

WOMEN IN COTTON

RESULTS OF A GLOBAL SURVEY



WOMEN IN COTTON

RESULTS OF A GLOBAL SURVEY

Abstract for trade information services

ID=42583

2011

SITC-263 WOM

International Trade Centre (ITC)

Women in cotton: Results of a Global Survey.

Geneva: ITC, 2011.xii, 21 p. (Technical paper)

Doc. No. SC-11-208.E

Study dealing with the role of women along the cotton value chain in cotton producing countries in different regions of the world, with special focus on Africa – outlines women's role in various cotton production activities in Africa, Asia and Latin America; compares women's participation in the total workforce in these regions; provides ideas on how to streamline gender development along the chain and how to improve the role of women, while at the same time improving the sector's competitiveness.

Descriptors: **Cotton, Value Chain, Gender.**

For further information on this technical paper, contact Mr. Matthias Knappe, knappe@intracen.org

English

The International Trade Centre (ITC) is the joint agency of the World Trade Organization and the United Nations.

ITC, Palais des Nations, 1211 Geneva 10, Switzerland (www.intracen.org)

Views expressed in this paper are those of consultants and do not necessarily coincide with those of ITC, UN or WTO. The designations employed and the presentation of material in this paper do not imply the expression of any opinion whatsoever on the part of the International Trade Centre concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Mention of firms, products and product brands does not imply the endorsement of ITC.

This technical paper has not been formally edited by the International Trade Centre.

Digital image on the cover: © ITC

© International Trade Centre 2011

ITC encourages the reprinting and translation of its publications to achieve wider dissemination. Short extracts of this technical paper may be freely reproduced, with due acknowledgement of the source. Permission should be requested for more extensive reproduction or translation. A copy of the reprinted or translated material should be sent to ITC.

Foreword

Cotton is an important sector for many countries, industrialized or developing, around the world. In developing countries it contributes to poverty reduction and is an important engine for growth. The sector involves women and men in all aspects but has traditionally been dominated by men, especially with regard to management functions. The role of women in the cotton sector has not been looked at in detail. To our knowledge, no comparative study exists that analyses the role of women along the entire cotton value chain from farming to ginning and subsequently cotton trade.

This paper is not a scientific analysis of the role of women in the cotton sector. It is based on structured voluntary information received from a wide network of ITC cotton contacts around the world. It was compiled on a no-cost basis. Nevertheless, it provides some interesting insights into the role of women in the cotton sector worldwide with a focus on Africa. This focus is due to ITC's active involvement in increasing the competitiveness of the African cotton sector. It provides ideas on how to streamline gender development along the cotton value chain and where development assistance providers could hook on to improve the role of women, while at the same time improving the sector's competitiveness. That way several development objectives could be met.

This technical paper was prepared using the contacts and experience gained under ITC's African Cotton Development Initiative, which focuses on the following aspects:

Facilitate South – South cooperation.

- Learning from success. Training programmes organized by ITC allow successful cotton producers in e.g. China, India and Turkey to share their knowledge with cotton professionals from Africa.
- Developing capacity to transform cotton. Successful textile and clothing producers in Asia are relaying their experiences to African countries. Closer linkages with cotton consuming spinning mills will lead to closer partnerships between spinners, ginner and farmer groups.
- Encouraging intra-African cooperation. Extensive knowledge and know how is available in Africa but often neglected.

Developing sustainable trade linkages.

- Promoting African cotton in world markets.
- Reducing cotton contamination in Africa remains an important issue even though in many cases the reputation of African cotton is "more contaminated" than the actual cotton itself.
- Sourcing from other developing countries. Finding new suppliers in the developing world promotes savings on items ranging from seeds and fertilizer to ginning and textile technology.

Sector strategy development at national and regional level.

Capacity building of cotton-related associations at national and regional level.

Capacity building on cotton trade and marketing.

Matthias Knappe
Senior Officer and Programme Manager – Cotton, Textiles and Clothing
Sector Competitiveness Section
Division of Market Development
International Trade Centre

Acknowledgements

The International Trade Centre (ITC) thanks the following for their contribution to this technical paper:

ITC staff

Adrien Ranchon, Author, Consultant
 Matthias Knappe, Senior Officer and Programme Manager, Cotton, Textiles and Clothing
 Nathalie Domeisen Schibilia, Senior Public Information Officer
 Kathryn Della Corte, Senior Secretary
 Kedsenee Premprung, Project Assistant
 Isabel Droste, Publications Assistant
 Vicky Hagen, Document Formatter

Companies

Société de développement du coton du cameroun (SODECOTON), Cameroon
 Makueni Ginneries, Kenya
 Woget Cotton Ginning Company Ltd, Malawi
 Iponga Cotton Company Ltd, Malawi
 Compagnie Malienne pour le Développement des Textiles (CMDT), Mali
 Cooperativa de Productores Orgánicos y Tradicionales Exportadores de Nicaragua (COPROEXNIC)
 Promover S.A. – Aratex algodón, Paraguay
 Société de Développement des Fibres Textiles (SODEFITEX), Senegal
 Denizli Cotton Sales Cooperative, Turkey
 Incirliova Cotton Sales Cooperative, Turkey
 Söke Cotton Sales Cooperative, Turkey
 Atça Cotton Sales Cooperative, Turkey
 Aydın Cotton Sales Cooperative, Turkey
 Ortaca Cotton Sales Cooperative, Turkey
 Rwinzori Cotton Ginneries Company Ltd, Uganda
 Nyakantozzi Growers Cooperative Union, Uganda

Associations and governmental organizations:

Agence Centrafricaine de Développement Agricole (ACDA), Central African Republic
 Ministry of Agriculture, Côte d'Ivoire
 Ethiopian Cotton Producers Exporters and Ginners Association, Ethiopia
 Central Institute for Cotton Research, India
 Cotton Development Authority, and Kenya Cotton Growers Association, Kenya
 Companhia Nacional Algodoeira, Mozambique
 Ministry of Industry and Trade, Malawi
 National Agricultural Seed Council, Nigeria
 Office de la Haute Vallée du Niger (OHVN), Niger
 Pakistan Central Cotton Committee, Pakistan
 Agriculture Research Institute, Pakistan
 Tanzania Cotton Board, United Republic of Tanzania
 Cotton Development Organisation, Uganda
 Ministry of Agriculture, and Cotton Association of Zambia, Zambia
 Cotton Research Institute, Zimbabwe

Contents

Acknowledgements	v
Abbreviations	ix
Executive summary	xi
1. WOMEN IN COTTON IN AFRICA	1
1.1. Women's role in cotton production	1
1.1.1. In the field	1
1.1.2. Ginning activities	1
1.1.3. Trading activities	2
1.1.4. Support services	2
1.2. Women's ownership and leadership in the cotton industry in Africa	2
1.3. Remuneration and salary	3
1.4. Women associations	4
1.5. Comparison of the role of women in West Africa, Central Africa and East Africa	4
1.5.1. Women's participation in the total workforce	4
1.5.2. Women's role in decision-making	5
2. WOMEN IN COTTON IN ASIA	6
2.1. Women's role in cotton production	6
2.1.1. In the field	6
2.1.2. Ginning activities	7
2.1.3. Trading activities	8
2.1.4. Support services	9
2.2. Women's ownership and leadership in the cotton industry in Asia	9
3. WOMEN IN COTTON IN LATIN AMERICA	9
3.1. Women's role in cotton production	9
3.1.1. In the field	10
3.1.2. Ginning activities	10
3.1.3. Trading activities	11
3.1.4. Support services	12
3.2. Women's ownership and leadership in the cotton industry in Latin America	12
3.3. Remuneration and salary	12
3.4. Women associations	13

4.	COMPARISON OF WOMEN'S PARTICIPATION IN THE TOTAL WORKFORCE IN AFRICA, ASIA AND LATIN AMERICA	13
4.1.	Remuneration and salary	14
5.	WAYS TO EMPOWER WOMEN IN THE COTTON SECTOR	15
5.1.	Organic cotton	15
5.2.	Fair trade certification	15
5.3.	Bt cotton	16
5.4.	Women associations	16
5.5.	Land and property ownership	16
6.	SOURCES	16
	Appendix The role of women in the cotton sector	19
Table 1.	Women as a percentage of the total workforce in the field in Africa	1
Table 2.	Women as a percentage of the total workforce in ginning in Africa	2
Table 3.	Women as a percentage of the total workforce in trading in Africa	2
Table 4.	Women as a percentage of the total workforce in support services in Africa	2
Table 5.	Women's ownership and leadership along the cotton value chain in Africa	3
Table 6.	Women's salaries as a percentage of men's salaries in the cotton sector in Africa	4
Table 7.	Women's salaries as a percentage of men's salaries in the cotton sector in Latin America	13
Table 8.	Women's salaries as a percentage of men's salaries in the cotton sector in Africa, Asia and Latin America	14
Figure 1.	Women as a percentage of the total workforce in the cotton sector in West Africa, Central Africa and East Africa	5
Figure 2.	The role of women in decision-making in the cotton sector in West, Central and East/Southern Africa	6
Figure 3.	Women as a percentage of the total workforce in the field in India, Pakistan and Turkey	7
Figure 4.	Women as a percentage of the total workforce in ginning in India, Pakistan and Turkey	8
Figure 5.	Women as a percentage of the total workforce in trading in India, Pakistan and Turkey	8
Figure 6.	Women as a percentage of the total workforce in support services in India, Pakistan and Turkey	9
Figure 7.	Women as a percentage of the total workforce in the field in Peru, Nicaragua and Paraguay	10
Figure 8.	Women as a percentage of the total workforce in ginning in Peru, Nicaragua and Paraguay	11
Figure 9.	Women as a percentage of the total workforce in trading in Peru, Nicaragua and Paraguay	11
Figure 10.	Women as a percentage of the total workforce in support services in Peru, Nicaragua and Paraguay	12
Figure 11.	Women as a percentage of the total workforce in the cotton sector in Africa, Asia and Latin America	14

Abbreviations

ACDA	Agence centrafricaine de développement agricole
COMPACI	Competitive African Cotton Initiative
COPROEXNIC	Cooperativa de Productores Orgánicos y Tradicionales Exportadores de Nicaragua
FLO	Fairtrade labelling organization
FAO	Food and Agriculture Organization
ITC	International Trade Centre
ICRW	International centre for research on women
PJBS	Pakistan journal of biological sciences
UNCTAD	United Nations Conference on Trade and Development
UNRISD	United Nations Research Institute for Social Development
WTO	World Trade Organization

Executive summary

Women play a major role in the agriculture of developing countries, in various sectors such as coffee, cocoa or cotton. As women represent around 70% of the poorest people in the world,¹ a better understanding of their role in and contribution to the different agricultural sectors is crucial in order to address poverty reduction as well as gender inequality issues. Around the world, millions of people depend directly or indirectly on cotton (around 20 million in Africa²).

