### BEFORE THE WORLD TRADE ORGANIZATION APPELLATE BODY

# United States - Subsidies on Upland Cotton

(AB-2004-5)

# Annex 1 to the

Appellant's Submission of the United States of America

October 28, 2004

#### DOMESTIC SUPPORT PROGRAMS FOR UPLAND COTTON

- 1. U.S. farm programs for upland cotton fall into three basic categories:
  - (1) payment to producers which are based on current planting or production: the marketing loan program and crop insurance;
  - (2) payments to recipients which are not tied to production of any particular product and for which no production is required ("decoupled payments"): production flexibility contract payments (PFCs, no longer in effect), market loss assistance payments (MLAs, no longer in effect), direct payments (DPs), and counter-cyclical payments (CCPs); and
  - (3) payments to users of U.S. upland cotton: Step 2 payments.
- 2. The economic effects of program payments based on current production depend on the expected market conditions at the time of planting, not the actual level of outlays at harvest. The actual level of outlays may vary considerably, depending on eligibility, payment criteria, weather, and current market conditions, especially events occurring outside the United States. What is significant, however, is the *expected* level of support at the time planting decisions are made. Crop insurance reduces production risk which can encourage planting, but also can encourage producers to apply less inputs such as fertilizer and pesticides which can reduce yields. Thus, the effects of crop insurance on production are ambiguous. Decoupled payments have minimal production effects, a finding supported by the economic literature on decoupled payments. Any effects of Step 2 payments on production are indirect, through the increased demand for cotton by users.
- 3. The following information briefly summarizes the programs and describes their economic effects.

### I. Payments Based on Current Production

# Marketing Loan Program

- 4. <u>Description of Program</u>. Marketing loan program payments for upland cotton began in 1986 and have continued under successive legislation, including the FAIR Act of 1996 and the FSRI Act of 2002. Under the marketing loan program, eligible producers may receive non-recourse loans on all production of upland cotton. The loan rate is currently established by the 2002 FSRI Act at \$0.52 per pound of upland cotton. The loan rate has varied only slightly between a narrow band of (\$0.50 \$0.525 per pound) since the program began, and has been essentially unchanged since 1996.
- 5. Instead of forfeiting the cotton to the government when prices fall below 52 cents per pound, producers have the option to repay the loan at that lower price, called the "Adjusted World Price," or AWP, as calculated by the U.S. Department of Agriculture. The difference

between the loan rate and the AWP is referred to as a "marketing loan gain." Alternatively, a producer may forego a marketing loan and choose to receive a "loan deficiency payment" in the amount of the difference between the loan rate and a lower AWP. In either case, if the producer then sells the cotton on which the marketing loan gain or loan deficiency payment has been received, the producer potentially realizes income at a rate of 52 cents per pound of upland cotton.<sup>1</sup>

- 6. <u>Economic Effects</u>. Through the marketing loan program, the U.S. Government has in effect guaranteed cotton producers will realize income equivalent to 52 cents per pound of upland cotton produced. Benefits to upland cotton producers result only when the AWP falls below the loan rate. Potential impacts on production are related to the expectations at planting of the level of prices at time of harvest, not the actual price that prevails at time of harvest, which may be higher or lower depending on market conditions unforeseen at the time of planting. Impacts of the program on planting decisions are thus greater when expected prices are low relative to the loan rate.
- 7. In years of high expected market prices at the time of planting, expected benefits are negligible and effects on production are minimal. Potential impacts on production are also highly dependent on expected market prices for competing crops, such as soybeans, as well as benefits to other program crops eligible for the marketing loan program.
- 8. Between 1999 and 2003, in every year except 2002 the expected harvest price, as measured by the average of the daily December cotton futures price taken over the months of January through March<sup>2</sup>, was above the loan rate at planting time, thus mitigating the effect of the loan rate. In 2002 when the futures price was below the loan rate, plantings dropped by almost 10 percent, far more than would have been the case had farmer been planting for the loan rate. Thus, plantings of upland cotton are responsive to price changes and vary considerably over time.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> First Written Submission, July 11, 2003, para. 20.

<sup>&</sup>lt;sup>2</sup> The planting season for cotton typically begins in March. The December futures contract reflects harvest time delivery.

<sup>&</sup>lt;sup>3</sup> First Written Submission, para. 21; Further Submission, paras. 55-70; Further Rebuttal Submission, paras. 162-164, 172-175.

