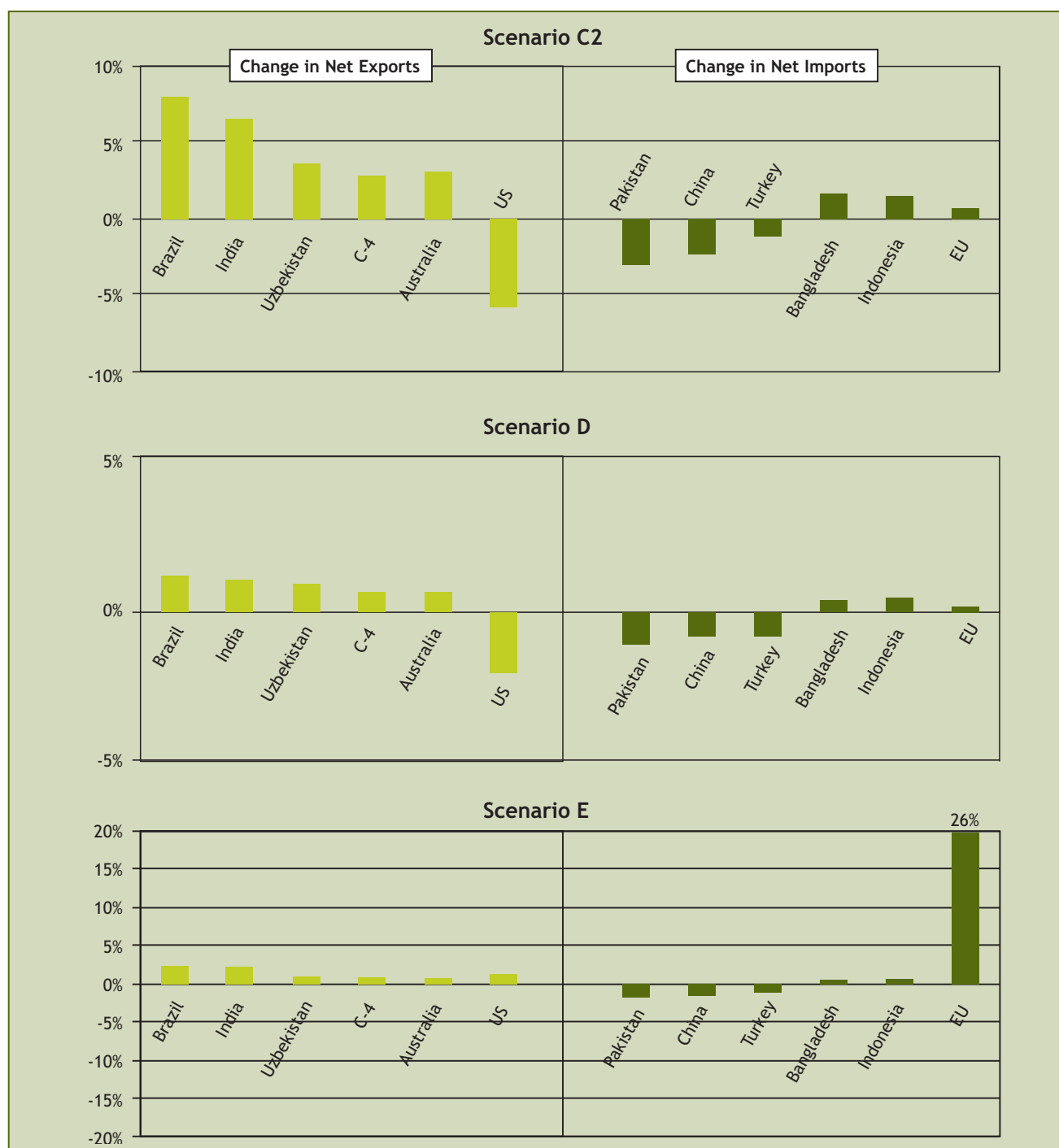
Source: Ibid.

Figure 13: Estimated Impact of Alternative Scenarios on Cotton Net Trade Values (percentage change) (1998-2007 averages)



Source: *Ibid.*

Figure 13: Continued



Source: *Ibid.*

Subsidies versus tariffs

Virtually all of the benefits for cotton in the Doha Round will result from the reduction of subsidies. The other areas of the Doha agriculture negotiations - market access and export competition - will play marginal roles.

In the case of market access, the cotton sector already has exceptionally low tariff levels, leaving little room for change. Only Two WTO members - the US and Oman - would lower their applied tariffs

if the draft Doha accord was agreed upon. All other countries either (i) already provide duty-free access, (ii) have significant “overhang” between their maximum permitted ‘bound’ tariffs and actual applied tariff levels, or (iii) qualify for exemptions for tariff cuts for one reason or another.

