

# **Cotton price distortions**

## **Building a case for reform**

Prepared for the  
Cotton Research and Development Corporation

**AUSTRALIA**

**5 June 2002**

This work is copyright. As permitted under the *Copyright Act 1968* – which allows fair dealings for the purposes of study, research, criticism or review – selected passages, tables or diagrams may be reproduced provided that due acknowledgment is made. However, the entire document or major sections may not be reproduced by any process without written permission of the CIE or the CRDC.

© Centre for International Economics and Cotton Research and Development Corporation 2002

#### Centre for International Economics

##### *Canberra office*

Marcus Clarke Street & Edinburgh Avenue Canberra ACT 2601

GPO Box 2203 Canberra ACT Australia 2601

Telephone (02) 6248 6699 Facsimile (02) 6247 7484

Email [cie@thecie.com.au](mailto:cie@thecie.com.au)

Internet <http://www.thecie.com.au>

##### *Sydney office*

Level 8, 50 Margaret Street Sydney NSW 2000

GPO Box 397 Sydney NSW Australia 1043

Telephone (02) 9262 6655 Facsimile (02) 9262 6651

Email [ciesyd@thecie.com.au](mailto:ciesyd@thecie.com.au)

Internet <http://www.thecie.com.au>

#### Cotton Research and Development Corporation

2 Lloyd Street Narrabri NSW 2390

PO Box 282 Narrabri NSW Australia 2390

Telephone: (02) 2792 4088

Email: [crdc@crdc.com.au](mailto:crdc@crdc.com.au)

Internet: <http://www.crdc.com.au>

# Contents

<b>Summary</b>	<b>v</b>
<b>1 A good start</b>	<b>1</b>
The ICAC working group	1
A step in the right direction, but more focused steps are needed	1
<b>2 Changing the debate context</b>	<b>3</b>
A question of cause and effect	3
WTO levers are critical to success	3
<b>3 Market based cotton price determinants</b>	<b>5</b>
The long term price path – downwards	5
Demand and supply factors – normal	5
<b>4 Government determined distortions</b>	<b>7</b>
Implications for producer incomes	9
<b>5 Progressing the reform agenda</b>	<b>14</b>
Following up the working group information	14
Identification of affected partners	14
Developing the case	15
Organisation for optimal results	15
<b>References</b>	<b>16</b>
<b>Boxes, Charts and Tables</b>	
Chart 3.1 The price of cotton	5
Table 3.2 Some factors impacting on cotton prices	6
Chart 4.1 Direct assistance to cotton production	8
Box 4.2 The effects of agricultural decline in Narrabri	9
Chart 4.3 Government assistance to cotton producers per pound of sales	10
Table 4.4 Potential gains from trade liberalisation in cotton	11
Chart 4.5 Average yield	13
Chart 4.6 Average operating profit	13



# Summary

The International Cotton Advisory Committee (ICAC) Working Group on Government Measures (WGGM) has made a good start in documenting government measures that affect the world cotton market.

The objectives of the working group are to identify effective strategies to reduce and eventually eliminate the negative effects on trade caused by direct government assistance to cotton production and trade. These objectives are noble but they are ambitious and may be unattainable outside the context of the World Trade Organisation (WTO).

The WGGM's work could provide the initial momentum for WTO activity and focus on the unique characteristics of the cotton market, including strategies for reform in the context of generic WTO reform directions.

The latest exercise of the working group is to have countries document the effects – particularly social effects – of low cotton prices. However, cotton prices may be low for a number of reasons including weather or low demand. It is critical to isolate the implication of trade distorting government measures on producers and regional economies.

This report addresses some of these issues in the context of the ICAC workings. Some work on the effects of government measures on distortions in world cotton prices, production and trade will be briefly summarised, together with implications for producers' incomes. Finally, some ways forward for the working group and ICAC to pursue the trade reform agenda will be identified.



# 1 A good start

## The ICAC working group

The International Cotton Advisory Committee (ICAC) established a Working Group on Government Measures (WGGM) at its 60th plenary meeting in 2001. One of the roles of the working group is to document the economic injury caused by low cotton prices in member countries (ICAC 2002).

In order to gather relevant material on the effects of low prices, member countries have been asked to provide information about price impacts on:

- income – the loss of production due to low prices multiplied by average prices;
- employment – decline in farmer numbers, direct and indirect employment effects; and
- trade balances – declines in export value and increase in import costs.

The main role of the working group is to identify effective strategies to reduce and eventually eliminate the negative effects on trade caused by direct government assistance to cotton production and trade (ICAC 2001). In the context of this role, ICAC is working with member countries to create an inventory of government measures impacting on cotton.