Even though women are strongly involved in smallholder cotton cultivation, this role is seldom fully acknowledged or rewarded. The 'feminization' of agriculture has been amplified by the large-scale migration of men seeking higher-paid work in urban areas. Across the small-holder dominated countries, women participating in the cotton sector face the same types of problems: the lack of access to credit, lack of decision-making independence, lack of property entitlement, lack of representation and participation in collective organization, disproportionate health risks from pesticide use, and lack of coverage by national labour legislation.

In Africa, the status of women is low across the board. They lag behind men in key aspects, such as education, health and political participation. Gender-based violence against women is pervasive and the existence of polygamy in some households affects household labour allocation and decision-making. In family farming contexts, the majority of the literature concludes that women's work as family labour is grossly under-reported, and that occupational segregation leads to an uneven distribution of costs or benefits.

As there is a gap in literature about the role of women in agriculture and particularly in the cotton sector, ITC conducted a study to better understand the role of women along the cotton value chain in cotton producing countries in the different regions of the world. First major results show that women are often working in the same activities (i.e.: picking, catering, planting and field management) and that their role is generally consistent across the globe. The study also highlights that women are less paid than men (around 90% of the average men salary) although there are high disparities across countries. In addition, preliminary results show that among the different possible ways to empower women, their involvement in women associations or cooperative unions and the strengthening of land ownership rights seem to have a tangible impact on incomes and women's involvement in decision-making processes.

Finally, a better understanding of and further insights on the role played by women in the cotton sector are important for the design of trade assistance programmes in cotton. Interestingly, various studies cited in this paper argue that a specific approach to farming benefit women more than others. While fair trade and organic cotton projects argue that the inclusive approach followed benefits especially women due to higher prices (premiums) and less exposure to chemicals, a study on the use of BT cotton provides a similar explanation. The BT cotton study argues that BT cotton increases yields and therefore work and remuneration to women while reducing the exposure to chemicals. Thus, it seems that several avenues could lead to the same envisaged results of empowering women in the cotton sector.

However, women, like men, are not a homogeneous group. Their roles and responsibilities along the cotton value chain differ not only from region to region, country to country but also within countries. Understanding the gender division of labour in the cotton area is therefore crucial to target gender-sensitive technical assistance programmes. The results of the survey will be a useful starting point to formulate gender-sensitive technical assistance programmes and projects that improve the competitiveness of the cotton sector in developing countries in general and the role of women in cotton in particular.

¹ Women, Poverty & Economics, Gender issues, United Nations Women website (www.unwomen.org), 2010.

² COMPACI (Competitive African Cotton Initiative) Newsletter Number 2, April 2010.

Data collection

To better understand the role and impact of women working in the cotton sector, ITC carried out a survey based on a questionnaire (see appendix p. 19) that was sent to several partners (cotton companies, associations and public institutions) around the world. Questions focused on women's involvement along the value chain (field, ginning, trading, support services) relative to men. In total, data from 20 countries was collected for the survey: 14 from Africa, 3 from Asia and 3 from Latin America. Around 38 companies, associations or institutions participated in the survey, representing a large number of cotton stakeholders especially in Africa, where cotton companies of all major producing countries participated.

The information collected from our partners is subjective and is not based on scientific investigations. However, the synthesis of information enables one to get an interesting overview of the main activities in which women are playing an important role and to compare their roles in different regions or countries, as well as their remuneration relative to men in the cotton sector around the world.

In addition the survey highlights ways to empower women in the cotton sector, using different approaches from research undertaken by non-governmental organizations (NGOs), international organizations or institutions into organic cotton and fair trade cultivation, and also regarding the introduction of Bt cotton and the support of women associations.

ITC encourages anyone who is directly or indirectly involved in the cotton sector to provide us with feedback, additional data and information to shed more light on the role of women in the cotton sector.

1. WOMEN IN COTTON IN AFRICA

1.1. Women's role in cotton production

1.1.1. In the field

Women's role in the workforce varies significantly from one country to another and even within countries. Table 1 below shows the high variation of women's participation in cotton fieldwork in Africa: from 10% to 100% in picking, and from 5% to 90% in planting. Overall, the main role of women in cotton production is planting (around 55% of the average total workforce in Africa) and picking (around 65% of the average total workforce in Africa, as compared to 80% in Turkey). In fact, the more labour intensive the cotton production, the larger is women's participation. As cotton production becomes more capital and knowledge intensive, women's relative participation in planting and harvesting activities tends to decrease. For instance, in Brazil, cotton is mainly produced on large farms using machines, but in smaller farms in the north-east cotton is hand-picked by women. In Pakistan cotton is picked exclusively by women. These activities are not considered to be as physical as ginning activities (gin stand and bale pressing), or as capital or knowledge intensive as machine harvesting, for instance.

On the other hand, the use and application of fertilizers or pesticides is mainly done by men, which explains the low percentage of women working in this area. Table 1 reflects a typical participation of women working in the cotton sector in Africa, which is about 30% in the use of fertilizers and 20% in the use of pesticides. In a few African countries, women do participate in activities that require physical strength such as ginning or using pesticides and fertilizers.

Table 1. Women as a percentage of the total workforce in the field in Africa³

Fieldwork	Variation (low–high)	Typical participation
Picking	10–100	65
Planting	5–90	55
Field management	0–90	35
Use of fertilizer	0–80	30
Use of pesticides	0–80	20
Machine harvesting	0	0

In countries where women are involved in cotton planting and harvesting, the inappropriate use of pesticides could result in additional dangers for them, putting at risk their reproductive health. Furthermore, in smallholder-dominated regions, women also assume the vast majority of domestic labour responsibilities. Spraying pesticides before, for instance, preparing the household meal may endanger the health of other household members.

1.1.2. Ginning activities

Overall, work in ginneries seems to be more appropriate for men, because of the more demanding physical effort, high workload and (according to male informants) the technical education needed. Table 2 indicates that African women in light work at the gin level represent 30% of the average workforce and around 20% in more physical work such as gin stand or bale pressing, or administration jobs demanding higher skills. However the rate of women's participation in ginning work varies strongly between countries.

³ Based on responses from Cameroon, Central African Republic, Côte d'Ivoire, Ethiopia, Kenya, Malawi, Mali, Nigeria, Uganda, Senegal, Togo, United Republic of Tanzania, Zambia, Zimbabwe.

Table 2. Women as a percentage of the total workforce in ginning in Africa

Ginning	Variation (low–high)	Typical participation
Light work at gin	0–100	30
Gin stand and bale pressing	0–80	20
Administrative work	0–55	20

1.1.3. Trading activities

In other cotton-related activities such as trading or the provision of support services, women do not play an important role, apart from catering for cotton workers and farmers or administrative work (secretarial). Table 3 shows on average a low participation (from 5% to 15%) in trading activities. In Africa the participation of women in trading, banking or administrative work is low compared to Turkey, for instance, where women account for about half of the total workforce in these sectors. The lack of necessary education among African women could be an explanatory factor for the absence of women in higher skilled jobs.

Table 3. Women as a percentage of the total workforce in trading in Africa

Trading	Variation (low–high)	Typical participation
Administrative work	0–70	15
Domestic agent: buying cotton from farmers and selling to ginneries	0–60	10
International trading	0–40	5

1.1.4. Support services

Table 4 below indicates that in support services a high percentage of women (around 65%) are involved in catering to cotton workers and farmers. Analysing the responses from the different countries, this seems to be one of the main traditional working areas of women in the cotton sector in Africa, although it varies substantially within regions and countries. In others areas such as banking and domestic transport, few women are involved (table 5 shows that around 30% of women are participating in banking and 25% in domestic transport).

Table 4. Women as a percentage of the total workforce in support services in Africa

Support services	Variation (low–high)	Typical participation
Catering to cotton workers and farmers	0–100	65
Banking	0–70	30
Domestic transport	0–95	25

1.2. Women's ownership and leadership in the cotton industry in Africa

Women's ownership in cotton production is low across the board. Table 5 indicates that on average in Africa women own 25% of the land on which cotton is grown. Women's property still remains an exception. According to the International Centre for Research on Women (ICRW),⁴ African women provide much of the labour for cotton production on household or male-owned plots. They often have their own plots where

⁴ ICRW visited the COMPACI (Competitive African Cotton Initiative) partners involved in six project countries (Benin, Burkina Faso, Côte d'Ivoire, Malawi, Uganda, Zambia).

they grow food crops and some cotton. The study undertaken by ICRW also highlights the fact that productivity on women's fields is limited, since they have to work in the men's fields and take care of their household and other farm-related chores before they can look after their own cotton fields. Furthermore, their access to inputs, credit and extension is very limited.

