



UNITED NATIONS
UNIVERSITY

UNU-WIDER

World Institute for Development
Economics Research

WIDER Working Paper No. 2013/015

Personalistic policy-making in a vibrant democracy

Senegal's fragmented response to the 2007/08 food price crisis

Danielle Resnick*

February 2013

Abstract

Since independence, Senegal has been highly reliant on international markets to meet its food needs, and this tendency has only increased with rapid levels of urbanization in recent decades. Poor domestic cereal harvests prior to 2007 exacerbated this import-dependence during a time of high global food prices, resulting in the cost of rice increasing by more than 100 per cent between January 2007 and September 2008. At various points of time during this period, the government responded by suspending customs duties and value added taxes, providing consumer subsidies and other modes of social protection, and launching a high-profile agricultural initiative. The timing, nature, and implementation of these interventions hindered their ability to more effectively tackle the crisis. This paper argues that the policies .../

Keywords: democracy, food policy, food crisis, political economy, Senegal

Copyright © UNU-WIDER 2013

*UNU-WIDER, email: resnick@wider.unu.edu

This study has been prepared within the UNU-WIDER project 'Political Economy of Food Price Policy' directed by Per Pinstrup-Andersen.

UNU-WIDER gratefully acknowledges the financial contributions to the research programme from the governments of Denmark, Finland, Sweden, and the United Kingdom.

This publication was supported by an agreement with Cornell University Division of Nutritional Sciences under Subagreement No. 60891-9461.

ISSN 1798-7237

ISBN 978-92-9230-592-5



JEL classification: N47, O20, Q18

which emerged reflected the confluence of a strong, diverse civil society placing disparate pressures on a government increasingly centralized around the personality and populist impulses of the former president, Abdoulaye Wade. Consequently, many of the policies were short-term and reactionary, insufficiently targeted, and generated a high level of distrust between consumers and traders. Given that Senegal still remains vulnerable to future food price crises, learning from these policy mistakes should be a key priority for the new government of president Macky Sall.

Acknowledgements

I am very grateful to Mamadou Dansokho at the Consortium for Economic and Social Research in Dakar for providing data and other helpful assistance for this study.

The World Institute for Development Economics Research (WIDER) was established by the United Nations University (UNU) as its first research and training centre and started work in Helsinki, Finland in 1985. The Institute undertakes applied research and policy analysis on structural changes affecting the developing and transitional economies, provides a forum for the advocacy of policies leading to robust, equitable and environmentally sustainable growth, and promotes capacity strengthening and training in the field of economic and social policy making. Work is carried out by staff researchers and visiting scholars in Helsinki and through networks of collaborating scholars and institutions around the world.

www.wider.unu.edu

publications@wider.unu.edu

UNU World Institute for Development Economics Research (UNU-WIDER)
Katajanokanlaituri 6 B, 00160 Helsinki, Finland

Typescript prepared by Lisa Winkler at UNU-WIDER.

The views expressed in this publication are those of the author(s). Publication does not imply endorsement by the Institute or the United Nations University, nor by the programme/project sponsors, of any of the views expressed.

1 Introduction

In mid-2008, one of Africa's most stable democracies had descended into a tense period of economic depression and growing social discontent. The sentiments of one taxi driver, who noted that 'If things continue like this, we'll have to eat sand,' captured the growing anxiety of many Senegalese as they watched the price of rice continue to skyrocket.¹ Between January 2007 and September 2008, the consumer price of imported Thai A1 rice, which is the country's main food staple, increased by more than 100 per cent in the capital of Dakar. The rise in the price of rice and other key commodities resulted in a level of inflation not seen since the country was forced to devalue its currency, the CFA franc, in 1994. Even compared to its relatively poor neighbours, Senegal was one of the worst affected by the 2007/08 global food price crisis, with food prices 24 per cent higher than the African average (Ndione 2008).

Senegal's historic dependence on external markets to supply its food needs, coupled with two seasons of poor domestic cereals production, made it especially vulnerable to global food price rises. While the high level of price transmission from the international to the domestic market impacted the rice sector most severely, other affected commodities included wheat and milk. Yet, there were a variety of long-term structural factors that caused Senegal to be so vulnerable. These included the lack of a visionary agricultural strategy for promoting greater domestic production and commercialization of local goods as well as the country's high level of urbanization and the longstanding preference of urbanites for imported food.

The government's initial response to the crisis, which became apparent in the beginning of 2007, was slow and its ultimate array of interventions was incredibly diverse. After first suspending custom duties and value added taxes (VAT) in July 2007, which failed to halt the rising costs, the government in turn provided consumer subsidies in subsequent months. The subsidies were accompanied by a diverse array of social protection schemes and the launch of a high-profile agricultural initiative known as the Grand Agricultural Offensive for Food and Abundance (GOANA). The cumulative impact of these interventions in protecting the most vulnerable was relatively small, while the burden on the public finances of this low-income country with few natural resources became extraordinarily heavy.

Why and when did the government choose these particular policies? And what key factors limited their ultimate success? I argue that the policies emerged from the confluence of a strong, diverse civil society placing disparate pressures on a government increasingly centralized around the personality and populist impulses of the former president Abdoulaye Wade. Having ascended to the presidency with the support of urbanites, particularly Dakar's poor, Wade was loath to alienate this constituency. The decision to implement, and then often to rescind, short-term policies reflected the variable pressures exerted by different groups. Both high levels of ministerial instability under Wade and the desire to please different interest groups resulted in inadequate targeting and implementation of policy measures as well as a lack of long-term planning to weather the crisis. In the face of competing demands by various stakeholders, schizophrenic policy outcomes emerged.

To elaborate on these points in greater detail, the paper first discusses the existing agricultural context in Senegal and the historical reasons for the country's rice import dependence. Then, I review the country's various agricultural and trade policies under the regimes of Leopold

¹ Cited in Sylla (2008: A11).

Senghor and Abdou Diouf before discussing the status of agriculture from 2000–07 under the government of Abdoulaye Wade and his party, the Senegalese Democratic Party (PDS). Subsequently, the causes and manifestations of the crisis are described during the 2007–08 period for four commodities: rice, wheat, bread, and milk powder. In turn, the response of Wade’s government to the crisis, and the impact of certain policy interventions are analysed. The paper concludes by highlighting that the government’s behaviour during 2007–08 had important implications for confronting new threats to food insecurity in the Sahel that emerged in early 2012.

2 Contextualizing Senegal’s agricultural sector

Agriculture has long represented an important sector for the Senegalese economy. Yet, due to a series of relatively ineffectual agricultural policies, the composition of the sector and its contribution to trade has changed substantially since the country achieved independence in 1960. In turn, this has led to a growing demographic shift from the countryside to urban areas, especially to the capital of Dakar, with attendant implications for the country’s dependence on food imports and its vulnerability to international price shifts.

Today, approximately 60 per cent of the population still lives in rural areas and agriculture remains their primary means of livelihood. Yet, only approximately 19 per cent of Senegal’s land area is arable, and it is divided across six main agro-ecological zones: the River Valley along the northern swathe of the country along the border with Mauritania, the *Niayes*² located between Dakar and the city of St. Louis, the Peanut Bassin, the forest-pastoral area, eastern Senegal, and Casamance along the southern border with Guinea-Bissau. Arable land though remains disproportionately concentrated in the Peanut Bassin and because only 2 per cent of the land is irrigated, much of Senegal’s agricultural activity is highly exposed to changing weather conditions (Faye et al. 2007).

Across these zones, the country produces a relatively diverse range of crops, including peanuts, rice, sorghum, maize, cotton, manioc, and sweet potato. Given the country’s long coastline, fish production offers a major source of protein while the abundance of cattle, particularly goats, has contributed to the growth of the milk and dairy sector. Increasingly, the horticultural sector is also gaining prominence, with the production of French beans, mangoes, cherry tomatoes, melons, and hibiscus flower, which is used to make the national drink known as bissap.

Yet, despite this diversity in agricultural goods, Senegal imports about 60 per cent of its food (Ba et al. 2009). Agricultural products represent on average 11 per cent of Senegal’s imports and are dominated by rice, which constitutes about 5 per cent of total imports and almost 70 per cent of total cereal imports (Cabral, Cissé, and Diagne 2009). The reasons for this high food import dependence are due to the historic promotion of peanuts, key structural constraints, a series of ineffective agricultural reforms, and rapid urbanization.

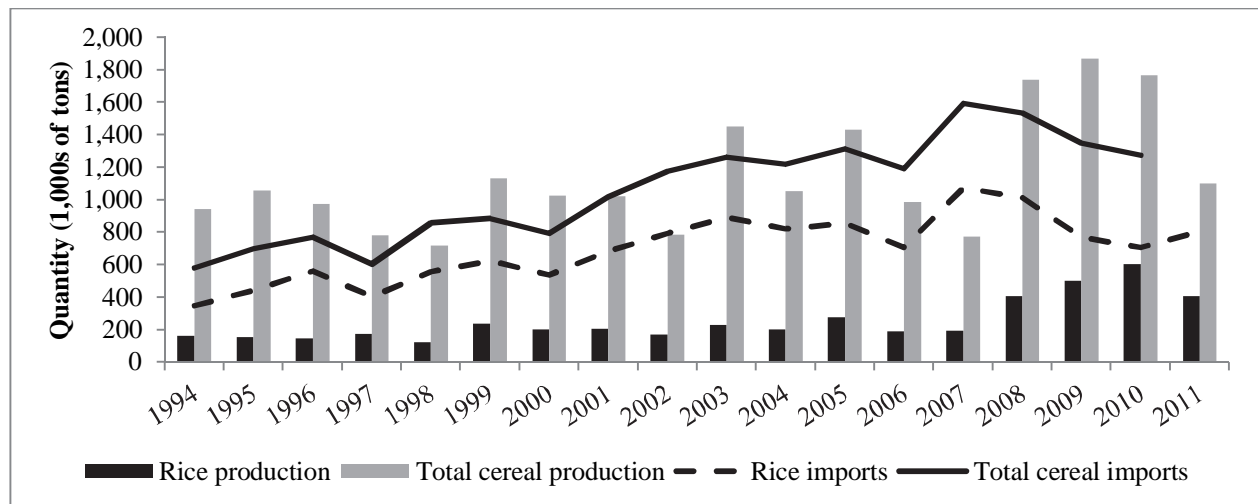
2.1 Agricultural and trade policies in historical perspective

During the colonial period, France encouraged rural peasants to produce peanuts as export crops while importing broken rice from French-controlled Indo-China in order to provide a

² *Niayes* is a Wolof (the most widely spoken language in Senegal) word that literally is translated as the ‘depression between sand dunes.’

cheap source of food for farmers and labourers. Between 1935 and 1939, Senegal imported an average of 75,000 tons per year (see Eicher and Baker 1992). By 2006, the country imported approximately 700,000 tons of broken rice, predominantly from Thailand and Vietnam (see Figure 1).

Figure 1: Trajectory of cereals production and trade (1994–2009)



Source: FAO FAOSTAT database; Republic of Senegal (2012a, 2012b).

When Senegal achieved independence from France in 1960, it not only maintained this emphasis on export-oriented peanut production, but also adopted a *dirigiste* approach to the economy. The government, led by Leopold Sédar Senghor and his Socialist Party, controlled the price of approximately 170 products and services in order to ensure that consumers received quality products at fair and reasonable prices (Diouf 2011). Yet, in the mid-1960s, Senegal lost its preferential access to the French market for peanut oil. This, combined with the drought that plagued the Sahel region during the early 1970s, resulted in a crisis for the agricultural sector in particular and for the economy more broadly. As a consequence of these and other factors, Senegal ultimately agreed to a structural adjustment programme with the International Monetary Fund in 1979.