**Upland Cotton Expected Harvest Prices at Planting and Planted Area** 

	1999	2000	2001	2002	2003
Harvest cotton futures price at planting time (cents per pound)	60.27	61.31	58.63	42.18	59.60
Million acres	14.6	15.3	15.5	14.0	13.5
Percent change from year earlier	11.5	7.2	1.3	-9.7	-3.6

### Crop Insurance

- 9. <u>Description of Program</u>. Under the Agricultural Risk Protection Act of 2000, the United States provides crop insurance subsidies in the form of subsidized crop insurance premiums. Private insurers now offer insurance plans for most agricultural crops, including upland cotton, and some livestock products. For marketing year 2002, crop insurance subsidies were available to approximately 100 agricultural commodities, representing approximately 80 percent of U.S. area planted and greater than 85 percent of the value of all U.S. crops.<sup>4</sup> A variety of annual insurance plans are now subsidized and reinsured by the Federal Government, including yield insurance (available both for individual farm yields and based on county-wide yield experiences) and several forms of revenue insurance. Participants in these programs may choose from various generic coverage and protection levels.
- 10. The basic program provisions for crop insurance are generic, not commodity-specific. The U.S. Government provides an incentive to participate in the crop insurance program by subsidizing the premium paid by the farmer. This premium subsidy is available to a broad array of commodities around the country and does not vary by commodity. Because premium calculations are prescribed by plan of insurance, premium calculations for a given insurance plan for upland cotton are identical to premium calculations for every other crop insured under that plan.
- 11. Other coverage parameters, such as yields or market price, are also determined based on the policy, not by commodity. For example, all commodities are treated the same way in regard to their actual production history. The actual production history is a 4-10 year average of past yields. Once coverage level and policy type have been selected, of course, coverage and subsidy totals by commodity can be calculated based on which crops have been insured. However, this is

<sup>&</sup>lt;sup>4</sup> Rebuttal Submission, para. 94.

a function of producer choices, not the program itself, which makes crop insurance available generally to producers.<sup>5</sup>

- 12. <u>Economic Effects</u>. Crop insurance subsidies are generally available for most crop producers and hence do not give a specific advantage to one crop over another. Thus, their effects are not commodity specific, and have no or minimal impacts on cotton markets.
- 13. While some economic studies have suggested crop insurance subsidies may have a slight effect on acreage, the effects on production are less clear. If crop insurance encourages moral hazard problems, crop yields will be adversely affected as producers attempt to increase crop insurance indemnities. If moral hazard and adverse selection problems are severe, they could potentially have a negative effect on production. Recent studies suggest that farms with more insurance tend to use less inputs like fertilizer and pesticides. This demonstrates a potential moral hazard problem with crop insurance that suggests that crop insurance participation may have a negative effect on yields. Lower yields may well offset the marginal effects on crop area. Thus, the economic literature in general reflects that by its very nature the impact of crop insurance on production may be significantly different than its impact on acreage.
- 14. The data also reveal that crop insurance purchases by cotton growers have generally been at lower coverage levels than for other row crops.<sup>7</sup> This was particularly the case before 2002 when less than 5 percent of insured cotton acres were insured at yield and revenue guarantees greater than 70 percent. Even though the United States notifies crop insurance as "amber box" but not specific to any commodity, over 2002-03, roughly 90 percent of cotton acreage insured was at yield and revenue guarantee levels of 70 percent or less. Coverage levels of 70 percent or less are consistent with the criterion under Paragraph 8(a) of Annex 2 of the Uruguay Round Agreement on Agriculture in determining minimal trade distorting payments for natural disasters. This suggests that over 90 percent of U.S. insured cotton area is insured at levels consistent with criteria WTO Members agree demonstrates that crop insurance has no or minimal trade-distorting effects or effects on production.

### II. Payments Not Based on Current Production

15. <u>Description of Programs</u>. Since 1996 with the passing of the FAIR Act, U.S. farm programs have shifted toward providing income support not based on production by using decoupled payments and by allowing greater planting flexibility. These decoupled payments do not provide support for a particular commodity, including upland cotton, because they are not linked to current production. These payments are made with respect to farm acreage that was

<sup>&</sup>lt;sup>5</sup> First Submission, paras. 29, 119-121.

<sup>&</sup>lt;sup>6</sup> U.S. Opening Statement, October 7, 2003, paras. 45-47.

U.S. Answers to the Questions from the Panel to the Parties following the Second Session of the First Substantive Panel Meeting, para 49.

devoted to agricultural production in the past, including acreage previously devoted to upland cotton production. No production is required to receive the payments, and payments are made regardless of whether anything is produced at all. Since 1996, four programs have provided decoupled payments.