In terms of decision-making, women are rarely involved, which can be explained by cultural factors and the strong relationship between ownership and leadership. When women do not own land or business, they therefore cannot make decisions. As table 5 shows, the percentage of women in ownership and decision-making is nearly the same, with a maximum variation of 10%. However, field and support services are the areas in which women are most involved in decision-making (25% in field and 30% in support services, especially catering to cotton workers and farmers). This result is consistent with the fact that most of the women are working in these areas.

Table 5. Women's ownership and leadership along the cotton value chain in Africa

	Average % of women in decision-making positions	Average % of women who own fields and businesses	Variation in decision-making positions (low–high)	Variation in field and business ownership (low–high)
Field	25	20	0–80	0–60
Ginning	15	15	0–45	0–70
Trading	10	10	0–45	0–50
Support services	30	20	0–95	0–90

The study conducted by ICRW highlights that in spite of their high labour contribution, women are under-represented in producer organizations or in leadership positions. (e.g. in Benin 10% of producer organization members are women, 5% in Zambia and 24% in Uganda). The study indicates that one main reason for this is a gender bias in the criteria for producer organization membership across the six countries and that the membership criteria are based on the amount of land for cotton production and status as head of the household.⁵

The ICRW study also highlighted that, in the countries involved, almost none of the cotton companies have gender policies. Gender bias among cotton company staff in all cotton-related activities affects how women producers are perceived and their potential to access to fields or decision-making. Men are likely to dominate all staff positions, from headquarters to the field. The few female company employees, apart from those in fieldwork, tend to be in administrative or support positions, with very few in positions of authority.

However, gender bias varies by degree and country, and some improvements can be observed in Zambia, for instance. In the last five years, the policy of the Cotton Board of Zambia has encouraged a commitment to having at least 30% women in decision-making organs of the Board. Currently, they have 30% female representation on the Board and several other women are on the district committees.⁶

1.3. Remuneration and salary

There is a high degree of variability across both countries and sectors in terms of remuneration and salaries in the cotton sector. Globally, as table 6 indicates, women are paid less than men (around 20% less on average in Africa) but there are high disparities between countries and companies. Preliminary results of the survey indicate that most women work in farming, and remuneration for farm work is lower than that in the ginning, trading or services sectors. This is due, to some extent, to the higher skill level needed in these occupations. In some African countries, such as Cameroon, Malawi, Mali and Uganda, women are not directly paid; this explains the strong variation in terms of salary in table 6 below (from 0%

⁵ COMPACI (Competitive African Cotton Initiative) Newsletter Number 2, April 2010 – Page 6.

⁶ Based on the questionnaire received from the "Cotton Board of Zambia".

to 100%). Women may spend many hours of labour on an export crop, but receive little share of the income earned.

Table 6. Women's salaries as a percentage of men's salaries in the cotton sector in Africa

Salary	Variation (low–high)	Typical remuneration
In farming	0–100	80
In ginning	0–100	80
In trading	0–100	70
In support services	0–100	80
Overall average salary		80

In African countries there is usually a clear separation made between men and women regarding work at home and on the farm. Men often grow cash crops, including cotton, which provide the main source of income for the household. Women, on the other hand, are usually responsible for producing food crops, which are grown to provide food for the family rather than for sale. According to a study conducted by PAN Germany,⁷ in many instances the money earned from the family land goes to men, though each member of the family is allowed to have land they can cultivate for themselves and earn their own income.

In smallholder cotton farming, women may be used as family labour, as day labour, or as contract labour. According to the Competitive African Cotton Initiative (COMPACI) project, most cotton companies make payments to the contractual counterpart, usually a man, who rarely shares information regarding earned income and residuals after loan repayment. However, some households (e.g. in Benin and Malawi) reported that husbands and wives share the earnings and jointly decide on how they should be spent.⁸ A relevant research question is how limited or no returns to women affect their incentives for involvement in cotton relative to other crops or income generating activities.

1.4. Women associations

There are hardly any women associations in the cotton sector in Africa. However, some women are taking part in cotton cooperatives (Mali), and various studies⁹ highlighted that some female family members – particularly those involved in premium-paying niche market value chains such as Fairtrade and organic – report increased independence and status in family decision-making, as a result of their involvement in an export crop such as cotton.

1.5. Comparison of the role of women in West Africa, Central Africa and East Africa

1.5.1. Women's participation in the total workforce

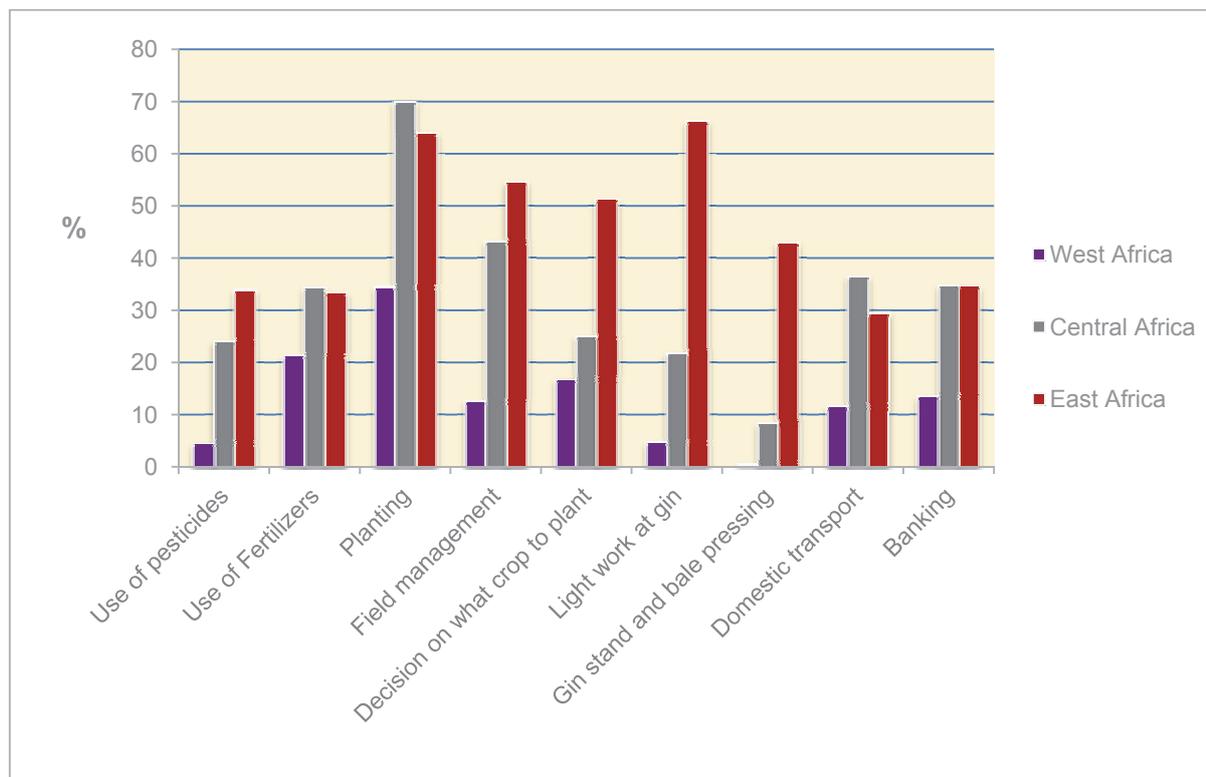
Figure 1 below shows the main cotton-related activities and highlights major regional differences in the participation of women in activities along the value chain. In areas such as picking, administrative work or trading, women's participation more or less is equal. In terms of remuneration responses indicate that women earn between 15%-30% less than men for the same kind of work.

⁷ 'Organic Cotton Empowering Women', Pestizid Aktions-Netzwerk (PAN Germany), December 2005.

⁸ COMPACI (Competitive African Cotton Initiative) Newsletter Number 2, April 2010.

⁹ COMPACI Newsletter Number 2, April 2010; 'Organic Cotton Empowering Women', Pestizid Aktions-Netzwerk (PAN Germany), December 2005.

Figure 1. Women as a percentage of the total workforce in the cotton sector in West Africa, Central Africa and East Africa



In field activities, women have a lower involvement in the use of pesticides and fertilizers in West Africa (5% and 20% respectively) as compared to Central Africa (25% and 30% respectively) and East Africa (both 30%).

In ginning, we also find more women participating in related activities in East Africa (about 65% in light work at the gin, 40% in gin stand and bale pressing), whereas this percentage is lower than 20% in West and Central Africa.

Women are more employed in domestic transport in East Africa (30%) and Central Africa (35%) than in West Africa (10%). The same appears to be the case in banking, where women account for 35% of the total workforce in Central Africa and East Africa, and only more than 10% in West Africa.

