

COMMODITIES AT A GLANCE

« Special issue on Cotton in Africa »



UNITED NATIONS

N°2 - July 2011

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

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Note

INTRODUCTION

This issue of **Commodities at a Glance** has been prepared by the Special Unit on Commodities (SUC) of UNCTAD. This quarterly publication aims to collect, present and disseminate accurate and relevant statistical information linked to international primary commodity markets in a clear, concise and friendly format.

Given the recent record rises in cotton prices and wider commodity price volatility, this edition of **Commodities at a glance** (n°2), will focus on the world cotton industry, with a special emphasis on African cotton producing countries. The cotton sector in Africa is critical to the provision of sustainable rural livelihoods and the economic development of these countries. This issue of **Commodities at a glance** with its focus on the African cotton sector has been prepared for the Pan-African Cotton Meeting in June 2011, in Cotonou (Benin).

For further information about this publication, please contact the Special Unit on Commodities (SUC), UNCTAD, Palais des Nations, CH-1211 Genève 10, Switzerland, telephone +41 22 917 5676 e-mail: commodities@unctad.org.

STATISTICAL DATA SOURCES

All Statistical data sources for this publication have been indicated under each specific graph.

Some discrepancies may appear in this document, especially between production and trade statistics due to the way information is reported by countries.

The share of Africa in cotton lint exports both in 1985/86-1989/90 and 2006/07-2010/11 is higher than the share of Africa in cotton lint production. This situation is due to the fact that cotton is mainly grown as an export crop in Africa for international markets, while it is largely processed and domestically used in other regions.

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MAKING NEWS THIS QUARTER...

Making news this quarter...

This quarter's edition of UNCTAD's *Commodities at a Glance* describes world cotton trade, price, production, and consumption trends, with a particular focus on Africa. The cotton sector is vital for at least 80 countries, of which 28 are in Africa, and accounts for around 2 per cent of the world's arable land. Cotton production and processing is a critically important source of income and employment in developing countries, including the least developed countries (LDCs) in Africa. China, India, the United States and Pakistan are the main producers in the world, followed by Brazil and Uzbekistan, who altogether account for 80 per cent of world cotton production. African cotton lint production accounts for 5 per cent of world production (see figure 7b). Cotton is also a widely traded commodity, involving over 100 countries in both import and exports.

Prior to 2008, the world cotton industry had been experiencing robust demand growth and rising yields. Over the last 60 years, cotton production once almost quadrupled, from 7 million tons in 1950/51 to 27 million tons in 2006/07, but declined thereafter to 22 million in 2009/10 (see figure 6). The introduction and adoption of new technologies and expansion of the area under cotton has resulted in significant production gains in the world. African cotton production peaked in 2004/05 (at around 2 million tons) and then declined by almost 50 per cent over the next five years (see figure 6). The African CFAF zone countries were hardest hit with production declines of 55 per cent between 2004/05 and 2008/09 as compared with a 20 per cent decline in SADC countries.

Since 1985, world cotton yields have risen from around 500 kilograms per hectare to 800 kilograms. However, these productivity gains have not materialized in Africa. The productivity gap between world and African cotton lint yields has grown over the past 20 years, with average cotton yields in Africa at about half the world average. Yields in Africa have declined by 10 per cent during this period (see figures 10 and 11). Growth in Africa's cotton production has not been based on productivity gains with declining yields being a key factor (see figure 10).

In 2009/10 African cotton exports accounted for 12.5 per cent of world cotton lint exports, down from the 21 per cent share achieved in 2003/04. This situation represents a substantial loss of global market share over the past 5 years. Again, in terms of export performance, the CFAF zone countries were hardest hit with their cotton exports falling from 14 per cent of world cotton exports (71 per cent of African cotton exports) to 7 per cent (59 per cent of African cotton exports) during 2003/04 to 2009/10[1]. Finding a solution to the cotton issue might facilitate the conclusion of the WTO Doha Round, and help African cotton producers achieve stable, predictable and fair prices on the world market.

A particular issue for cotton producing African countries concerns "commodity dependence" as many countries have experienced unbalanced growth patterns due in part to the high concentration of merchandise exports in few commodities traded on often volatile world markets. Relying on a few commodities with uncertain profitability enhances their economic vulnerability.

The cotton-led growth of many African countries has been negatively affected by the growing volatility of world prices, competing synthetic fibers, and cotton subsidies in the United States, Europe and China. Nonetheless, there are substantial growth opportunities for African cotton, although some challenges need to be addressed: (i) improving value addition (and quality), (ii) closing the productivity gap between Africa and other world producers through farm-level productivity and ginning efficiency; and (iii) supporting capacities and institutions through the capacity-building of stakeholders, and strengthening of governance structures. In the short-term, the main threats to the sustainability of the African cotton sector include: the US dollar:Euro exchange rate, OECD subsidies, a lack of access to finance and extension services, weak cooperatives / marketing systems and a lack of adapted risk management tools. All of these issues have to be addressed to enhance the prospects for the competitiveness of Africa's cotton sector.

[1] See European Union - Africa Partnership on Cotton update relating to the EU-Africa partnership on Cotton, June 2010. <http://www.coton-acp.org/en/update-relating-european-union-africa-partnership-cotton-june-2010>.

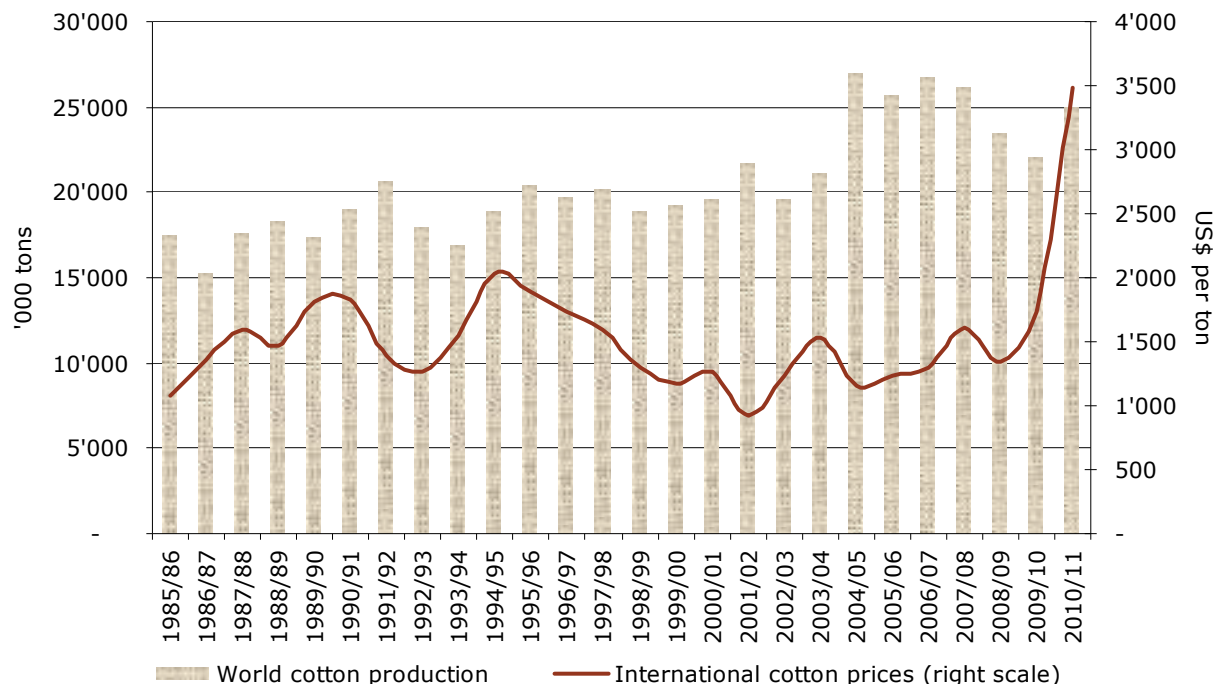


FACTS AND FIGURES

International Cotton Market

Fig 1. World cotton production and international cotton prices 1985/86 – 2010/11

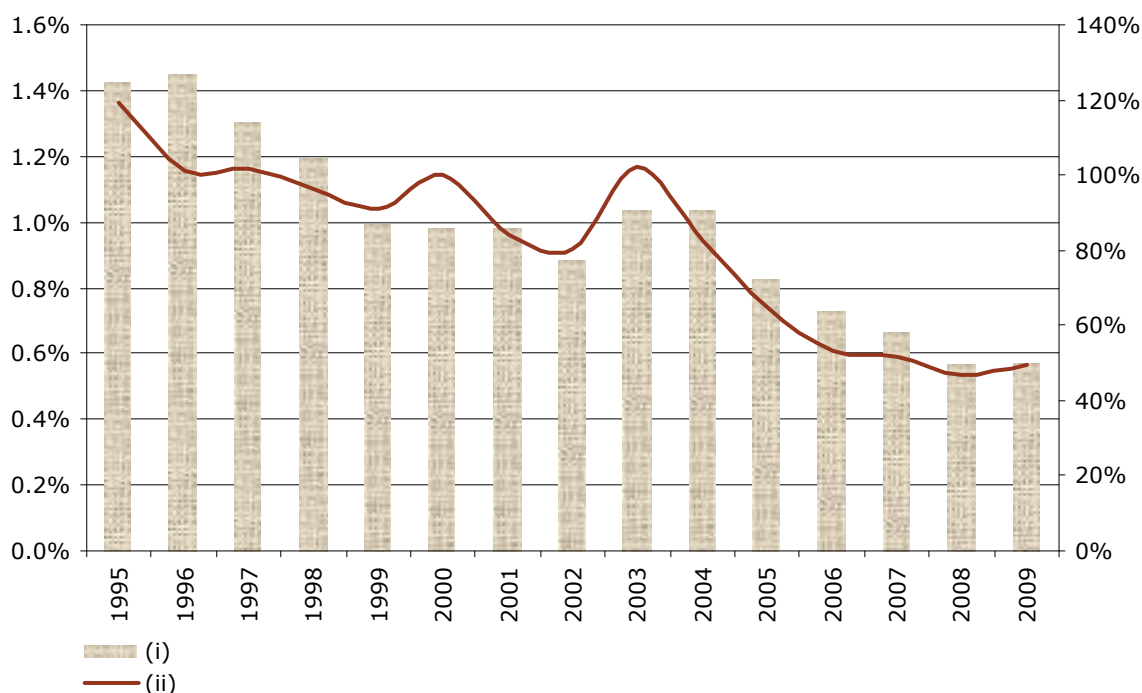
World cotton prices spiked in 2010/11 to double their average price of the last 35 years (1985/86). World production has increased slightly over the timeframe



Source: Cotton production: International Cotton Advisory Committee (ICAC)
 International Cotton Prices: computed from UNCTAD, UNCTADstat
Note: Crop season – 01/08 to 31/07 of each year

Fig 2. (i) Share of cotton trade in global trade of all primary commodities (excl. Fuels), and (ii) ratio of the cotton price index vis-à-vis the price index of all primary commodities (excl. fuels), 1995 - 2009

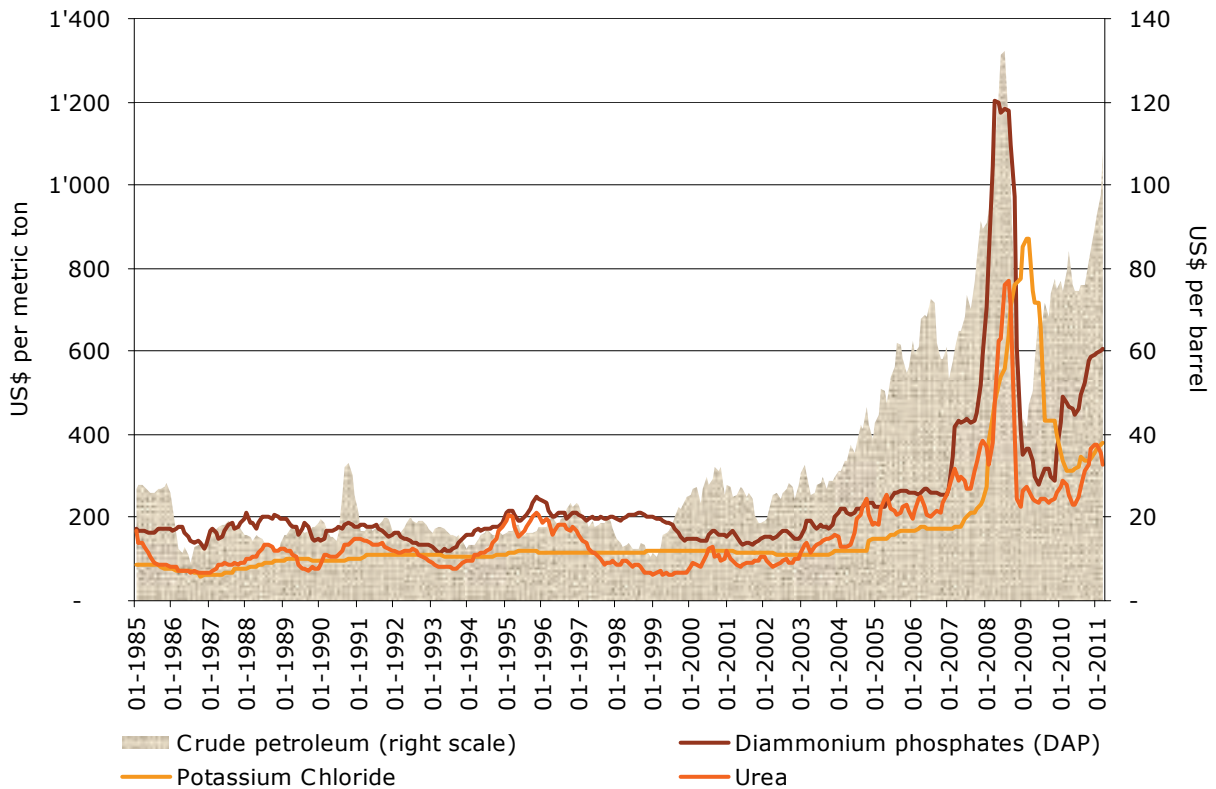
The value of cotton trade has decreased relative to all primary commodities (excl. fuels) since 1995. Furthermore, the price of the cotton has decreased relative to prices of all commodities (excl. fuels). Both the increase in prices of other commodities and the decrease in cotton prices explain this trend.