## A step in the right direction, but more focused steps are needed

Some good work has already been done by ICAC, particularly on identifying government measures that distort production, consumption and international trade in cotton. The fact that, in some major producing countries, one third to a half of the returns to cotton farmers are from government subsidies is a highly significant finding (ICAC 2000).

However, the latest exercise of the WGGM, to consider the economic harm caused by low prices, lacks focus. Cotton prices vary for all sorts of reasons including seasonal conditions in major producing countries, exchange rate changes, world economic conditions and, of course, government subsidies and

## **Cotton price distortions**

---

market distortions. To progress trade reforms, it is important to show how government policies and subsidies adversely impact on world prices and prices in individual countries. What then needs to be achieved is an understanding of the influence of price reductions caused by government induced market distortions on producers and cotton producing regions, as well as consumers. No useful conclusions can be drawn if the focus is on the effects of low prices *per se*.

The underlying mission of the WGGM is ambitious and noble – to eventually remove distortionary trade measures in the cotton market. This is commendable, but the work program must be sharply focused on this long term goal. To be realistic, this needs to be firmly set in the context of wider deliberations on trade reform under the auspices of the World Trade Organisation (WTO). In this context the work of the WGGM, focusing on production and trade reforms in the cotton market, can make a major contribution to trade reform and, more specifically, to removing distortions in the cotton market.

## **2 Changing the debate context**

### **A question of cause and effect**

Low prices in the international marketplace for cotton will affect producers in a similar way to low prices in most sectors. That is, lower prices potentially cause lower returns to producers who will feed those returns through to any of reduced employment and production or reduced investment in infrastructure. This will lead further to changes in government and economywide income, and have effects on revenues, employment and output in industries that are part of the sector's value chain. These price effects would not be unique to the cotton industry.

The ICAC approach of gathering data is important in quantifying impacts on domestic economies. However, in and of itself, the information is not valuable in achieving anything to alleviate the effects. The working group information needs to be utilised to establish the 'cause' of the lower prices and, in particular, the extent to which world cotton prices are reduced because of government induced market distortions. This analysis can then be taken a step further to identify the implications of market distortions for producers' incomes and for the economies of cotton producing regions.

### **WTO levers are critical to success**

A critical step in making useful the WGGM information is to employ the levers available through the WTO. The WTO provides a forum and mechanisms to push for a level playing field in international trade, an ambition that seems to be shared by most competitive cotton producing nations. The direction that the WTO is taking, via the member governments' agreement, is further substantial reductions in measures that distort trade in all sectors of an economy. The removal of these distortions will mean producers can produce according to their capabilities and consumers can consume without paying distorted, and generally higher, prices.

Beginning in 2000, the WTO has had a stronger focus on the impact of barriers on agricultural trade (WTO 1999). Based on this renewed interest in agricultural reform, the WGGM work could provide momentum for WTO progress on cotton

## **Cotton price distortions**

---

market reform. Of prime importance is that the data can specify the economic harm caused by low prices, which, it will be argued, are caused by trade distortions. This issue of economic injury is critical in gaining the attention of WTO member countries.

Accordingly, the utility of the information provided by ICAC members to the WGGM is in its ability to isolate the unique characteristics of the cotton market. Some of these unique characteristics include the cascading effects of support and protection that exist in the global cotton producing market from the point of production (producer subsidies) to the throughput processing stage (import quotas) and, finally, the consumer marketplace (quotas and tariffs). These trade measures distort prices and are one of the leading determinants of lower raw cotton prices.

Recent studies have shown that the effects of government induced distortions on lowering prices have caused major economic and social costs, but again these are not unique to the cotton industry. What is also apparent is that the effects of the lower prices have been more significant in unprotected cotton markets compared with protected markets. This information should be the impetus for unprotected nations to speak with one voice on the harmful economic effects of market distortions.

### 3 Market based cotton price determinants

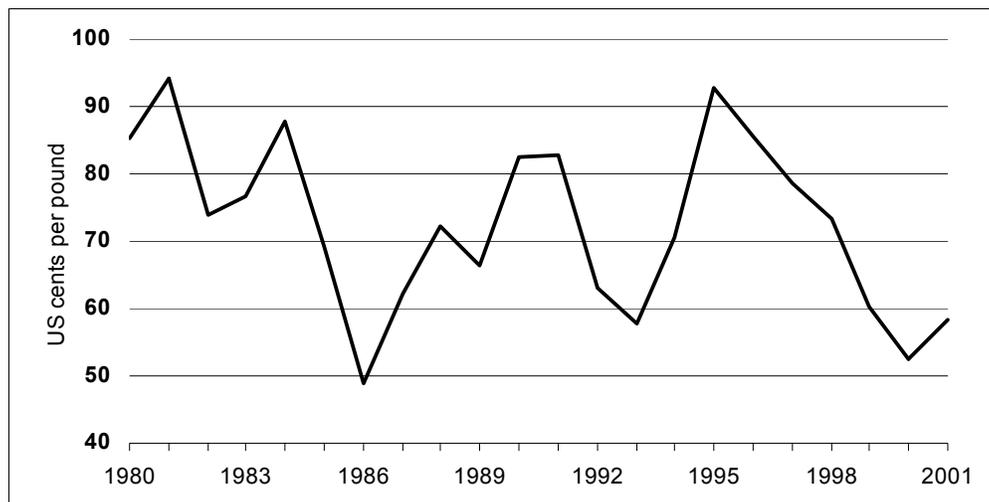
#### The long term price path — downwards

