Country Context

After nearly three decades of civil war, the government of Chad has maintained relative peace and stability since 1993. Between 1994 and 1999, the authorities restored the elementary functions of government, and established a solid macroeconomic adjustment track record. Real GDP growth averaged 3.4 percent per year. However, Chad is still one of the world’s poorest countries. An estimated 80 percent of its population of 7 million live with less than a dollar a day. The depth and pervasiveness of poverty is striking. The political and ethnical environment remains fragile. Ethnically, and politically motivated clashes are regionally confined, small, nevertheless fairly frequent.

In 2000, Chad was hit by a drought which caused a sharp decline in agricultural production, limiting real GDP growth to 0.6 percent. Real GDP growth resumed briskly in 2001, reaching 9 percent, driven by oil-related investment and its spillover effects, as well as a return to normal agricultural production. Since data on household incomes are not available for Chad, it is difficult to assess the poverty reduction and distributional impact of this development. However, it is reasonable to assume the recent spur in growth is primarily benefiting the urban populations of N'Djamena and the southern secondary cities through oil investment related spillover effects, especially in the construction and services sectors. At the same time the southern rural population is feeling the impact of the sharp drop in world cotton prices which is expected to translate in a cumulative drop in farm gate prices of at least 25 percent between the 2000-2001 and the 2002-2003 cotton campaigns.

Combined with policy changes, the government's consistent budget increases for education, health, and public works since 1994 have resulted in substantial progress in the delivery of basic services. For basic infrastructure, 43 percent of the all-year road network can now be used throughout the year as opposed to 20 percent in 2000. Most impressively, the gross school enrollment rates for girls and boys have increased from 31 and 62 percent in 1994-95, respectively, to 58 and 89 percent in 1999-2000, and the DPT vaccination rate has increased from 18 percent in 1994 to 43 percent in 2000. Nevertheless social indicators remain well below the average for sub-Saharan Africa.

The Cotton Sector in Chad

The modern development of cotton in Chad began with the process of compulsion by the French colonial government in the 1920s. During the colonial period, cotton was produced and marketed through the French Compagnie Française pour le Developpement des Fibres Textiles (CFDT). After Independence, it continued through CotonChad, a parastatal, with CFDT, now undergoing a process of privatization (under the new name of DAGRIS), maintaining an equity interest in the company.
Production is located in the south of the country and the crop still largely dominates the economy. However, price movements on the world market, together with the uncertain political and economic climate, have led to fluctuations of income and some farmers turned towards alternative crops. Cotton also has an important role to play in poverty reduction. It is grown in the Sudanian region of Chad which accounts for 10% of the country’s land area and 40% of the total population. (See map.) Of the roughly 400,000 farm households in the cotton region (with average household size of 5 to 6 people), 60% grow cotton on small, rainfed farms, with an average land area of 1 to 2 hectares.

On average, seed cotton accounts for up to 20%, of average farm and subsistence income. Although groundnuts are also grown as cash crops (as well as for food and storage), farmers also sell millet and/or sorghum and vegetables for cash. However, cotton represents the only source of significant and stable income that can be used to purchase items such as farm equipment, traction animals, or other large items. Furthermore, the marketing services of CotonChad provide the only accessible means to modern fertilizer, pesticides, and credit for farmers.

The Chadian cotton industry exhibits a structure of vertical integration, dominated by CotonChad, the only cotton processing company largely owned by the Chadian state (75 per cent) and DAGRIS (17 per cent). CotonChad operates by buying cotton from producers at a price linked to the international price of cotton and by re-selling it on the world market. (See Figure 1 for details)

CotonChad:

(i) provides farm inputs to farmers on credit and manages the distribution of such inputs;
(ii) purchases, collects and transports seed-cotton from the villages to its 9 cotton ginneries;
(iii) gins the seed-cotton, and commercializes the lint; and
(iv) produces oil from the cotton seeds, and soap.