Source: Computed from UNCTAD, UNCTADstat
Note: ratio computed from export value data statistics (SITC Rev 3, 263). Data available from 1995.

Fig 3. Crude petroleum and fertilizer prices, January 1985 – March 2011

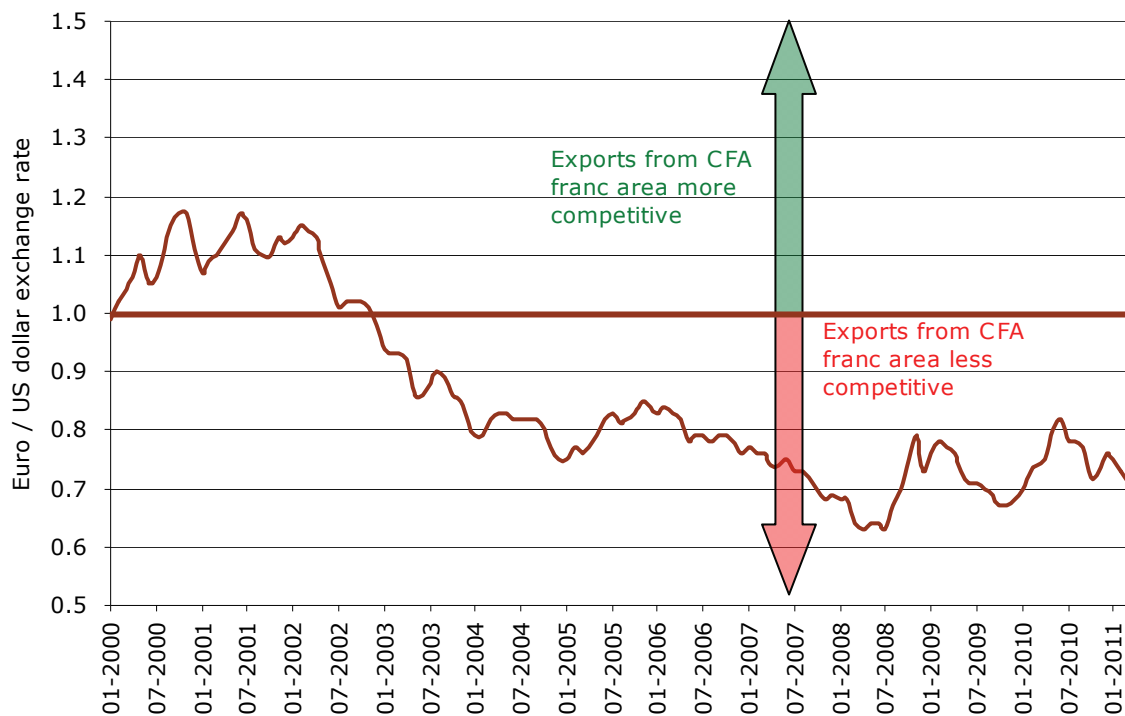
Fertilizer prices are closely linked to oil prices. They spiked in 2008 and continue to be high.



Source: UNCTAD, UNCTADstat for crude petroleum prices, WORLD BANK for fertilizers prices

Fig 4. Euro / US dollar exchange rate January 2000 – March 2011

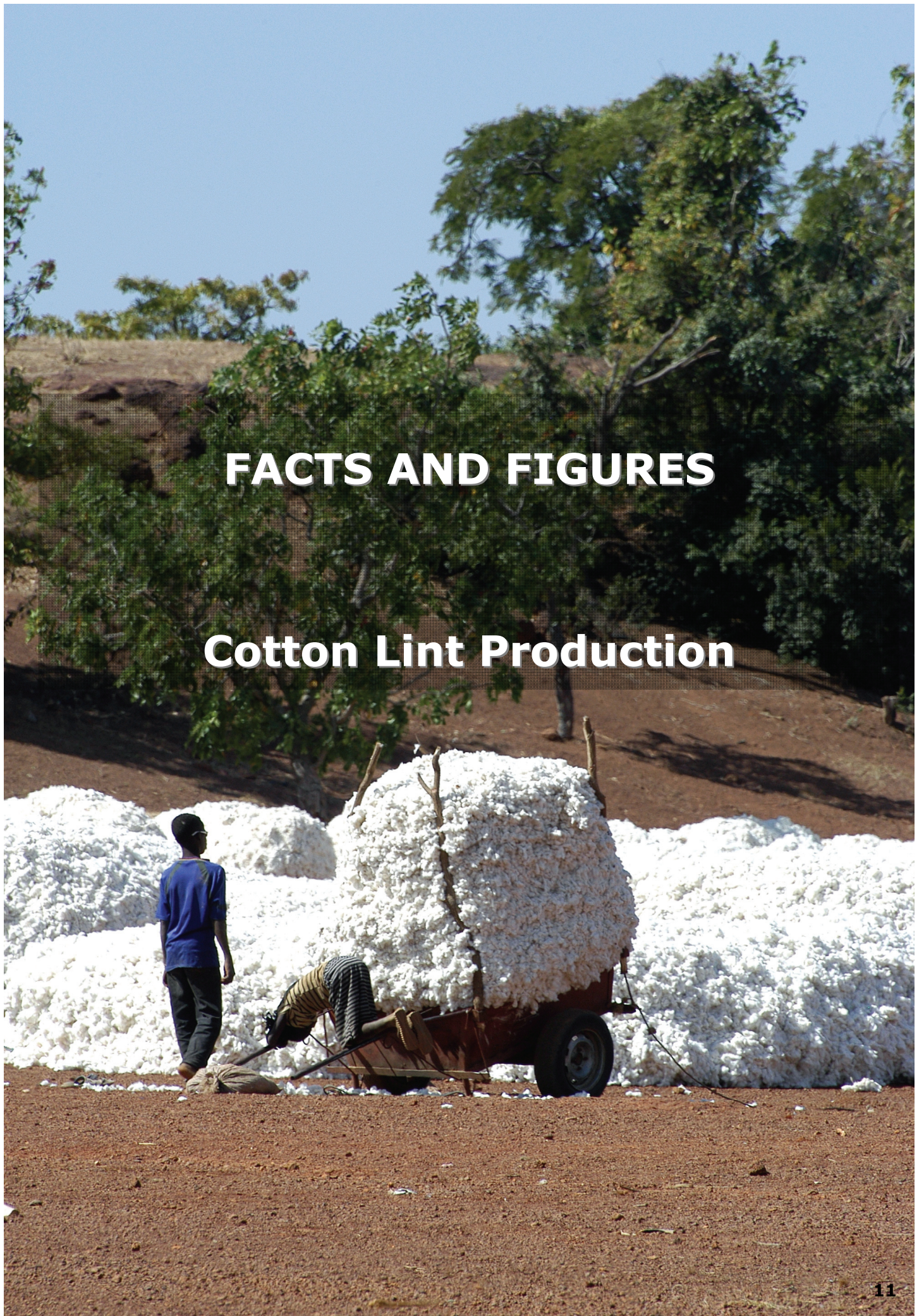
During most of the last decade, the Euro/US dollar exchange rate has hindered the competitiveness of cotton produced in the CFA region of West and Central Africa