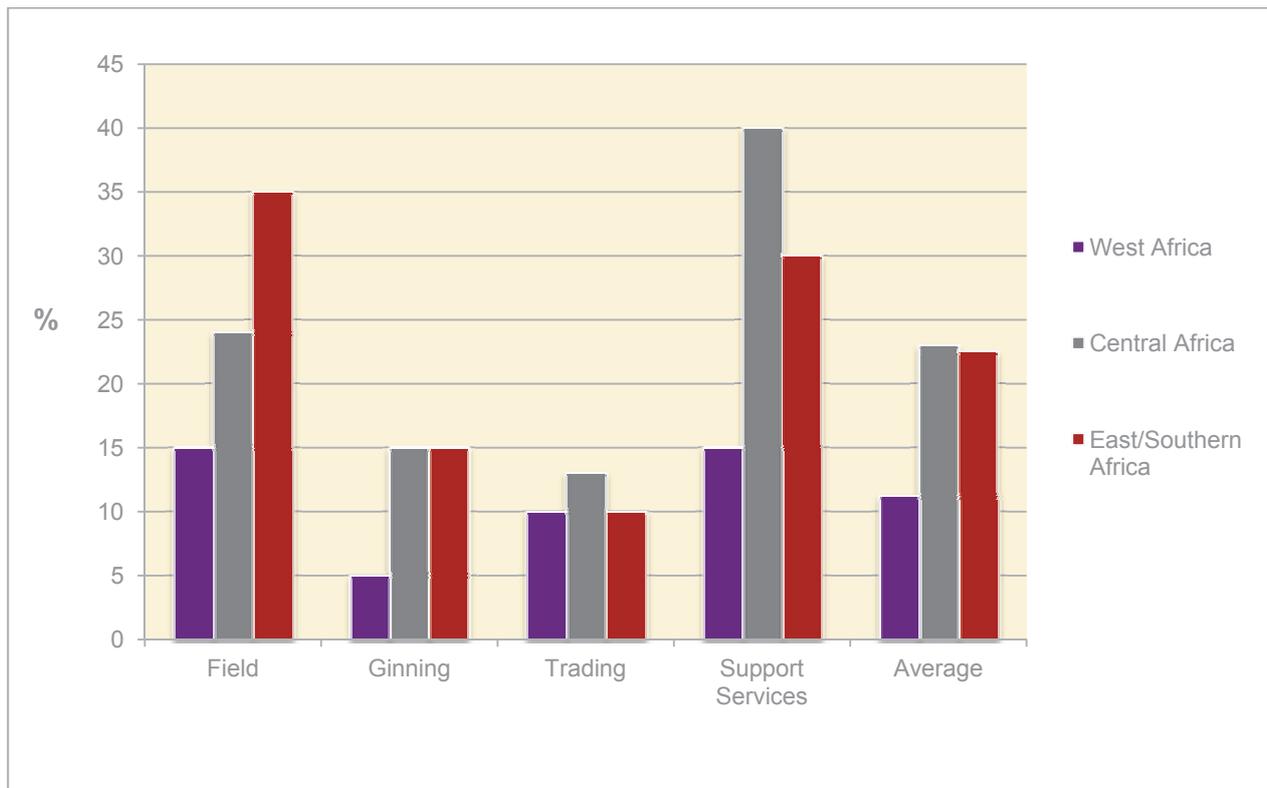
Overall, the regional comparison indicates that differences exist in specific activities, especially in the use of hazardous products, field management, ginning operations, domestic transport and banking. However, due to the small number of respondents, the results need to be interpreted with caution.

1.5.2. Women's role in decision-making

Figure 2 below shows the differences of the role of women in decision-making in West, Central and East Africa. According to the preliminary results, women seem to be more involved in decision making in East and Central Africa (around 25% on average) than in West Africa (around 10% on average).¹⁰

¹⁰ However, these findings need to be confirmed as they might have been distorted by the low number of respondents.

Figure 2. The role of women in decision-making in the cotton sector in West, Central and East/Southern Africa



2. WOMEN IN COTTON IN ASIA

2.1. Women's role in cotton production

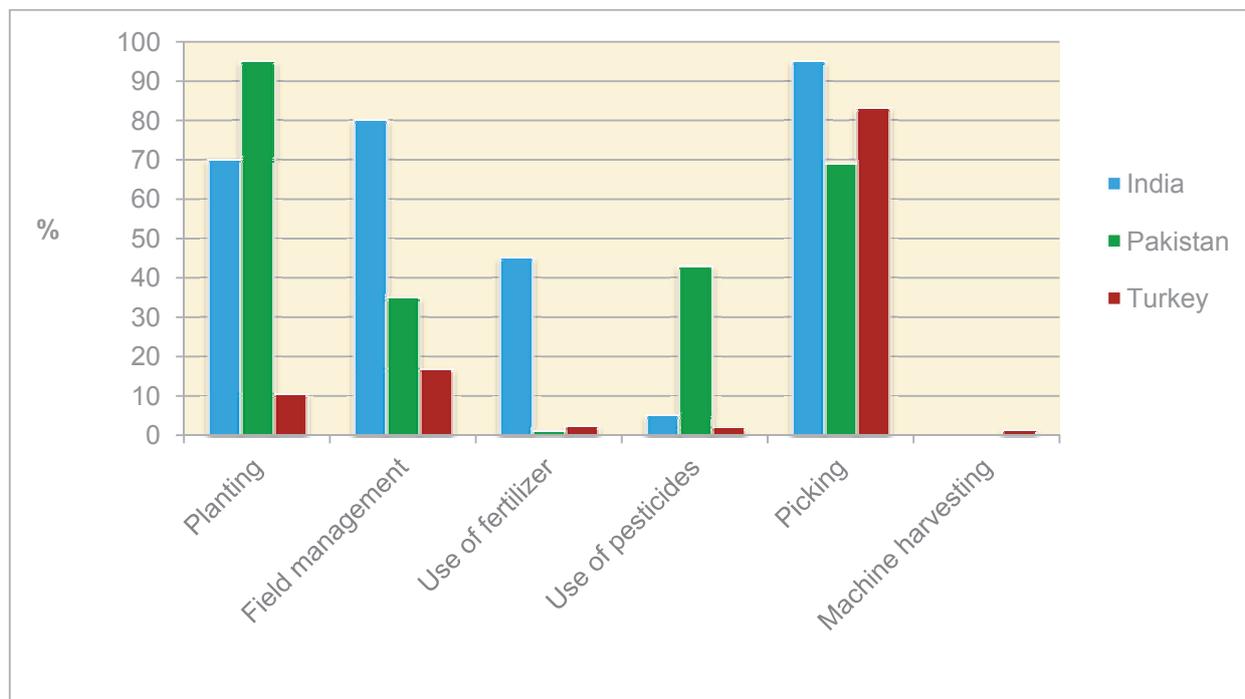
2.1.1. In the field

In Asia, the largest cotton growing areas are located in India, China, Pakistan, Uzbekistan and Turkey. According to responses received on our questionnaire (see figure 3 below), in Pakistan cotton is mostly planted and picked by hand by female workers (on average around 65% of the total workforce), and also in India (around 70% in planting and 90% in picking). The *Pakistan Journal of Biological Sciences* (PJBS) noted that in 2005 some 2.6 million women picked cotton in nine major cotton districts in Pakistan.¹¹ In Turkey, women are also involved in picking activities (around 80%), but unlike Pakistan and India, a very low percentage of women work in planting activities (less than 10%).

With regard to the use of chemical products, preliminary results show high differences among these three countries. In India for example women are much more involved in the use of fertilizers than in Turkey or Pakistan (around 40% of the total workforce); whereas in the use of pesticides, the share of female participation is higher in Pakistan than in the other two countries. This result confirms a study conducted by the *Pakistan Journal of Biological Sciences* (PJBS) in 2005, highlighted that most women working in cotton in Pakistan become ill from their exposure to pesticides. However, the PJBS study noted that while women are generally less involved than men in pesticide application, they are involved in several on-farm and off-farm activities at the time of spraying. In field management, a higher number of women are recorded in India (around 80%), than in Pakistan (30%) or Turkey (15%).

¹¹ From 'Literature Review and Research Evaluation relating to Social Impacts of Global Cotton Production for ICAC Expert Panel on Social, Environmental and Economic Performance of Cotton (SEEP)', 2008.

Figure 3. Women as a percentage of the total workforce in the field in India, Pakistan and Turkey



In India, a study¹² highlighted that women were largely involved in fieldwork, undertaking tasks such as selecting and sowing seeds, removing stalks, weeding the field and harvesting the lint. Although their job is sometimes considered unskilled, some tasks actually require a good knowledge (e.g. checking the insect population level, degree of soil moisture and fertilizer requirements). The study also underlined that the only operation performed exclusively by men is the application of pesticides. This is consistent with our findings, even though women sometimes participate in this activity by preparing chemical solutions or fetching water. Finally, the research also highlights that women's labour contribution differs across economic classes. Female farmers from lower classes proved to be well-informed about the fieldwork involved at each stage of the cropping cycle.

In other regions, such as Uzbekistan, research indicates that changes in agriculture and land policy (collective farms to independent farms organized as farmers' associations) has consolidated management as a male occupation, even though women are still highly involved in cotton production.¹³

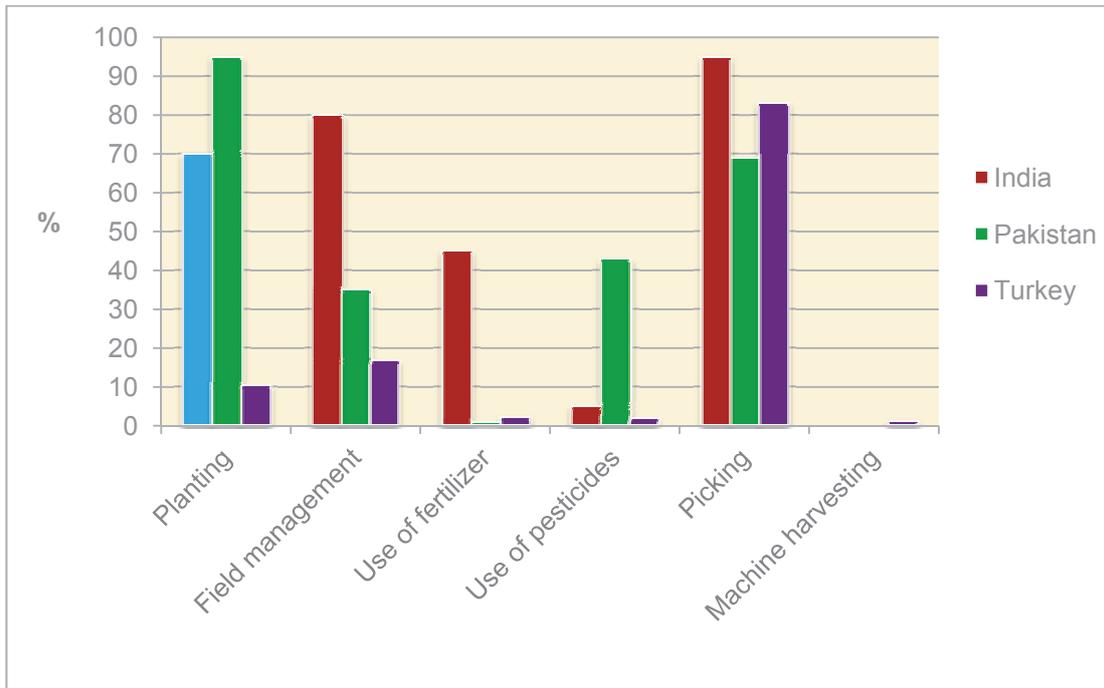
2.1.2. Ginning activities

Preliminary results indicate that women are more involved in ginning activities in Turkey, especially in administrative work (around 35%), than in India or Pakistan. This can be explained by the higher level of education or skills required to undertake such activities. In other ginning-related activities such as gin stand operation, bale pressing or light work at gin, female participation is not significant (less than 25% in the three countries). This is likely due to the physical strength required to undertake such work.