The producer price for seed-cotton is uniform throughout the country and is set each year by a committee consisting of representatives of farmers and CotonChad.

In 1985, cotton accounted for 80% of Chad’s exports and 25% of government revenue. In 1997, it still accounted for 65% of merchandise exports. Credit to CotonChad for input pre-financing and seed cotton purchases was estimated at an average of 40% of total banking sector credit in 1998, with by-products such as cottonseed oil and cake, soap accounting for 1.5% of GDP. Despite the importance of cotton production in Chad’s economy and the role it plays in the every day life of producers, its impact on farm revenues is low, owing to several factors including: (i) inefficiencies in the management of CotonChad; (ii) high transactions costs related to insufficient transport infrastructure, a
lack of road connections and weak farmers’ organizations; and (iii) inefficient farming practices. As a result, cotton farmers receive a low producer price (in 1999/2000, producer prices represented only 49% of the world price of fiber). Farmers’ organizations play a very limited role in seed-cotton marketing, and the average yield of seed-cotton is very low, at times representing only about half the average yields in Mali.

CotonChad has been a major employer in the country. In 1998, it employed roughly 3000 salaried employees, including seasonal workers, which made it the largest employer after the public administration (30,000 civil servants), and army (22,000). Both direct and indirect taxation of CotonChad on inputs, employees’ incomes, corporate incomes and exports, as well as dividends represent a significant part of total revenues, and amounted to 24% of total government revenues, in 1997.
However, in recent years, the parastatal was substantially reorganized: half of its ginning mills were shut down, its private planes sold off, and 1,700 out of its 3,000 employees were laid off. Other measures have been at the level of peasant farmers who are now made to pay the full rate for fertilizers and insecticides, and to bear transport costs through the setting of fewer collection points.

The Current State of Dialogue

In December 1999, the Government of Chad adopted a cotton sector reform program, with the objective of improving the incomes of cotton farmers and enhancing their efficiency in cotton production, through the liberalization of the sector, including the privatization of the para-statal CotonChad, and the promotion of the development of strong cotton producer organizations. The reform program will be supported through the 5th SAC, currently under negotiation.

As part of the reform program, a study will be conducted to evaluate the potential scenarios for reform. The alternative scenarios, to be identified under the planned study, may include, for example: (i) the privatization of CotonChad as currently structured, preserving the vertically integrated structure of the industry as well as its de facto monopsony position in seed cotton marketing; (ii) the break-up and sale of CotonChad into few entities comprising several ginning factories, preserving the vertically integrated structure, but allowing for some competition in prices or services; (iii) the sale of each of the 9 ginning factories separately, allowing for even more competition in prices or services but also preserving the vertically integrated structure; or (iv) the privatization of the various functions of CotonChad separately (distribution of inputs, transport, ginning, commercialization), essentially abandoning the structure of vertical integration.

In order to obtain reliable information on potential impacts of the different scenarios it was agreed that a PSIA will be conducted to facilitate decision-taking about the reform path. A first joint SDV – PREM mission has been launched. A small team from WB headquarters visited the country. Their preliminary findings are provided below.

Available Information and Data

The fact finding mission could not identify any reliable or updated data base containing poverty and social indicators on a disaggregated level. Based on the expert knowledge of the country team, and desk reviews, a preliminary list of stakeholders were identified. These groups included: (i) cotton farmers (differentiated by size and type of landholding, occupation, socio-political organization, ethnicity, and by their leadership role in cotton producer organizations); (ii) farmers’ organizations; (iii) local entrepreneurs, including traders, transporters, and other service providers; (iv) local extension and research staff; (v) staff of CotonChad; (vi) government officials.

The mission found significant degrees of heterogeneity within these groups, particularly among farmers. For example, there was likely to be significant differences between
farmers according to their degree of access to draft animals, plows, and wheel barrels and those that did not.