Source: International Monetary Fund, International Financial Statistics

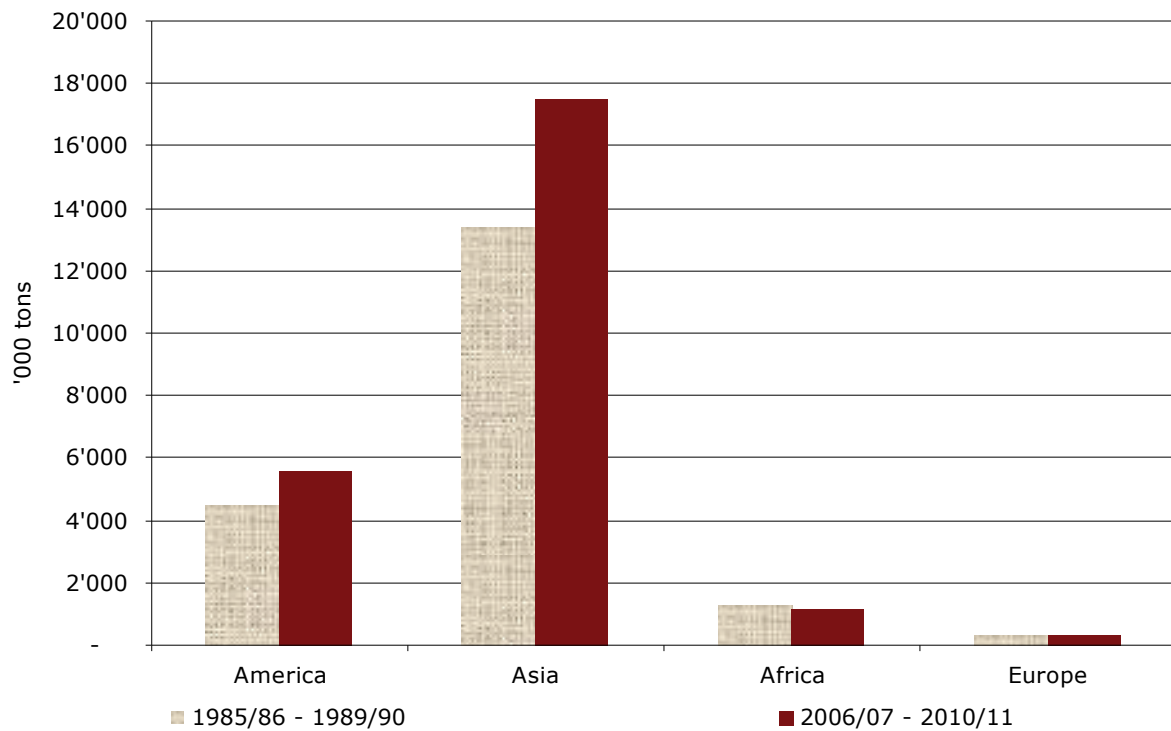
FACTS AND FIGURES

Cotton Lint Production



**Fig 5. Average annual cotton lint production by region
1985/86 – 1989/90 and 2006/07 – 2010/11**

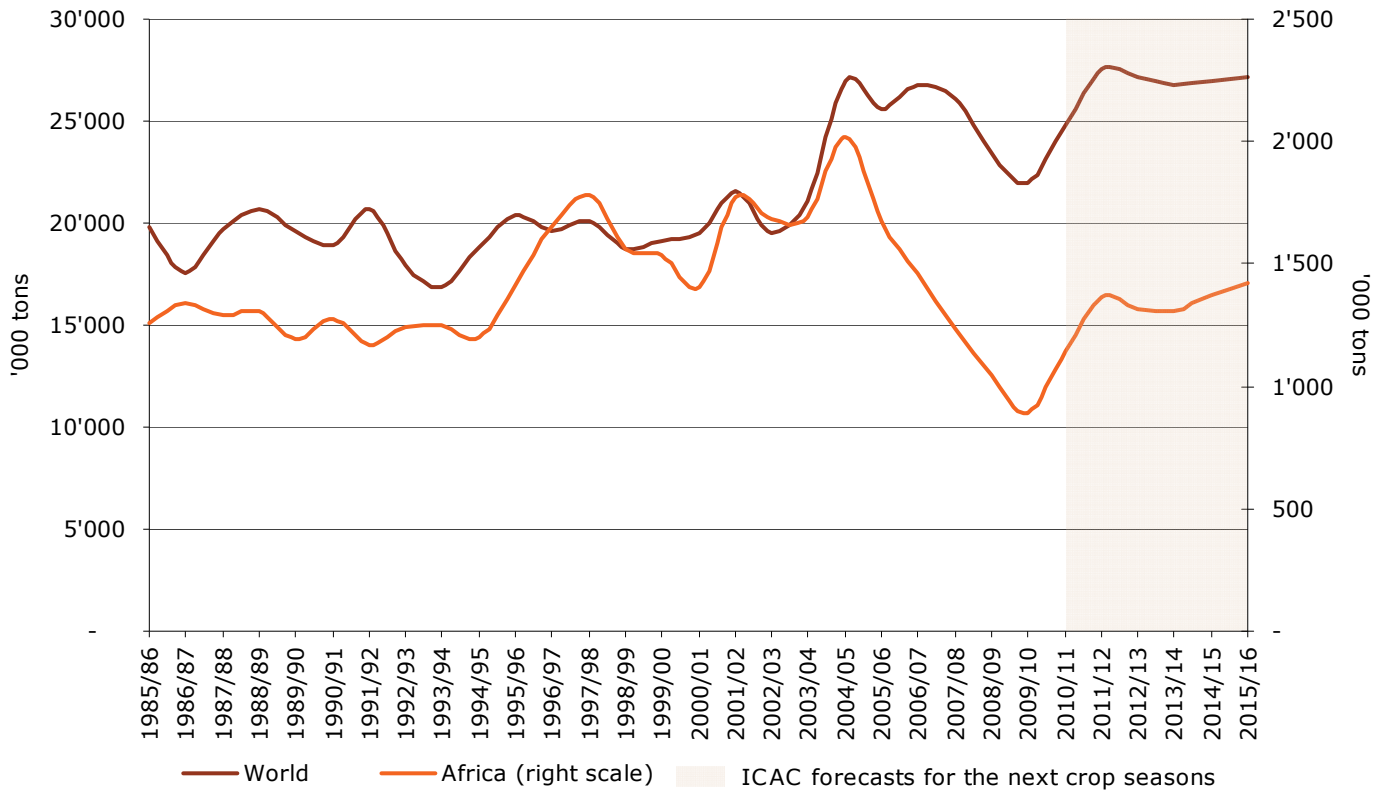
The volume of cotton produced in Asia has increased by ca. 23% from 1985/86 to 2010/11. The volume of cotton produced in Africa has decreased by ca. 10% over the same period



Source: UNCTAD computations from ICAC statistics

Fig 6. World and African cotton lint production 1985/86 - 2010/11

African cotton lint production increased from the mid-1990s to the mid-2000s, but declined to pre-boom levels after 2004/05. World production rose during this time period.



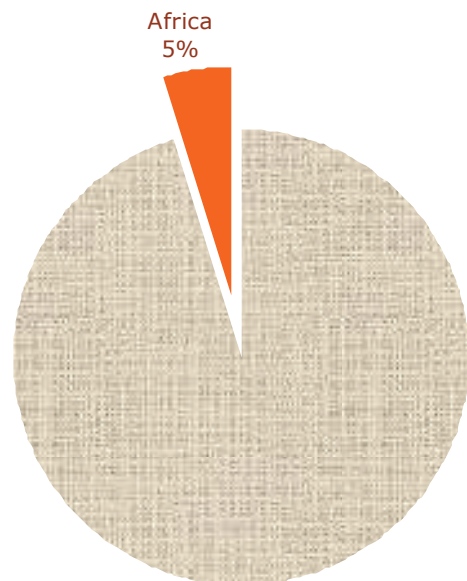
Source: UNCTAD computations from ICAC statistics

Note: According to ICAC and USDA, world cotton lint production should strongly increase in 2011/12 (+8% for USDA and +10% for ICAC).

Fig 7.a. African cotton lint production, as a Share of world production 1985/86 -1989/90

Fig 7.b. African cotton lint production, as a Share of world production 2006/07 - 2010/11

The share of African cotton lint production has contracted in the last 20 years as African production fell by 10% and world production rose by 26%

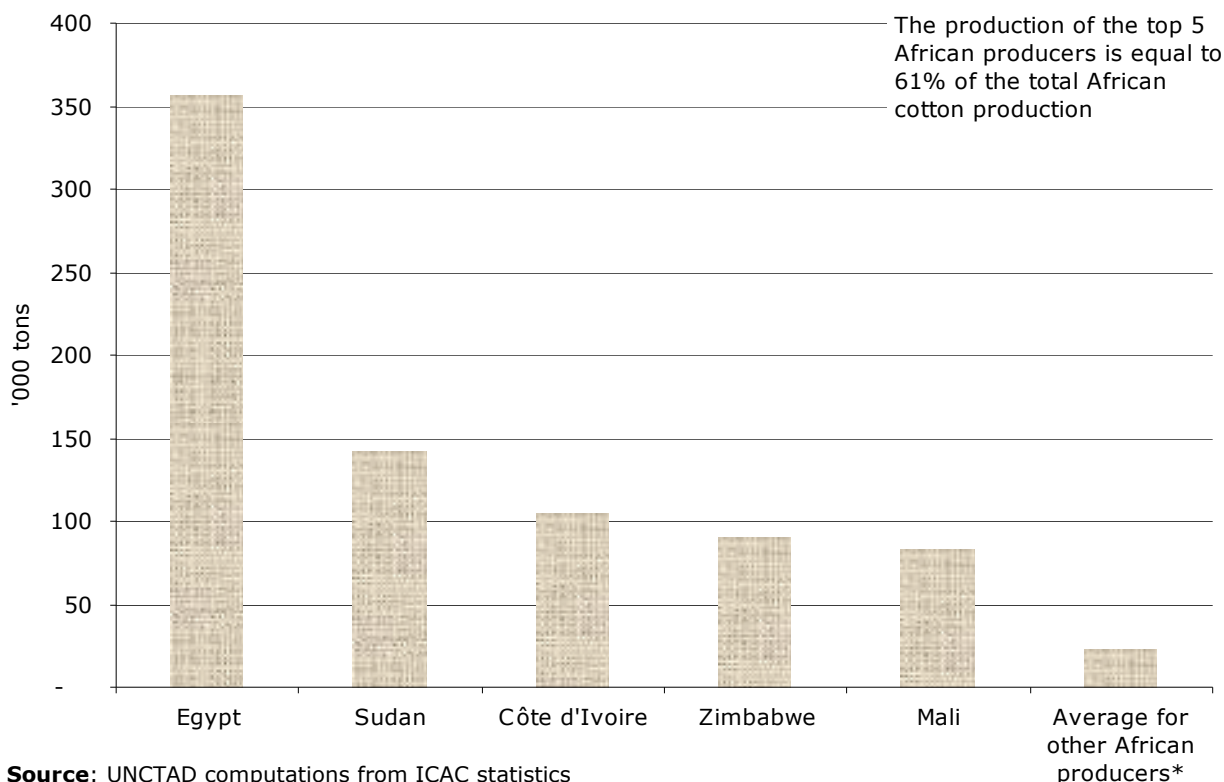


Source: UNCTAD computations from ICAC statistics

Source: UNCTAD computations from ICAC statistics

Fig 8. Average annual cotton lint production by Africa's top five producers 1985/86 – 1989/90

Cotton lint production volumes exhibit greater uniformity across the top 5 African producers in the last 20 years.

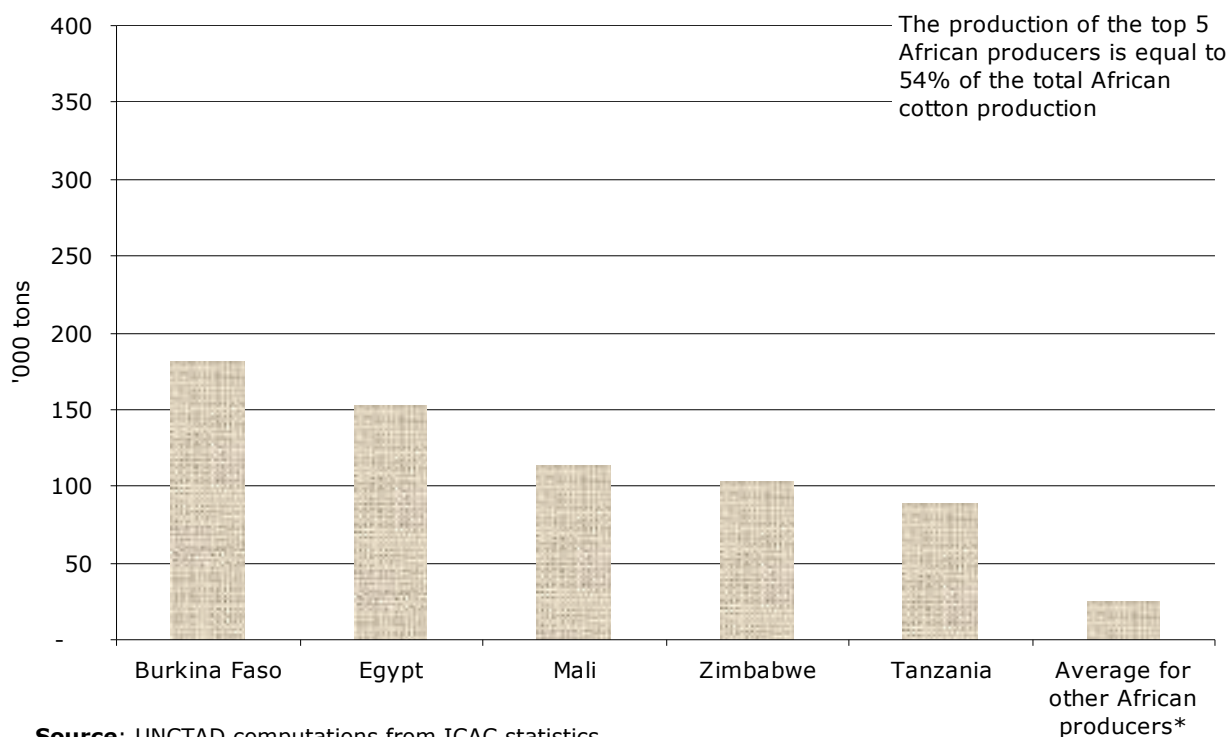


Source: UNCTAD computations from ICAC statistics

Note: * 22 countries

Fig 9. Average annual cotton lint production by Africa's top five producers 2006/07 – 2010/11

Changes in the ranking of the top 5 producers were due to: (i) the onset of civil strife disrupting trade flows in Sudan and Côte d'Ivoire; (ii) the introduction of GM cotton in Burkina Faso; and (iii) supportive sectoral and institutional reforms in Tanzania during the mid-1990s.



Source: UNCTAD computations from ICAC statistics

Note: * 21 countries

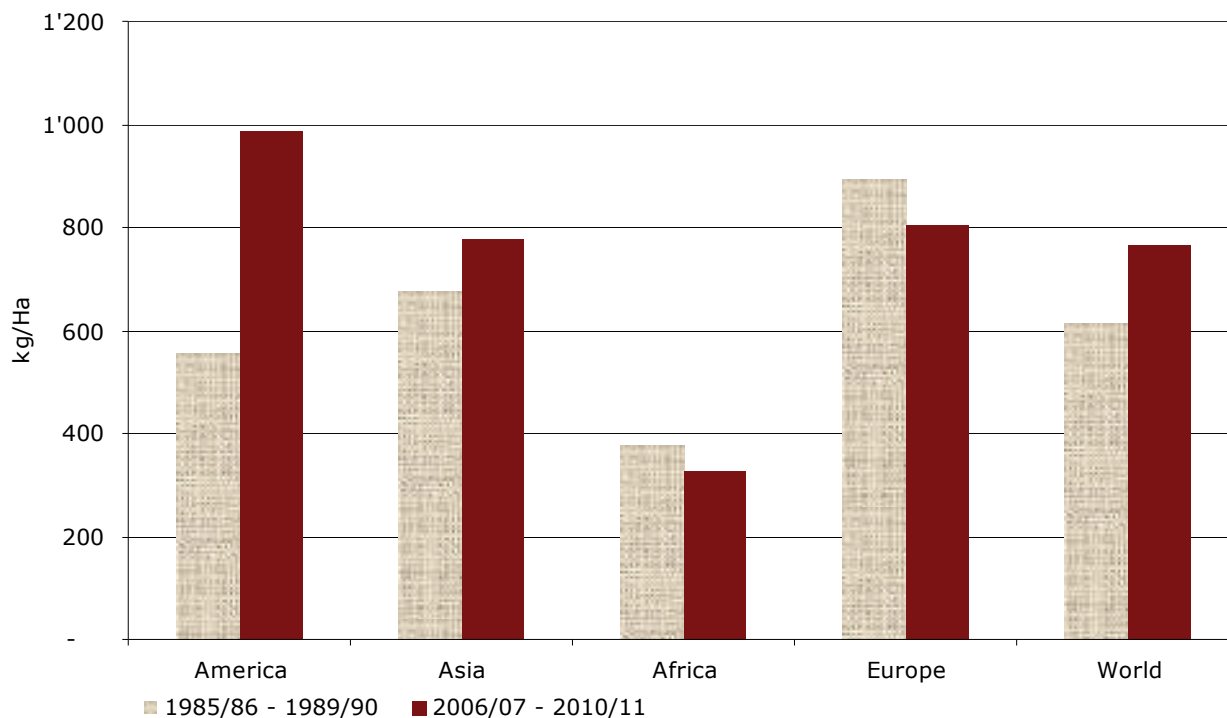
A photograph showing a cotton ginning area. In the foreground, a man in a blue shirt and dark pants stands next to a bullock cart. The cart is heavily loaded with large, fluffy bales of white cotton lint. The background features large piles of cotton lint and a line of green trees under a clear blue sky. The ground is reddish-brown soil.