The long term trend in cotton prices has been steadily downwards, but around this trend there has been considerable variation. Chart 3.1 shows a 20 year price path for cotton, and demonstrates that the prevailing price in early 2000 was at a level equivalent to the previous lowest price achieved during 1986. There has been a modest upturn in the past year. The longer term price path is one of the motivating factors behind research such as that being done by the WGGM. The work is important in establishing the effects of government distortions on prices. This also requires an understanding of other determinants of cotton prices.

#### Demand and supply factors — normal

The cause of cotton price movements, like most goods and services, is the interaction of supply and demand factors. Longer term influences on cotton supply include the price of cotton received by producers relative to prices for alternative crops, trends in the cost of production, technological changes and any

Chart 3.1 The price of cotton



Data source: ABARE (2001).

## Cotton price distortions

---

capacity constraints. Prices received by producers will, in turn, depend on competition in global markets, exchange rate influences and developments in the processing, marketing and transport sectors. Importantly, government subsidies to producers in major producing countries and other government policies that distort markets will also have a major influence on world cotton prices and returns to producers in non-subsidising countries.

Most international trade in raw cotton is conducted in US dollars and, in the short term, factors such as movements in the US futures markets can influence world cotton prices and cause higher or lower returns to producers. Weather patterns affecting yields are, of course, also important influences on production, cotton prices and returns to producers in the short term.

Demand side effects include anything that affects purchasing power by segments of the value chain or consumers. For example, income, the price and availability of substitutes like synthetic fibres, and marketing efforts will all affect the demand for cotton. A small sample of market factors determining the price of cotton is presented in table 3.2. Assessing the relative impact of these factors is complicated and further analysis is beyond the scope of this paper.

These factors will determine trends in the price of cotton. However, most countries do not have the capacity to affect these determinants. Most cotton producing countries are price takers, meaning the majority of supply and demand factors are determined externally. There are two notable exceptions – the US and China – which together produced approximately 40 per cent of total cotton output in 2000-01 (ABARE 2000). This degree of market importance means that they can influence the price of cotton on the world market. The fact that these two countries have the highest aggregate producer subsidies and the only direct government assistance for export promotion is a cause for concern.

Table 3.2 **Some factors impacting on cotton prices**

<b>Demand side</b>	<b>Supply side</b>
Income (consumer and secondary industry)	The market price for various stages
Fashion trends (is cotton the 'in' material?)	Technology
Substitutes (wool, synthetics)	Competition (local and international)
Quality of output	Weather
Productivity in transformation industries	Available agricultural capacity
Marketing	Alternative crops

Source: CIE.

## 4 Government determined distortions

As noted, a critical issue is how government policies influence prices. Some work has been undertaken on the impact of cotton market trade distortions (CIE 2001 and Valderrama Becerra 2000), but there is an opportunity for the WGGM to do more.

Several nations provide direct and indirect support to their cotton farmers for a variety of reasons. The primary reason for government protection in any industry is to shelter that industry from international competition. For the cotton industry, the effect of this protectionism is that farmers are more likely to behave by maximising government payments rather than operate in response to demand factors, largely at the expense of non-subsidised producers' revenue (Peña 1999).