¹² 'Socio-economic and gender analysis of Cotton cultivation in South India', FAO, 2002.

¹³ 'Uzbekistan – Agrarian Reform, Gender and Land Rights in Uzbekistan', UNRISD, 2002.

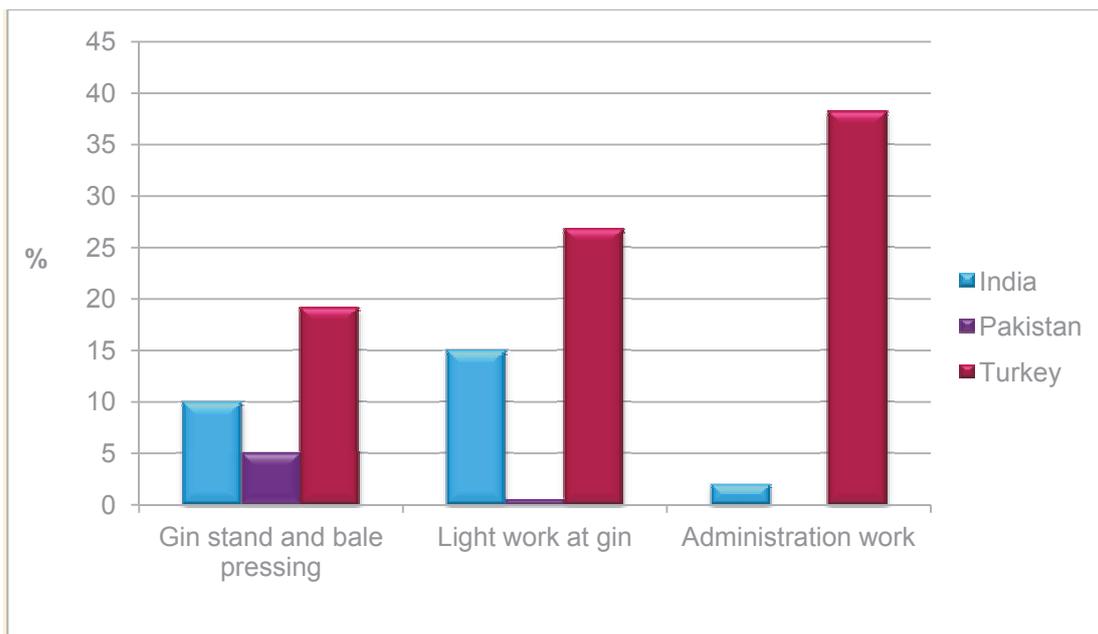
Figure 4. Women as a percentage of the total workforce in ginning in India, Pakistan and Turkey



2.1.3. Trading activities

As shown in figure 5 below, women do not participate in trading activities apart from administrative work (around 30% of the total workforce) and international trading (20%) in Turkey. This result is probably due to the level of necessary skills and knowledge required, reflecting that education for women may be more accessible in Turkey than in India or Pakistan.

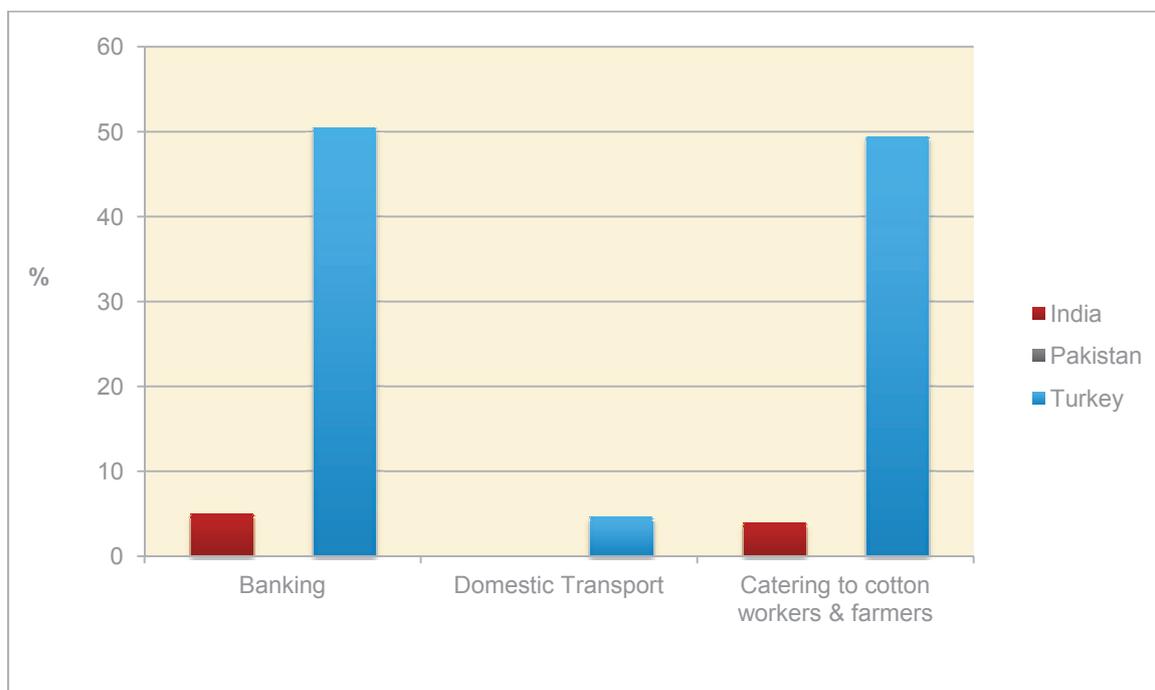
Figure 5. Women as a percentage of the total workforce in trading in India, Pakistan and Turkey



2.1.4. Support services

Preliminary results indicate a larger participation of women in support services in Turkey, compared to their counterparts in Pakistan and India, particularly in banking and catering to cotton workers and farmers (50% of the total workforce in Turkey for both activities) (see figure 6).

Figure 6. Women as a percentage of the total workforce in support services in India, Pakistan and Turkey



2.2. Women's ownership and leadership in the cotton industry in Asia

More information and data from cotton companies or associations in Asia are needed to get a good understanding of the participation of women in decision-making and owning business property. However, an FAO study¹⁴ conducted in India showed that men generally control the management of the crop (e.g. purchasing of inputs, selling of produce) and manage the financial transactions. Women's participation in decision-making varies across economic classes. According to the research, some women heads of family and many female smallholders are actively responsible for crop management.

3. WOMEN IN COTTON IN LATIN AMERICA

3.1. Women's role in cotton production

Preliminary results show that activities in which women are mostly involved in the cotton sector in Latin America¹⁵ are picking and planting, with around 60% and 35% of participation respectively. Figure 7 below shows that women are less involved in other activities such as field management or application of chemical products.

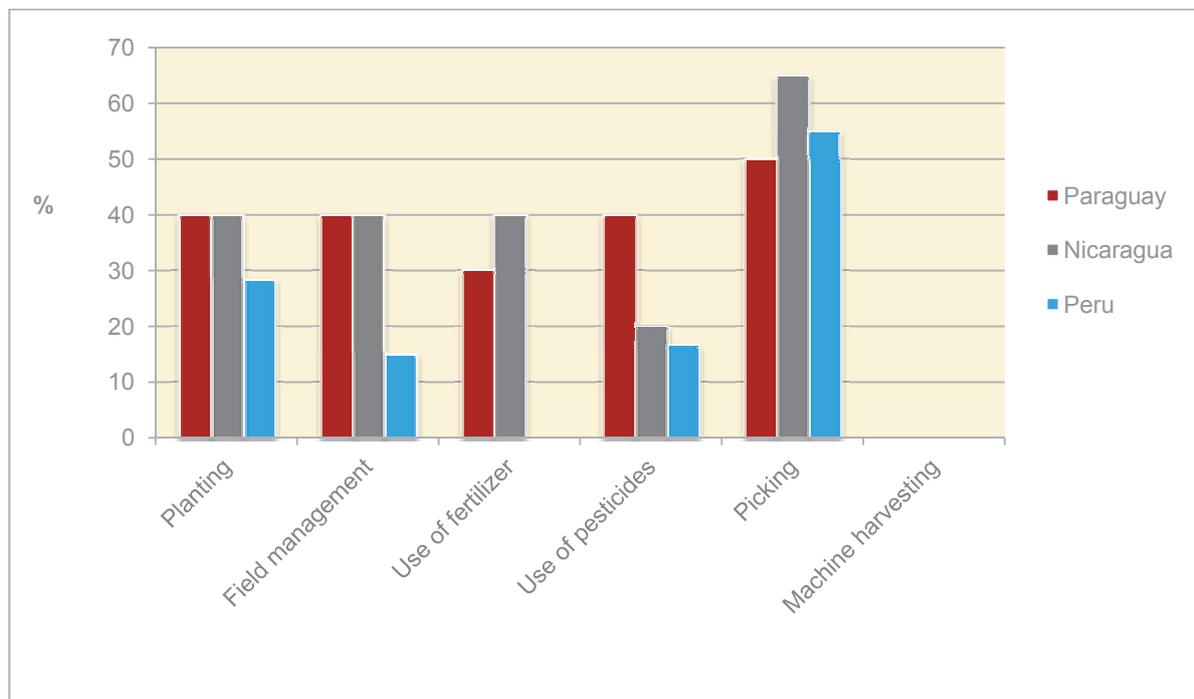
¹⁴ "Socio-economic and gender analysis of Cotton cultivation in South India", FAO, 2002.

