



Africa Bureau  
Office of West Africa Affairs  
Sahel Regional Program

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# POLICY SYNTHESIS

*for USAID - Bureau for Africa*  
*Office of West Africa Affairs, Sahel Regional Program*

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Number 10

October 1996

## PRISAS/INSAH-MSU-USAID SAHEL REGIONAL FOOD SECURITY PROJECT: RESULTS AND IMPACT

By

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**BACKGROUND:** Since mid-1994, the Regional Food Security Program (PRISAS) of the Institut du Sahel (INSAH) has monitored and analyzed the impact of the CFA franc devaluation on income and food security in West Africa. This work has been conducted collaboratively with national research teams throughout the region. Support for this work comes from USAID's Africa Bureau, Office of West African Affairs, Sahel Regional Program, via the USAID-Michigan State University Food Security II Cooperative Agreement. This bulletin summarizes some preliminary findings of the work on the impact of the CFA franc devaluation.

**METHODS:** In 1994/95, PRISAS researchers and the affiliated Sahelian national research teams designed and implemented four sets of country-level studies (Chad, Mali, Niger and Senegal) to examine the effects of the devaluation on relative prices, income and production costs of major food commodities and related services. The results and policy implications of these studies' findings were presented and debated among researchers and research-output clients in a regional workshop in June 1995, and in national round tables in January and February 1996. Each of these meetings brought together technical advisers and high-ranking representatives from the cabinets of Prime Ministers; ministries of agriculture/rural development, finance, commerce and planning; agricultural/rural development projects; parastatal marketing organizations (especially for cash crops); the Central Bank and the Chamber of Agriculture. The number of key representatives and decision makers from the public and private sectors who

participated directly in these meetings was 15 in Chad, 30 in Mali, 20 in Senegal and 5 in Niger.

Although it is too early to discern what effect these studies and the ensuing debates will have on policy, there is evidence that policymakers are becoming increasingly aware of and concerned with important policy issues in several areas. Chief among these is the pricing of cash crops.

### KEY FINDINGS AND IMPACTS:

#### *Cash Crops*

*Cotton:* Along with the 64% increase in world cotton price, the 50% devaluation of the CFA franc resulted in a 228% increase in the nominal world price, expressed in CFAF between January 1994 (when the devaluation occurred) and May 1995. Farm prices of cotton were set for the 1993/94 season prior to devaluation, and hence showed little increase in the year following the devaluation (Table 1). With inflation running at 25 to 35% in these countries in 1994, and production costs increasing by 40%, real incomes of cotton producers fell sharply in 1994. By 1994/95, some of the price increases began to be passed through to farmers. Nonetheless, the farmers' share of the world price fell dramatically after devaluation in all four countries, from around 50% to 25% in 1994. (For comparison, U.S. cotton farmers received 63% of the world price in 1992/93.) By 1996, the Sahelian farmers' share of the world price had recovered to between 29 and 40% (Table 2).



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The transmission of devaluation-induced price incentives from the world market to West African Sahelian producers has been impeded by the price setting mechanism for cotton, which is heavily dominated by the governments via the national cotton parastatals (CMDT in Mali, Coton-Tchad in Chad, SODEFITEX in Senegal and Société Cotonnière in Niger). A critical policy question is how these parastatals and governments will use the gains they are reaping from the devaluation--i.e., whether they will invest them in a way that will increase productivity and incomes throughout the subsector (e.g., through developing improved varieties and modernizing textile plants).

*Peanuts:* The same phenomenon of weak pass-through of prices to farmers applies to peanuts in Senegal, where prices are set by SONACOS, a peanut marketing parastatal. Although the nominal farm price rose with devaluation, relative to 1993, the farmers' *share* of the world price declined by 63% in 1994 and 54% in 1995.

The domestic supply response to these stagnant or falling real prices in Senegal is striking. Cotton area and output decreased from 1993 levels by 20% in 1994 and 23% in 1995. Peanut production increased modestly, but in an environmentally unsustainable way. The modest increases in peanut production are due only to better rainfall, an increase in the area planted, and a significant increase in planting density--a technique that increases the rate of land degradation and loss of soil fertility considerably. Moreover, the increase in area of peanuts cultivated was achieved at the expense of food crops (millet and maize particularly), leading to a decrease in food consumption by peanut-producing households.