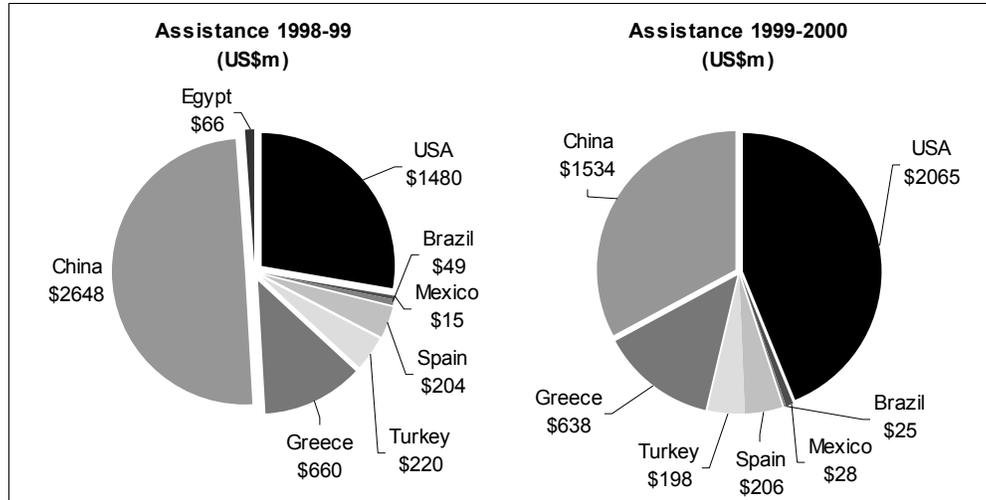
Price distortions caused by government interventions have been declining over time, but they are still significant. In 1999-2000, seven countries had distortionary policies, which benefited some 52 per cent of world cotton production. This is down from 1986 when 25 countries had distortionary policies affecting 69 per cent of world production (Valderrama Becerra 2000). Chart 4.1 shows that, while the number of countries and proportions of production supported has fallen, the aggregate level of assistance in 1999-2000 was still significant at around US\$4.7 billion. The US and China accounted for 77 per cent of this protection. Recent changes introduced through the United States Farm Bill will produce higher aggregate support levels in the US at least (Shurman 2002). Recent domestic price reductions in China, however, may have led to lower levels of assistance.

While nationalistic arguments based on protecting an industry are emotively strong, the programs have mostly negative effects. Protection means the following.

- The amount of cotton produced is distorted – producers plant in accordance with the returns provided through government not market payment mechanisms. In the US, for example, about one third of cotton producer returns are from government assistance (CIE 2001), which is likely to increase to around 45 per cent of total revenue following the passage of the US Farm Bill.
- Producers are rewarded for total output, not necessarily quality output.

## Cotton price distortions

Chart 4.1 Direct assistance to cotton production



Data source: Valderrama Becerra (2000).

- The consumer pays more – when a country is shielded from international price competition, processors and consumers will pay higher prices with consequences such as domestic consumption reducing and surplus cotton being placed in the world market, leading to further price falls in non-subsidising countries (CIE 2001).
- Society pays more on average – consumers pay a high price, competitor nations ‘pay’ in lost revenue and tax payers pay to fund the programs.

Protected cotton producers welcome government assistance as a way to ensure the viability of their industry. However, the reality is that it can fundamentally weaken the viability of the industry. Producers lose the capacity to respond to technological change and market signals, and plant cotton based on bad incentives. Rarely would there be consideration of the losers (competing nations and consumers). The short case study in box 4.2 illustrates the impacts of declining agricultural returns potentially caused by trade distortions in a cotton producing region of Australia. Whether in the case of Narrabri, Australian cotton producers at large or other unprotected producers, one implication is certain – while protection persists, prices will continue at lower levels than with free trade, particularly as suppliers and buyers do not respond to normal supply and demand pressures (Peña 1999).

### Box 4.2 The effects of agricultural decline in Narrabri

Narrabri is a small country town located on the north west slopes of New South Wales. It is the administrative centre for the Namoi Valley, which is a major cotton production area. Between 1991 and 1996, during which time cotton prices dipped significantly, societal changes in Narrabri caused by lower agricultural returns included:

- a reduction in population of 3.76 per cent against a nationwide increase of 6 per cent
- a reduction in labour force of 2 per cent against a nationwide increase of 5 per cent
- no reduction in the number of persons earning under A\$200 per week (22 per cent)
- an increase in the number of people over 55 years of age of 2 percentage points.

Alone, these changes might not be problematic. However, the combined effects have the potential to be very damaging. For example, funding for health and education activities is allocated on a per capita basis, so a population fall puts pressure on funding for health and schools, which could mean further population reductions due to low service levels.

While these changes cannot be directly attributed to cotton prices, it is clear that the general decline in agricultural returns, through price and demand factors, can have long term implications for the social fabric and future economic viability of rural Australia.

*Source:* Chapman and Greenville (2002).