FACTS AND FIGURES

Cotton Lint Yields

**Fig 10. Cotton lint yields by region
1985/86 – 1989/90 and 2006/07 – 2010/11**

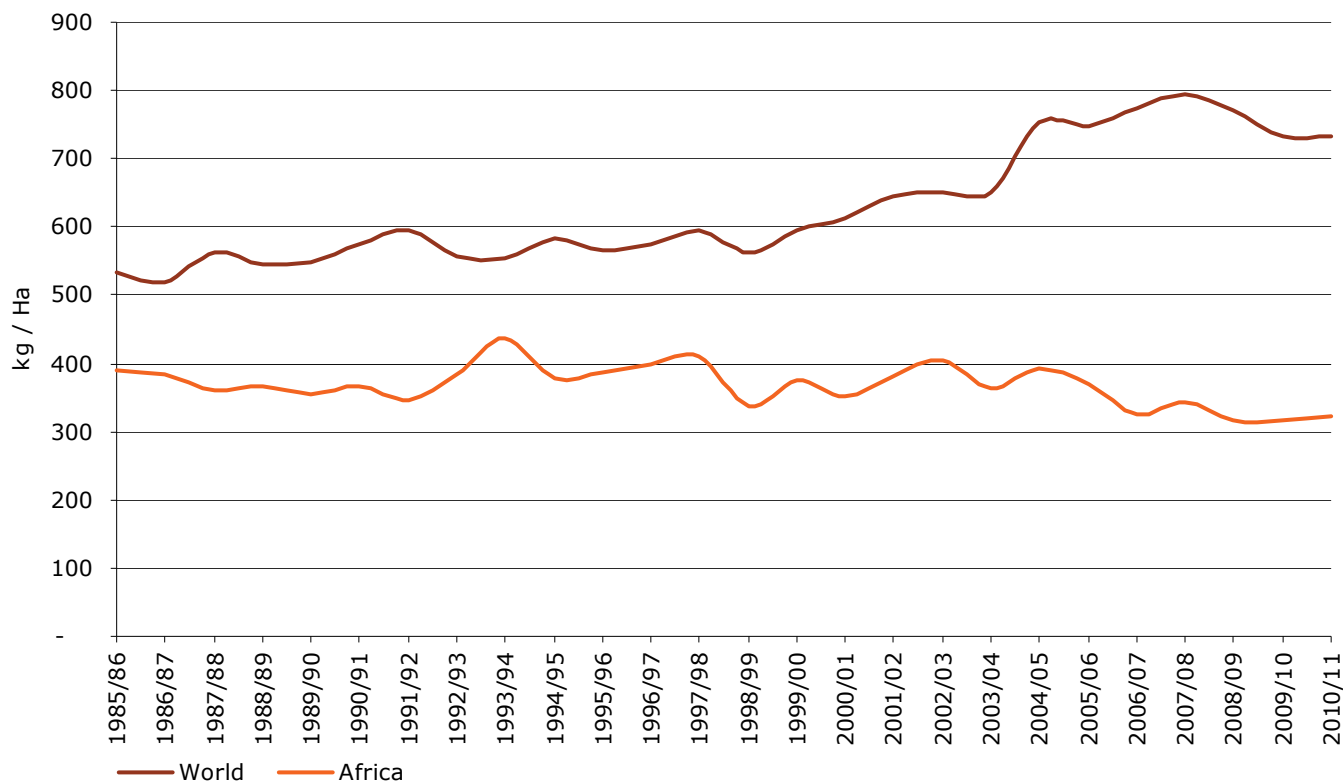
Average cotton lint production yields in Africa over the last 20 years were about half the world average. Yields have decreased in Europe and Africa by ca. 10% over the last 20 years.



Source: UNCTAD computations from ICAC statistics

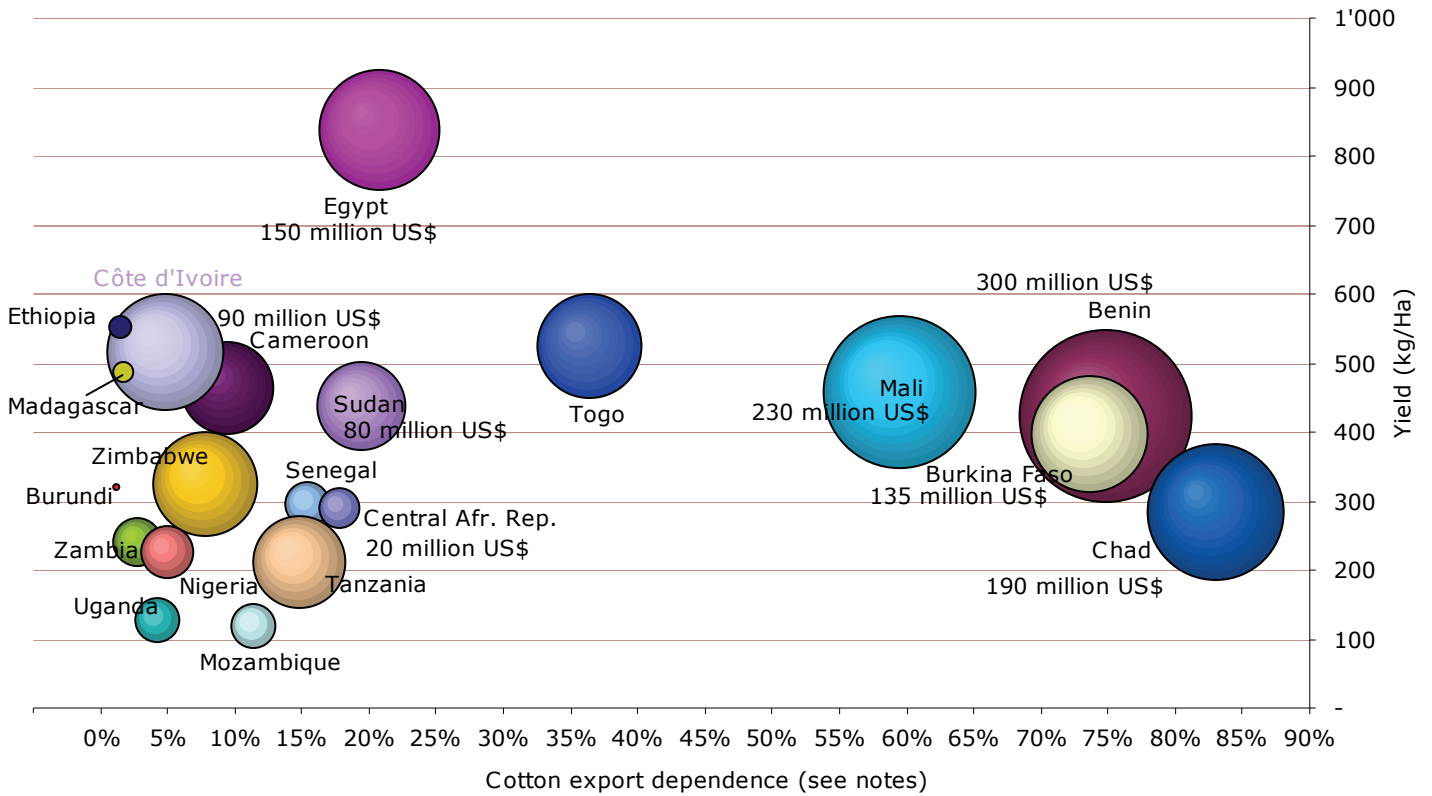
**Fig 11. World and African cotton lint production yields
1985/86 - 2010/11**

The gap between world and African cotton yields has grown over the last 20 years.



Source: UNCTAD computations from ICAC statistics

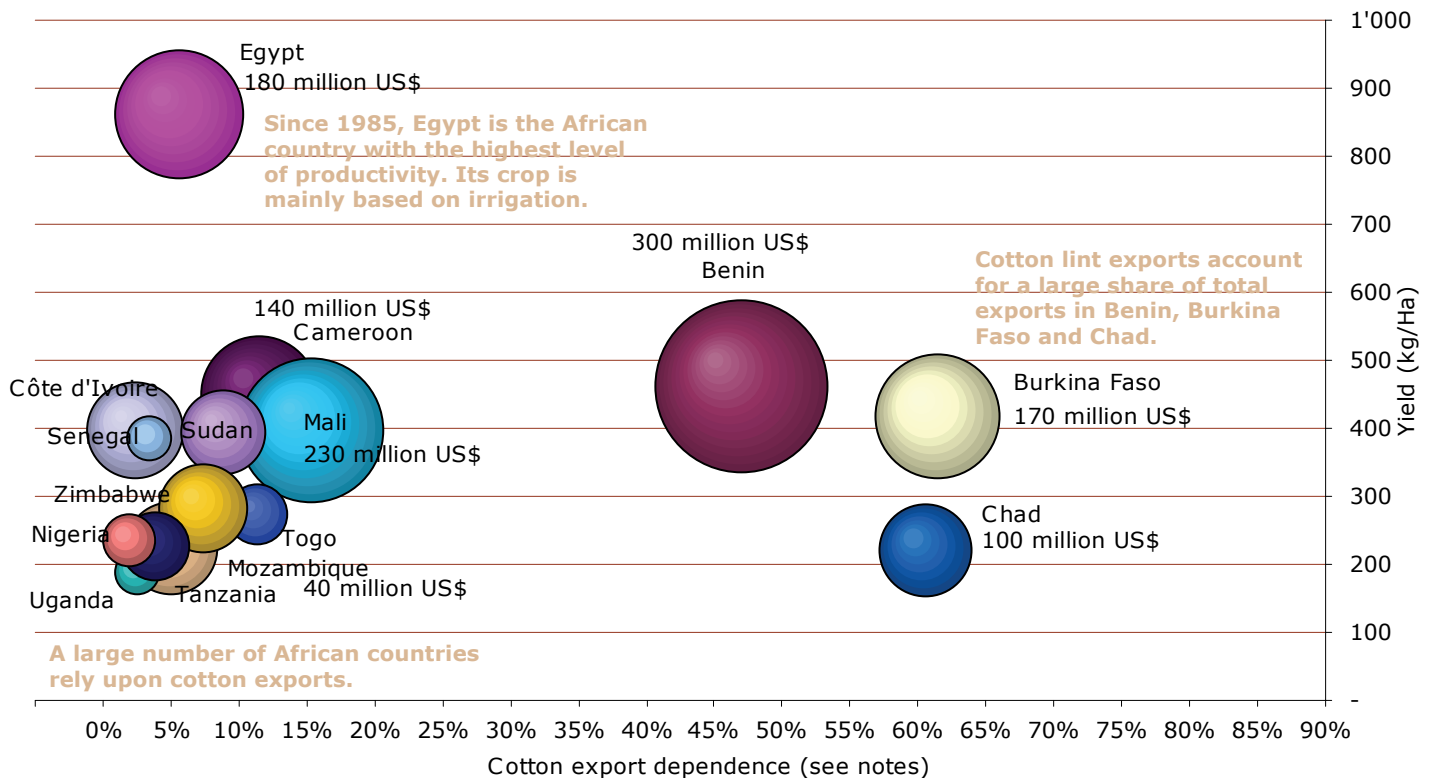
Fig 12.a. Average cotton yields of African cotton producing countries vs. dependence on cotton exports, 1995 - 1999



Source: UNCTAD computations from ICAC statistics (yields) and UNCTADstat (export revenues)

Note: Dependence on cotton exports is calculated based on SITC rev 3: 263. The size of the bubbles is proportional to total cotton export revenues in US\$. Data are available from 1995.

Fig 12.b. Average cotton yields of African cotton producing countries vs. dependence on cotton exports, 2005 - 2009



Source: UNCTAD computations from ICAC statistics (yields) and UNCTADstat (export revenues)

Note: Dependence on cotton exports is calculated based on SITC rev 3: 263. The size of the bubbles is proportional to total cotton export revenues in US\$.