The fact finding mission also found that the issue of relations between farmers and pastoralists would be an important consideration in ensuring success of the reform. There appears to be competitive claims and multiple uses of land and water between some groups of pastoralists and farmers in some regions of the cotton-producing areas. In other regions, however, there appears to be more complementary relations and coexisting modes of subsistence.

Finally, there appeared to be conflicting interests behind the ‘declared’ quality of cotton from the moment it leaves the villages to the moment it is ginned and sold in the international market. There are price incentives in place to encourage production of high quality cotton that is based on lower pricing for lower grades of cotton. However, in the end, the two types of cotton are ginned together. Farmers are aware of these differences, which give arise to disputes and conflicts among cotton producers (free-riders, delegates of farmers’ organizations, other relevant categories) and other relevant stakeholders, like CotonChad (managers, administrators, chef-d’usines, agents, interface), extension agents and delegates of farmers’ organizations.

So far, the key transmission channels that will impact on the welfare, of farmers and other stakeholders, have been identified as (i) employment, (ii) access to factor and product markets, (iii) prices, (vi) assets and capabilities. However the impact mechanisms will need to be further spelled out.

The mission also looked into issue of cultural practices, social capital and cohesion. One of the main findings here was that there appears to be a strong relationship between the quality and quantity of cotton produced and the degree of social cohesiveness and authority of traditional leaders. There are geographical differences, with the Western part being more cohesive and their leaders more legitimized. In some cases, cotton production appears to have created social fragmentation. Since CotonChad deals with village associations, and not individual farmers, those farmers who buy inputs at the beginning of the agricultural season but do not produce a correspondent amount of cotton make the whole village association and therefore, community of cotton-producers pay for their lack of outputs. At times, farmers who are forced to bear the cost of the ‘free-riders’ resort to either demanding payment or confiscating assets from the latter’s relatives. This appears to create tensions at the intra-household and inter-household level, which in turn affect the dynamics of operation of the village association. Other communities, adopt other strategies connected to cotton production (such as common cultivation of contiguous lands) to minimize social fragmentation and increase the level of social capital.

In conclusion, based on the initial field visit to gain a sense of issues on the ground, a preliminary set of issues were identified that will be further explored in the course of the work. Based on the field visit, some of the key issues identified to be explored further included: (i) relations between pastoralists and farmers which may impinge on cotton production; (ii) importance of cotton, and other crops on farm incomes in the region, and
the importance of non-farm income; (iii) patterns of debt among village associations and producer groups; (iv) impact of the reform on social capital and cohesion; (v) rules of the game, values and practices surrounding cotton production, processing and commercialization; (vi) issues surrounding the quality of cotton and declassification of cotton.

Given stakeholders, and preliminary identification of transmission mechanisms and likely issues, it remains to determine how reforms will translate to changes in household welfare in the Chadian context.

**Potential Opportunities and Constraints**

The reform program has as its principal objective the increase in revenue for cotton farmers. According to the program, this objective will be achieved by:

1. disengaging the state from cotton production and reviewing the industrial structure of the cotton sector
2. strengthening the role of farmers’ organizations

The reform program identifies a substantial risk. The cotton reform program touches about 300,000 poor families and its primary goal is to improve their livelihoods. Given the complexity of the reform program it will be a challenge to ensure the program’s consistency with the stated objective – especially in the context of sharply declining world cotton prices. To overcome this risk, *an extensive ex-ante and ex-post poverty and social impact analysis* will be completed, allowing for early adjustments in the program if needed.

There is the possibility that the Government will after the divestiture be able to concentrate on its currently neglected task of providing an improved extension service to cotton producing communities. The potential for increased yields through improved cultivation practices seems to be considerable.

Learning from the difficulties in the implementation of other cotton reform programs, Chad has decided to pay particular attention to consensus building among all stakeholders along the reform path. In particular, the selection of a divestiture scenario for the ginning activities of CotonChad will be made taking into account the view of the farmers’ organizations and the results of an *ex ante* Poverty and Social Impact Analysis (PSIA).