For traditional export crops still under strong state control, the price-setting mechanisms have adversely affected investment in agricultural inputs (especially fertilizers) and equipment because these pricing mechanisms have impeded the generation of increased farm income. For instance, the bulk of animal traction equipment in Senegal is at least 15-years old; however, the ability to replace this equipment has decreased due to sharp increases in equipment prices relative to low and declining real farm income as well as the failure of agricultural credit institutions. It thus appears that, in spite of the large increase in the export price of peanuts (when expressed in F.CFA), no significant investment is

taking place in Senegal's Peanut Basin to generate and sustain gains in agricultural productivity and competitiveness (Diagana and Kelly).

Debate on these findings has led to the following recommendations by the participants in the national round-table meetings described earlier:

*In Chad:* The workshop participants recommended further study of the option of privatizing the cotton company. More immediately, participants suggested that the price-setting mechanism be revised to guarantee full participation of all cotton subsector actors, especially farmers, in the price negotiation.

*In Senegal:* The participants recommended that access to and profitability of fertilizers be improved through greater liberalization of agricultural input and output markets, the reduction of administrative costs and taxes that increase marketing costs, and research to develop more appropriate/affordable types/formula of fertilizers.

*In both Chad and Senegal:* The outdated statistical base of consumer price indices was acknowledged. Senegal has already taken a step forward in improving this database by creating a working group of professionals at ISRA and CREA (University of Dakar) that is charged with designing an action plan for improving the quality and availability of economic data and information in the multi-institutional system setting.

### **Food Crops**

*Rice:* Research indicated that a large proportion of the higher domestic prices of rice brought about by the devaluation was quickly passed back to farmers in the *Office du Niger*, Mali's largest irrigated rice zone, because of the competitiveness of the rice marketing system. However, the combination of rice exports from Mali to neighboring countries (especially Burkina Faso), which were now profitable because of the devaluation, and the maintenance of high pre-devaluation levels of import taxes on rice, resulted in reduced supplies and higher prices of rice on Malian markets during 1994/95. In order to reduce the pressure on soaring consumer prices, the Malian government decided in early 1995 to reduce import taxes on rice from 49% to 11%. Some policy makers feared that this would undermine local production incentives. Analysis



by the Malian market information system (*SIM*) and INSAH/PRISAS showed that even with the tax reduction, irrigated rice production in Mali's *Office du Niger* zone remained highly profitable. In 1996, the government further reduced the import tax to 6%.

In contrast to the experience in Mali, Senegal initially protected its consumers from the full impact of the devaluation by fixing producer prices, thereby depressing net farm income from rice. Farmers have responded by shifting increasingly to horticultural crops in the irrigated perimeters of the Senegal River. Based partly on evidence from the studies' findings, the Government of Senegal has initiated policy changes to allow consumer prices to reflect increases in the costs of imported inputs and commodities. In July 1995, the Senegalese administration put an end to producer price fixing for rice.

*Maize:* A pilot study of the opportunities and constraints in the maize subsector in Mali was conducted by IER-MSU with contributions from the PRISAS/INSAH regional project with regard to scientific, technical and financial support. This study recommended, as a measure accompanying the devaluation of the CFA franc, a 5% substitution of maize flour for wheat in bread in order to increase demand for maize and reduce imports of wheat. In line with this recommendation, the bread-making industry agreed to produce and test bread made of 85% wheat flour and 15% maize flour for one month (March 1996) on the Bamako market. Moreover, the maize-subsector pilot study is frequently cited as a basic reference by policymakers in debates on cereals policies and by the Malian national agricultural research system in strategic planning exercises. In addition, the food technology unit of the national agricultural research institute (IER) has adopted the approach used in the pilot maize-subsector study for its applied research to develop processed food products that add value to domestic agricultural commodities and meet consumer preferences.

### **Agricultural Transformation**

In recognition of its past and current contributions to policy analysis and debate, the PRISAS/INSAH regional project has been asked to produce thematic notes which will feed into the national and sub-regional debates aimed at devising an action plan for structural trans-

formation of agriculture in the Sahel. These notes will focus on key issues of the debate including: (1) sectoral linkages between agriculture and the rest of the economy, (2) reconciling structural adjustment programs with sustainable agricultural growth objectives, and (3) strategies for financing agriculture and increasing rural incomes.