Table 1. Ratio of average cotton yields of selected African countries to the World's average (1985/86 – 1989/90)

Rank	Country	Ratio compared to the world	Rank	Country	Ratio compared to the world
1	Egypt	1.48	15	Zimbabwe	0.68
2	Morocco	1.08	16	South Africa	0.67
3	Côte d'Ivoire	1.04		Africa	0.66
	World	1.00	17	Niger	0.54
4	Cameroon	0.93	18	Chad	0.51
5	Mali	0.90	19	Ghana	0.51
6	Tunisia	0.87	20	Zambia	0.36
7	Madagascar	0.84	21	Central Afr. Rep.	0.35
8	Ethiopia	0.80	22	Angola	0.35
9	Sudan	0.80	23	Kenya	0.31
10	Togo	0.79	24	Tanzania	0.27
11	Senegal	0.76	25	DRC	0.21
12	Burkina Faso	0.76	26	Nigeria	0.17
13	Benin	0.75	27	Mozambique	0.15
14	Burundi	0.73	28	Uganda	0.05

Source: UNCTAD computations from ICAC statistics

Table 2. Ratio of average cotton yields of selected African countries to the World's average (2006/07 – 2010/11)

20 years ago, Egypt, Morocco and Côte d'Ivoire had production yields above the world average. Today, only South Africa and Egypt have production yields above the world average. However, yield disparities between African countries appear to have reduced.

Rank	Country	Ratio compared to the world	Rank	Country	Ratio compared to the world
1	South Africa	1.25		Africa	0.43
2	Egypt	1.11	15	Malawi	0.39
	World	1.00	16	Angola	0.38
3	Benin	0.58	17	Zimbabwe	0.37
4	Niger	0.57	18	DRC	0.35
5	Cameroon	0.56	19	Togo	0.35
6	Sudan	0.53	20	Guinea	0.34
7	Ghana	0.53	21	Central Afr. Rep.	0.32
8	Mali	0.51	22	Nigeria	0.29
9	Senegal	0.51	23	Tanzania	0.28
10	Burkina Faso	0.50	24	Uganda	0.26
11	Côte d'Ivoire	0.48	25	Kenya	0.26
12	Ethiopia	0.44	26	Zambia	0.24
13	Madagascar	0.44	27	Chad	0.23
14	Burundi	0.44	28	Mozambique	0.18

Source: UNCTAD computations from ICAC statistics

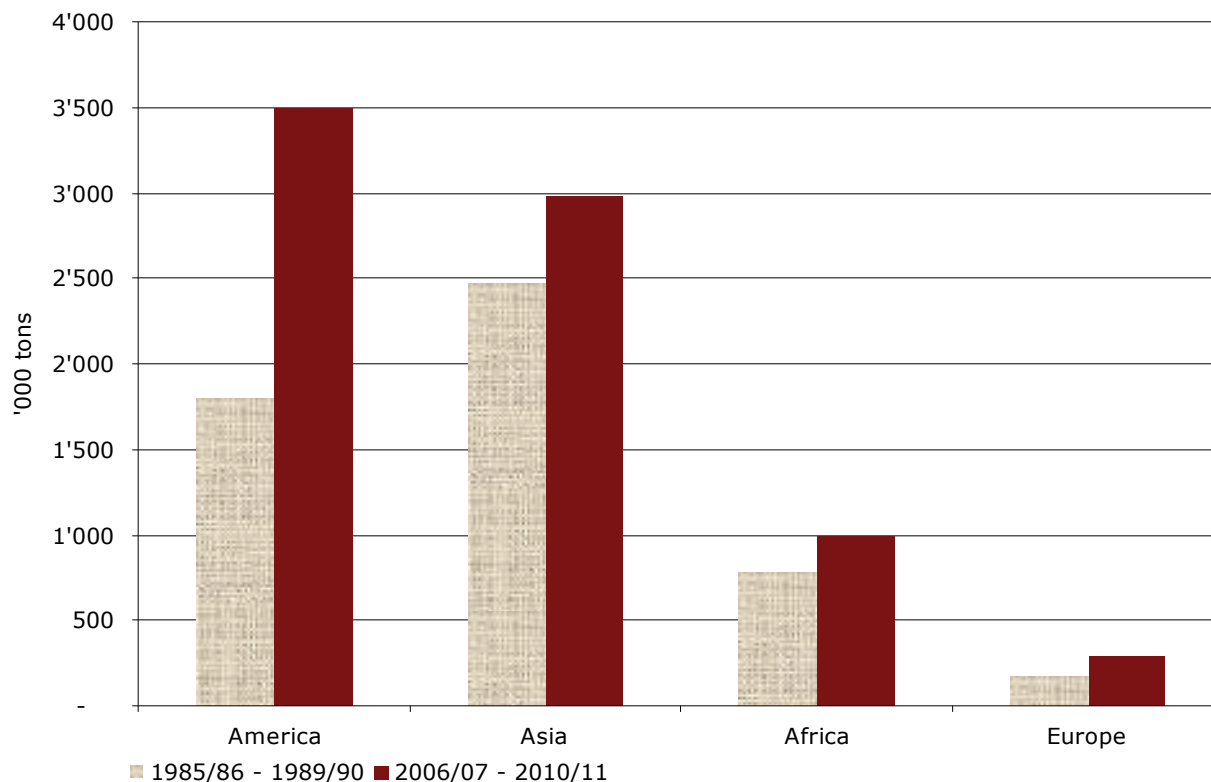
FACTS AND FIGURES

Cotton Lint Marketing and Trade



**Fig 13. Average annual cotton lint exports by region
1985/86 – 1989/90 and 2006/07 – 2010/11**

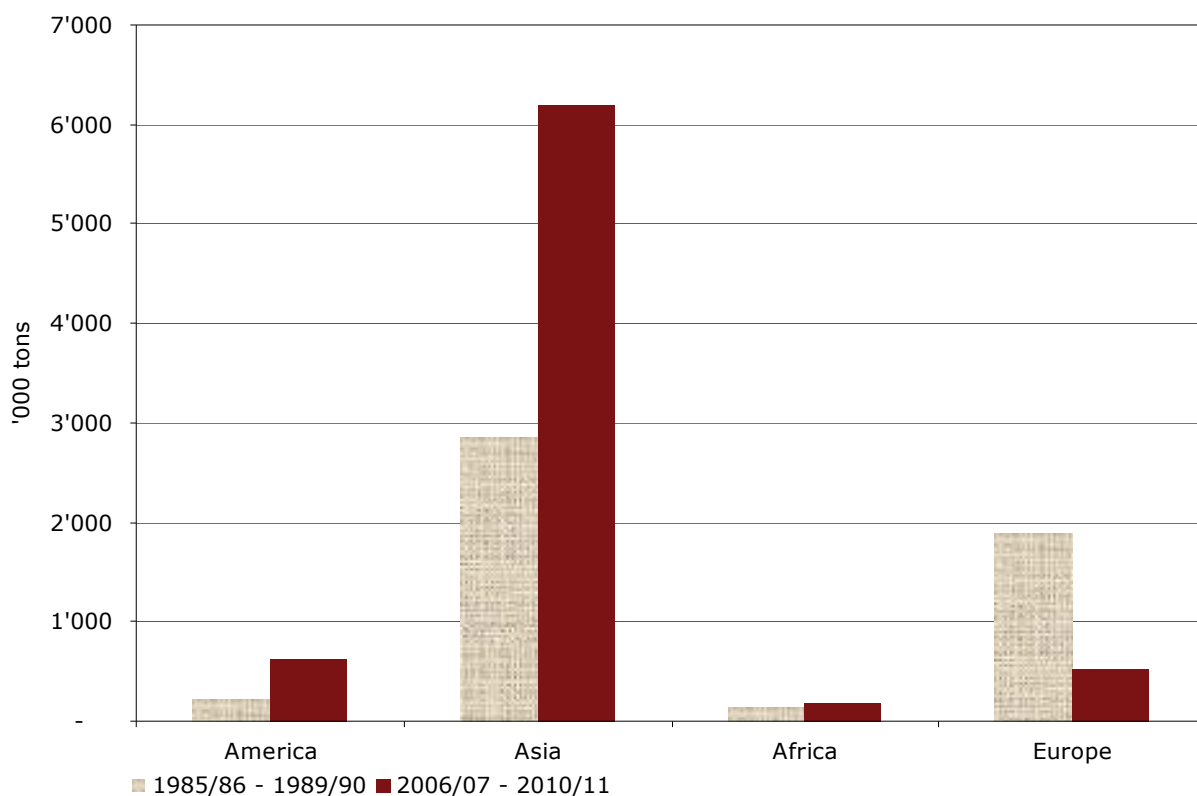
African cotton lint exports to the world has increased by ca. 26% over the last 20 years; exports from America increased by ca. 95%.



Source: UNCTAD computations from ICAC statistics

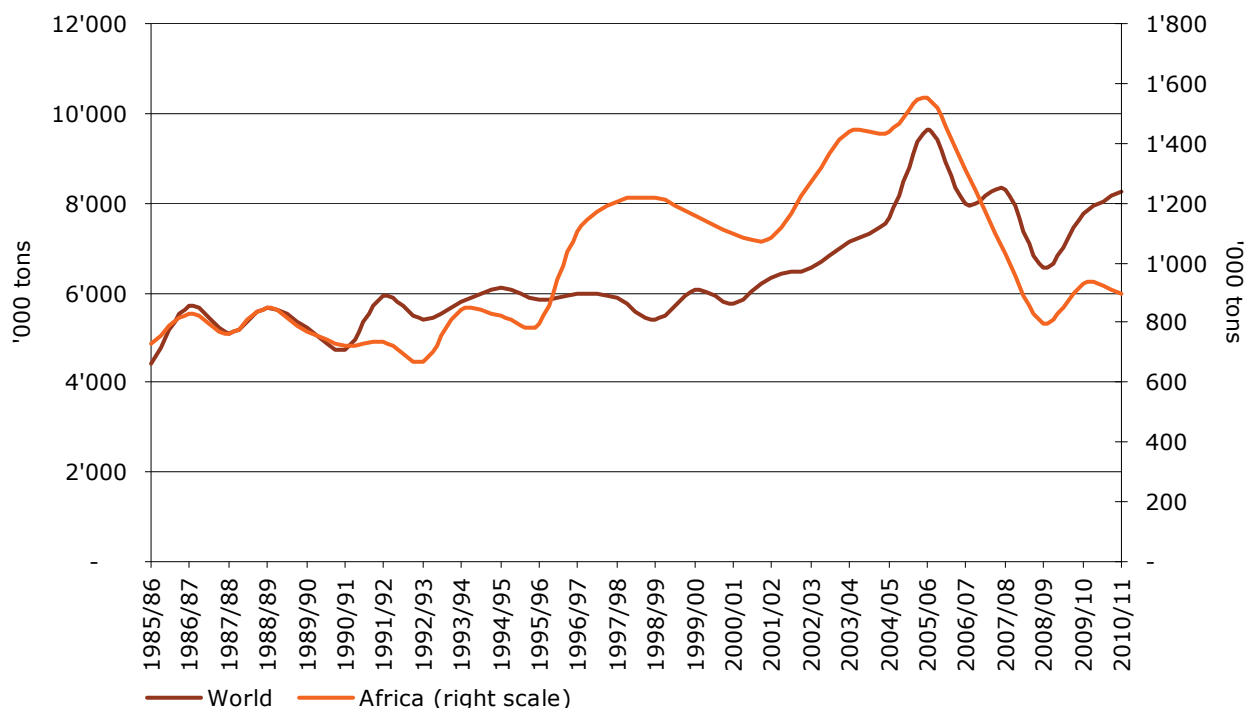
**Fig 14. Average annual cotton lint imports by region
1985/86 – 1989/90 and 2006/07 – 2010/11**

The volume of cotton lint imported by Asia has more than doubled in the last 20 years, mainly due to Chinese imports. African imports continue to be marginal



**Fig 15. World and African cotton lint exports
1985/86 - 2010/11**

In line with the fall in production, African cotton lint exports increased from the mid-1990s to the mid-2000s, but have declined to pre-boom levels since 2005/06.