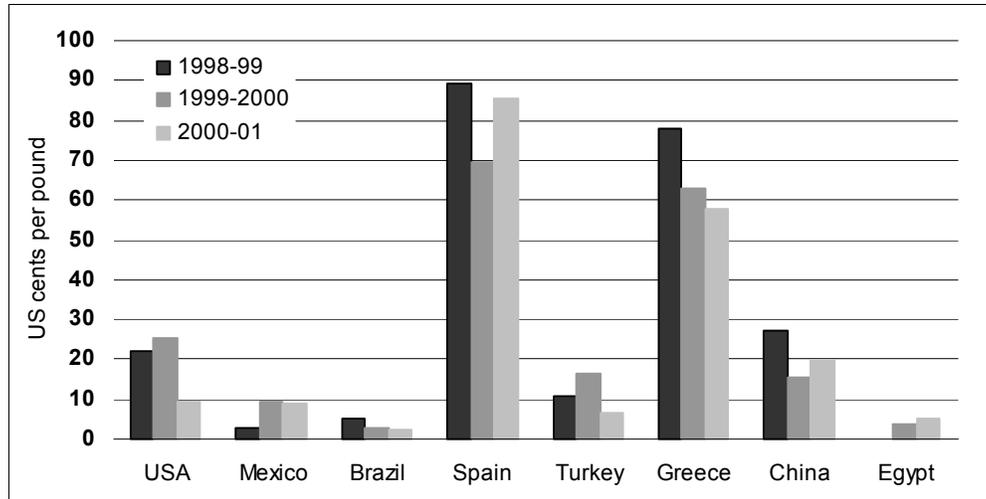
## Implications for producer incomes

The implications for producer incomes will be split between producers that are subsidised and those that are not. Generally, subsidised producers earn more and non-subsidised producers earn less. We know that non-subsidised producers receive the world price, and chart 4.3 gives a proxy measure for the price premium received by producers in subsidised markets. Returns to subsidised producers in Spain and Greece are highest, while Egypt and Brazil are the lowest.

The concerning feature of this chart is that the countries that drive price movements – the US and China – are providing 10 and 20 cents per pound premiums respectively. The figure for China is measured until the end of the 2001 financial year, subsequent support levels may be lower given that domestic prices in China have dropped 30 per cent since the second quarter of 2001 (Townsend 2002). The figure for US support does not include the likely increase in assistance driven by the recent US Farm Bill, which includes new payments such as countercyclical support and continuation of price support in a low cotton price environment (Shurley 2002).

## Cotton price distortions

Chart 4.3 Government assistance to cotton producers per pound of sales<sup>a</sup>



<sup>a</sup> These data do not include export subsidy programs. This is relevant in the context of China and the US, as they are the only countries providing such support.

Data source: ICAC (2001); CIE (2001).

Some work has been conducted to estimate the impacts of a complete removal of tariffs on US cotton production (CIE 2001 and Valderrama Becerra 2000). The CIE has estimated that if all trade barriers on textiles and clothing were removed, US consumers would spend US\$20 billion less on these products because of cheaper prices. Similarly, Valderrama Becerra has estimated that the decline in US production associated with a removal of US subsidies would result in an average international cotton price 6 cents higher than realised in 1999-2000 and 12 cents higher than expected in 2000-01. At current prices, this would represent a potential increase in returns to non-subsidised producers of between 11 and 22 per cent.

Any changes in global cotton prices from a reduction in protection would result in a generally better operating environment for Australian producers. In 2001, the CIE conducted a modelling exercise that estimated the potential changes to the Australian cotton industry under the following three scenarios.

- Removal of all tariffs and quotas on textile and clothing.
- Removal of all production and income assistance to cotton producers and all export subsidies on raw cotton and tariffs on raw cotton.
- The combination of simulation 1 and simulation 2 (effectively completely free trade in cotton and products).

The exercise yielded results that are a proxy for the benefits of trade liberalisation for Australia and other unprotected nations. Table 4.4 summarises the percentage changes across a range of variables caused by each of the three scenarios. What is clear from this modelling exercise is that producer incomes in Australia would be strongly enhanced, relative to 1999 incomes, from either a single change or a complete liberalisation of the world cotton market. The losers would primarily be producers in the US and China, which is no surprise given the level of support that has historically been provided to producers in those countries.

More interesting than the percentage changes is the potential increase in income available to Australian cotton producers from liberalisation, as a proxy for the effective harm per farmer from distorted international prices. The measure suggests that the estimate of lost income from distorted prices in any cotton producing region in Australia is between \$10 900 and \$136 700 per annum. This lost income, as in other industries, feeds into lower population growth, lower regional incomes and expenditures, and other socially negative outcomes. Considering the impact of lower agricultural returns, such as those presented earlier for Narrabri, it is easy to see that the per farm lost income has serious consequences for rural and regional Australia.

Not all cotton producing regions have suffered the same types of impacts as Narrabri. For example, Emerald in mid-north Queensland has seen population growth, a reduced proportion of low income earners and increases in employment and labour force. The cause of the growth in this region is primarily a significant increase in the mining sector, with some growth in cotton returns flowing from higher productivity, good water availability and a lower Australian

Table 4.4 Potential gains from trade liberalisation in cotton

Variable	Unit	Scenario 1	Scenario 2	Scenario 3
<b>Percentage change</b>				
Australian cotton production	kt	3.3	44.2	50.1
Australian cotton industry net income	A\$m	4.9	53.3	61.6
Export price of cotton	fob	0	2.2	2.3
US cotton production	kt	-0.5	-15.9	-17.4
China cotton production	kt	0.3	-19.5	-19.8
Rest of world production	kt	1.2	13.4	15.2
Global consumption	kt	0.8	-2.7	-2.1
<b>Change in income</b>				
Australian cotton producers	A\$/year/farm	10 900	118 300	136 700

Source: CIE (2001).