¹⁵ Based on responses from Peru, Paraguay and Nicaragua.

3.1.1. In the field

In Peru, picking is done by women, both hired and family members. Planting is generally men’s work, but depending on the region or culture, women participate in the management of the crop. On the poorest and most isolated small farms, it is noticed that women’s participation is higher.

Figure 7. Women as a percentage of the total workforce in the field in Peru, Nicaragua and Paraguay



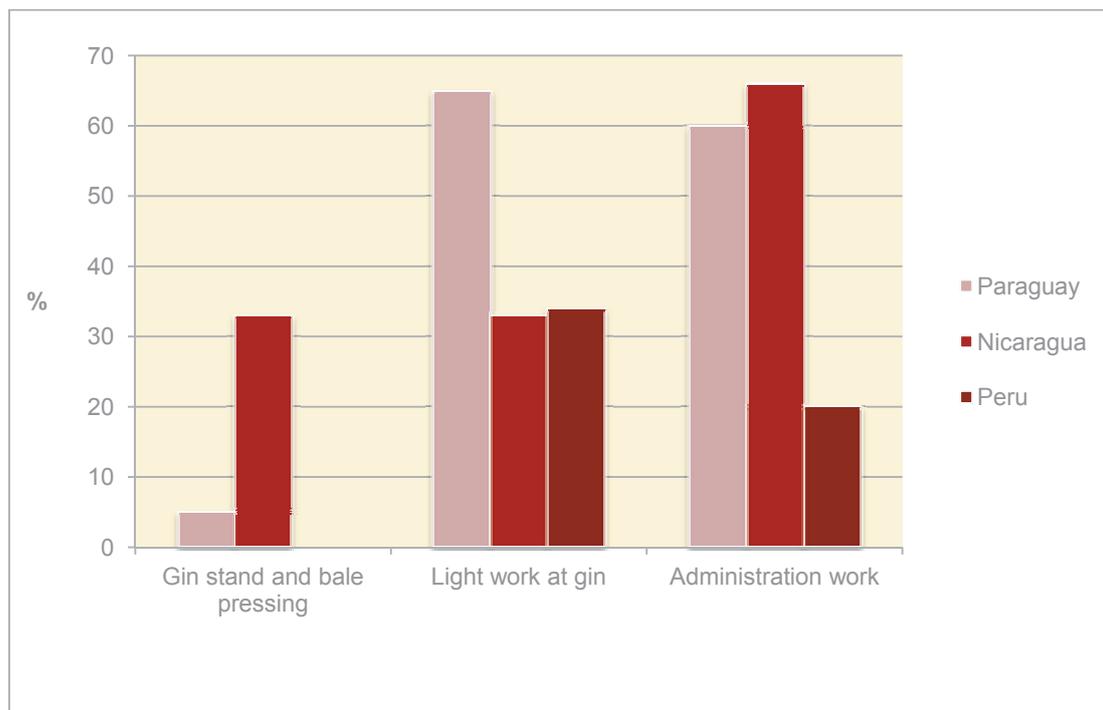
In Paraguay, particularly in the production of organic cotton, all members of the family participate but decisions are made by the husband. As crop management requires more workers, generally all members of the family (men, women, adults and youth) are involved in all related activities.

Regarding the application of pesticides and fertilizers, women do not participate a lot, although they are more involved in these activities in Nicaragua and Paraguay in organic cotton production (around 35%) than in Peru (around 10%).

3.1.2. Ginning activities

In ginning activities, figure 8 below indicates that only few women are involved, mostly in administrative work (around 50% of the workforce, e.g. secretarial positions) or light work at gin (45%; selection and bag sewing, packaging, etc.). Few women work at the gin stand and bale pressing as it is physical work usually done by men.

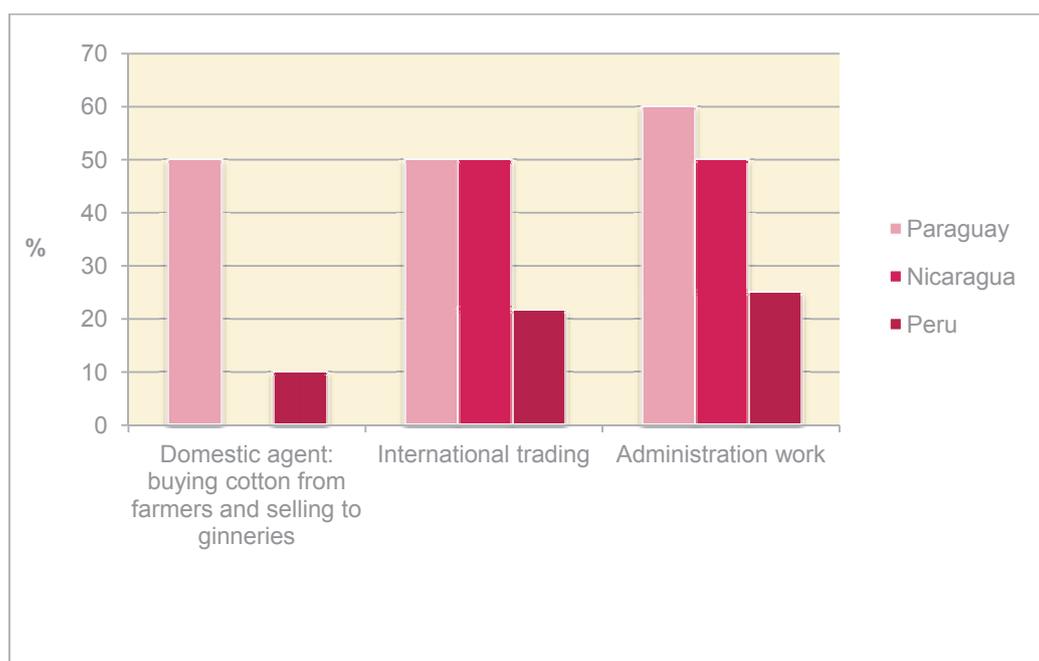
Figure 8. Women as a percentage of the total workforce in ginning in Peru, Nicaragua and Paraguay



3.1.3. Trading activities

With regard to trading activities, women undertake administrative work (e.g. secretaries, assistants, accountants) and work in international trading. Except in Paraguay (50%), very few women work as domestic agents dealing with buyers and sellers.

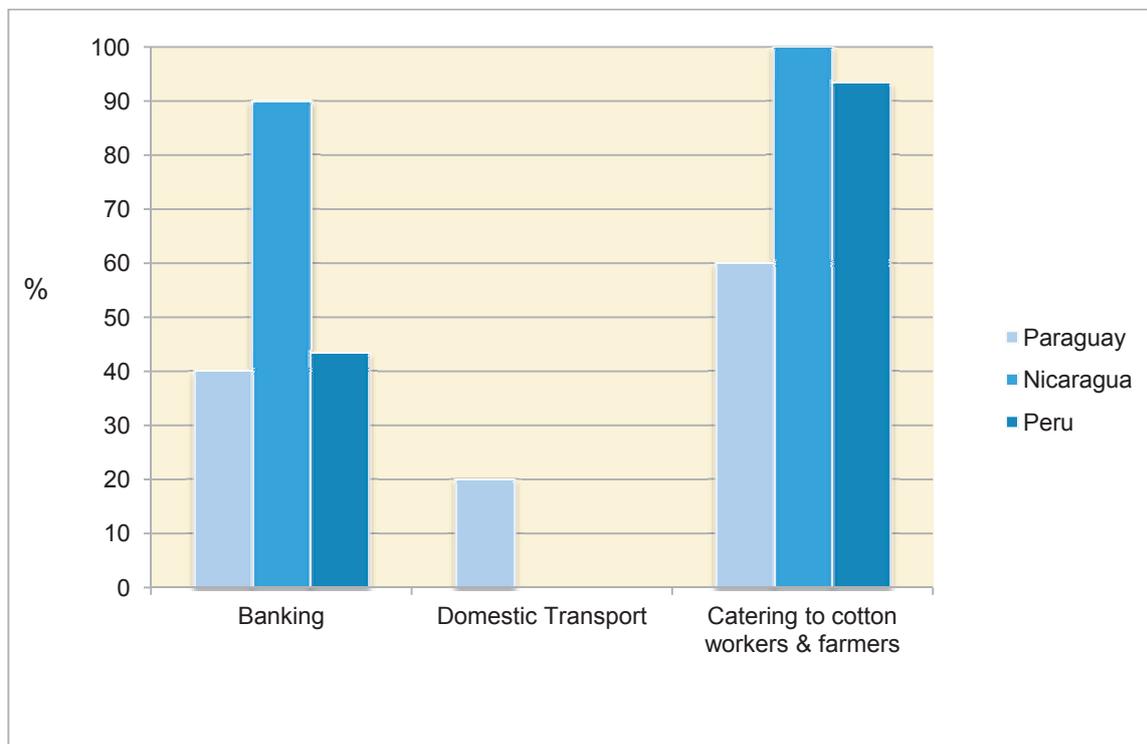
Figure 9. Women as a percentage of the total workforce in trading in Peru, Nicaragua and Paraguay



3.1.4. Support services

As indicated in figure 10, catering to cotton workers and farmers is mainly women's work, with a typical participation of 85%. Banking is also an activity sometimes done by women (around 60%). In Peru, this is the case especially in big cities connected to rural areas. Domestic transport is men's work.