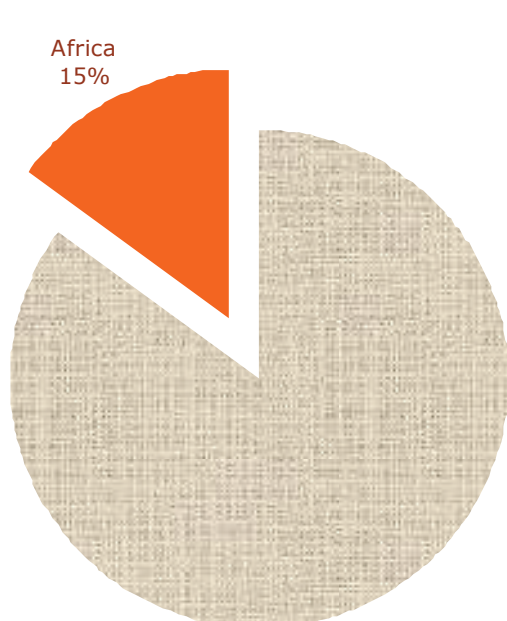


Source: UNCTAD computations from ICAC statistics

**Fig 16.a. Africa cotton lint exports,
as a share of world exports
1985/86 -1989/90**

**Fig 16.b. Africa cotton lint exports,
as a share of world exports
2006/07 - 2010/11**

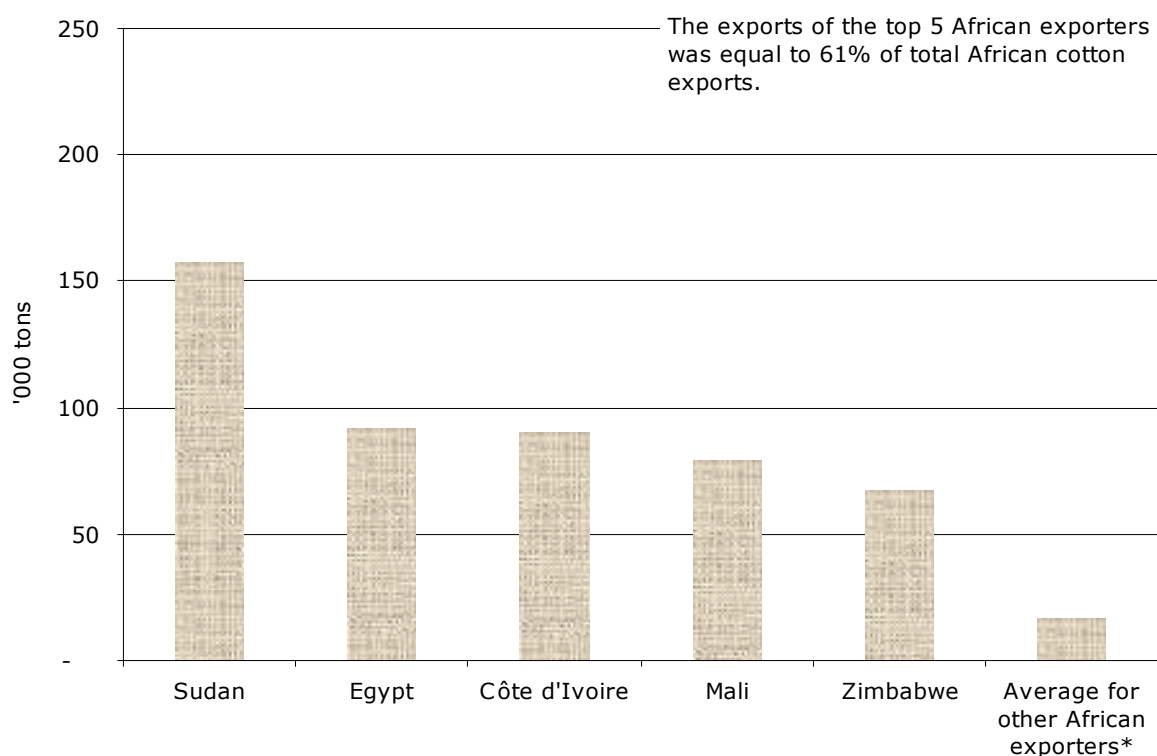
The share of Africa in world cotton lint exports both in 1985/86-1989/90 and 2006/07-2010/11 is higher than the share of Africa in world cotton lint production. This situation is due to the fact that cotton is mainly grown as an export crop in Africa and exported as such to international markets, while it is largely processed and internally used in other regions. Despite an increase in export quantities by ca. 20'000 tons, the share of African cotton lint exports has contracted in the last 20 years. During the "boom period" (1995/96 - 2005/06), Africa's export share in the world was 18%.



Source: UNCTAD computations from ICAC statistics

Source: UNCTAD computations from ICAC statistics

Fig 17. Average annual cotton lint exports by Africa's top five exporters 1985/86 – 1989/90



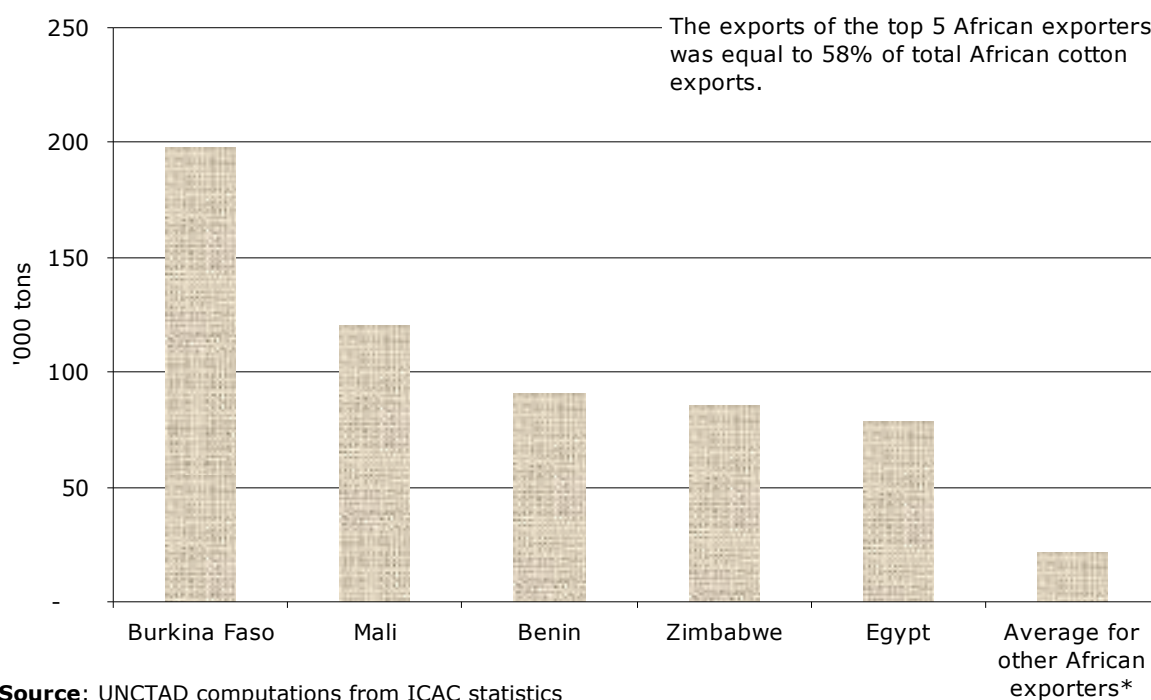
Source: UNCTAD computations from ICAC statistics

Note: * 18 countries

Some discrepancies may appear in this document, especially between production and trade statistics due to the way information is reported by countries.

Fig 18. The Five main cotton lint African exporting countries 2006/07 – 2010/11

Changes in the ranking of the top 5 exporters were due to: (i) the onset of civil strife disrupting trade flows in Sudan and Côte d'Ivoire, and (ii) the introduction of GM cotton in Burkina Faso.



Source: UNCTAD computations from ICAC statistics

Note: * 19 countries

Some discrepancies may appear in this document, especially between production and trade statistics due to the way information is reported by countries.

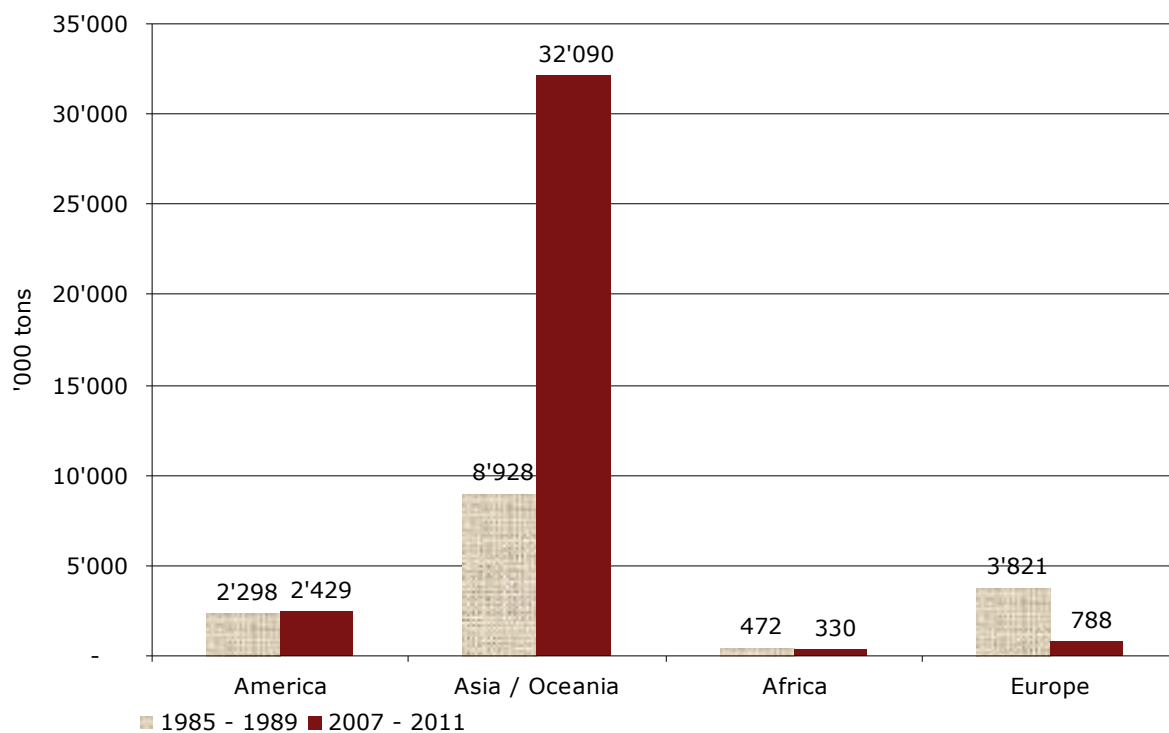


FACTS AND FIGURES

Value addition – Cotton Yarns

**Fig 19. Average annual cotton yarn production by region
1985 – 1989 and 2007 – 2011**

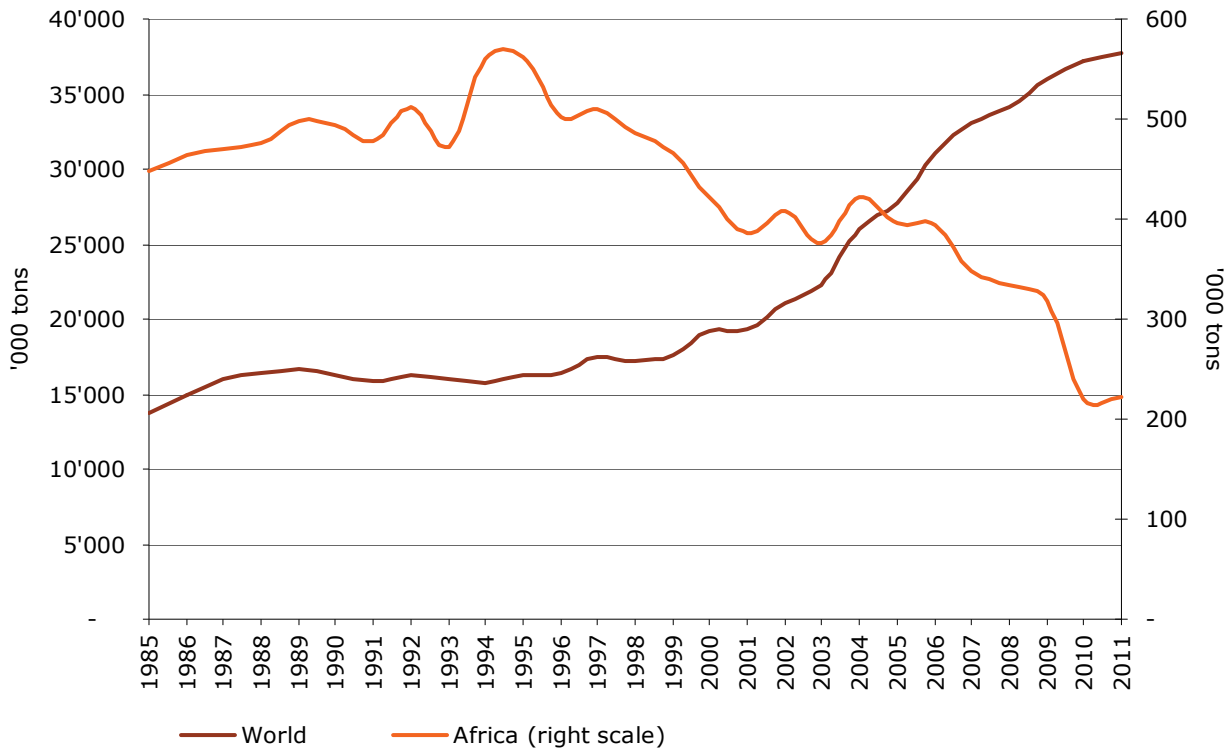
Cotton yarn production has been multiplied by 3.6 in Asia/Oceania over the last 20 years. This is mainly due to: (i) the rapid growth in demand for cotton products in Asia (especially, China); and (ii) improved infrastructural, industrial and technological conditions. In contrast, in Africa the volume of yarn production remains marginal relative to the continent's lint production.