## **Cotton price distortions**

---

dollar exchange rate. It is also possible, however, that had mining not boomed in Emerald, significant ground may have been lost because of the lower returns to cotton caused by the assistance already discussed. The reality is that assistance in other cotton producing nations is costing Australian producers significant amounts of lost income and, until trade distortions in the cotton market are removed, the segments of rural Australia dependant on cotton income will be negatively effected.

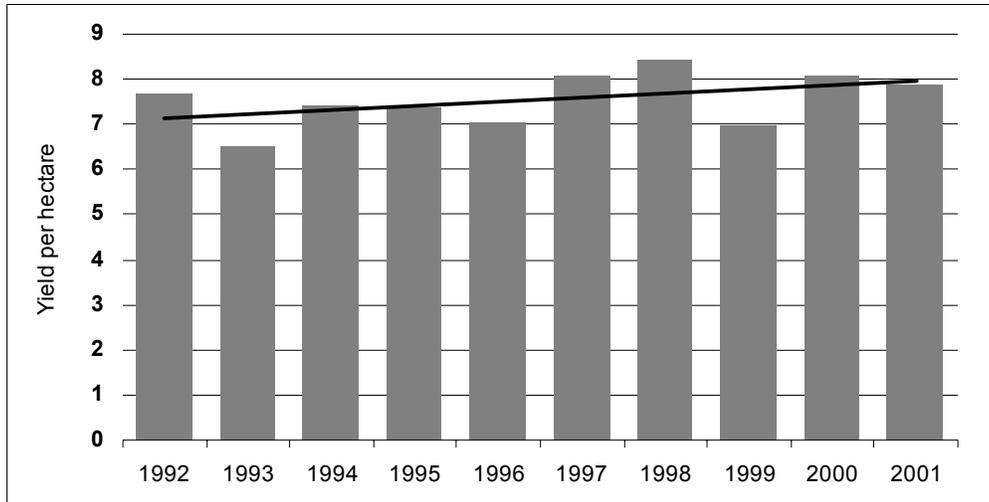
Charts 4.5 and 4.6 show that over the past decade, even though there have been average yield increases in Australia through technological advances, the trend in profits from farming has been demonstrably downwards (CRDC and Boyce 2001).

In a less distorted world market, the price should be determined only by supply and demand, not by the distorting policies of countries that choose to inflate local prices in a way that maximises local producer returns and minimises global consumer surpluses. It is almost certain that the effect of removing subsidies would be lower production and higher prices in the short term. But in the longer term the impact would be offset, either partially or totally, by shifting world production to non-subsidising countries and at a price that is reflective of market factors (Valderrama Becerra 2000).

So it is necessary to first understand the effects of low prices, but significantly more important for non-subsidised producers to begin progressing a debate on the cause of lower prices, meaning a debate on reforms to distortionary government policies.

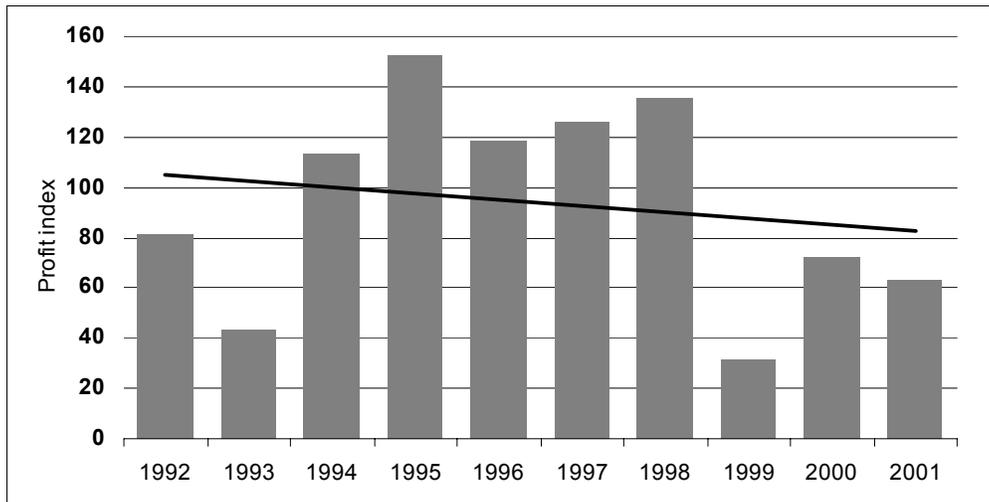
## 4 Government determined distortions

Chart 4.5 Average yield



Data source: CRDC and Boyce (2001).