Figure 10. Women as a percentage of the total workforce in support services in Peru, Nicaragua and Paraguay



3.2. Women's ownership and leadership in the cotton industry in Latin America

Preliminary results show high disparities regarding women's ownership and leadership in Latin America, which vary among countries and activities. In Peru, women make decisions in support services, especially in catering (around 100%) but rarely in field activities. However, according to our findings, in the poorest areas women and other members of a household are more involved. Although it is common to hear that women make decisions in harvesting as much as men, the final decision is generally made by men.

In Nicaragua and Paraguay, results obtained are substantially different for women working in cooperatives producing organic cotton. In these cases, their participation in decision-making or ownership is higher (decisions are made jointly with men, around 50%).

3.3. Remuneration and salary

Although there are high variations in terms of salaries among countries and activities, first results show that women are generally less paid (around 90% of men's salary) in Peru. However, women working in cooperatives in organic cotton production seem to get the same remuneration as men.

Table 7. Women's salaries as a percentage of men's salaries in the cotton sector in Latin America

Salary	Variation (low–high)	Typical remuneration
In farming	50–100	95
In ginning	0–100	80
In trading	75–100	100
In support services	0–100	100
Overall average salary		90

3.4. Women associations

In Nicaragua, there are some examples of women associations. Two groups of women producers – Cooperativa Multisectoral Mujeres de Malpaisillo (22 members) and Cooperativa Multisectoral Mujeres de San Agustín (18 members) – participated in this survey. Both cooperatives produce organic cotton and get credits through a foundation. In these two cooperatives, around 40% of women are involved in decision-making. Organic cotton farming is supported in Nicaragua by the Centre for Development in Central America (CDCA). CDCA has organized farmers into cooperatives in order to more effectively market a range of organic crops.

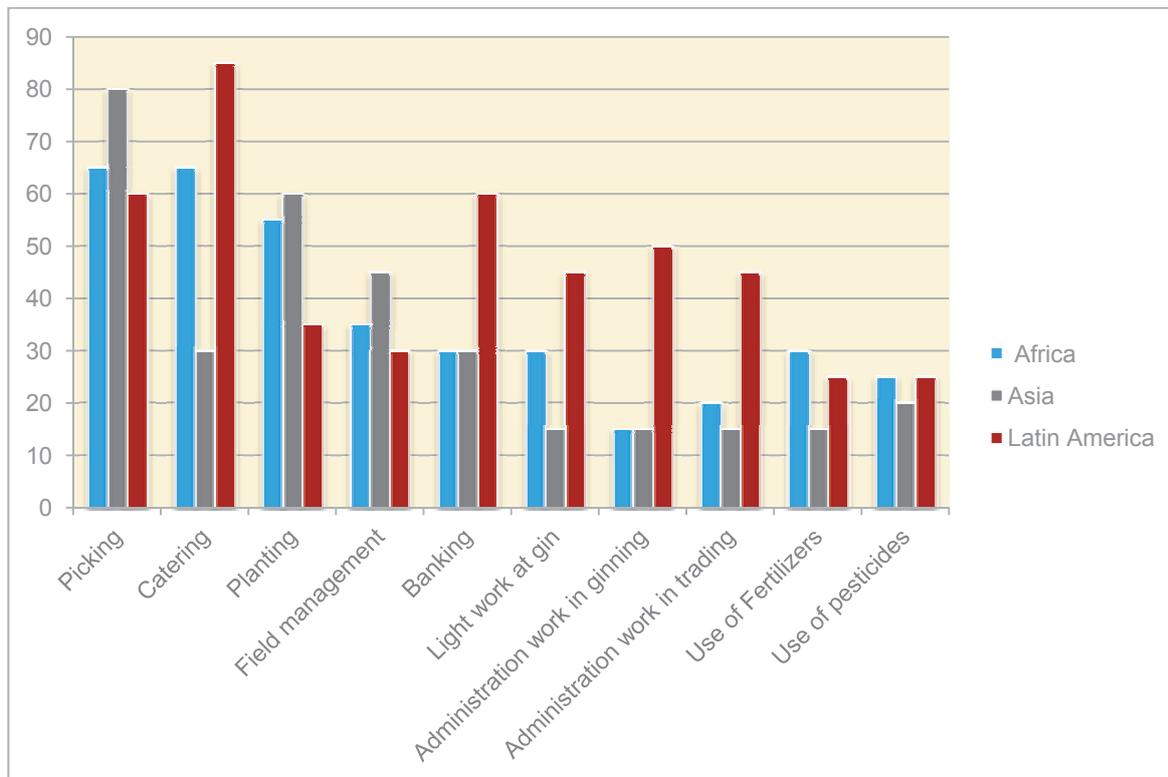
In Paraguay, mixed or women associations exist in communities where organic cotton is produced. They work in a development capacity in organizational or productive fields, as well as assisting group and personal development. These organizations are also working to facilitate business with private companies, and to implement projects with the public or private sector for technical assistance. Other types of organizations exist, such as cooperatives which jointly market the production of several producers. One example is the association Comité Kuña katupyryve Recavo, created in 1995 and comprising 15 members. The objective of the association is the development of its members and related families, improving incomes through training and capacity building, and incorporation of productive activities within the organization and the community. The association has a consumer store, with its own administration, where members and their families are provided with staple food. They have received various trainings through state institutions or NGOs.

4. COMPARISON OF WOMEN'S PARTICIPATION IN THE TOTAL WORKFORCE IN AFRICA, ASIA AND LATIN AMERICA

Figure 11 below indicates the main cotton-related activities in which women are mostly involved in Africa, Asia and Latin America, in terms of women's participation as a percentage of the total workforce. Overall, preliminary results show that women working in cotton in these three regions of the world are mostly involved in picking (over 60% of participation), catering (around 60%), planting (around 50% on average), and field management (around 40% on average) activities.

Besides these top four activities, women also play a substantial role in banking (around 40%), light work at gin (30% of participation), administrative work in trading or ginning activities (both around 25%), and use of fertilizers or pesticides (around 20%).

Figure 11. Women as a percentage of the total workforce in the cotton sector in Africa, Asia and Latin America



Overall, the comparison indicates that women play generally the same role and work in the same activities on the three continents. However, it is important to note that some data obtained from Latin America are related to women working in organic cotton production organized in cooperatives. Similar data was not available from Africa and Asia. The situation is likely very different in large mechanical cotton growing regions in Brazil and Argentina where large farms are harvested with the help of machines operated mainly by men.

4.1. Remuneration and salary

Although there are high variations in terms of salaries among countries and activities, first results show that women are generally paid less, earning 90% of men’s salary on average, in Africa, Asia and Latin America.

Table 8. Women’s salaries as a percentage of men’s salaries in the cotton sector in Africa, Asia and Latin America

Salary	Variation (low–high)	Typical remuneration
Africa	0–100	90
Asia	0–100	90
Latin America	0–100	90
Overall average salary		90

5. WAYS TO EMPOWER WOMEN IN THE COTTON SECTOR

5.1. Organic cotton

The introduction and use of organic cotton is an important issue regarding women's health and incomes. Organic cotton allows women to work without risk to their health, especially when they are working in the fields during pregnancy, whereas in conventional cotton cultivation there might be health risks in case of incorrect use of pesticides. In addition, organic cotton makes more use of traditional knowledge.

The introduction of organic cotton growing has increased the number of areas cultivated by women and continues to do so, particularly in Benin and Senegal. Similar developments have been observed in other African countries.¹⁶ The advantages of organic cotton production for women are, for instance, the possibility to be directly involved in cotton campaigns and workshops and to grow cotton on their own land, making decisions on how to work it. In addition, seeds and manure required for organic cultivation methods are locally available and cost less than synthetic products. Above all, growing organic cotton contributes to stabilizing prices through the payment of a premium, as long as market linkages for organic cotton are secured.

Our survey conducted in Nicaragua and Paraguay confirmed that organic cotton can be an avenue to empower women. According to respondents,¹⁷ women working in cooperatives or associations in organic cotton are more involved in decision-making or other activities along the value chain (e.g. banking or trading). In addition to having equal responsibilities and involvement, they receive the same salary as men. In Latin America, organic cotton production began in Peru in the 1980s. Peru and Paraguay currently grow the largest amounts of organic cotton on the continent. Production is largest in Peru. However, production in Paraguay is growing and has the potential to become more significant.

In Latin America, as in Africa and India, farmers are concerned with ensuring food security. Small farmers are particularly vulnerable to low prices and the global trading environment for both conventional and organic cotton. As in Africa, adequate financing is a key constraint facing farmers wishing to join the organic cotton sector, as is the lack of a ready market for rotation crops.

Overall, organic cotton represents approximately 1% of the total cotton production. Its global impact on the improvement of the situation of women in the cotton sector is therefore limited.

5.2. Fair trade certification

As fair trade is based on paying producers a guaranteed minimum price that covers the cost of production, women can obtain a steadier and higher income from their certified cotton production. To earn the fair trade cotton label, producers agree to standards that ensure an environment-friendly product, including avoiding genetically modified seeds, limiting the use of pesticides, enriching the soil, practising crop rotation and hand-picking.

The product standards for fair trade cotton caution producers to use pesticides. For example, the Fairtrade Labelling Organization (FLO) works with a list of prohibited materials which includes a number of pesticides that are in use in conventional cotton production in some countries. Fair trade certification therefore prevents women from health risks.

With fair trade certification producers can sell their cotton at a higher price to ginning and trading companies provided they have a guaranteed market for fair trade products. As consumers are increasingly concerned about social and environmental responsibility, demand for fair trade products is growing. In addition to the minimum producer price, a communal premium is paid to producers who agree to invest a percentage of cotton proceeds back into the community.

¹⁶ 'Organic Cotton Empowering Women', Pestizid Aktions-Netzwerk (PAN Germany), December 2005.