- 16. Production Flexibility Contract Payments. Production flexibility contract (PFC) payments were established under the FAIR Act of 1996 2002. The program provided support to producers based on historical acreage and yields for seven commodities (referred to as "covered commodities," including wheat, corn, barley, grain sorghum, oats, and rice, in addition to upland cotton). PFC payments were made on 85 percent of the base acreage for each commodity multiplied by the corresponding payment rate multiplied by the applicable payment yield. The FAIR Act appropriated a fixed but declining budgetary amount to the program for each fiscal year from 1996 through 2002 and allocated a certain percentage of that amount to each of the seven commodities. Thus, the payment rate changed annually but was set to decline over the life of the 1996 Act.
- 17. Producers were permitted to plant any commodity or crop on base acres, subject to certain limitations and exceptions concerning the planting of fruits and vegetables. Additionally, producers had to use the land for an agricultural or related activity and not for a non-agricultural commercial or industrial use and comply with certain conservation requirements. Otherwise, PFC payments were not affected by what was planted on base acreage nor by whether anything was produced on it at all.<sup>8</sup>
- 18. *Direct Payments*. Direct payments were established under the 2002 FSRI Act, replacing the PFC payments but are identical in concept to the PFC payments. Under the 2002 Act, coverage was extended to include peanuts, soybeans, sunflower seed, canola, rapeseed, safflower, flaxseed, mustard seed, crambe, sesame seed, and other oilseeds. Like PFC payments, direct payments are decoupled from production: there is no requirement that the recipient engage in any production to receive payment, and there is no requirement that the farm acres for which payment is made be utilized for production.
- 19. A "payment rate" is set by the statute for each of the covered commodities that in the aggregate form the theoretical U.S. agricultural production for which direct payments are made. For payment acres on which cotton had been produced during the base period, the payment rate is defined as \$0.0667 per pound.<sup>9</sup>
- 20. Market Loss Assistance. Market loss assistance (MLA) payments were made under four separate pieces of legislation, one each for the years 1998 through 2001. They were *ad hoc* emergency and supplementary assistance provided to producers in order to make up for losses

<sup>&</sup>lt;sup>8</sup> Panel Report, paras. 7.212 - 7.215

<sup>&</sup>lt;sup>9</sup> First Written Submission, July 11, 2003, paras. 56 - 63; Panel Report, Paras. 7.2218-7.222.

sustained as a result of recent low commodity prices. The 1998 MLA payments were intended essentially as a 50 percent additional PFC payment. The 1998, 1999 and 2001 legislation each appropriated a dollar amount to assistance which was divided among PFC payment recipients proportionately to their respective previous PFC payment. The 2000 legislation provided for payments at the same contract payment rates as the 1999 Act. MLA payments were only made to recipients enrolled in the PFC program.<sup>10</sup>

- 21. MLA payments were paid on the identical payment base as PFC payments and were authorized by the U.S. Congress on a *post hoc* basis as emergency supplemental payments. The legislation authorizing these payments was passed several months after planting for the crop year in question had occurred. If producers had expectations of payment, then they also knew that they would be eligible to receive a payment regardless of what crop they planted. Indeed, they could choose not to plant and still be eligible for the payment. Thus, MLA payments were decoupled from planting decisions and did not affect production.<sup>11</sup>
- 22. Counter-cyclical Payments. The counter-cyclical payments (CCP) program was also established by the FSRI Act of 2002. It provides support to producers (as defined) based on historical acreage for the same commodities as DP payments, including upland cotton. An eligible producer must enter into an annual agreement in order to receive payments for a crop year. The eligibility requirements and planting flexibility requirements are the same as for the DP program. CCP payments, like DP payments, are made to producers on farms for which payment yields and base acres are established for each of the 2002 through 2007 crop years of each covered commodity.
- 23. CCP payments depend on the current prices of commodities. They are provided to producers with base acres and yields for a covered commodity for each of the 2002 through 2007 crop years whenever the effective price falls below the target price, which is fixed by the Act at 72.4 cents per pound for upland cotton. Target prices are fixed for MY 2002-03 and then raised to fixed levels for MY 2004-07 except for soybeans, rice, upland cotton and peanuts, which remain at the MY 2002-03 levels throughout the term of the FSRI Act of 2002. The effective price for a commodity is the sum of the DP payment rate (see above), plus the higher of the national average farm price for the marketing year or the loan rate (see above). The difference between the effective price and the target price is the CCP payment rate.<sup>12</sup>
- 24. <u>Economic Effects</u>. All four payment programs are decoupled payments, meaning the recipient cannot affect the size of the payment by his economic activity in this case, producing more of a specific crop, including cotton. The economic literature on decoupled payments establishes that the production effects of such payments are minimal. Because the payments are not tied to current production they have no effect on marginal planting decisions. Decoupled

<sup>&</sup>lt;sup>10</sup> Panel Report, 7.216 -7.217.