Chart 4.6 Average operating profit



Data source: CRDC and Boyce (2001).

## **5 Progressing the reform agenda**

### **Following up the working group information**

The working group will provide some information on economic harm and the extent of distortionary policies. However, unless the work is more focused, it will be difficult to establish the linkages between government induced distortions, world price reductions and declines in producer incomes. The next stage is for those that are affected by low cotton prices, through the effects of trade barriers, to use the information to progress negotiations on removing the cause of the harm. One way forward is to:

- identify those groups that have an interest in reducing barriers to trade;
- develop a case with the information becoming available through the working group and other available work; and
- organise a new interest group to apply pressure to WTO member nations to achieve progress in the context of the WTO trade reform agenda.

### **Identification of affected partners**

The essential issue for achieving reform is to establish who is most affected by the distortionary policies practiced in the cotton market. The identification of stakeholders is possible at two levels: first are those who are directly affected, and second are those indirectly affected.

In the cotton market, the entire value chain from producer to sellers of final product are directly affected because of distorted product pricing – non-subsidised producers, ginning operators, textile production, consumers in countries where cotton is protected or subsidised, and sellers of cotton products in all markets. The value of combining these opinions is that they can speak with authority on the impacts of trade barriers.

Identifying indirectly affected parties is difficult and involves looking at the users of cotton and those who pay for the effects of protection. Some of the indirectly affected parties might include national treasury and agricultural ministers and bureaucracies, other agricultural lobby groups, global banks, non-government

organisations such as IMF and the World Bank, environmental groups or other business coalitions (Stoeckel 2000). The value of including these groups in developing liberalisation strategies is that they can apply pressure on domestic governments and industries to assist in building the case for reform.

## **Developing the case**

Once combined, the groups identified as losers from the distortions need to build a collective case of how the cotton producing and consuming world is actually affected. This will include the combination of information on the effect of low prices, more expertise and work on the cause of price distortions (CIE 2001) and, ultimately, a clear picture of the impact of protection on the collective bottom line. For example, in the US, significant progress might be achieved through observing publicly that cotton textile consumers are paying US\$20 billion too much for their goods and that it is their taxes that subsidise US cotton producers.

For the Australian industry, it will be critical to put the issue of the impact of protection on domestic consumption and farmer returns at the top of the agenda for trade reform. The way to achieve this will be through briefings and discussions with Commonwealth government ministers and bureaucracies and through stronger alliances with interested agricultural lobby groups such as the National Farmers Federation. Internationally, Australian industry could build a coalition with other non-subsidising countries – but it must be armed with the relevant facts.

## **Organisation for optimal results**

Ultimately, the WTO is the body through which the push needs to be made. However, the WTO is not an amorphous body that has its own decision making power. WTO agreements are normally the product of consensus decisions of its member countries. What this means is that to achieve progress in reform of distortionary policies, the 'new cotton coalition' needs to convince both affected countries and non-affected countries of the potential benefits of removing distortions in the cotton market. Informed and organised consensus on the impact of cotton protection will be the first step in moving beyond information to action in removing barriers to trade in cotton.

## References

- ABARE (Australian Bureau of Agricultural and Resources Economics) 2000, *Australian Commodity Statistics*, Canberra.
- CIE (Centre for International Economics) 1995, *The Australian Cotton Industry – An Economic Assessment*, report prepared for the Cotton Research and Development Corporation, Canberra.
- – 2001, *Trade Distortions and Cotton Markets: Implications for Australian Cotton Producers*, report prepared for the Cotton Research and Development Corporation, Canberra.
- Chapman, L. and Greenville, J. 2002, 'Profiling Rural Australia: Impact of Changes in the Agricultural Sector on Rural Towns', *Australian Commodities*, vol. 9, no. 1.
- Chaudhry, M. 2001, Cost of production of raw cotton, Paper presented at the III Brazilian Congress, Campo Grande, Brazil, 31 August.
- CRDC (Cotton Research and Development Corporation) and Boyce Chartered Accountants 2001, *Australian Cotton Comparative Analysis – 2001 Crop*, Narrabri.
- ICAC (International Cotton Advisory Committee) 2000, *Production and Trade Policy Affecting the Cotton Industry*, Washington DC.
- – 2001, Working Group on Government Measures, Memorandum No. 718, Washington DC.
- – 2002, Working Group on Government Measures, Memorandum No. 2, Washington DC.
- Kaltsas, I. 2000, 'Explaining international cotton prices: a structural model approach', *Proceedings of the Beltwide Cotton Conference*, vol. 1, National Cotton Council, Memphis, pp. 273–4.
- Peña, J. 1999, 'Market outlook dim: farmers concerned over weak market', *AG-ECO NEWS*, vol. 15, issue 37.
- Shurley, D. 2002, 2002 Farm bill provisions and impacts, Presentation, University of Georgia, <http://www.ces.uga.edu/Agriculture/agecon/bill/billpres.htm>, Accessed 22 May 2002.
- Stoeckel, A. 2000, *Solving the Problem: A Look at the Political Economy of Trade Reform*, Centre for International Economics, Canberra.
- Townsend, T. 2001, World cotton market conditions, Paper presented at the Beltwide Cotton Economics and Marketing Conference, Anaheim, 12 January.