Under Senghor's successor, Abdou Diouf, Senegal further pursued the liberalization of the agricultural sector under the New Agricultural Policy (NPA), launched in 1984. It involved the removal of export taxes, a reduction in subsidized inputs and the ultimate elimination of fertilizer subsidies, and a gradual reduction in price controls (Faye et al. 2007). Overall, the NPA generally was viewed as a failed initiative for spurring agricultural production, mostly because it required the existence of a private sector to provide necessary inputs and to promote the commercialization of local agriculture. Moreover, higher competition without supporting institutions aggravated the crisis and consequently, agricultural production grew at only 1 per cent annually between 1980 and 1988 even as population growth was approximately 2 per cent (Ba et al. 2009). Growing rural poverty prompted mass migration from the countryside to urban areas, particularly to Dakar.

Along with other members of the CFA zone, Senegal also devalued its currency in January 1994 by 50 per cent, meaning that the cost of imports purchased on the international market with the CFA franc increased by 100 per cent.³ While the devaluation temporarily reduced

³ The CFA was devalued from a ratio of 50 CFA francs to 1 French franc to a ratio of 100 CFA francs to 1 French franc. By halving the currency, imports became twice as expensive.

the country's import dependence, the domestic agricultural sector did not experience a large boost in exports. This was partially a result of already low agricultural production as well as the increased cost of imported inputs. Due to declines in competitiveness, many rice producers diversified into other crops. An escalation of civil conflict during the mid-1990s in Casamance, which is one of the main rice-producing areas, further hurt local production.⁴ At the same time, the devaluation concentrated the market structure for imported rice; while there were 43 importers in 1996, there were only seven importers in 2000, four of which controlled 63 per cent of the total volume of imported rice (Ba et al. 2009).

Based on the failures of the NPA and spurred by not only the impact of the devaluation but also Senegal's the establishment of the West African Economic and Monetary Union (UEMOA) in 1994, the government adopted another programme known as the Structural Adjustment Programme for the Agricultural Sector (PASA).⁵ Among other things, the PASA aimed to further liberalize the distribution and price of all agricultural products, privatize the rice sector and eliminate subsidies to the production of local rice, and progressively reduce tariffs with the goal of ultimately adopting a regime of general custom tariffs under UEMOA (IIED 2002).

With the introduction of Law 94–63 in 1994, the prices of goods and services were also to be predominantly determined by a competitive market. But, the following year, the government issued Decree 95–77 to retain some control over the market, for economic and social reasons during periods of exceptional circumstances, through the use of two price regimes: (1) compulsory price fixing, which involves fixing prices at different stages of commerce or regulating the legal profit margin accorded to diverse intermediaries of commerce, and (2) homologation, which involves consultation between the Ministry of Commerce and a multi-stakeholder Economic and Social Council before a decision is taken by the relevant authorities (Diouf 2011). In other words, homologation is a typical price setting mechanism but one that requires the government to consult with relevant stakeholders before taking decisive action and choosing a price. The latter policy was intended to prevent market concentration in sectors important for national welfare. Today, only bread and pharmaceuticals fall under the homologation regime.

By the end of the 1990s, the cumulative impact of these reforms was mixed. On the one hand, the government's slow extrication from the agricultural and other sectors most likely averted a macro-economic crisis. On the other hand, production was only marginally higher while the availability of key inputs declined substantially (see Diagne et al. 2006). Most importantly, the ranks of Senegal's urban population had swelled, growing from 2.8 to 3.8 million people between 1990 to 2000,⁶ and these urbanites retained a strong preference for imported foodstuffs over local goods.

⁴ The civil war in the Casamance began in 1982 when then-President Leopold Senghor reneged on a promise to make the region independent since the people of the Casamance are ethnically- and religiously-distinct from the rest of the Senegalese population. Consequently, the Movement of Democratic Forces of Casamance launched a secessionist rebellion, which has now become a low level conflict.

⁵ UEMOA consists of eight francophone, African countries: Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, and Togo.

⁶ See the World Urbanization Prospects 2011 Revision: <http://esa.un.org/unpd/wup/index.htm>

3 Policy and politics during Wade's first term (2000–07)

Senegal's gradual economic liberalization occurred in parallel with a number of political reforms that paved the way for multi-party democracy in the mid-1990s.⁷ These reforms culminated with the victory of Abdoulaye Wade, leader of the PDS, in the 2000 presidential elections and ended 40 years of PS rule. Much of Wade's initial support came from the country's urban poor who labour in the informal sector. Retaining the support of this constituency while also trying to expand his appeal to rural voters partially explains Wade's erratic approach to the agricultural sector.

Early on in Wade's tenure, Senegal adopted the Common External Tariff (CET) imposed by its membership within UEMOA. Within UEMOA, customs duties on intra-regional trade were gradually eliminated and the CET was established in 2000 in order to harmonize member countries' customs duties on third-country imports. The CET required imposing a 10 per cent levy on cereal imports from countries outside of the UEMOA area. In many ways, this increased the scope for greater rice imports since the previous customs duty was 20 per cent (Baris 2009). At the same time, UEMOA allows every member state to choose seven categories of products that are exempt from VAT specifically because they are consumed in large quantities by the poor. In Senegal, the government chose to exempt groundnuts, cereals/manioc, fresh vegetables, fresh meat, fresh and frozen fish, eggs, and potatoes and onions (see IMF 2008).

Besides regional trade issues, Wade attempted to put his own mark on agricultural issues. In fact, starting in 2005, Senegal increased the share of government expenditure on agriculture from 4.4 to 14.1 per cent (see Fan, Omilola, and Lambert 2009). This exceeded the target advanced under the Comprehensive Africa Agriculture Development Programme (CAADP) whereby African governments committed to spending at least 10 per cent of their budgets on agriculture.⁸ But, instead of having a consolidated vision for the agricultural sector, much of Wade's tenure was characterized by a variety of scattered interventions that lacked long-term planning. For instance, in 2003, Wade announced a 'plan for maize' that envisioned Senegalese farmers producing one million tons annually. Yet, the plan was announced right before the growing season, with little attention to the seed, fertilizer, or land requirements to achieve this goal (see Antil 2010). This was followed by a 'plan for manioc,' 'plan for sesame,' and then a 'plan for bissap'. None of these initiatives were very successful, and they involved minimal engagement with other stakeholders.

The one exception was the Agricultural, Forestry, and Livestock Act (LOASP), which was intended to provide a framework for reducing poverty and diminishing inequalities between rural and urban populations over a 20-year time horizon. To do so, the LOASP primarily was concerned with increasing agricultural exports and generating incentives for private investment in rural areas (Stads and Sène 2011). After drafting the initial version of the LOASP, the Ministry of Agriculture's planning, analysis, and statistics directorate (DAPS)

⁷ As of 1976, Senghor paved the way for political liberalization by allowing two additional parties besides the PS to compete in elections. However, it was not until significant constitutional changes in the early 1990s under Diouf when restrictions on multi-party competition were lifted.

⁸ CAADP is an initiative of the New Partnership for Africa's Development that aims to boost agricultural productivity in Africa.

interacted closely with other government agencies and with the National Council of Rural Concertation and Cooperation (CNCR) in order to refine the LOASP.⁹

Established in 1993, CNCR is a federation of 28 small-scale producers' associations, including those belonging to the horticultural, livestock, fish, forestry, and agricultural cooperatives unions, as well as the federation of non-governmental organizations and a federation that promotes female producers. This broad representation has allowed it to become the main civil society organization that interacts with the government on issues of agricultural policy. As such, CNCR organized almost 50 consultative meetings throughout the country to discuss an existing draft of the LOASP. Most importantly, LOASP was intended to address one of the major disincentives to agricultural production in Senegal, which is the fact that since 1964, a majority of land belongs to the state. For instance, Articles 22 and 23 of the LOASP promoted greater land rights for rural communities, the option of privatizing and consolidating land to favour the creation of more viable landholdings, and the potential for using land as collateral to obtain loans (Djiré 2009).

In May 2004, the National Assembly unanimously approved the LOASP. However, after legislative approval, the president must issue an application decree for a law to be implemented, and this did not occur until mid-2007. A suspected reason for the delay was that the LOASP initially emphasized agribusiness and the private sector over family farming and therefore President Wade was reluctant to offend smallholder farmers before the February 2007 elections (see Resnick and Birner 2010).

Another agricultural initiative emerged in November 2006 in the wake of increasingly frequent attempts by young, unemployed Senegalese men to emigrate to Europe via fragile fishing boats. A series of high-profile deportations by the main destination countries, Spain and Italy, led to widespread anger in the months preceding the 2007 elections. Wade therefore responded by launching the Return to Agriculture programme (REVA), which aimed to integrate the youth into pilot farming centres of excellence in order to combat unemployment and thereby dissuade emigration through the creation of 300,000 new rural jobs (see Antil 2010).

None of these fragmented initiatives amounted to a clear and coherent agricultural and rural development strategy. This was both a result of, and exacerbated by, the institutional landscape. Due to the increasing centralization of power around the presidency under Wade, he frequently shifted his cabinet to prevent the emergence of political competitors or to reflect a new perspective on how his government should be organized (see Mbow 2008). For instance, the portfolio of the Ministry of Agriculture was consistently changing during Wade's first seven years in office. It shifted from being responsible for agriculture and livestock under Pape Diouf from 2000 until 2003, to agriculture and water under Habib Sy from 2003 until 2006, and then to agriculture, water, and food security under Farba Senghor in 2006. This persistent shift in ministers typically is accompanied by a shift of other high level staff, thereby undermining continuity in policy. Furthermore, these circumstances prove highly problematic for the vast donor community in the country concerned with issues of rural development. As noted by an agricultural specialist at the United States Agency for International Development (USAID), 'the fundamental problem for USAID is that there is no interlocutor to discuss agricultural strategy' (interview with Badiane 2012). Likewise, the

⁹ DAPS was established within the Ministry of Agriculture in 2001 in order to increase the latter's capacity for policy design and harmonization with public and private sector institutions.

director of the Food and Agricultural Office (FAO) in Senegal noted ‘There is a lot of instability within the agricultural ministry since 2002, and there have been at least seven ministers over the last six years. These changes are often accompanied by a change in the directors as well and this makes our communication less efficient, and this is honestly a problem’ (interview with Ouattara 2012).

A similar dynamic characterized policy in other important sectors, such as social protection. Between 2001 and 2007, the main ministry in charge of social protection had its main mandate and portfolio of operations changed seven times, shifting from the Ministry of Social Development to the Ministry of Family, National Solidarity, Female Enterprise, and Micro-Finance by the end of 2007. Not surprisingly, this institutional instability has prevented the Department of Social Assistance, which has been housed in these various ministries, from implementing durable social protection programs (Samson and Cherrier 2009). At the same time, a number of other ministries, ranging from education, labour, agriculture, and health, are also involved in social protection activities, leading to challenges with coordination.

Historically, Senegal’s social protection regime has been to limited private and public sector workers, who comprise a very small share of the population, with minimal assistance for the most vulnerable groups. In 2005, the government also adopted the National Social Protection Strategy (NSPS) 2005–15 to bolster Pillar 3 on social protection within the second Poverty Reduction Strategy Paper. The NSPS aimed to extend health insurance coverage from 20 to 50 per cent of the population, and to implement a social protection regime to protect those most vulnerable to shocks, particularly those working in the informal sector. Furthermore, there has been little ownership of the NSPS, evidenced by the fact that yearly reviews of the PRSP reveal that this is the component which has the weakest implementation (interview with Pigois 2012).

