Wheat Imports Subsidies in the Sudan: Problems and Future Policy Options for Poverty Alleviation

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1 Introduction

The aggregated agriculture (Agriculture, Forests, Animal Resources and Fisheries) remained an important sector in the Sudanese economy with a contribution of 30.6% to the national Gross Domestic Product (GDP) in 2012 and 2013 (CBOS, 2013, p. 118). It grew by 5.7% and 3.6% in 2012 and 2013, respectively, with the lower growth rate in 2013 relative to 2012 driven by the shortage of rain in the rain-fed areas and slight insecurity in some of the production areas (CBOS, 2013, p. 119). As shown in Figure 1, Agriculture in the Sudan is practiced within three major farming systems, namely, the irrigated farming, which contributes 61% to the agricultural value added, semi-mechanized rainfed farming, which contributes 7% and the traditional rainfed farming with 32% contribution to the total agricultural value added (Buchanan-Smith et al., 2014, p. 22)

![Figure 1: Major agricultural farming systems in the Sudan: value added and cultivated land (2013).](image)

Considering the distribution of the cultivated land amongst the three farming systems however portrays the lower productivity of land in the rainfed sectors relative to the irrigated sector. This can be mainly attributed to the dependency on the mostly variable rainfalls, the lower intensity of farming practices and recurrent insecurity problems (CBOS, 2013).

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1 This work is still on progress and this version is not suitable for citation. An updated version will be uploaded as soon as it is finalized.
Within the agriculture sector, crop production contributed nearly 50% of the agricultural GDP in 2007\textsuperscript{2}, with the remainder coming from livestock and forestry (Buchanan-Smith et al., 2014, p. 22). This makes cereals production constituting more than 10% of the country GDP. The share of the area grown with cereals in the total crop land in the country during 2011 and 2012 was about 67\% and 61\%, respectively, and was 71\% in average during the previous decade when South Sudan was included (FAO/GIEWS, 2015).

Now, the major staple cereal crops in the Sudan are sorghum, wheat and millet. As shown in Figure 2, millet is mainly a rainfed crop with its majority of production coming from the rainfed traditional sector, while sorghum is largely grown in all the three farming systems and is particularly dominant in the mechanized farming system (FAO/GIEWS, 2015, p. 19). Wheat is mainly an irrigated crop with 97\% and 99\% of its total production in seasons 2013/2014 and 2014/2015, respectively coming from the irrigated sector, with the remaining production coming from the rainfed traditional sector and it is not grown at all in the rainfed mechanized sector.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{Production (1000 tons) of the major staple food crops in the Sudan.}
\end{figure}

\textbf{Source:} Based on data from FAO/GIEWS (2015, p. 19).

In terms of cultivated area, in average, 96\% of the area cultivated with wheat fell within the irrigated sector during the period between 2008 and 2013 and it recorded a high share of 98\% during the 2014/2015 season. The wheat sector has been the target of numerous government interventions since the current government came to power 25 years ago and adopted the motto of

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\textsuperscript{2} Note that all the statistics for the period prior to July 2011 consider the Sudan before the separation of south Sudan.
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“self-sufficiency” and particularly “we only eat what we grow”. However, the Gezira farmers have found it difficult to switch from cotton to wheat cultivation, which was evidenced by the findings of studies assessing their production efficiency (Al-Feel and AL-Basheer, 2012). This has also led to a volatile production of both wheat and cotton in the Gezira scheme as indicated by a study covering the period between 1992 and 2008 (Mahir and Abdelaziz, 2011). Trends of wheat production have also been declining specially during the period between 2006 and 2013 and the level of 2013 production is about 64% lower than that of 2006 (OECD-FAO, 2014).

While the level of wheat production is declining at the national level, the consumption was in the rise through the years (Figure 3). The steady increase in the consumption of wheat is driven by several factors, of which is the general population growth, but more specifically it is influenced by the rural-urban migration, which is shown to be steadily increasing (CBS, 2015) and the changes in the consumption preferences of the Sudanese households driven by the overall wave of urbanization.

Accordingly, the huge majority of the domestically consumed wheat is imported. And because wheat is a key staple food particularly in cities, its prices are quite sensitive indicator for the acceptance of the government policies. Therefore, the government has consistently subsidized its imports.

Despite the declining production efficiency among wheat farmers special in the Gezira scheme, the government is consistently trying to reduce the imports burden by encouraging domestic production. Most recently for instance, the government has officially declared a floor price of

![Figure 3: Sudan’s production and consumption of wheat in million tons (2005-15)](image-url)

Source: Based on data from OECD-FAO (2014).
SDG 400 per 100 kg sack, and the Agricultural Bank of Sudan has made available more agricultural credit for wheat growers in order to encourage more farmers to grow wheat. Hence, the officially forecasted cultivated wheat crop area in 2015 is 237 thousand hectares, exceeding the area of the previous season by 90% (FAO/GIEWS, 2015).