<sup>&</sup>lt;sup>11</sup> U.S. Opening Statement, October 7, 2003.

<sup>&</sup>lt;sup>12</sup> Panel Report, paras. 7.223-7.226.

payments may have more general effects on production in that they increase wealth and may reduce risk for producers. However, most empirical studies suggest that the wealth and risk effects associated with decoupled payments are negligible.<sup>13</sup> Not surprisingly, much of the literature on decoupled payments suggests that the benefits of the payments accrue mainly to landowners in the form of higher land values.<sup>14</sup>

- 25. Some critics have argued that decoupled payments potentially distort production because direct payments can increase wealth and reduce the risk of growing crops in general. Economists have long recognized that an individual's risk preferences may be influenced by their level of wealth. To the extent that producers have such risk preferences, increases in wealth through decoupled payments may provoke producers to take on more risk, thus potentially increasing production and distorting markets.
- 26. There is broad agreement that wealth may affect risk preferences and hence production, most economists would agree that while the lump sum effects of decoupled income support under uncertainty is conceptually clear, the effects are empirically trivial. Numerous empirical studies show that effects of decoupled support are minimal, with most estimates showing increases in total acreage of considerably less than 1 percent.<sup>15</sup>
- 27. The main impact of decoupled payments is likely on land values because a large portion of direct payments get capitalized into land values. Moreover, much of the increase in wealth from farm payments accrues to non-operator landlords. For example, using 1997 cost of production data, only about 35 percent of U.S. cotton production was grown by owner-operators. Therefore, only 35 percent of the value of decoupled payments would benefit producers of upland cotton. To the extent that decoupled payments increase land rental costs, costs of production increase for renters. Thus, the effects of increased wealth largely accrue to non-operators and any theoretical production effects are further minimized.<sup>16</sup>
- 28. The minimal effect that decoupled payments have on production is illustrated by USDA data provided to the Panel on January 28, 2004, on base acres versus planted acres for upland cotton.
  - In 2002, upland cotton base totaled 18,558,304 acres. Of these acres, 13,135,588 base acres were on farms where farmers underplanted their cotton base (that is, planted acres of cotton were less than cotton base acres). Of the 13,135,588 base acres on farms that underplanted their base, *only* 5,997,438 acres of upland cotton were planted in 2002.

<sup>&</sup>lt;sup>13</sup> Exhibit US-23, "The Production Effects of Decoupled Payments".

<sup>&</sup>lt;sup>14</sup> U.S. Further Rebuttal Submission, November 18, 2003, paras. 69-85; U.S. Answers to Panel Questions, December 22, 2003, paras. 154-158.

<sup>15</sup> Exhibit US-23, "The Production Effects of Decoupled Payments".

Exhibit US-23, "The Production Effects of Decoupled Payments"; U.S. Further Rebuttal Submission, November 18, 2003, paras. 69 -85; U.S. Answers to Panel Questions, December 22, 2003, paras. 154-158.

This includes 4.7 million acres of upland cotton base acres that were on farms that planted *no* cotton in MY 2002.<sup>17</sup>

- By contrast, some farmers used their planting flexibility to overplant their base (that is, where planted cotton acres exceeded cotton base acres). On farms whose planted acres exceeded base acres, cotton base acres totaled 5,422,716 acres in 2002. However, these farms planted 13,115,588 acres to cotton.<sup>18</sup>
- The data support the notion that rather than being required to base planting decisions on acreage base allocations, producers were able to exercise their planting flexibility, clearly choosing to plant other crops instead of cotton.