4 Evolution and manifestations of a crisis

The above context, characterized by weak social protection measures, the lack of an agricultural strategy, continued food import dependence, and high levels of ministerial instability, provided the backdrop to the food price crisis in Senegal, which began in 2007 and continued through 2008. The immediate cause of the crisis was twofold. First, Senegal experienced especially poor agricultural yields during both the 2006/7 and 2007/08 production periods. In 2006/7, this was the result of shortages in seeds and other inputs as well as a late start to the rainy season, which shortened the plant cycle and caused yields to subsequently decline. Consequently, there was a 9 per cent reduction in cultivated area (EIU 2007a), with cereal production in particular negatively affected. Torrential rainfalls in late August and September in the north and center of the country further limited output from the 2007/08 harvest (EIU 2007b). Early indications of the crisis were reported by the FAO in December 2006, which noted that net domestic production could only meet 48 per cent of the country’s grain needs (Fewes Net 2006).

Second, as already noted, Senegal depends heavily on imports to satisfy its food needs, and the crisis in domestic production only increased that need. In turn, high levels of exposure to external markets proved particularly dangerous due to global price increases in 2007 for key commodities that Senegal imports. In fact, food price inflation increased to 7.3 per cent by 2007, compared with 1.4 per cent the previous year (WFP 2008a). This section focuses on four agricultural commodities that were among the most affected by the crisis: rice, milk, wheat flour, and bread.

4.1 Rice

Rice occupies the most central place in Senegalese households, constituting 70 kg of the total 185 kg of cereals that Senegalese consume annually (WFP 2008a). This is particularly true for Senegal's poorest 20 per cent of the population who devote 62 per cent of their expenditures to food. Of those expenditures, 12 per cent are allocated towards purchasing rice, 16.5 per cent are targeted at other cereals, such as millet and sorghum, while the remainder is spent on cooking oil, meat, sugar, tubers, and legumes. By contrast, of those among the richest quintile of the population, only 4 per cent of expenditures are allocated to rice (see Daffé, Cissé, and Diène 2011).

As noted earlier, Senegal remains heavily dependent on imports to meet the demands for rice consumption. This outward orientation has long been driven not only by low levels of domestic production but also by consumer preferences, especially in Senegal's rapidly expanding urban areas. According to Demont and Rizzotto (2012), Senegal can only cover 40 per cent of demand for rice through domestic production. Consequently, Senegal is the second largest importer of rice in Africa and the tenth largest in the world (David-Benz et al. 2010).

A key reason for this is that imported, broken rice cooks faster and requires less cleaning than domestic varieties and therefore, it enables busy urban workers to conserve on both time and scarce cooking oil. As seen in Table 1 below, it is particularly poor urban Senegalese, concentrated in the first quintile of the income distribution, who devote the largest share of their household expenses towards purchasing imported rice. By contrast, rural consumers are much more likely to eat local rice or other domestic cereals, such as millet and sorghum.

Table 1: Share of rice in the consumption expenses of households in Dakar, 2008 (%)

| Product | Quintile 1 | Quintile 2 | Quintile 3 | Quintile 4 | Quintile 5 | Average |
|---------------|------------|------------|------------|------------|------------|---------|
| Imported rice | 8.46 | 7.13 | 6.72 | 4.86 | 3.04 | 5.4 |
| Local rice | 0.04 | 0.04 | 0.26 | 0.04 | 0.12 | 0.11 |

Source: based on Gergely and Baris (2009).

These consumer preferences, combined with the contraction in local rice production starting in 2006 only further exacerbated Senegal's dependence on the international market. In fact, Senegal's rice imports increased from approximately 700,000 tons in 2006 to over one million tons the following year, and the rice import bill increased by 55 billion CFA during the same period (WFP 2008a).¹⁰ Much of this increase in imports came from Thailand and India.¹¹ A portion of the price rise was due to growing transport costs, estimated to have increased from US\$65 to US\$170 per ton between 2004 and 2007 (WFP 2008a).

The small number of rice importers further prevented a more competitive price structure for consumers. In particular, as of 2007, there were only seven wholesale importers, four of

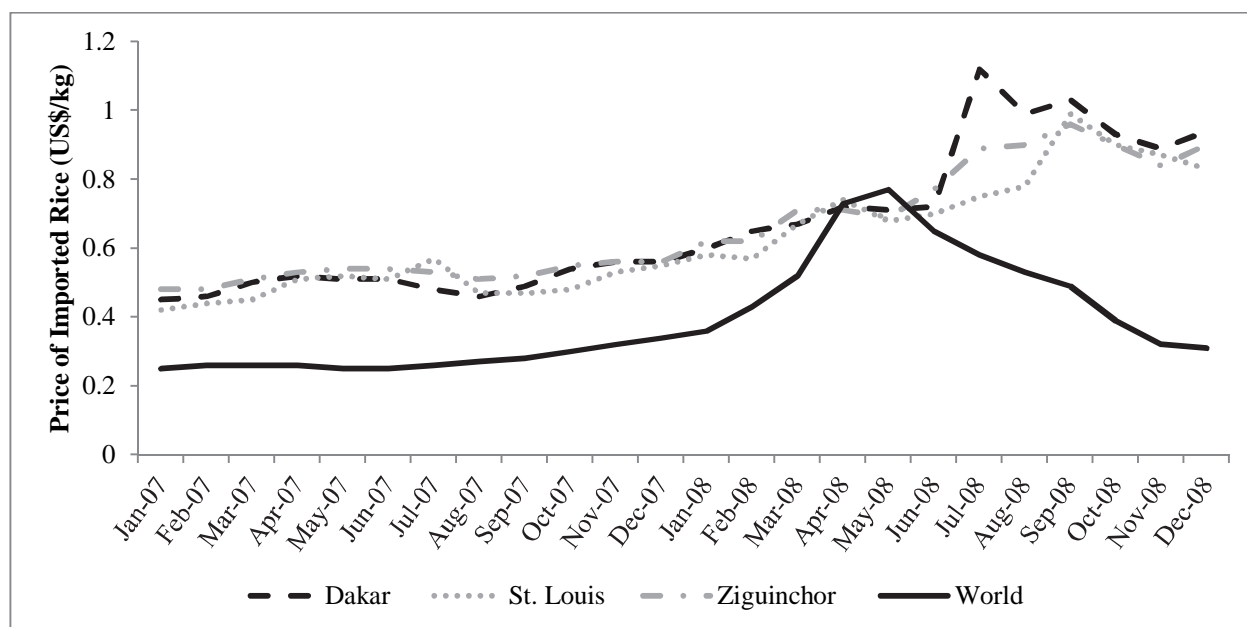
¹⁰ The average US\$/CFA exchange rate during 2007–08 was 1 US\$: 464 CFA.

¹¹ Senegal bought 41 billion CFA and 87 billion CFA of rice from India and Thailand, respectively, in 2007 (OBG 2009).

whom controlled almost 80 per cent of the country’s rice imports.¹² These importers, along with many of the vendors who sell broken rice, belong to the very powerful National Union of Traders and Industrialists of Senegal (UNACOIS). Established in 1990 with the aim of promoting greater economic liberalization under the PS, UNACOIS today includes some of the country’s wealthiest businessmen and traders who possess close links with smaller-scale retailers and street hawkers through a complex web of credit relations and religious ties (see Thiou, Diop, and Boone 1998).

Figure 2 below highlights the relationship between the international price of rice and the nominal retail cost for consumers in different areas of Senegal. Notably, prices in Senegal were rising in parallel with those on the world market until March 2008 when India imposed a ban on exports of non-basmati rice and Vietnam re-imposed a ban on new rice sales. It was not until July 2008 when the huge spike in world prices was reflected in the retail price of imported rice in Senegal. The time-lag was only slightly shorter in Dakar than it was in the local rice production regions of Ziguinchor and St. Louis. After December 2008, the price of imported rice in Dakar fell to an average of 0.80 US\$/kg throughout 2009.

Figure 2: Consumer price trends for imported rice



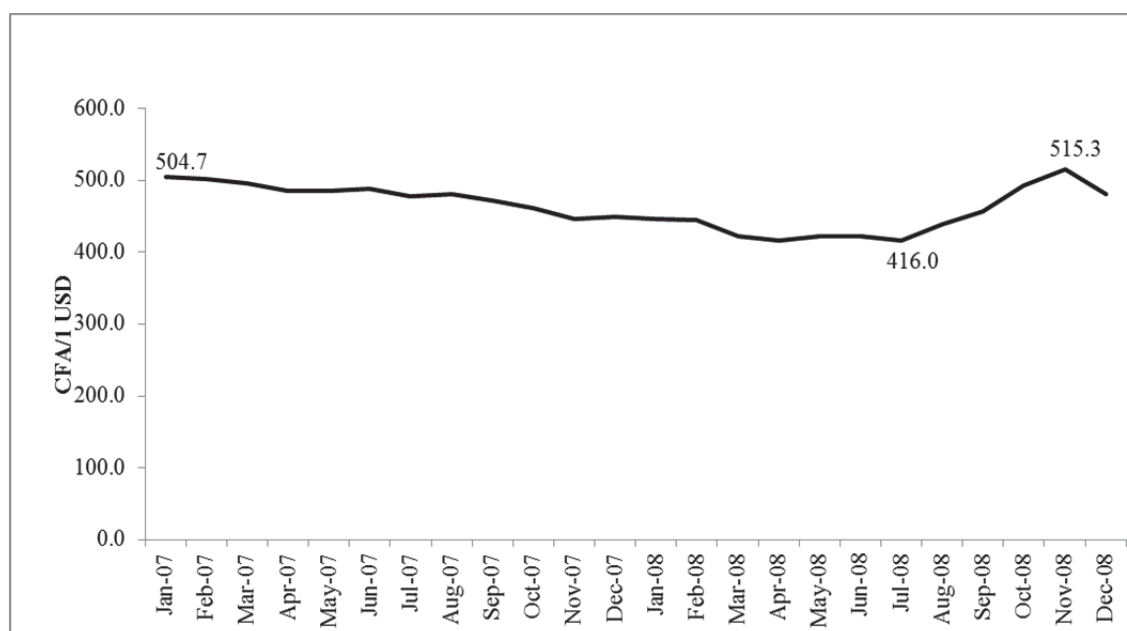
Notes: These are nominal prices for Thai Rice A1.

Source: Calculated from the FAO’s GIEWS Food Price Data and Analysis Tool and monthly bulletins from the Senegalese Commission for Food Security.

Movements in the exchange rate between the CFA and US\$ played less of a role in the initial onset of the crisis. As seen in Figure 3, the CFA was actually appreciating against the US\$ throughout all of 2007 and part of 2008, meaning that the cost of imports should actually have been more affordable. Yet, in conjunction with certain domestic measures discussed below, the gradual depreciation that occurs by July 2008 certainly did not help to contain increasingly large spikes in the retail price of rice at that time.

¹² The seven wholesale importers are Tiger Denrées and Amadou Lo, Safcom - Moustapha Tall, Moustapha Ndiaye, Sencom, Daral Négoce, Contrade, and Bocar Samba Dieye.