Source: UNCTAD computations from ICAC statistics

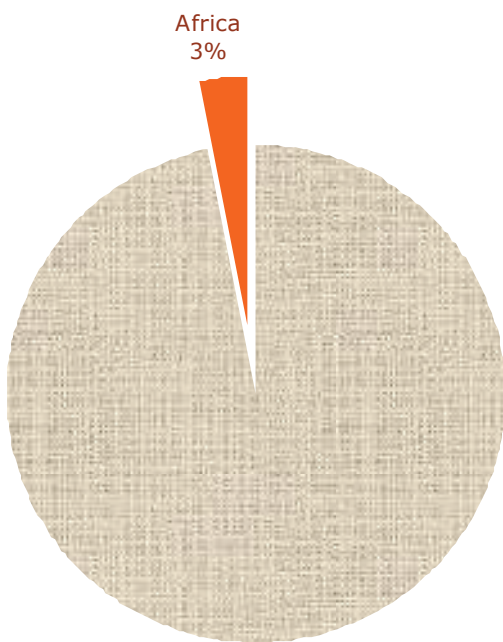
Fig 20. World and African cotton yarn production 1985 - 2011

While the volume of yarn produced in the world has almost tripled over the last 20 years, production in Africa has halved since the early 1990s, largely due to the low adoption of new technologies, declining yields, climatic variability and low ginning capacity.



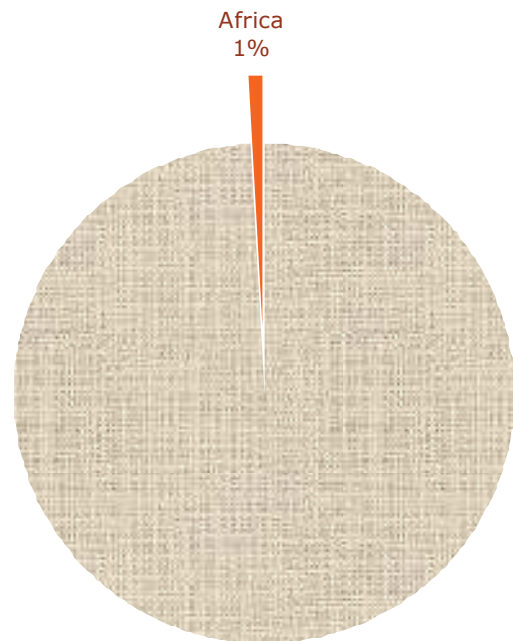
Source: UNCTAD computations from ICAC statistics

Fig 21.a. African cotton yarn production, as a share of world production 1985 - 1989



Source: UNCTAD computations from ICAC statistics

Fig 21.b. African cotton yarn production, as a share of world production 2007 - 2011

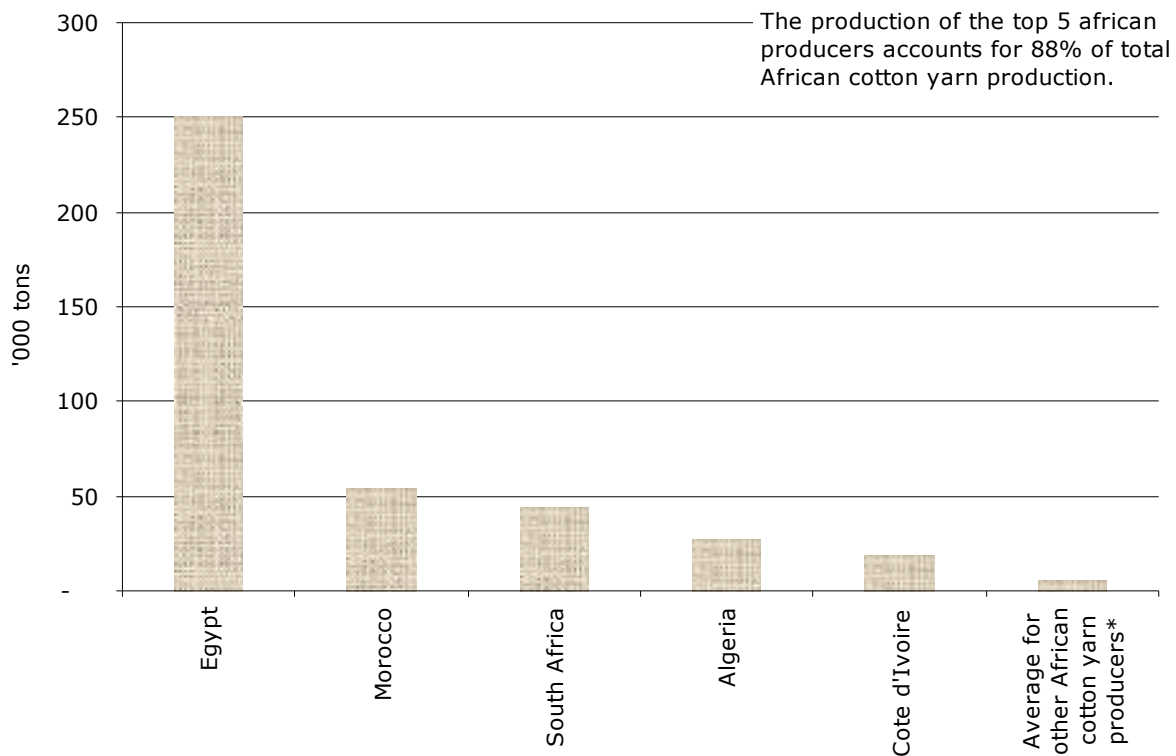


Source: UNCTAD computations from ICAC statistics

The share of African cotton yarn production has contracted in the last 20 years to 1% of global production

Fig 22. Average annual cotton yarn production by Africa's top 5 producers 1985 – 1989

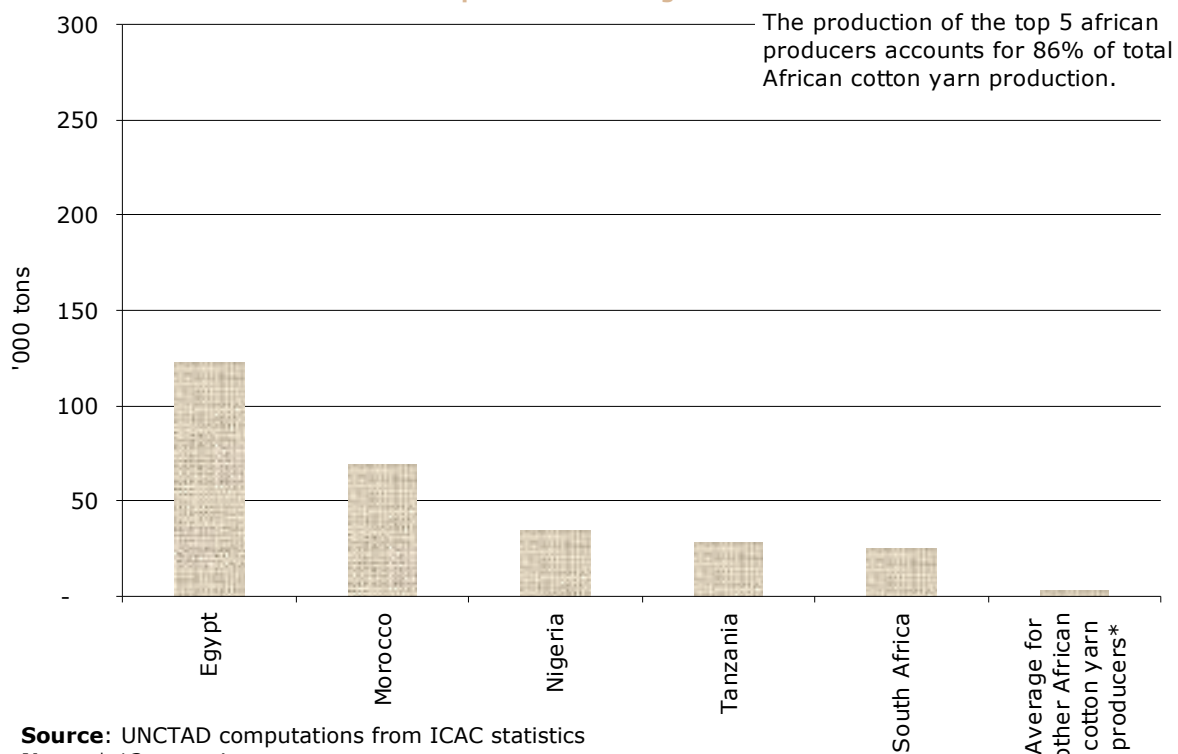
The yarn production of Africa's top producer, Egypt, has fell by 50% over the last 20 years. This is mainly due to: (i) the decrease in demand for Egyptian cotton (considered a luxury product); (ii) a decline in the amount of land under cotton; and (iii) the removal of subsidies and privatization of the sector in the mid-1990s.



Source: UNCTAD computations from ICAC statistics
 Note: * 10 countries

Fig 23. Average annual cotton yarn production by Africa's top 5 producers 2007 – 2011

Nigeria and Tanzania have joined the ranks of the top five producers. In Nigeria, this was due to: (i) higher cotton seed prices; (ii) lower producer prices for competing crops since 2000; and (iii) various government stimulus measures for cotton producers. In Tanzania, sectoral and institutional reforms have been implemented during the 1990s.