**Analytical Capacity**

The Government shows sincere interest in the PSIA. However, neither its own institutions nor private sector organizations do have sufficient capacities to support a PSIA. Capable staff is already burdened with work overload. Some university institutes have shown interest to be involved in the required field work for the PSIA. Additional expertise will have to brought in through international consultants.
Cotton Production and Marketing in Chad

**Inputs and credit.** CotonChad takes orders for inputs through its field agents or “interface”. This system was set up roughly 2 to 3 years ago to replace the role of the extension agency, ONDR. However, the operation of the system is ineffective in so far as input markets are virtually non-existent and CotonChad cannot meet all of farmer’s needs. This rationing in the input market means that farmers at times may dilute inputs by spreading to other crops, or by expanding use to a larger surface than recommended for the proper and effective use of inputs. Also, aside from the services provided by CotonChad, there is a total absence of credit markets which leads farmers to engage in distress sales of inputs to gain urgent cash which in turn compromises their production and level of revenues earned from cotton. For example, in 2002, farmers were known to immediately resell fertilizer they received on credit from CotonChad (at a cost of FCFA 14,000 per bag), for FCFA 3000 per bag. This then leads to lower yield and production, which compromises revenues earned after the harvest, and increases the level of debt burden to the farmer, since he will no longer be able to cover the cost of the fertilizer.

**Land** is another important factor of production. Land rights are traditionally allocated by the chef de terre who also oversees arbitration of land rights. Due to the low population density in the country as a whole, the more pressing issue where land is concerned centers around conflicts between pastoralists and farmers. Although there have always been reports of conflicts between sahelian herders and farmers, it seems the incidents of these conflicts are growing as herders are increasingly being driven south due to desertification. These conflicts have also been compounded by the trend in increased population of both people and cattle, and increased conflict due to corruption of local officials who do not enforce the law. The problem is also compounded by an increasing trend in the ownership of cattle among those officials that are suppose to enforce the law, thereby limiting farmers’ legal recourse, or hope of a fair judgment.

**Marketing and transport.** Associations Villageoises (AV) are important actors in the cotton marketing cycle. There are about 5000 in total across all villages. This system of associations was created by CotonChad and ONDR to facilitate the streamlining of cotton purchase, organization and credit recovery. AV’s are also vested with a community development role. Each AV has a population of roughly 100 households (both cotton and non-cotton producing), along with several “groupements” or sub-village groups of various kinds –i.e. for other crops, women’s groups, pastoralists , etc. On average, there are 5 groupements per AV, and this figure varies roughly between 2 to 14 in each AV. Revenues of the AV consist of the rebates from cotton sales by CotonChad, and communal revenues from general sales, and membership fees. These are used by the AV for recovery of bad debts, and community projects (such as wells, schools, etc.).

CotonChad has set up roughly 2500 central markets for the 5000 AVs where cotton is graded, weighted and loaded onto trucks. Cotton is then graded into three classes: high, medium, low. CotonChad estimates that 98% of its purchases are high grade (there is a discount of roughly 40% for second grade and 60% for lowest grade). Grading is done by visual inspection at the market center by the “interface”, AV leadership and CCL (this
function was previously performed by MPZS), and later also at the ginnery, agents from the Ministry of Agriculture certify the grading before payment is made.

Farmers complain that CotonChad downgrades their cotton—i.e. gives cotton a lower grade than it deserves. This is a serious area of contention between farmers and CotonChad (through the “interface). In some villages, farmers estimate a loss of between CFA500,000-600,000 to the village as a result of the grading of cotton lower than what the village was expecting. Some villages have decided to deal with this problem (and also the problem of communal debt burden) by allocating a fixed amount of land as common field for cotton production. Other villages, in order to ensure a more uniform quality of cotton, have also resorted to collectively farming cotton.