If developed countries were to extend duty-free access for cotton exports from LDCs, this would have little to no impact on market access opportunities for these countries. Most developed countries already provide duty-free access for cotton exports

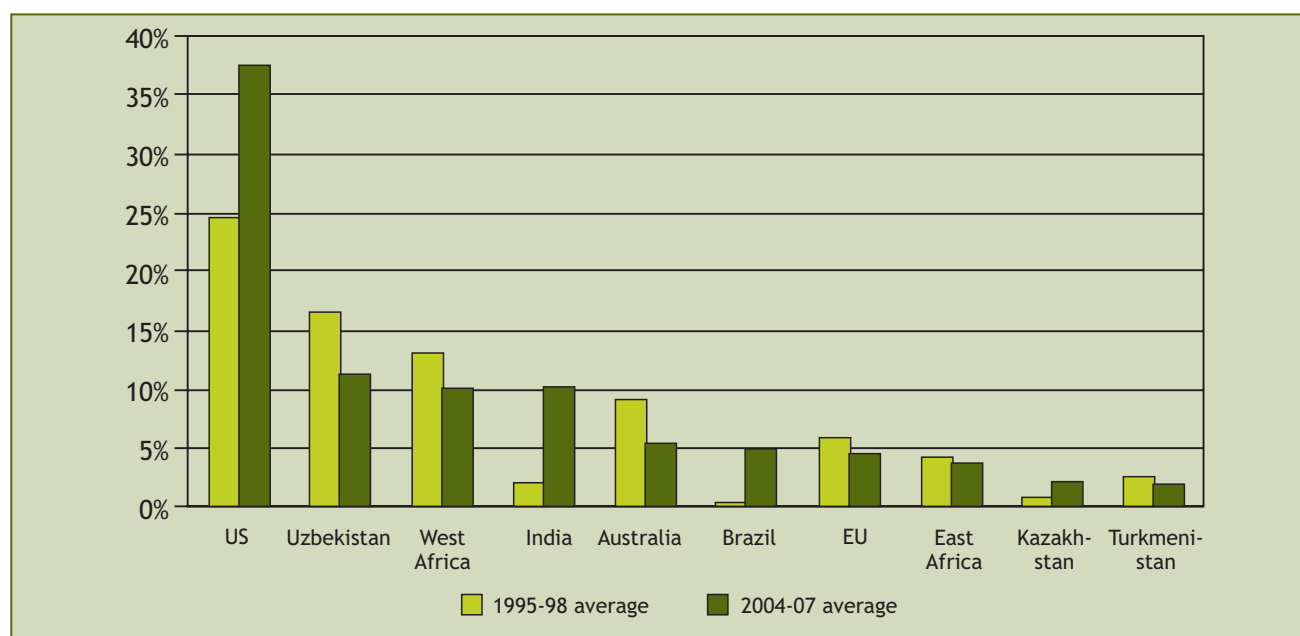
from other WTO members, with the exception of the US. However, in recent years, the US share of world cotton imports has dropped to 0.05 percent due to a decrease in cotton consumption: expanded access to the US market is therefore unlikely to have a significant impact on LDC exporters. In addition, US cotton quotas are consistently under-filled, despite low in-quota tariffs of between zero and 3 percent.

Developing countries make up nearly 95 percent of world cotton imports, as shown in Figures 10 and 11. Of the top fifteen developing country importers, only China does not provide duty-free MFN access to cotton. Beijing is expected to slate cotton for lesser

tariff cuts by designating it as a ‘special product’ in the WTO Doha Round, an option open to developing countries wishing to exclude some products from liberalisation commitments on the basis of food security, livelihood security and rural development grounds. If China does not do so, however, its large tariff overhang for cotton would still prevent any meaningful cut in the applied tariff.

Several important cotton exporters are not WTO members, and are therefore not subject to its rules. In 2004-08, these non-members accounted for 20 percent of world cotton exports, and four of them were in the top ten of the world’s largest cotton exporters - as shown in Figure 14.

Figure 14: Share of World Cotton Exports, 1995-98 and 2004-07 averages



Source: *Ibid.*

5. Conclusion

The results of this study illustrate that the potential gains from a positive result on cotton in the Doha Round are substantial. The negotiations may help increase world prices, decrease production in countries that are major subsidisers, and increase cotton production’s overall value.

Significantly, data from the 1998-2007 period suggests that farmers around the world would have benefited from an average increase of 3.5 percent in cotton prices if the US had implemented the recommendations of the WTO’s Dispute Settlement Panel and cut those subsidies that were deemed to be unlawful. Farmers in some of the poorest countries in the world would have been amongst these.

Farmers in poor countries could also have gained from an average 6 percent increase in world cotton prices over the same base period, if the US had accepted the proposals on subsidy cuts that have been made by African countries in the WTO Doha Round. Although price transmission is smoother in East and Southern Africa than it is in West and Central Africa, many of the world’s poorest farmers would have benefitted from cuts of this sort.

Cotton production in the US would have declined by as much as 15 percent if African proposals in the draft Doha accord were applied to historical output levels over the ten-year period examined, and production in the EU could drop by as much as 30 percent. However, production volumes could

increase by as much as 3-3.5 percent in Brazil, Central Asia and West Africa - with production values growing by up to 13 percent.

Similarly, if African proposals that are included in the Doha draft were applied to trade flows over the ten-year period that the study examines, US

export volumes would have fallen by 16 percent on average. Average export volumes would have increased dramatically for Brazil and India (12-14 percent), and by a lower but still substantial amount in Uzbekistan, the 'C-4' West African cotton producing countries (Benin, Burkina Faso, Chad and Mali), and Australia (2-2.5 percent).



The International Centre for Trade and Sustainable Development (www.ictsd.org) is an independent non-profit and non-governmental organisation based in Geneva. Established in 1996, ICTSD's mission is to advance the goal of sustainable development by empowering stakeholders to influence trade policy-making through information, networking, dialogue, well-targeted research and capacity-building. This Information Note is produced as part of ICTSD's Programme on Agricultural Trade and Sustainable Development. More information about ICTSD activities in this area can be found on: www.ictsd.org