¹⁷ Responses from Nicaragua: Cooperativa de Productores Orgánicos y Tradicionales Exportadores de Nicaragua, COPROEXNIC, R.L.; Paraguay: responses from Promover S.A. – Aratex algodón.

Examples of the success of fair trade cotton cooperatives can be found in farming communities of rural India. Chetna Organic, launched in 2004, and Zameen Organic, founded in 2006, are both fair trade organic cotton initiatives that help farmers improve their lives by providing training on sustainable agriculture and expanding market access.¹⁸ However, fair trade cotton like organic cotton is a tiny niche market that has no substantial impact on the role of women in the cotton sector in global terms. Moreover, fair trade cotton such as organic cotton are very vulnerable to market fluctuations as experienced by farmers in West Africa during the financial crisis. During that period neither fair trade nor organic cotton could be sold with a premium.

5.3. Bt cotton

Use of Bt cotton, genetically modified cotton with resistance against the insect *Bacillus thuringiensis*, can also help to empower women in the cotton sector. A research study carried out by the University of Warwick in the United Kingdom found that Bt cotton can generate higher incomes and more employment, especially for hired female labour. The research, which focused on India, showed that Bt cotton raised the total wage income by 40 United States dollars per hectare compared with conventional cotton. The largest increase was for hired women, who gained 55% in average income. In fact, the increase in returns is mostly related to higher yields in Bt cotton, because of the additional labour employment for picking the increased cotton production. In addition, Bt cotton improves women's working conditions as it reduces the application of pesticides. It also leads to labour saving, for both women and men, therefore meaning that labour saved can be reallocated to other household economic activities previously carried out by women. Overall, Bt cotton can enhance the quality of life of women by giving them higher incomes, more employment opportunities and better working conditions. However, it did not seem to have empowered them in participating more equally in decision making processes nor in moving women up the value chain.

5.4. Women associations

The position of women as individuals is very weak in the cotton sector, even if they play an important role. To strengthen their situation, it is therefore necessary to foster collaboration of women in associations. Within an association, educated women can act as a role model for others. Moreover, special workshops of topics that are of special interest to women e.g. on cotton cultivation can be organized. Women associations lead to empowerment of women. Once they are independent and more organized, they have their own income and then the possibility of deciding how the money will be spent. Preliminary results from Latin America (Nicaragua and Paraguay) confirm that women organized in cooperatives are more involved in field activities as well as in decision-making and ownership in cotton production.

5.5. Land and property ownership

Finally, among the possible ways to empower women in the cotton sector, ownership of land and property is one major issue to be addressed as ownership provides the ability to make decisions. Land ownership empowers women, ensures more equality with men and provides income and security. Without resources such as land, women have limited influence in household decision-making.

However, women continue to own just a fraction of land worldwide. Despite existing laws that protect their rights to property, men and women often are unaware of them. Meanwhile, prevailing social norms reinforce attitudes that discourage women from owning land or other assets.¹⁹

6. SOURCES

Data collected from ITC questionnaires sent to cotton companies in Africa (Cameroon, Central African Republic, Côte d'Ivoire, Ethiopia, Kenya, Malawi, Mali, Mozambique, Nigeria, Uganda, Senegal, Togo,

¹⁸ 'Fair Trade Cotton' Fair Trade USA, May 2009.

¹⁹ "Study Shows Gender Norms Heavily Influence Women's Asset Ownership", June 2011, ICRW.

Uganda, United Republic of Tanzania, Zambia, Zimbabwe), Asia (India, Pakistan, Turkey), and Latin America (Nicaragua, Paraguay, Peru):

Africa

- Cameroon: responses from Sodecoton;
- Central African Republic: responses from the Agence Centrafricaine de Développement Agricole (ACDA);
- Côte d'Ivoire: responses from the Ministry of Agriculture;
- Ethiopia: responses from the Ethiopian Cotton Producers Exporters and Ginners Association;
- Kenya: responses from the Cotton Development Authority, Makueni Ginneries and Kenya Cotton Growers Association;
- Malawi: responses from the Ministry of Industry and Trade, Woget Cotton Ginning Company Ltd and Iponga Cotton Company Ltd;
- Mali: responses from the Office de la Haute Vallée du Niger (OHVN) and CMDT;
- Mozambique: responses from Companhia Nacional Algodoeira;
- Nigeria: responses from the National Agricultural Seed Council;
- Senegal: responses from Sodefitex;
- Uganda: responses from the Nyakantozi Growers Cooperative Union, Cotton Development Organisation and Rwinzori Cotton Ginneries Company Ltd;
- United Republic of Tanzania: responses from the Tanzania Cotton Board, Tanzania Cotton Growers Association and the Ministry of Industry, Trade and Marketing;
- Zambia: responses from the Ministry of Agriculture, Cotton Association of Zambia;
- Zimbabwe: response from the Cotton Research Institute;

Asia

- India: responses from the Central Institute for Cotton Research;
- Pakistan: responses from the Pakistan Central Cotton Committee and the Agriculture Research Institute;
- Turkey: responses from Atça Cotton Sales Cooperative, Aydın Cotton Sales Cooperative, Denizli Cotton Sales Cooperative, Incirliova Cotton Sales Cooperative, Ortaca Cotton Sales Cooperative, Söke Cotton Sales Cooperative, Tepeköy Cotton Sales Cooperative, Yenipazar Cotton Sales Cooperative.

Latin America

- Nicaragua: responses from Cooperativa de Productores Orgánicos y Tradicionales Exportadores de Nicaragua (COPROEXNIC), R.L.;
- Paraguay: responses from Promover S.A. – Aratex algodón;
- Peru: responses from Textile Exchange and Industrias Nettelco S.A.;
 - COMPACI (Competitive African Cotton Initiative) Newsletter Number 2, April 2010;
 - 'Fair Trade Cotton', Fair Trade USA, May 2009, www.transfairusa.org;
 - 'Fair Trade Cotton Becomes Social Harvest', USAID, May 2010;
 - 'GM crop produces massive gains for women's employment in India', University of Warwick, 2010;

- 'Literature Review and Research Evaluation Relating to Social Impacts of Global Cotton Production for ICAC Expert Panel on Social, Environmental and Economic Performance of Cotton (SEEP)', www.icac.org/seep/documents/reports/literature_review_july_2008.pdf;
- 'Organic Cotton Empowering Women', Pestizid Aktions-Netzwerk (PAN Germany), December 2005;
- 'Organic Cotton in Latin America: Islands of Uniqueness' www.organicexchange.org/Documents/Section4_SowingSeedsofChange.pdf;
- 'Socio-economic and Gender Analysis of Cotton Cultivation in South India', FAO, 2002.

Appendix The role of women in the cotton sector



The Role of Women in Cotton – A Questionnaire

Promotion of gender equality and empowerment of women is one of the eight Millennium Development Goals (MDGs) for 2015 – set up by the United Nations.

Under this framework and with the endeavour to promote cotton production, productivity, quality, increased earnings, improved working conditions and more influence in decision-making processes for women, it is vital to understand the role of women at all levels in the Cotton sector.

In that context the International Trade Centre (ITC)¹ is conducting a survey of the role of women in the Cotton sector in producing countries.

The data is used in discussions with donors of possible assistance to women in the Cotton sector in various countries. Without relevant data, organizations and donors would not know how and on what basis to assist gender mainstreaming in the cotton sector.

We therefore kindly request you to respond to the following few questions regarding your country.

Thank you in advance for your cooperation.

Matthias Knappe
Programme Manager Cotton, Textiles and Clothing
ITC, Geneva, Switzerland
Phone: +41 22 730 0321
Fax: +41 22 730 0446
knappe@intracen.org

www.cottonguide.org
www.quidedecoton.org
www.guiadelalgodon.org

¹ International Trade Centre (ITC) is the technical cooperation agency of the World Trade Organization (WTO) and the United Nations Conference on Trade and Development (UNCTAD) for operational, enterprise-oriented aspects of trade development.

Questionnaire

i. The role of women in the Cotton sector

Kindly indicate in percentage terms the role of women as compared to men in the various domains listed in the table. If you have absolute figures (e.g. 110,000 women) kindly also indicate.

Not applicable, i.e. does not need to be filled in:

	% of women of total workforce	% of women in decision making positions	% of women who own fields and businesses	Comments
Field				
Decision of what crop to plant				
Planting				
Field management				
Use of fertilizer				
Use of pesticides				
Picking				
Machine harvesting				
Ginning				
Gin stand and bale pressing				
Light work at gin				
Administration work				
Trading				
Domestic agent: buying cotton from farmers and selling to ginneries				
International trading				
Administration work				
Support Services				
Banking				
Domestic Transport				
Catering to cotton workers & farmers				

2. Renumeration and salary

What is the average salary of a woman working in the cotton sector compared to men, assuming that the men salary is 100.

In farming:	_____
In ginning:	_____
In trading:	_____
In support services:	_____

3. Women Association(s)

Is there an association of women or informal group of women in the Cotton sector in your country?

If the answer is Yes, please provide more details as described below:

Name of the association _____

Full address including e-mail and website (if available) _____

Contact person _____

Number of members/individuals in each association _____

Year of establishment _____

Other information you may think relevant (mission, purpose, main activities, etc.) _____

Sources of funding (membership fee, donors, government, sale, etc.) _____

•	_____
•	_____
•	_____
•	_____
•	_____
•	_____

Your participation in this questionnaire is highly appreciated! Kindly provide your personal details (optional) below.

Name:	_____
Name of association:	_____
Address:	_____
Tel/Fax:	_____
Email:	_____



Street address
International Trade Centre
54-56 Rue de Montbrillant
1202 Geneva, Switzerland

P: +41 22 730 0111
F: +41 22 733 4439
E: itreg@intracen.org
www.intracen.org

Postal address
International Trade Centre
Palais des Nations
1211 Geneva 10, Switzerland

The International Trade Centre (ITC) is the joint agency of the World Trade Organization and the United Nations.