### **Health and Education**

In 1995, INSAH/PRISAS researchers, in conjunction with two Malian experts, conducted two case studies on the impact of the CFA franc devaluation on health and education in Mali. The studies focused on cost-induced changes in people's access and adjustment to health and education. The results were presented at a WHO-UNESCO conference in Geneva on these themes. As a consequence, UNESCO submitted a proposal seeking PRISAS/INSAH support to develop training aimed at developing local capacity for analyzing the impact of policies and institutions on education and health in West Africa.

### **Gender Issues**

Specific work has yet to be undertaken on gender issues. However, work pertaining to the topic is being designed and will be carried out in the near future. Work in this area includes:

- A study of the impact of policy reforms and structural adjustment on the role and resources of women in ensuring rural household food security in Mali;
- An analysis of the effects of the CFA franc devaluation on intra-household food consumption patterns in urban Côte d'Ivoire, with disaggregation of the impacts and adjustment by gender; and
- Country studies of the impact of the devaluation on investment, productivity and competitiveness of selected food and agricultural commodity subsectors, using approaches and methods that allow disaggregation by gender.



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**Table 1**  
**Evolution of Nominal Farm Prices for Cotton,**  
**1992/93 - 1995/96 (CFA F/kg)**  
*(Figures in parentheses indicate % change from*  
*previous year)*

|                | Mali        |              | Niger       | Senegal     | Chad        |
|----------------|-------------|--------------|-------------|-------------|-------------|
|                | a           | b            |             |             |             |
| <b>1992/93</b> | 85          | 85           | 75          | 100         | 77          |
| <b>1993/94</b> | 85<br>(0)   | 97.5<br>(15) | 100<br>(33) | 110<br>(10) | 89<br>(16)  |
| <b>1994/95</b> | 125<br>(47) | 150<br>(54)  | 139<br>(39) | 150<br>(36) | 120<br>(35) |
| <b>1995/96</b> | 125<br>(0)  | 155<br>(3)   | 164<br>(18) | 170<br>(13) | 120<br>(0)  |

a, b: Under the contract-plan governing cotton marketing in Mali, in addition to an initial payment for their cotton (noted in column a), farmers receive an additional payment, similar to a patronage rebate in a cooperative. The level of the rebate depends on the profitability of the cotton organization, CMDT. The figure in column b represents the sum of the initial payment and the rebate.

**Table 2**  
**Farmers' Share of World Price of Cotton, 1989/93-**  
**1995/96 (Farm Price/World Price)**

| Farm Price/ FOB World Price* | Mali <sup>#</sup> | Niger | Senegal | Chad |
|------------------------------|-------------------|-------|---------|------|
| <b>Average, 1989-93</b>      | 0.50              | 0.52  | 0.46    | 0.49 |
| <b>1994</b>                  | 0.25              | 0.26  | 0.28    | 0.23 |
| <b>1995</b>                  | 0.35              | 0.32  | 0.35    | 0.28 |
| <b>1996</b>                  | 0.38              | 0.42  | 0.40    | 0.29 |

\* Both prices expressed in fiber equivalent.

<sup>#</sup> Mali farm price is before farmer rebate. See Table 1 note.

For more information on cash crops, see:

Tefft, James. 1996. *Comment profiter de l'aubaine cotonnière.* Politique d'Actualité: PRISAS Informations Bulletin No. 96-02. Bamako: PRISAS.

Diagana, Bocar, and Valerie Kelly. 1996. *Will the CFA Franc Devaluation Enhance Sustainable Agricultural Intensification in the Senegalese Peanut Basin?* MSU Policy Synthesis No. 9. East Lansing: Michigan State University.

The research summarized here was carried out under the USAID-Michigan State University (MSU) Food Security II Cooperative Agreement, through MSU's collaborative program with the Institut du Sahel (INSAH) on regional food security issues in the Sahel (PRISAS program). Funding was provided by USAID's Africa Bureau, Office of West African Affairs, Sahel Regional Program. The views expressed in this document are exclusively those of the authors.

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