In the case of transport, the sector as it pertains to cotton is characterized by bilateral monopolies. In emergencies, CotonChad uses its own fleet to purchase seed cotton in far away zones. Roads are in poor shape and there are no all weather roads.
Figure 2: A Theory of the Impact of the Cotton Sector Reform

Note: This figure constitutes a very rough consideration of impact chains. It will be part of the team’s tasks to refine this impact chain, for example by more rigorously applying the concept of transmission channels.
PSIA Challenge

The provided material on the Cotton Sector Reform must be considered as a type of pre-feasibility study drawn up by the country team, based on desk work and on some preliminary field observations during a scooping mission. The Government is determined to withdraw from the cotton chain and has taken first steps to investigate the path towards privatization. From the first review of available material the main conclusion seems to be that currently there is no agreement as to the expected privatization impacts.

The different privatization scenarios, once identified by a planned study, will be discussed in separate workshops with private investors and farmers to ensure that their views and interests are fully taken into account. Following these workshops, the government will adopt one scenario through which the sector will be reformed and CotonChad will be privatized.

In parallel with the scenario study, an ex-ante qualitative analysis shall be conducted to assess the poverty and social impact of each of the various scenarios identified by the scenario study. The ex-ante qualitative analysis will also provide information for the identification of alternative scenario and mitigation measures. This will allow issues of poverty and social impact to be spelled out before the scenarios are presented in the workshops. Decision makers will then have the opportunity to take these issues into account when deciding which scenario ultimately to adopt. In addition, both ex-post qualitative and quantitative poverty and social impact evaluations will be conducted to assess the outcome of the reform program.

The country team calls upon you (and your group, the ‘PSIA Team’) to help in conducting PSIA. You are invited to assist in a comprehensive PSIA study that should finally allow a decision on how to go ahead with the privatization program.

The challenge for you and your PSIA team will be to do a focused PSIA in affected areas. All efforts will have to take into consideration the socio-economic and agro-ecological environment as well as potential support and/or mitigation measures. You and your colleagues should make use of the existing (provided background) information and data, and you should make proposals how to supplement these with focused studies, applying the PSIA research methodology.

The decision-taking process has been delayed already and your team is pressed to provide answers quickly. The task manager has given the team sufficient resources to bring on board additional experts, however, he has set the deadline in 8 months from now for the PSIA to be concluded.

Luckily you had just attended a PSIA training workshop and you and your colleagues are now well conversant with the different steps that will lead to a useful document that will facilitate final decision-taking.
Your next meeting with the country team is scheduled for tomorrow evening\(^1\). You have decided to approach the challenge by assessing the available data and draw some preliminary conclusions. Then you will decide what additional data and information is necessary to confirm or reject your preliminary assumptions about stakeholders, institutions, impacts, and framework conditions and risks.

Your colleagues suggested a step-by-step move, using the available methods. You have decided to do

- A thorough stakeholder analysis with particular emphasis on adversely affected groups and institutional stakeholders;
- The identification of institutional constraints to an efficient and transparent cotton industry and enabling conditions to maximize the benefits of reform;
- The identification of probable short-term and long-term impacts and the necessary mitigation measures to compensate negative (side-) effects, i.e. a Social Impact Analysis (maybe for different scenarios);
- Mechanisms to transform constraints into opportunity for change;
- Risk Analysis (maybe for different scenarios);
- Preliminary M&E Design.

You have the chance to give presentations of your results and discuss them with other colleagues working on other reform programs.

Good Luck….

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\(^1\) Note: You will do this whole exercise in 2 steps, with presentations to the plenary after each of the two thematic group work sessions. Your first presentation will be your stakeholder analysis and the institutional analysis. The second presentation will be on the expected impacts and policy associated risks. You should prepare brief 10 minutes presentations that contain your findings and proposals. No need to repeat all the background information. Be informative and creative in your presentation! Your audience does not want to hear the facts only, they want to be entertained….