Figure 3: CFA/US\$ Monthly exchange rates, 2007–08



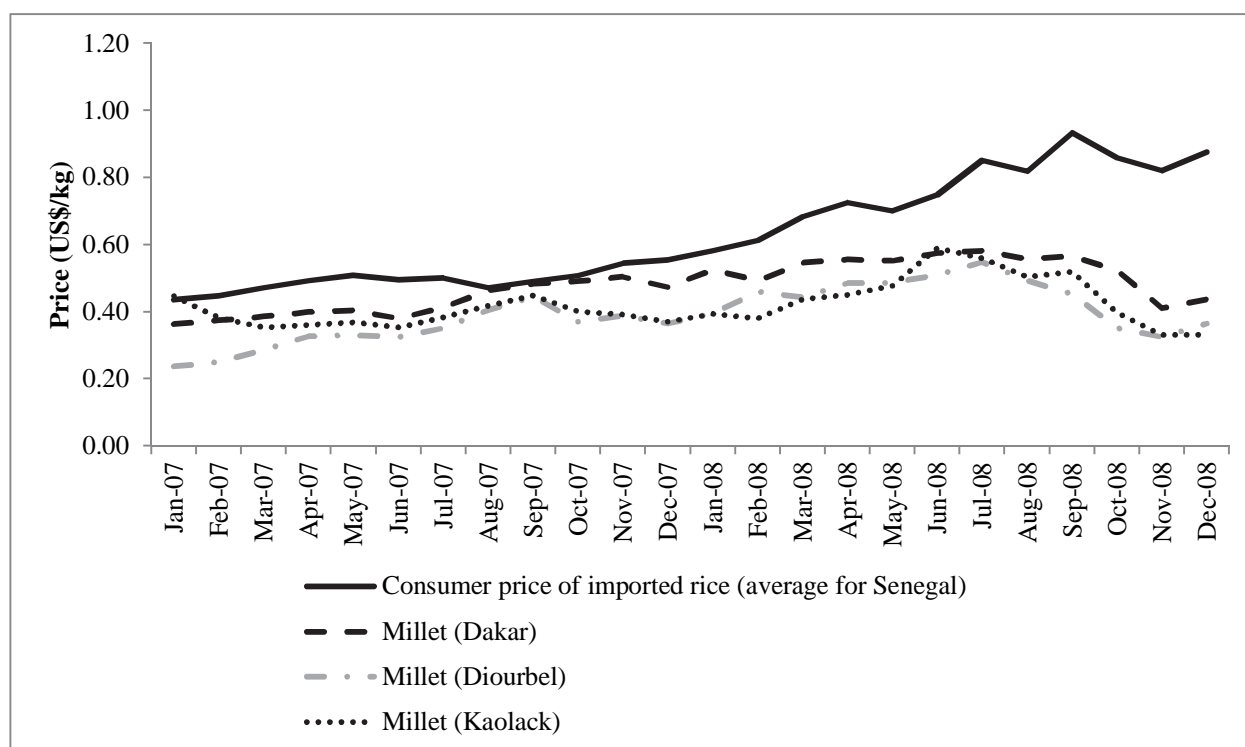
Source: Calculated from IMF International Financial Statistics Database.

A number of studies have highlighted the high level of price transmission for rice between the international and local markets in Senegal (see Aker et al. 2011; David-Benz et al. 2010; Daviron et al. 2008). Similarly, Aker et al. (2011) observe a high correlation between the price of imported rice and that of local rice. While the price of imported rice increased by 106 per cent within Dakar between January 2007 and September 2008, the price of local rice in St. Louis increased by 101 per cent during the same period. The price of millet, which is a domestically-grown cereal that requires little rainfall, experienced a 48 per cent price increase during the same period for the country as a whole.¹³ But, the correlation in prices between millet and imported rice was only 0.35 during the height of the crisis, which ranged from September 2007 until September 2008. Notwithstanding natural variations in prices for millet over the course of the year that coincide with harvest periods, Figure 4 below highlights that the price of millet bore little resemblance to that of imported rice, not only in the main millet-producing regions of Diourbel and Kaolack but also within Dakar. Collectively then, these trends offer some evidence of substitution effects away from imported rice to local rice, particularly for urbanites, but less so from imported rice to millet.¹⁴

¹³ Millet requires much more preparation time and therefore is only consumed by Dakarois, in the form of couscous, in the evenings, during religious festivals, and during the period of Ramadan.

¹⁴ I focus on millet here rather than another cereal, sorghum, because millet constitutes 26 per cent of the annual consumption of cereals by Senegalese. The equivalent figure for sorghum is 7 per cent (see WFP 2011).

Figure 4: Consumer price trends for cereals



Notes: Prices are nominal.

Source: Senegalese Commission on Food Security.

4.2 Powdered milk

Although Senegal's dependence on rice made it particularly vulnerable, a variety of other major consumer products were affected by the crisis. One was milk, especially powdered milk, which is used for yogurts, infant formula, *lait caillé* (fermented milk), butter, biscuits, and other dairy goods. Two-thirds of milk products consumed in Senegal are imported, particularly from the European Union, Argentina, and Australia. Erratic electricity supplies for refrigeration also mean that powdered and UHT, rather than fresh, milk are the main form in which a majority of milk consumption occurs. However, the majority of consumers who buy dairy products and particularly powdered milk are overwhelmingly concentrated in urban areas and, importantly, among wealthier Senegalese households (IMF 2008).

While there is a nascent dairy industry emerging, domestic milk production has been restricted by the poor genetic potential of local breeds (IMF 2010). Moreover, there is relatively little integration between local dairy producers and the domestic dairy processing industry (Ba et al. 2009). A combination of poor production, floods, and drought in these regions, respectively, resulted in a global spike in the price of milk. Between January 2007 and March 2008, the world price for milk powder in US\$/kg increased by almost 67 per cent. In turn, the consumer price in US\$/kg for powdered milk in Dakar increased by 52.6 per cent during the same period.

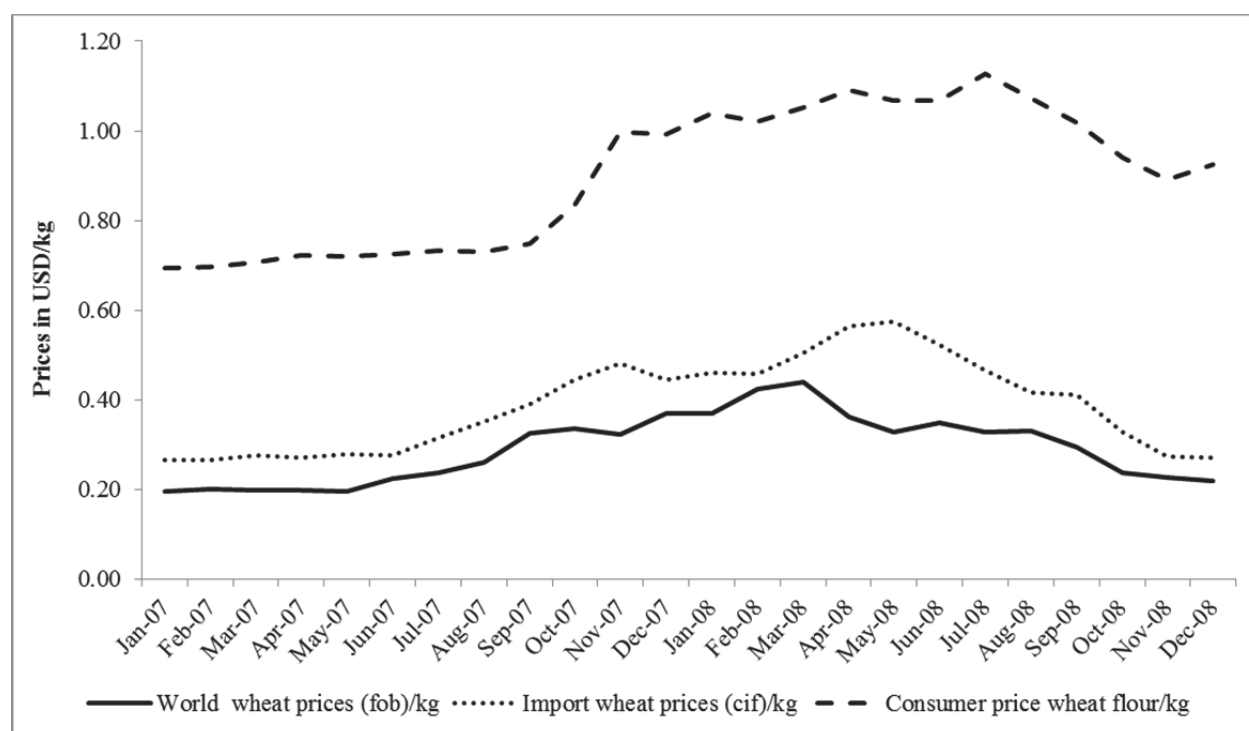
4.3 Wheat flour and bread

Other affected products included wheat and particularly wheat flour, which is used to make bread. A sizeable share of the population consumes bread, which constitutes 4.3 per cent of

total household expenditures allocated towards food consumption (IMF 2008). Urban households, both rich and poor, purchase bread to a much larger extent than their rural counterparts, and consumption levels have actually increased since the 1990s as a result of the growth of the restaurant sector and a growing preference to eat bread at lunch and dinner rather than just for breakfast (Asprodeb 2008). Without a domestic wheat sector and a lower preference by urban Senegalese for bread with domestic food grains, meeting the demands for bread consumption has forced Senegal to rely on imports from predominantly France, Argentina, and the United States.

Like the rice sector, wheat imports are controlled by three main companies: *Grands Moulins de Dakar*, *Nouvelle Minoterie Africaine*, and *Moulins Sentenac*. Yet, unlike rice, the price of bread has long been classified under the homologation price regime. As noted earlier, this means that the price typically is fixed by the Ministry of Commerce with input from the Economic and Social Council.

Figure 5: Price trends for wheat and wheat flour in Senegal

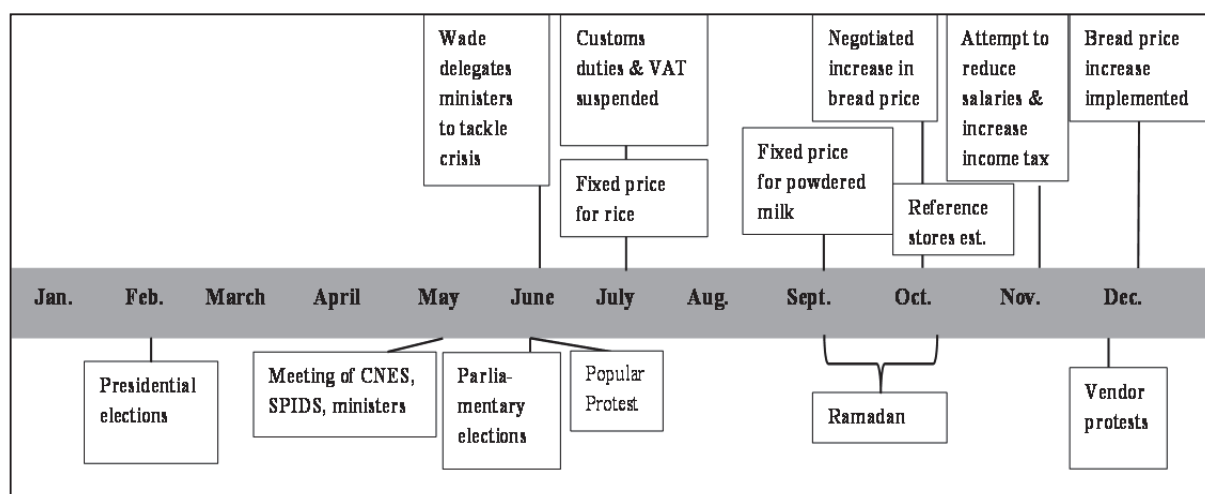


Notes: Prices are nominal.

Sources: Monthly bulletins from the Senegalese Commission for Food Security; World Bank Pink Sheet Commodity Price Data.