Source: UNCTAD computations from ICAC statistics
 Note: * 13 countries

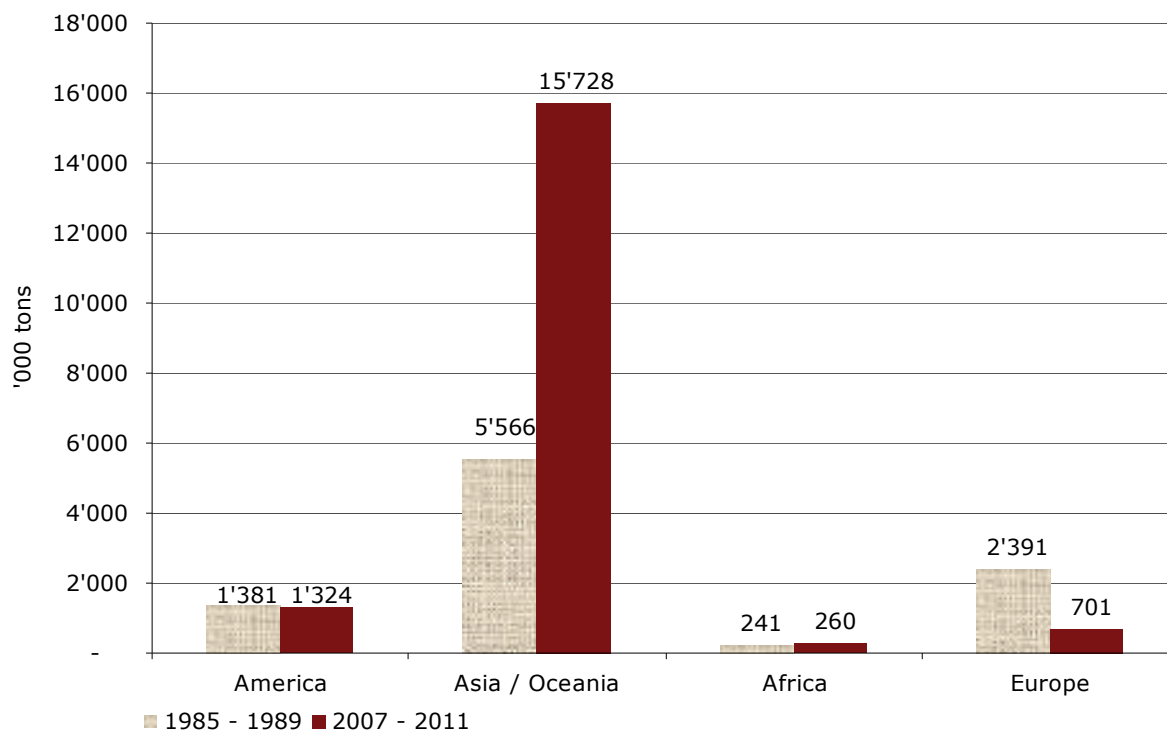


FACTS AND FIGURES

Value addition – Cotton Fabrics

**Fig 24. Average annual cotton fabric production by region
1985 – 1989 and 2007 - 2011**

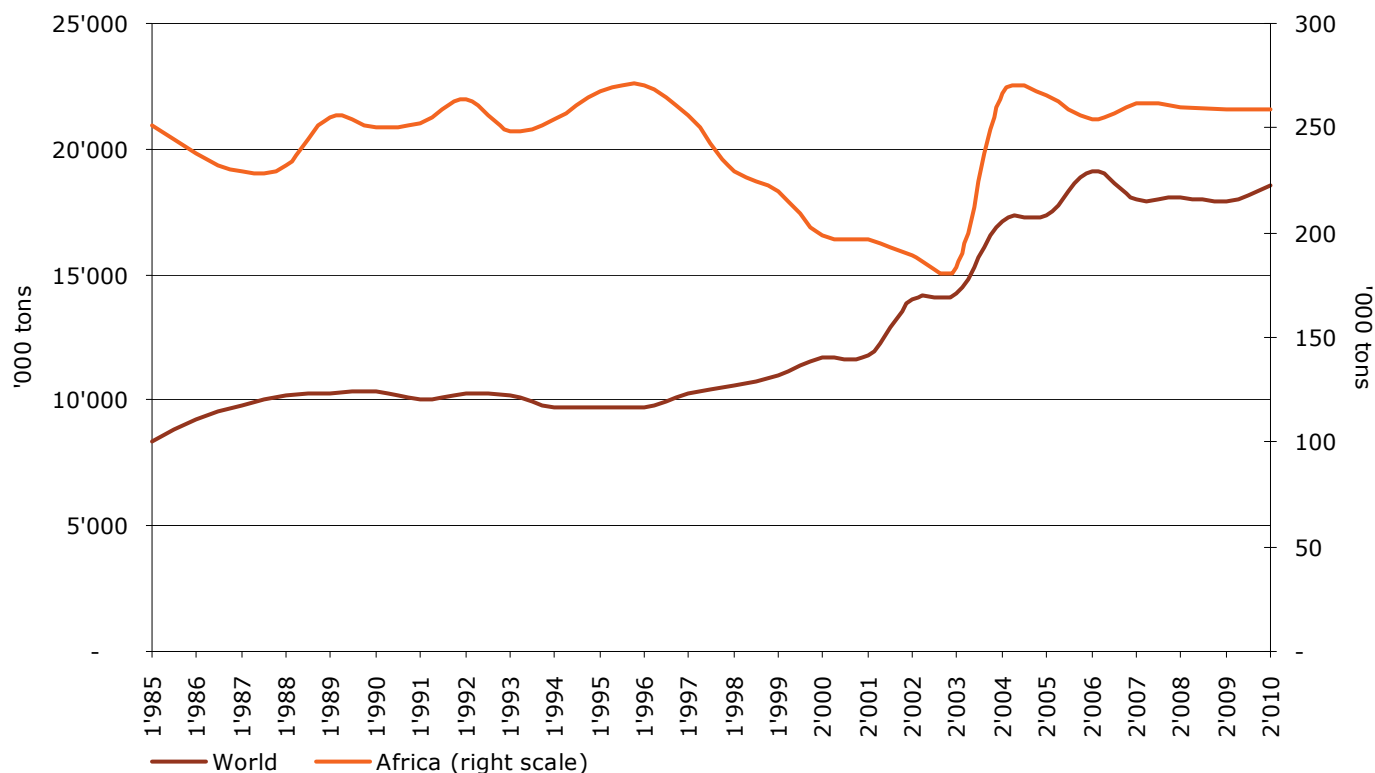
Cotton fabric production has almost tripled in Asia/Oceania over the last 20 years. This is mainly due to: (i) the rapid growth in demand for cotton products in Asia (especially, China); and (ii) improved infrastructural, industrial and technological conditions. In contrast, in Africa, the volume of cotton fabric production has increased only slightly and remains marginal relative to the volume of lint produced. This is largely due to the low adoption of new technologies, declining yields, climatic variability and low ginning capacity.



Source: UNCTAD computations from ICAC statistics

Fig 25. World and African cotton fabric production 1985 - 2011

The volume of fabric produced in the world has almost doubled over the last 20 years. Production in Africa has remained relatively stable with a significant dip in the late 1990s and a speedy recovery in 2004, mainly due to the reduction of cotton lint and yarn production in Africa (see figures 6 and 22).

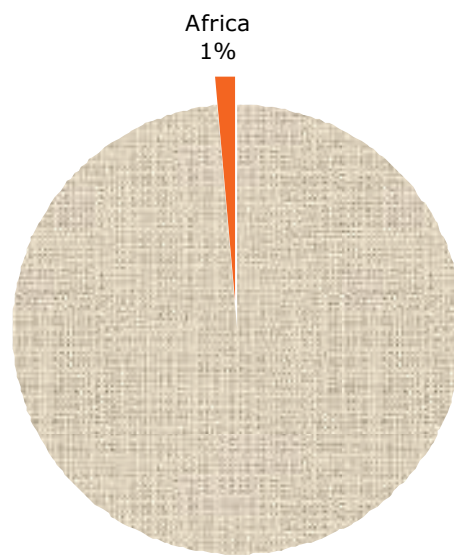
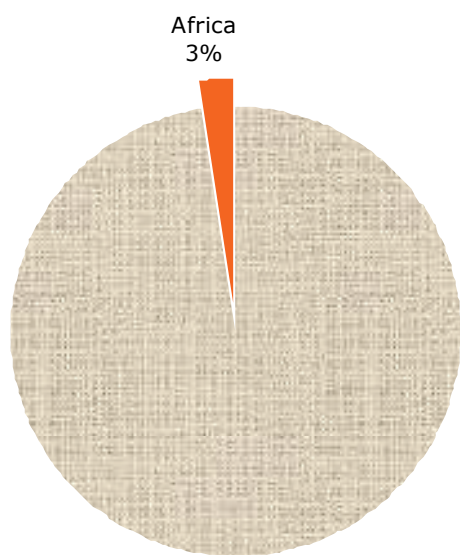


Source: UNCTAD computations from ICAC statistics

Fig 26.a. African cotton fabric production, as a share of world production 1985 - 1989

Fig 26.b. African cotton fabric production, as a share of world production 2007 - 2011

The share of African cotton fabric production has contracted in the last 20 years to 1% of global production.

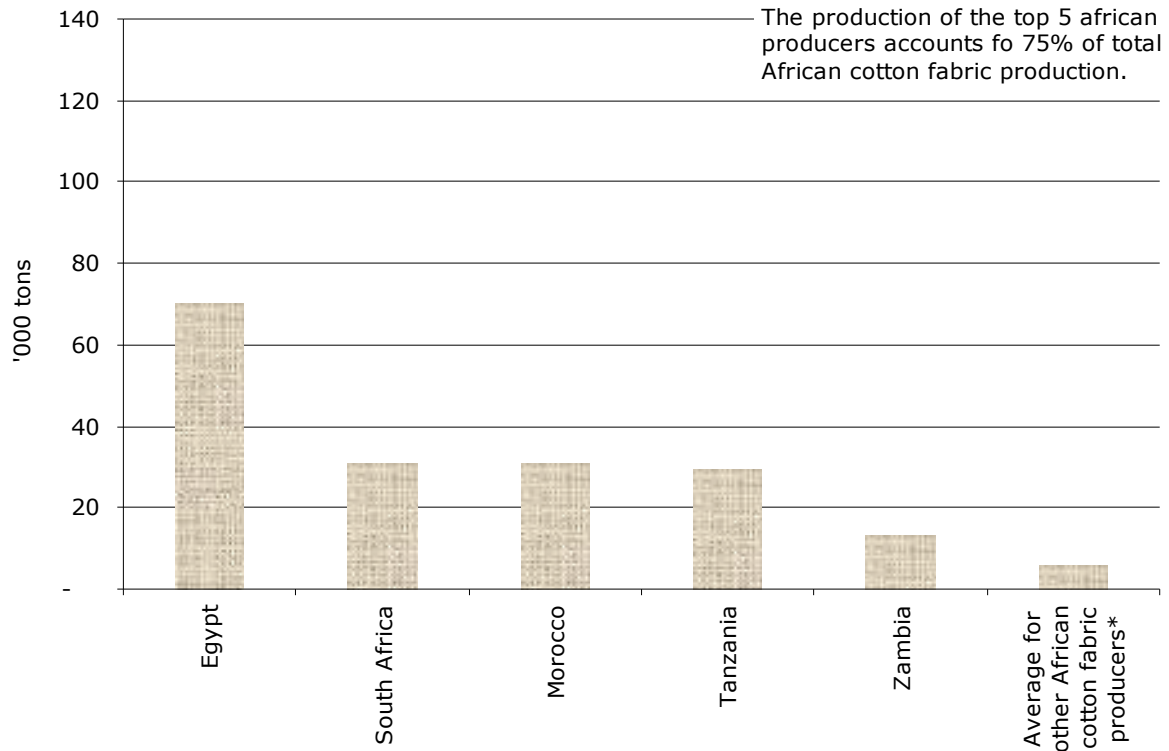


Source: UNCTAD computations from ICAC statistics

Source: UNCTAD computations from ICAC statistics

Fig 27. Average annual cotton fabric production by Africa's top 5 producers 1985 – 1989

Cotton fabric production is highly concentrated in Africa and this trend has increased over the last 20 years.

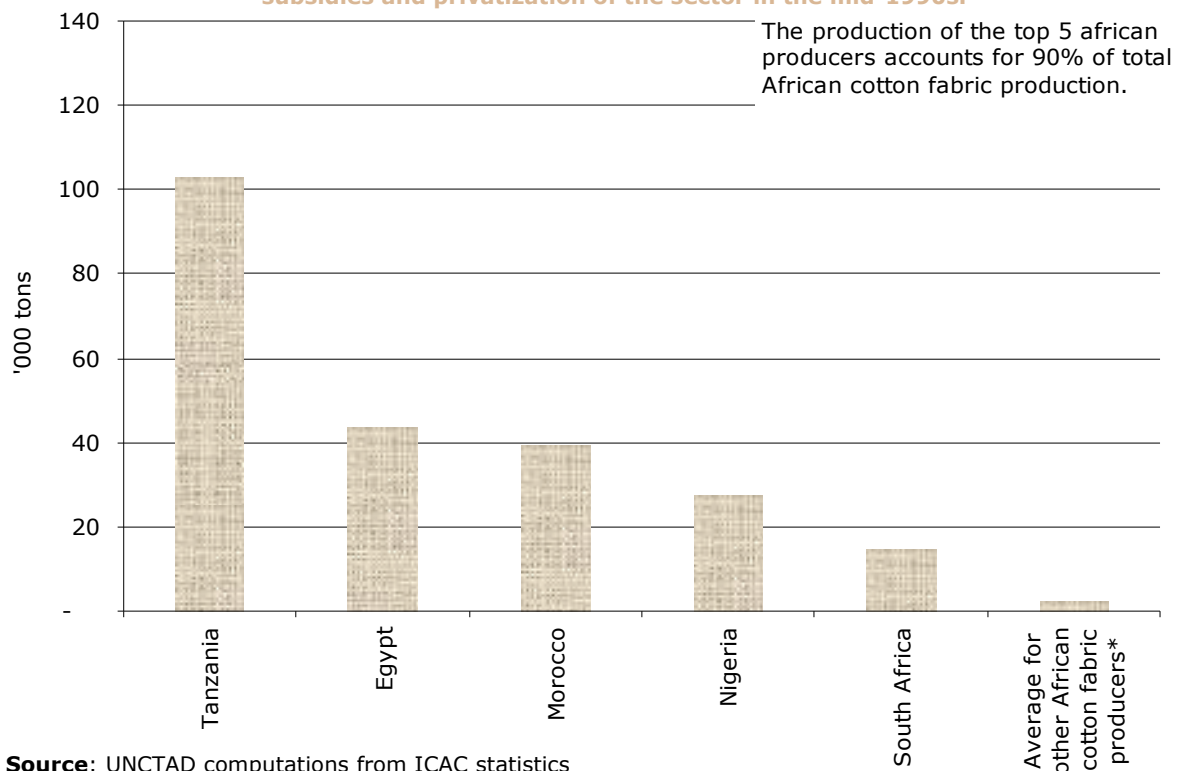


Source: UNCTAD computations from ICAC statistics

Note: * 10 countries

Fig 28. Average annual cotton fabric production by Africa's top 5 producers 2007 – 2011

Cotton fabric production has tripled in Tanzania and dramatically declined in Egypt and South Africa. Nigeria has emerged as a significant producer of fabric. In Egypt, the decrease is mainly due: (i) the decline in the demand for Egyptian cotton; (ii) a decline in the amount of land under cotton; and (iii) the removal of subsidies and privatization of the sector in the mid-1990s.



Source: UNCTAD computations from ICAC statistics

Note: * 11 countries



UNITED NATIONS