– – 2002, Towards a longer run average cotton price, Paper presented to the 78th Annual Convention of the American Cotton Shippers Association, Florida, May-June.

Valderrama Becerra, C. 2000, The world cotton market: prices and distortions, Paper presented at the 10th Australian Cotton Conference, Brisbane, 17 August.

WTO (World Trade Organisation) 1999, *The World Trade Organisation in Brief*, Geneva.

# 1

## Defining Harm

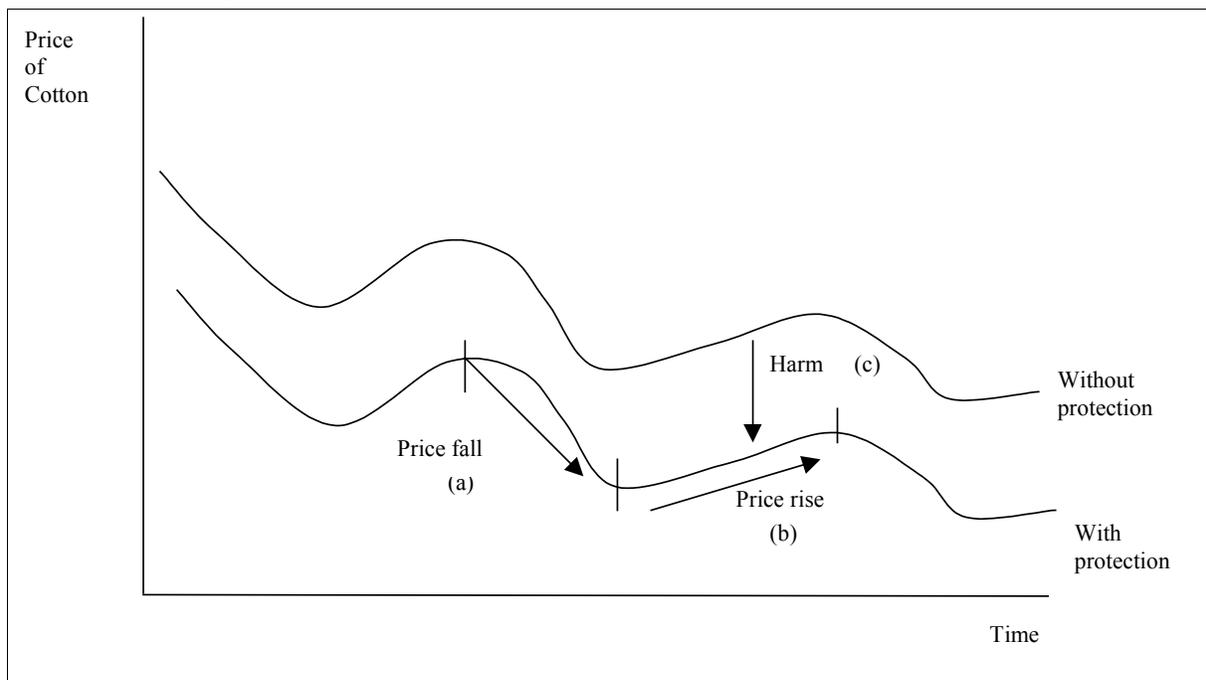
The chart below shows two stylised price paths. The top path is the price of cotton in a completely free trade market. The bottom path is the price of cotton in a market with price support and other protective mechanisms.

The movement (a) + (b) which is what was referred to in the Narrabri box really is of no concern when looking at harm, it happens in all markets and is determined by the range of factors discussed. However the real problem caused by the trade distortions, and therefore where the WGGM needs to focus, is that the moves (a) and (b) did not happen on the top price path.

What the CRDC, AFFA and DFAT need to do is get the WGGM to start thinking in terms of the movement (c) which represents the true harm, otherwise the point about low prices being no different in the cotton industry that any other industry will be totally lost.

If this chart is not clear or there is something that does not make sense please let me know as soon as possible and I will run through it with you.

### 1.1 Harm versus price fluctuations



*Adrian Kirchner*