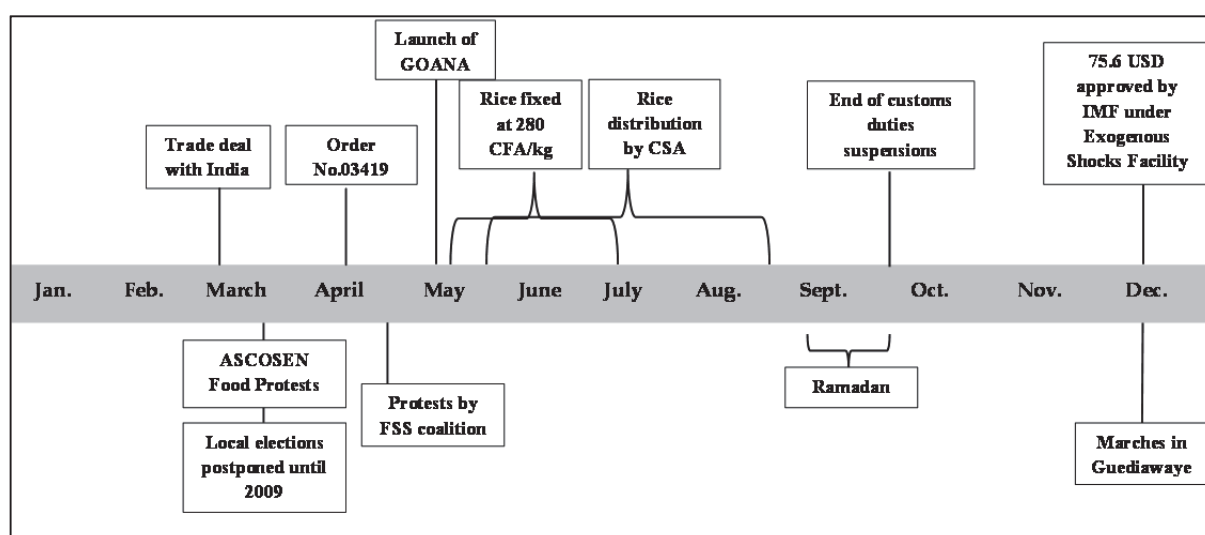
This had important implications in 2006 as the world price of wheat began to increase. For instance, between 2006 and 2007, the quantity of wheat imports increased by 10 per cent even as the equivalent value in CFA increased by 70 per cent. As seen in Figure 5, this in turn caused the import price of wheat to increase. Yet, the consumer price of wheat flour remained relatively flat through mid-2007 as a result of the government's decision to freeze flour prices in November 2006 (Ndiaye 2007a). Likewise, due to homologation, the price of bread remained fixed at 150 CFA until October 2007 when, as discussed in greater detail below, bakers successfully lobbied for an increase to 175 CFA.

Figure 6: Timeline of events, 2007



Source: author's compilation.

Figure 7: Timeline of events, 2008



Source: author's compilation.

5 Government responses to the food crisis

Senegal therefore faced a crisis for a variety of major consumer products, in addition to rising costs for fuel, kerosene, and butane gas, which are critical for cooking and electricity. Yet, the government's response to the crisis initially was quite slow, hindered by the priorities of the February and June 2007 presidential and parliamentary elections, respectively.¹⁵ Indeed, the director of the FAO office in Senegal observed,

¹⁵ Wade was re-elected as president in 2007 with 55 per cent of the vote, with strong levels of support from both rural and urban areas. As a result of a boycott by many key opposition parties, his PDS party also obtained the majority of seats in the 2007 legislative elections.

Six months before the crisis in 2007, the previous [FAO] director tried to attract the attention of the president and his ministers to the fact that there was a looming crisis by showing them our statistics and early warning system. The former director wrote a communiqué noting that the government needed to be careful because a food crisis was looming because we could see that the global food stocks were going down. The government was not very convinced (interview with Ouattara 2012).

Yet, by mid-2007, radio stations increasingly were emphasizing rising food prices and emphasizing the implications of this as the period of Ramadan approached. Due to growing social pressures, the government therefore relied during the subsequent two years on a combination of trade and fiscal measures, social protection policies, and production support to brave the crisis. The broad and variegated level of interventions reflected the influence of various interest groups, who each in turn convinced the government to support their particular cause. Figures 6 and 7 elaborate on the chronology of events and policy decisions over 2007 and 2008, which are then detailed in the subsequent sub-sections.

5.1 Trade and fiscal measures

Some of the initial impetus for the government's response to the food crisis emerged from the National Confederation of Senegalese Employers (CNES) who sent a declaration to the Ministry of Economy and Finance in early 2007 demanding the removal of custom duties and VAT taxes on powdered milk. By May 2007, a meeting of CNES with the Ministry of Finance, the Ministry of Commerce, the Ministry of Livestock, importers, and producers of milk-based products affiliated with the Union of Professionals of Industries and Mines (SPIDS) occurred. Most stakeholders involved in the meeting disagreed with CNES, and subsequent studies by the Ministry of Finance revealed the negative fiscal impact that such measures would have (Dia et al. 2008).

A range of important consumers groups and trade unions organized demonstrations the following month in which they accused traders of benefiting from the price rises and the government of failing to care about consumers. In turn, during a meeting of his ministers later that month, President Wade delegated the Ministry of Commerce to find a way to tackle the food crisis (Dia et al. 2008). In July and August, the Ministry of Economy and Finance subsequently announced the suspension of customs duties of 10 per cent for rice, 5 per cent for wheat, and 5 per cent for powdered milk that it typically implements as part of the CET with UEMOA. At the same time, the 18 per cent VAT under UEMOA were lifted on powdered milk and for all levels of the production chain for bread (IMF 2008).¹⁶ The latter measure was opposed by domestic milk processors and producers who believed that the VAT should be maintained and re-invested into the local dairy sector (Dia et al. 2008).

To compensate for the revenue losses created by these interventions, the government attempted to undergo further fiscal policy changes. Among the most controversial of these included the announcement in early November 2007 to reduce public sector salaries as well as to introduce a progressive tax of between 1 and 30 per cent for both private and public sector salaries. Not surprisingly, this decision was heavily unpopular and ultimately withdrawn. Yet, it motivated many of the country's trade unions and opposition parties to announce a march on 22 November to protest the rising cost of living and to demand higher salaries. The march coincided with a heavily violent riot in Dakar by street vendors, who

¹⁶ As noted earlier, Senegal already chose to exempt cereals, including rice and wheat, from the UEMOA VAT.

were forced off the street by police in an effort to gentrify the city center to prepare for Senegal's hosting of the 11th summit of the Organization of the Islamic Conference. The government eventually quelled tensions by focusing more specifically on improving working conditions for vendors (EIU 2007c) rather than addressing the concern over high food costs. However, it did prompt President Wade to sign an agreement with the Government of India in March 2008 to send approximately 600,000 tons of rice to Senegal annually for the subsequent five years (OBG 2009).

5.2 Social protection policies

Besides these trade and tax measures, the Ministry of Commerce implemented a series of price ceilings, or implicit consumer subsidies, which tended to have only minimal sustainability. For instance, under Decree No. 2006-1246, wheat flour was added to the homologation regime in November 2006, and the price of wheat and wheat flour was therefore fixed (Ministry of Commerce 2007; Ndiaye 2007a). Yet, the world price and import price of wheat slowly increased over the summer of 2007, leading both large-scale importers and millers to demand that the government amend its price ceiling, noting that they were losing money as the price of flour and bread remained fixed. Philippe Steffan, the director of *Grands Moulins de Dakar*, which is the largest importer of wheat and miller of flour in Senegal, alerted the government in October 2007 that his factory would have to begin firing millers if the prices were not re-adjusted (see Flipo 2007). Bakers, however, wanted to continue retaining a profit margin from their sale of bread while major consumers' organizations insisted that the government maintain price stability. Ultimately, the government sided with the millers and bakers by agreeing in late October to raise the price of bread by November, strategically ensuring that this increase occurred after the end of Ramadan.

For scented, broken rice, it was announced in July 2007 that the price of this commodity would be set at 225 CFA, down from the 250–275 CFA national average. Yet, due to a lack of enforcement, most rice retailers eventually abandoned the price ceilings (Ndiaye 2007b). The price of milk and milk powder was not fixed until right before the start of Ramadan in September 2007 (Ndiaye 2007b). However, as noted in more detail below, the concentration of milk consumption among wealthier Senegalese meant that this measure did not have a large impact on protecting the poor.

In late March 2008, the government faced even greater pressure to confront the food crisis as a result of the country's first major demonstration explicitly targeted at rising food costs. This demonstration was organized on 30 March by the largest and best organized consumer union, the Association of Senegalese Consumers (ASCOSEN), and supported by many key opposition parties. Since many participants wrote on their T-shirts *On a faim, ça suffit* (We are hungry, that's enough!), this march was ultimately labelled in the media as the *Emeutes de faim* (Food riots) (interview with Ndao 2012). Due to the participation of opposition groups, President Wade claimed that the rally was only an attempt by the opposition to gain attention and for journalists to create sensation. Instead, he announced publicly 'There is no famine in Senegal. There are no hunger riots in Senegal' (cited by Sy 2008).

Subsequently, however, Wade invited the leader of ASCOSEN, Momar Ndao, to explain why he organized the protests. After explaining their concern with reducing consumer prices and the organization's own solutions to this problem, 'Wade called the prime minister and said 'These people have some interesting solutions and I ask you to organize a meeting every week in order to exchange ideas about how to deal with the food prices'. The State organized

a type of task force, quasi inter-ministerial, presided over by the prime minister and with all the relevant ministries' (interview with Ndao 2012).

Not long after, inter-ministerial order No. 03419 was announced in April 2008, stating that the government would offer a subsidy to rice distributors in order for them to maintain the price at a maximum of 280 CFA a kilogram (WFP 2008a). This, however, led to a rationing of rice supplies because the government could not pay many distributors the subsidies on time. In turn, 200,000 tons of rice were stockpiled in warehouses around Dakar by early May 2008 and caused the retail price in Dakar to inch closer to 300 CFA (Sylla 2008).

Indeed, UNACOIS believed the subsidies were a mistake. According to the organization's secretary general, 'During the crisis, we [UNACOIS] did tell the Ministry of Commerce that we are in a free market and the government needs to have the courage to say that to the population...We opposed the government's decision to introduce subsidies but, the government ignored us because it was under so much pressure and protests. But, we didn't think this was a sustainable policy' (interview with Lo 2012). The subsidy on rice was discontinued in July 2008 due to budget constraints. Indeed, the policy had cost the government 11.5 billion CFA (Daffé, Cissé, and Diène 2011), even as many importers and traders still remained unpaid for this consumer subsidy in the form of tax rebates and direct payments (Ndiaye 2009).

The crisis also demanded a greater role for the Commission for Food Security (CSA), which holds the country's cereal stocks and provides price and supply information on a regular basis for millet, sorghum, rice, maize, peanuts, and beans. Yet, according to the director, the CSA in recent years has suspended its buying of local produce to reinforce stocks because of insufficient government resources. Moreover, the Senegalese government has been concerned with displacing the private sector, and particularly UNACOIS, by intervening in local markets too much (interview with Sèye 2012). The main response of this agency to the crisis occurred in May 2008 through its *Assistance au Monde Rural* (AMR) program. The AMR involved the purchase of more than 20,000 metric tons of rice in order to target vulnerable consumers in rural areas. By August 2008, when the annual rains began, the distribution of rice was halted (interview with Sèye 2012).

Arguably, a more developed social protection programme would have represented the best approach for protecting vulnerable Senegalese from food price shocks in the short-term. As noted earlier, the social protection system has remained woefully weak. Yet, a range of donors in the country, including USAID, UNICEF, the World Food Programme, the World Bank, and the FAO have all shown an interest in supporting greater protection of the vulnerable. For instance, a school feeding program was established in Dakar in 2008 that assisted approximately 80,000 children between the ages of 3 and 12 (Daffé, Cissé, and Diène 2011). Another project, entitled Targeted Child Nutrition and Social Transfers, has provided vulnerable mothers of children aged 0–5 with a financial subsidy. A program of food vouchers, costing approximately 1.9 billion CFA, was also established in 2008 for 17,400 households in a suburb of Dakar and in the southern region of Ziguinchor (Daffé, Cissé, and Diène 2011). Probably one of the clearest modes of social protection occurred through overseas remittances, which increased from 400 to 560 billion CFA between 2006 and 2008 before falling in 2009 (see Daffé, Cissé, and Diène 2011).