2 The wheat subsidy

About 2.6 million metric tons (MTs) (OECD-FAO, 2014) of subsidized wheat is the current amount imported by the three major wheat importers in the Sudan, namely, Sayga, Weeta and Seen. This amount according to experts is believed to be far more than the domestic consumption of the Sudanese bakeries in terms of wheat flour that is suitable for bread making.

Within the government poverty alleviation strategies, the imports of wheat are subsidized. The subsidy is set to guarantee the following: 1) A fixed price for the consumer of SDG 0.33 per bread (70 grams). 2) This goes up to the bakeries as they receive the subsidized wheat flour from the three major millers at the price of SDG 120 per 50 kg sacks. 3) The major milling companies (Sayga, Weeta and Seen) import the suitable wheat grain from different sources and they receive the amount of the subsidy in the form of a preferential exchange rate. This happens by that the companies deposit the value of their desired amount of wheat imports in local currency (SDG) to their accounts with Central Bank of Sudan (CBoS) and receive the equivalent foreign currency required for imports. According to experts, the applied exchange rate is almost 50% below the official exchange rate to be counted as the subsidy.

The official exchange rate in the Sudan is 5.98 SGD/US$ (CBoS, 2015), which is far below the black market exchange rate of more than 7.5 SGD/US$. This means that the selected milling companies receive at least 4.5 SDGs in each US$ they withdraw from their CBoS’s accounts for the imports of wheat.

The intention of the government is to supply the importing companies with their requirement of foreign currency that is equivalent to their desired amount of imports against the deposited local currency with the subsidy included as a difference in the applied exchange rate. This is expected to be translated into subsidized wheat flour that is delivered to the bakeries through the companies’ agents all over the country. The bakeries are then expected to sell each 70 grams’ bread to the consumers at the price of SDG 0.33.

3 The problem

The effectiveness of this wheat subsidy depends on many factors, but the most important one is the assumption that all the steps of this chain including importing, milling, distribution to agents, transportation and delivery to bakeries across the country is done without any misconduct. Unfortunately, that is not always the case the following problems are constantly reported leading
at the end to considerable shortages in the supply of wheat bread to the Sudanese households across the country: 1) Consumers: bread is not available, not according to the designated size/weight or not according to the normal quality (the flour used is a mixture of different qualities, of which is cheap local types of wheat flour). 2) Bakeries: wheat flour is not available in the amount they require to satisfy local bread demand, the subsidized flour is far below what they need and therefore, they are forced to mix it with other types of flour. 3) Agents: the subsidized flour they receive is less than what they are supposed to, not all the subsidized flour id sold to bakeries, but the black market to regional traders and exporters. A lot of informal trade of wheat flour is claimed by experts to take place internally and across borders to Ethiopia, Eretria and Chad. 4)Milling companies: importing ships are arriving in Port-Sudan, but companies are unable to claim their imported amounts because the CBoS is unable to provide them with sufficient foreign currency to claim their imports. Therefore, companies produce 60% or less of what they are supposed to.

4 Objectives and research questions

(1) Given the problems in implementing the subsidies and the losses of public funds due to these difficulties, would completely removing the subsidy and saving the public fund for the government lead to drastic implications on the Sudanese households with their different income and regional groups?

(2) More than a decade ago, there was a government policy aiming at assuring self-sufficiency in wheat by cultivating large areas in the Gezira scheme by wheat. This policy wasn’t successful and one of reason was that the climate and soil of the Gezira scheme were not suitable for wheat production and northerly Sudan is better. Would channeling the amount of the current subsidy to domestic wheat producers in the northern Sudan and financing large scale cultivation project there improve the livelihood of the Sudanese people?

(3) Due to the long chain through which the subsidy is injected starting from the importer and through the way down to consumers and the difficulties facing the government to reduce corruption and smuggling through the chain, would it be better that the amount of subsidy been distributed in the form of food coupons to low income households while the rest of the chain left without any intervention?

5 Methodology

Due to the microeconomic and macroeconomic nature of this research problem, a single country CGE model is applied calibrated to a new post-separation social amounting matrix for the Sudan is used. The model is based on the STAGE model of McDonaled (2007), which is an open economy static single country CGE model. The SAM provides data on 69 sectors and 63 commodities with wheat included among them and 14 production factors of which 12 are labor
divided according to Rural/urban, skill level and gender. Households are disaggregated according State and Rural/urban with each category disaggregated to five income quintiles.

The research questions are introduced in the model in terms of simulation scenarios that start from the inclusion of the amount of the subsidy in the database and changes its value and rate accordingly to depict each policy.
6 References