# III. Payments Made to Processors/Users: Step 2

- 29. <u>Description of Program</u>. The upland cotton user marketing certificate or "Step 2" program for upland cotton has been authorized since 1990 under successive legislation, including the FAIR Act of 1996 and the FSRI Act of 2002. It provides for the issuance of marketing certificates or cash payments (user marketing or Step 2 payments) to eligible domestic users and exporters of eligible upland cotton when certain market conditions exist.
- 30. Under the FAIR Act of 1996, the Secretary issued user marketing (Step 2) payments to domestic users and exporters of upland cotton for documented purchases by domestic users and sales for export by exporters made in a week following a consecutive four-week period when the lowest price quotation for United States cotton delivered to Northern Europe exceeded the Northern Europe price quotation by more than 1.25 cents per pound, and the adjusted world price did not exceed 130 percent of the marketing loan rate for upland cotton. Payments were made in certificates or cash to domestic users or exporters at a rate per pound equal to the difference between the two price quotations during the fourth week of the period, minus the 1.25 cents per pound threshold.
- 31. The FSRI Act of 2002 continued the Step 2 program, but application of the 1.25 cents per pound threshold has been delayed until 1 August 2006 (that is, for the 2002 through 2005 marketing years). Consequently, Step 2 payments are issued following a consecutive four-week period when the lowest price quotation for United States cotton delivered to Northern Europe exceeded the Northern Europe price quotation by any amount and the adjusted world price did not exceed 134 percent (not 130 percent, as under the FAIR Act of 1996) of the marketing loan rate. Payments are made at a rate per pound equal to the difference between the two price quotations during the fourth week of the period, with no reduction for the threshold.<sup>19</sup>

<sup>&</sup>lt;sup>17</sup> Panel Report, para 7.636, Table A-1.

<sup>&</sup>lt;sup>18</sup> Panel Report, para 7.636, Table A-1.

<sup>&</sup>lt;sup>19</sup> Panel Report, paras. 7.209-7.211.

- 32. <u>Economic Effects</u>. Step 2 is a single program that provides for payments on all sales of upland cotton produced in the U.S. in a given marketing year whether used domestically or exported. Step 2 payments are provided to merchandisers or manufacturers who use upland cotton, as they represent the first step in the marketing chain where those payments could be made and have the greatest impact on producer prices.<sup>20</sup>
- 33. Step 2 payments reflect world market conditions and payments are not always in effect. The timing of payments affects the potential benefits and thus the impacts of the program on producers and users of upland cotton.<sup>21</sup> For example, over the past 6 years, Step 2 was suspended during the following periods<sup>22</sup>:

Stopped	Resumed		
12/17/98	10/01/99		
12/13/01	3/29/02		
9/19/02	10/25/02		

34. The benefits to producers are thus indirect and are likely small. To the degree that such payments increase the demand for cotton and hence raise prices, the producers receives benefits from the program. However, these benefits may be offset by smaller counter-cyclical payments, as well as potentially lower marketing loan gains and loan deficiency payments.<sup>23</sup>

<sup>&</sup>lt;sup>20</sup> U.S. Opening Statement, July 22, 2003.

<sup>&</sup>lt;sup>21</sup> U.S. Opening Statement, July 22, 2003.

<sup>&</sup>lt;sup>22</sup> U.S. Further Rebuttal Submission, November 18, 2003, para. 33, footnote 33.

<sup>&</sup>lt;sup>23</sup> Calculating the Per-Unit Rate of Support, Dr. Glauber, August 22, 2003; U.S. Answers to Panel's Questions, December 22, 2003, para. 171.

### References

- 1. First Written Submission, July 11, 2003, paras. 20 25, 29, 56 63, 119 121 (description of programs)
- 2. Rebuttal Submission, August 22, 2003, paras. 59 64 (effects of direct payments)
- 3. Exhibit US-23, The Production Effects of Decoupled Payments, August 22, 2003, Dr. Joseph Glauber
- 4. Exhibit US-24, Calculating the Per-Unit Rate of Support, August 22, 2003, Dr. Joseph Glauber
- 5. Further Submission, September 30, 2003, paras. 71 75 (effects of decoupled payments)
- 6. Opening Statement, October 7, 2003, paras. 39 49 (Sumner's treatment of decoupled payments, crop insurance, Step 2)
- 7. Answers to Panel's Questions, October 27, 2003, No. 125(5), paras. 16 18 (upland cotton planted on base acres)
- 8. Further Rebuttal Submission, November 18, 2003, paras. 69 85 (effects of decoupled payments, literature review)
- 9. Opening Statement, December 2, 2003, paras. 42 58 (effects of decoupled payments, literature review, enrollment and planting data for cotton)
- 10. Answers to Panel Questions, December 22, 2003, No. 242, paras. 154 158; No. 248, 169 171 (land values, Step 2)
- 11. Comments of the U.S. Concerning Brazil's Econometric Model, December 22, 2003, paras. 28 30.
- 12. U.S. Comments to Brazil's Answers, January 28, 2004, para. 169 (Step 2)