5.3 Production and commercial support

The centrepiece of the government's response to the food crisis was the GOANA, which was launched in May 2008. The announcement followed two very public, political events that seemingly embarrassed Wade. The first was another march on 26 April against the rising cost of living that was organized by the opposition coalition known as *Front Siggil Senegal*. The second was a declaration by Wade in early May that the FAO and particularly his Senegalese compatriot and then-director general of the FAO, Jacques Diouf, were to blame for the international food crisis. In response, Diouf noted that it was national governments who were culpable due to their lack of preparedness (Diallo 2008).

Given Senegal's historically high dependence on imported rice, the main emphasis of GOANA was to promote food self-sufficiency. One element for achieving this was the National Plan for Self-Sufficiency in Rice, which aimed to produce 1.5 million tons of paddy rice by the end of 2012. The mechanisms for doing this involved irrigating and cultivating unused land in the River Valley, providing subsidies for seeds, fertilizers and phytosanitary products, assisting with rice commercialization, reinforcing the capacity of producers, and introducing new varieties of rice, such as the New Rice for Africa. Notably, by offering subsidized inputs, including a 50 per cent subsidy for fertilizer prices, GOANA in many ways reversed previous government policy initiatives that occurred during the structural adjustment era.¹⁷ Overall, GOANA aimed to create, on an annual basis, 500,000 tons of rice, 2 million tons of maize, 3 million tons of manioc, 2 million tons of other cereals, and 400 million liters of milk (Antil 2010).

The announcement of GOANA received only a lukewarm reception from both domestic stakeholders and international donors. While large-scale investments in the agricultural sector were widely supported, the specific aim of attaining food self-sufficiency was deemed unrealistic. Moreover, like REVA and previous agricultural plans, the initiative reflected Wade's tendency for short-term, populist projects rather than a long-term agricultural strategy. According to one report, many government ministers were completely surprised by the announcement of GOANA (see Antil 2010).

The CNCR in particular denounced the abandonment of the LOASP, which had involved large-scale stakeholder consultation, while GOANA had involved none. Furthermore, given that the CNCR includes many of the country's small-scale producers, the organization's members did not understand how GOANA's goals could be feasibly achieved: 'CNCR and its members are surprised by the extremely ambitious quantitative objectives, which they consider impossible to achieve in the given time frame. The experiences and failures of special programs of production for maize, manioc, sesame, and bissap confirm that these objectives are not realistic' (CNCR 2008). Indeed, the cost of expanding rice production by the desired 500,000 tons for just one year was estimated by experts to cost US\$335 million, which was equivalent to the entire total budget for the agricultural sector during the previous four years combined (Ndiaye 2009). Furthermore, GOANA focused specifically on agriculture production without considering the fishery, forestry, and livestock sectors (Cabral, Cissé, and Diagne 2009).

Although the FAO provided 1.5 million US\$ to buy inputs for the most vulnerable smallholders during the crisis, it has had no affiliation with GOANA. In fact, the organization

¹⁷ The subsidized fertilizer inputs under GOANA are considered to be 'universal' rather than 'targeted.'

had been working with the government on elaborating a national policy document called the National Programme to Support Food Security, which had a five-year time horizon and involved a diverse range of long-term interventions. Without consulting the FAO, the government abandoned the document and soon thereafter announced GOANA. According to the national FAO director, ‘GOANA is not a sustainable program. In fact, you see every year GOANA I, II, III. If this was a good programme, it would have been oriented towards the medium- and long-term rather than changed every year’ (interview with Ouattara 2012). Representatives of USAID felt similarly, noting that GOANA lacked structural support and sustainability and should have instead been embedded within a larger agricultural programme (interview with Badiane 2012).

A second and less controversial initiative undertaken specifically by the Ministry of Commerce was the establishment of Reference Stores. Although originally adopted by the government in July 2001, this project was not implemented until October 2007 after a consultation with the president’s council of ministers. The objectives of this programme were threefold. The first was to better integrate the food distribution network so that retail sellers would be more directly linked with purchasing centres, thereby reducing transaction costs and creating competition among retailers in order to improve prices for consumers. The second was to promote local agricultural production through supporting goods in the Reference Stores such as iodized salt, local rice, milk, sugar, oil, tomatoes, onions, and soap. A final objective was to promote greater employment, particularly among the youth, by creating more retail jobs. Three private promoters (Easy Boutiques, Prista, and Référence Boutique) were responsible for implementing this programme with the support of 3 billion CFA in finance from the Ministry’s Economic Promotion Fund (Ministry of Commerce 2011).

Collectively then, the government encountered during the crisis a broad range of well-organized and vocal interest groups who each possessed distinct preferences on various policy mechanisms (see Table 2). The type and design of the interventions the government ultimately took illustrated three key elements of policy-making under Wade. First, even though a well-targeted social targeting programme combined with a legitimate, long-term agricultural strategy would have been the most appropriate response to the crisis, the government clearly was concerned with attempting to satisfy as many groups as possible. Second, many of these initiatives were reactionary, had short time-horizons, and were not well-planned. Third and related, they also were the outcome of presidential interference in the policy process, reflecting the increasing centralization and personalization of power around Wade that already manifested during his first term.

6 Impact of the crisis and government responses

By the end of 2008, many of these policies had not quelled social discontent. In fact, by December 2008, yet another protest occurred in Dakar over both food prices and multiple electricity outages despite the rising cost of electricity. Nevertheless, the collective impact of both the crisis and the government’s response was increasingly clear in three key domains: (1) macro-economics and trade, (2) poverty, malnutrition, and household welfare, and (3) production and commerce.

Table 2: Identifying key domestic stakeholders and policy preferences

| Stakeholder Group | Organization | Preference | Key government interlocutor |
|-----------------------------|---|--|---|
| Consumers and labour unions | ASCOSEN, CNES | Reduction of customs duties and VAT; Provision of consumer subsidies | Ministry of Commerce, Ministry of Finance |
| Producers | CNCR | Implementation of LOASP, rejection of GOANA, broader view of the agricultural sector | Ministry of Agriculture |
| Importers and traders | UNACOIS (including seven rice importers) | Opposed consumer subsidies for rice | Ministry of Commerce |
| | Grands Moulins de Dakar, Nouvelle Minoterie Africaine, and Moulins Sentenac | Opposed price fixing for wheat flour and bread | Ministry of Commerce |
| Processors | SPIDS (Nestlé, Sapolait, Senlait, Mamelles Jabot, etc.) | Opposed removal of VAT for powdered milk | Ministry of Livestock |
| Opposition parties | Front Siggil Senegal | Advocated supporting consumers and producers simultaneously | Not applicable |

Source: author's compilation.

6.1 Macro-economics and trade

Both the crisis and the government's reaction placed a huge burden on the country's public finances. The rising cost of imports resulted in the trade deficit increasing from 17.1 per cent of GDP in 2006 to 25.6 per cent by 2008. During the same period, the external current account deficit rose from 9.8 to 14.7 per cent (Daffé, Cissé, and Diène. 2011). Some of this burden was alleviated in December 2008 when the IMF approved a one-year arrangement of 75.6 million US\$ under the exogenous shocks facility (ESF) to enable Senegal to finance the balance of payments impact of higher food and energy prices. This allowed Senegal to immediately obtain 37.8 million US\$ from the IMF and to receive an equal amount upon completion of the first review under the ESF arrangement.¹⁸

The government's collective response to the crisis resulted in a tremendous loss of public revenue. According to the IMF (2008), elimination of customs duties on rice, wheat, and milk powder, which were finally re-instated in September 2008, cost the government a total of 12 billion CFA during 2007. Similarly, the removal of the VAT on wheat flour and milk powder resulted in a loss of 5 billion and 12 billion CFA, respectively.¹⁹ Collectively, these revenue losses were equivalent to 0.5 per cent of GDP in 2007. During 2008, the cost of the trade and fiscal measures increased to 36 billion CFA (FAO 2009). After considering the cost of other social protection policies as well as subsidies that the government allocated for electricity and

¹⁸ See <http://www.imf.org/external/np/sec/pr/2008/pr08334.htm>

¹⁹ For the powdered milk, Dia et al. (2008) have further estimated that the loss in public revenue in 2008 was 10.76 billion CFA.

gas, the government's overall response to the crisis amounted to 374 billion CFA (748 million US\$) (Diouf 2011).²⁰

Besides causing the government to lose substantial revenue, the reduction of the VAT on rice in particular further augmented the appeal of importing rice, thereby failing to correct one of the main structural weaknesses at the heart of the crisis in Senegal (David-Benz et al. 2010).

6.2 Poverty, malnutrition, and household welfare

The crisis demonstrated notable impacts on incomes and consumption within urban areas, across the rural and urban milieu, and among different rural regions of the country. Households engaged in a variety of strategies to cope with the crisis. In urban areas, households often shifted their diets to cheaper but more affordable goods or reduced their number of daily meals from three to two. In rural areas, households often depended on assistance from neighbours and family or bought food on credit (WFP 2011).

As Table 3 highlights, the estimated poverty rates of rural households are estimated to have risen slightly between the years of the crisis. In rural areas, Cabral (2008) found that farmers who combined subsistence agriculture with livestock breeding were more protected from the crisis than those who relied on subsistence agriculture alone. Table 4 further shows that indicators of child malnutrition generally worsened in the years after the crisis, even in urban areas. One of the main exceptions to this trend was in St. Louis where child stunting in particular decreased over time. As noted earlier, St. Louis is the centre of domestic rice production and as many Senegalese shifted to consuming domestic varieties of rice when imported rice became too expensive, access to such varieties would have been higher in this region than elsewhere. Moreover, domestic rice production experienced a boost during the 2009 and 2010 seasons (see below).

Table 3: Incidence of poverty in Senegal

| Area | 1994–95 | 2001–02 | 2005–06 | 2009 |
|-------------|---------|---------|---------|------|
| National | 67.9 | 57.1 | 50.6 | 50.7 |
| Dakar | 56.4 | 42 | 32.4 | 30.7 |
| Other urban | 70.7 | 50.1 | 38.6 | 38.1 |
| Rural | 71 | 65.2 | 61.7 | 63.2 |

Notes: These are individual, rather than household, poverty rates and based on the ESAM1, ESAM2, and ESPS 2005. The 2009 rates are estimates.

Sources: Backiny-Yetna et al. (2009); WFP (2008b); World Bank (2006).

²⁰ This excludes the cost of GOANA. Subsidies for butane gas and electricity comprised some of the largest outlays by the government, estimated at around 75 billion CFA (see FAO 2008).

Table 4: Incidence of child malnutrition, pre- and post-crisis

| Region | Children who are below normal weight for age (%) ^b | | Children who are below normal height for age (%) ^b | |
|-----------------------|---|------|---|------|
| | 2005 | 2010 | 2005 | 2010 |
| Senegal | 14.5 | 19.2 | 20.1 | 28.7 |
| Dakar | 5.1 | 9.8 | 9.6 | 18.1 |
| Diourbel | 14.8 | 21.4 | 18.9 | 32.5 |
| Fatick | 12.3 | 13.6 | 21 | 23.5 |
| Kaffrine ^a | - | 25.5 | - | 38.2 |
| Kaolack | 9.4 | 19.3 | 16.8 | 30.8 |
| Kedougou ^a | - | 24.6 | - | 42.5 |
| Kolda | 27.4 | 26.4 | 39.2 | 43.7 |
| Louga | 14.4 | 27.2 | 20.6 | 31 |
| Matam | 25.3 | 26.5 | 26.1 | 31.1 |
| St. Louis | 24.2 | 25.4 | 28.1 | 24.6 |
| Sedhiou ^a | - | 28.8 | - | 42.8 |
| Tambacounda | 23 | 23.8 | 30.5 | 28.3 |
| Thies | 12.4 | 16.5 | 12 | 29.2 |
| Ziguinchor | 7.3 | 10.9 | 19.9 | 22 |
| Urban | 7.9 | 12.8 | 12 | 20.5 |
| Rural | 18.1 | 23.2 | 24.4 | 33.7 |

Notes: ^a These regions were not created until 2008; ^b These data are for children aged 0–5 years who fall two standard deviations below the mean.

Source: WHO Global Database on Child Growth and Malnutrition.

Within urban areas, informal workers and casual labour were hurt much more than salaried professionals by price rises. A study on urban malnutrition following the crisis revealed that residents in both Pikine, which is the most densely populated area of Dakar, and in Ziguinchor were more likely to be unable to meet their food needs than those in Kaolack, which is the center of millet production (WFP 2008b). Even though it is the second main rice producing region, Ziguinchor had the highest rates of food insecurity during the crisis (WFP 2011), a phenomenon tied to poor infrastructure connecting the region to the rest of the country and continuing low level civil conflict in the broader region of the Casamance.

The VAT removals and suspension of customs duties by the government had disparate effects on the rural and urban segments of the population depending on the commodity under

consideration. Estimates by the IMF (2008) revealed that the use of these measures in 2007 to contain the price of rice benefitted the two poorest quintiles of the population and those in rural areas more, especially given that these commodities comprise a larger share of the food budget for these groups. By contrast, richer Senegalese benefitted from the measures targeted at powdered milk, given their higher consumption of this good. The tariff removals for bread were most beneficial for the urban poor, who consume a higher share of this commodity than their rural counterparts. Overall, the IMF (2008) concluded that by the end of 2007, almost 55 per cent of the benefits accumulated from the trade and fiscal measures accrued to households within the top 40 per cent of the welfare distribution.

A similar trend emerged with respect to the government's various social protection policies. According to the CSA, its efforts to distribute rice through the AMR were not very successful for numerous reasons. First, the government reduced the CSA's requested budget for the program, from 10 billion CFA to 7.9 billion CFA, during a series of modifications within the National Assembly. Second, these resources were released to the CSA 45 days behind schedule, delaying the purchase of rice from UNACOIS and the organization of vehicles and technical capacity to deliver the rice. Third, while the CSA wanted to target so-called 'red zones,' which indicate the highest level of vulnerability as determined by a joint mission conducted with the FAO and the WFP, the government disagreed and preferred to target everyone. Above all, the director of the CSA argues that his unit's ability to function has been hindered by high levels of ministerial instability: 'We've been in the office of the president, the office of the prime minister, the Ministry of Agriculture, and now in the Ministry of the Family... We are moving all the time, like a suitcase. In the same way, many other agencies and their bosses are moving' (interview with Sèye 2012).

The political disincentive for targeting likewise has been observed by other key agencies involved in social protection interventions. For the director of UNICEF's social protection unit 'A lack of targeting is due to a lack of political willingness' (interview with Pigois 2012). He notes though that the problem is likewise related to a lack of technical capacity within the government and the absence of consensus on targeting even among the donor community. For instance, while UNICEF prefers geographical targeting because it favours a community, the World Bank prefers means-testing. Yet, without one governmental body in charge of social protection and a developed database for identifying beneficiaries, both types of social protection interventions are not entirely feasible.

This issue was critical for the government use of consumer subsidies for imported broken rice, which were applied across the board. As noted above, this decision often caused traders and retailers to withhold stocks due to imperfect reimbursement from the government. In turn, this often generated a high level of confusion about who was responsible for rice shortages. Consumer groups blamed traders of unfairly benefitting by receiving the subsidy and then exporting rice to neighbouring countries where the cost of rice was higher (interview with Ndao 2012). Major traders' groups, such as UNACOIS, flatly denied such accusations (interview with Lo 2012).

6.3 Production and commerce

The impact of the main initiative to support production, GOANA, was positive in the short-term but with few long-term benefits. On the one hand, Gergely and Baris (2009) estimate that the country achieved its objective of 500,000 tons of rice production during 2008/9, mostly because of favourable rains, the expansion of cultivated land, and planting during the both the dry and wet seasons. This is confirmed in Figure 1 above, which shows a resurgence

in rice and cereal production overall after 2007. Much of these gains occurred in the River Valley around St. Louis, which accounted for approximately 70 per cent of the increase in production. As a consequence of this increased production as well as a substitution to maize, the average level of dependence on rice imports decreased to 65 per cent in 2010, compared with an average of 82 per cent over the period from 2001–10 (WFP 2011).

On the other hand, rice production fell again to 406,000 tons by the 2010/11 growing season, which is lower than production in the 2008/09 season. This trend provides some support for the suggestion that the brief period of production gains was due more to good rains than to the structure of GOANA. Ndiaye (2009) also notes that the political pressures for GOANA to succeed have prevented an objective assessment of crop surveys and the implementation of key famine early warning mechanisms. Moreover, there have been concerns that to increase cultivated land, the land of some smallholder farmers was expropriated by larger producers (Ndiaye 2009) while others suspected that larger producers were the main beneficiaries of the input subsidies (interview with Badiane 2012). A more worrying aspect is that GOANA does not address processing and commercialization, meaning that increased production will not necessarily translate into increased food security for the broader population (OBG 2009). Therefore, while the intention underlying GOANA, which was to reduce food import dependence, is laudable, the plan appears to have been too focused on short-term production goals rather than long-term structural changes to the agricultural sector that will be critical for ensuring long-term food security for the country.

REVA, which was announced in 2006 but not implemented until 2007, has likewise demonstrated ambiguous results in terms of enticing young people to farm. As of 2010, a total of 600 jobs, rather than the anticipated 300,000, have been created within the fruit and vegetables sector (Daffé, Cissé, and Diène 2011). According to a study conducted by Sall (2012), REVA resulted in young people learning new farming techniques and methods, and with the concentration of irrigation on pilot farms, they could also farm during the typical dry season and thereby prevent migration to urban areas. At the same time though, a number of participants have still complained about the low incomes from agriculture and some farms have had noticeable dropout rates by youth from suburban Dakar who found it difficult to adjust to living conditions in rural areas. Most significantly, REVA's focus on horticultural, export-oriented agriculture appears to conflict with the food security objectives embedded within GOANA and previous agricultural plans, such as the LOASP (see OECD 2007).

The Reference Stores created by the Ministry of Commerce resulted in the establishment of 170 stores by 2011, 119 of which were in Dakar. But, this has not proved to be a very sustainable programme due to the inability to retain store managers beyond a year or so. Many have migrated, either to other areas of Senegal or overseas, and some used the money they received from the state for other means than to purchase goods from local markets. The three networks managing the stores complained that part of the reason for the lackluster success of this programme was the lack of support from the state (interview with Diouf 2012). The continued operation of the programme and its expansion to the rest of the country depends heavily on further investment in resources by the government (Diouf 2010).

7 Conclusions: beyond 2007/08, beyond Wade

The 2007/08 food price crisis therefore dramatically highlighted the unsustainability of Senegal's longstanding consumption and production patterns. The preference of Senegal's large urban population, both rich and poor, for imported rice, powdered milk, and wheat-

based bread represented the country's Achilles heel as such goods became increasingly expensive. Although the preference for imported goods was inherited from the colonial period, successive governments have done little to ameliorate this skewed pattern. In fact, the demand and increase in imports of rice in particular has increased over time even as the country's main export good, peanuts, has experienced a steady decline in global demand and thereby contributes less revenue to the country's economy.

Large-scale discontent, particularly in Dakar, manifested in no less than five major protests during this period. For the former president Wade, who rose to power in 2000 by tapping into urban disgruntlement under his predecessor, the food price crisis represented a threat to his presidential legacy. The crisis emerged at a time when he had already increasingly centralized power around the executive, launched a variety of short-term but high-profile plans both within the agricultural sector and elsewhere, and reshuffled his cabinet multiple times. The resultant high levels of ministerial instability prevented more long-term strategic planning within the agricultural and social protection sectors as well as closer engagement with the donor community. Simultaneously, however, Senegal's vibrant democracy resulted in the emergence of a broad range of well-organized interest groups advocating for specific policy mechanisms. In order to satisfy as many groups as possible, the government forfeited the opportunity to devise a well-targeted social protection programme and a long-term agricultural strategy. Instead, the government's initiatives were reactionary, myopic, and resulted in significant policy volatility, including the retraction of unpopular salary taxes or the termination of consumer subsidies after three months due to their expense and problems with enforcement.

These patterns were not just limited to the 2007/08 period. By 2012, the price of food became heavily politicized, mostly because of presidential elections scheduled for February. Wade's key opponent in those elections, Macky Sall, argued on the campaign trail that food prices would again increase if Wade were re-elected for a third time (Dione 2012).²¹ To prevent attracting scorn on his government's attempts to handle the 2007/08 crisis, Wade failed to respond to the growing warnings of the donor community that a second crisis was possible within the Sahel. In late 2011, the FAO noted that a decline in cereal and agro-pastoral production in a number of West African countries, including Senegal, posed a new threat to food security. In many ways, this new crisis, which could not be blamed on global price changes, confirmed the insufficiency of Wade's legacy project, GOANA. With a level of cereal production that could meet only 39 per cent of the Senegalese population's cereal consumption needs, the CSA, USAID, the WFP, and the FAO all publicized the possibility of a new crisis but with no response (interview with Seye 2012). Indeed, for the FAO, electoral motives were clearly a prime reason for this decision: 'Another crisis is looming but in the electoral period, the government has said nothing and not asked the FAO and WFP to help because if it declares that a famine is possible, the opposition could then blame the government for this'. (interview with Ouattara 2012).

Ultimately, Sall ousted Wade, obtaining almost two-thirds of the national vote and more than 75 per cent in Dakar. Widely viewed as a technocrat who lacks Wade's penchant for short-term populist policies, there is the potential for greater bureaucratic decision-making on issues of agriculture, trade, and social protection.²² Thus, if another global crisis occurs,

²¹ Wade had changed the constitution in 2011 in order to run for a third term.

²² Since coming to office, Sall's government has promised to conduct an audit of GOANA to assess whether the programme should continue.

hopefully the impact will not only be less severe but also the policy responses will target the poorest without requiring exorbitant outlays of government revenue or sowing so much discontent among Senegal's various stakeholders.

References

- Aker, J., S. Block, V. Ramachandran, and C. P. Timmer (2011). 'West African Experience with the World Rice Crisis, 2007-2008'. Working Paper 242. Washington, DC: Center for Global Development.
- Antil, A. (2010). *Les 'Émeutes de la Faim' au Sénégal: Un Puissant Révélateur d'une Défaillance de Gouvernance*. Paris: IFRI.
- Association Sénégalaise pour la Promotion du Développement à la Base (ASPRODEB) (2010). *Projet Pilote de Valorisation des Cereales Locales en Panification: Soumis pour Financement au FNRAA*. Dakar, Senegal: ASPRODEB.
- Ba, C. O., B. Diagna, P. Nuhine Dièye, I. Hathie, and M. Niang (2009). *Changements Structurels des Economies Rurales dans la Mondialisation: Programme Rural Struc-Phase II*. Washington, DC: World Bank.
- Backiny-Yetna, P., M. Camara, D.Ndoye, P. T. Ndiaye, C. Tsimpo, and Q. Wodon (2010). 'Progress under the Growth and Poverty Reduction Strategy of Senegal'. *Perspective Africaine*. 5 (1-3): 1-27.
- Baris, P. (2009). 'Quels Outils de Régulation pour Relancer la Riziculture au Sénégal?'. *Grain de Sel*, 48: 5-6.
- Cabral, F. J. (2008). 'Insécurité Alimentaire en Milieu Urbain et Rural au Sénégal: Les Mêmes Causes Créent-elles les Mêmes Effets?'. Working Paper 08-12. University of Sherbrooke: Groupe de Recherche en Economie et Développement International.
- Cabral, F. J., F. Cissé, and A. Diagne (2009). *Croissance Agricole et Options d'Investissement pour la Réduction de la Pauvreté au Sénégal*. Dakar: CRES.
- Conseil National de Concertation et de Coopération des Ruraux (CNCR). 2008. 'Déclaration sur la GOANA et le Programme Agricole 2008/09'. Dakar: CNCR. Available at: <http://www.cncr.org/spip.php?rubrique32>.
- Daffé, G., F. Cissé, and M. Diène (2011). *Evaluation des Impacts des Crises et des Réponses Politiques mise en Œuvre au Sénégal: Situation des Enfants et Simulations de Politiques de Protection Sociale*. Dakar: CRES.
- David-Benz, H., A. Diallo, F. Lancon, V. Meuriot, P. Rasolofo, L. Temple, and A. Wane (2010). *L'Imparfait Transmission des Prix Mondiaux aux Marchés Agricoles d'Afrique Subsaharienne*. Montpellier: CIRAD.
- Daviron, B., M. Aubert, N. Bricas, H. David-Benz, S. Dury, J. Egg, F. Lanon, and V. Meuriot (2008). *La Transmission de la Hausse des Prix Internationaux des Produits Agricoles dans les Pays Africains*. Montpellier: CIRAD.
- Demont, M., and A. Rizzotto (2012). 'Policy Sequencing and the Development of Rice Value Chains in Senegal'. *Development Policy Review*, 30 (4): 451-72.
- Dia, D., Y. Ngom, V. Duteurtre, P. Nuhine Dièye, G. Duteurtre, and C. Broutin (2008). *Etude de l'Impact de la Hausse des Cours du Lait et des Produits Laitiers sur les Producteurs et les Consommateurs*. Dakar: ISRA and Montpellier: CIRAD.

- Diagne, A., F. J. Cabral, B. O. Ndiaye, M. Dansokho, and M. Sane (2006). 'Senegal'. In H. Thomas (ed.), *Trade Reforms and Food Security: Country Case Studies and Synthesis*. Rome: FAO.
- Diallo, T. (2008). 'Crise Alimentaire: Jacques Diouf Réplique à Wade'. *Le Quotidien*, 24 April.
- Dione, B. (2012). 'Macky Sall aux Populations de Louga: Si vous Réelisez Wade, les Prix Vont encore Flamber'. *Le Soleil*, 13 March.
- Diouf, El H. A. (2011). 'La Formation des Prix Intérieurs dans les Pays Importateurs de Denrées Alimentaires'. Dakar: Ministry of Commerce.
- Diouf, M. M. (2010). 'La Politique de Baisse des Prix des Denrées de Première Nécessité par les Magasins de Référence'. *Revue de l'Amicale des Commissaires aux Enquetes Economiques*, 14–15.
- Djiré, M. (2009). 'The Agriculture Policy Act (LOA) of Mali: Great Potential for Realizing the Right to Food through Equitable Access to Land and Natural Resources'. In L. Cotula (ed.), *The Right to Food and Access to Natural Resources*. Rome: FAO.
- Economist Intelligence Unit (EIU) (2007a). 'Country Report: Senegal, August'. London: EIU.
- (2007b). 'Country Report: Senegal, November'. London: EIU.
- (2007c). 'Country Report: Senegal, November'. London: EIU.
- Eicher, C. and D. Baker (1992). 'Agricultural Development in Sub-Saharan Africa: A Critical Survey'. In L. Martin (ed.), *A Survey of Agricultural Economics Literature, Volume 4: Agriculture in Economic Development 1940s to 1990s*. Milwaukee, WI: American Agricultural Economics Association.
- Fan, S., B. Omilola, and M. Lambert (2009). 'Public Spending for Agriculture in Africa: Trends and Composition'. ReSAKSS Working Paper No. 28. Washington, DC: IFPRI.
- Faye, J., C. O. Ba, P. Nouhine Dièye, and M. Dansoko (2007). *Dimensions Structurelles de la Libéralisation pour l'Agriculture et le Développement Rural: Programme RuralStruc-Phase 1*. Washington, DC: World Bank.
- FewsNet (2006). 'Senegal: Monthly Food Security Update, December,' Rome: FAO.
- Flipo, B. (2007). 'L'Afrique Face à la Flambée du Blé'. *Jeune Afrique*, 22 October.
- Food and Agricultural Organization (FAO). 2008. 'Sénégal: Initiative en Réponse à la Flambée des Prix des Denrées Alimentaires'. Rome: FAO. Accessed at: http://www.fao.org/fileadmin/user_upload/ISFP/Senegal_final_report.pdf
- (2009). *Initiative on Soaring Prices in Senegal: Inter-Agency Consultative Mission with the Government and Development Partners*. Rome: FAO.
- Gergely, N., and P. Baris (2009). 'Étude sur la Compétitivité du Riz de la Vallée du Fleuve Sénégal sur les Marchés Nationaux et Régionaux'. Paris: GLG Consultants.
- International Institute for Environment and Development (IIED) (2002). 'Pour le Développement d'une Agriculture Régénératrice au Sénégal'. London: IIED.
- International Monetary Fund (IMF) (2008). 'Senegal: Selected Issues,' IMF Country Report No. 08/221. Washington, DC: IMF.

- (2010). ‘Senegal: Poverty Reduction Strategy Papers Annual Progress Report’. IMF Country Report No.10/368. Washington, DC: IMF.
- Mbow, P. (2008). ‘The Return of Personalism’. *Journal of Democracy*, 19 (1):156–69.
- Ministry of Commerce (2007). ‘Décret n 2006-1246 du 13 Novembre 2006 modifiant l’Article 3 du Décret n 95-77 du 20 Janvier 1995 portant Application des Articles 44 et 64 de la Loi n 94-63 du 22 Août 1994’. *Journal Officiel No. 6342*, 28 April. Dakar: Ministry of Commerce. Available at <http://www.jo.gouv.sn/spip.php?article5856>.
- Ndiaye, M. (2007a). ‘Senegal Agricultural Situation Country Report 2007’. *Global Agricultural Information Network (GAIN) Report*. Washington, DC: USDA Foreign Agricultural Service.
- (2007b). ‘Senegal Agricultural Situation: Domestic Market Price and Policy Update 2007’. *Global Agricultural Information Network (GAIN) Report*. Washington, DC: USDA Foreign Agricultural Service.
- (2009). ‘Senegal Agricultural Situation: Agricultural Situation Update 2009’. *Global Agricultural Information Network (GAIN) Report*. Washington, DC: USDA Foreign Agricultural Service.
- Ndione, M. (2008). ‘Contraintes d’une Croissance Inégalement Répartie, No. 10’. *Magazine du Bureau Régional de la Banque Mondiale à Dakar*: 22–23.
- Organization for Economic Cooperation and Development (OECD). 2007. ‘Country Report: Senegal’. *African Economic Outlook*. Paris, France: OECD.
- Oxford Business Group (OBG). 2009. *The Report: Senegal 2009*. London, UK: OBG.
- Republic of Senegal (2012a). *Note d’Analyse des Comptes Nationaux Définitifs 2009, Semi-Définitifs 2010 et Provisoires 2011*. Dakar: Agence Nationale de la Statistique et de la Démographie.
- (2012b). ‘Bulletin Mensuel des Statistiques Economiques de Septembre 2012’. Dakar: Agence Nationale de la Statistique et de la Démographie.
- Resnick, D., and R. Birner (2010). ‘Agricultural Strategy Development in West Africa: The False Promise of Participation?’. *Development Policy Review*, 28 (1): 97–115.
- Sall, M. (2012). ‘The REVA Plan in Senegal: Does Modern Farming Change the Minds of Young People about Agriculture?’ Paper prepared for the Conference on ‘Young People, Farming, and Food’, held in Accra, Ghana, 19–21 March.
- Samson, M., and C. Cherrier (2009). *Etude de Faisabilité pour un Programme de Transferts Sociaux Monétaires comme Instrument Majeur d’une Protection Sociale Centrée sur l’Enfant au Sénégal*. Dakar: UNICEF.
- Stads, G.-J., and L. Sène (2011). *Private-Sector Agricultural Research and Innovation in Senegal: Recent Policy, Investment, and Capacity Trends*. IFPRI, Rutgers University, and McGill University.
- Sy, H. T. (2008). ‘Senegal: Debate Rages Over Whether Country Faces Famine,’ *The Daily Nation*, 30 April. Accessed at: <http://allafrica.com/stories/200804300061.html>
- Sylla, C. (2008). ‘Senegal suffers from Food Crisis, Nation is Reliant on Others to Import most of its Edible Resources’. *Nanaimo Daily News*, 17 May: A11.
- Thioub, I., M.-C. Diop, C. Boone (1998). ‘Economic Liberalization in Senegal: Shifting Politics of Indigenous Business Interests’. *African Studies Review*, 41 (2): 63–89.

World Bank (2006). 'Second Poverty Reduction Strategy Paper'. Report No. 38131-SN. Washington, DC: World Bank.

World Food Programme (WFP) (2008a). 'Rapport d'Analyse de Marché Sénégal: Commerce du Riz'. Rome: WFP.

— (2008b). 'Impact de la Hausse des Prix sur la Sécurité Alimentaire des Populations en Milieu Urbain : Sénégal-Pikine-Kaolack-Ziguinchor'. Rome: WFP.

— (2011). 'République du Sénégal: Analyse Globale de la Vulnérabilité, de la Sécurité Alimentaire et de la Nutrition (AGVSA)'. Rome: WFP.

Databases consulted

FAO FAOSTAT: faostat.fao.org/

FAO GIEWS Food Price Data and Analysis Tool: www.fao.org/giews/pricetool2/

International Monetary Fund (IMF), International Financial Statistics Database CD-ROM.

Senegalese Commission for Food Security (Commissariat à la Sécurité Alimentaire), Bulletins SIM: <http://csa.sn/site/>

World Bank Pink Sheet Commodity Price Data: go.worldbank.org/4ROCCIEQ50

World Health Organization (WHO) Global Database on Child Growth and Malnutrition: www.who.int/nutgrowthdb/.

Interviews

Badiane, Dr. Aminata Niane. Agricultural Expert, USAID. Dakar, Senegal, 13 March 2012.

Diouf, Makhfou Mahécor. Head of the Legislative and Entrepreneurial Assistance Department, Department of Interior Commerce, Ministry of Commerce. Dakar, Senegal, 13 March 2012.

Guèye, Cheikh. Geographical Researcher, Enda Tiers-Monde. Dakar, Senegal, 19 November 2008.

Lô, Moustapha. Secretary General of UNACOIS. Dakar, Senegal, 15 March 2012

Ndao, Momar. President of the Senegalese Association of Consumers (ASCOSSEN). Dakar, Senegal, 15 March 2012.

Ouattara, Amadou. FAO Representative for Senegal. Dakar, Senegal, 14 March 2012.

Pigois, Rémy. Chief of Social Policy, UNICEF. Dakar, Senegal, 14 March 2012.

Seye, Colonel Issa. Director, Commission for Food Security. Dakar, Senegal, 16 March 2012.