



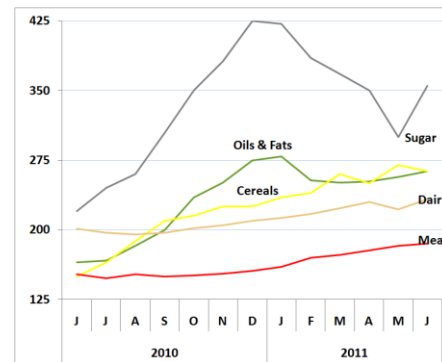
SOARING FOOD PRICES AND ITS POLICY IMPLICATIONS IN NORTH SUDAN: A POLICY BRIEF

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Soaring food prices: a global concern

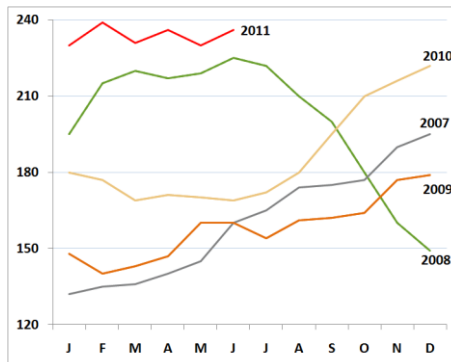
Volatile and soaring food prices have been making headlines globally since 2007 with concerns over their negative impacts on the poor and their destabilizing social consequences in developing countries. Depending on published sources and local situation analysis and monitoring, and following a brief background on the pattern and causes of international food price surges, this brief attempts to assess the chronology of food price changes and their impact on the poor in Sudan, and proposes set of remedial measures in tackling price surges and volatility.

FAO Food Commodity Price Indices



Source: FAO World Food Situation; FAO Food Price Index, July 2011.

FAO Food Price Index



Source: FAO World Food Situation; FAO Food Price Index, July 2011

According to FAO, the international food price index rose by nearly 40% in 2007 and further by about 50% during the first half of 2008; coming on top of a 33% increase in previous years. The major price increases were in cereals, sugar and the oilseed complex, with meat prices even exceeding the 2008 peak. Between January 2007 and January 2008 wheat nominal prices rose by 240% and real prices by 172%, following a 63% increase over the preceding three years. World price-rise transmission hit a range of countries; the Sudan was no exception though in a mild way as local wheat prices were partially insulated



via subsidies. Yet after March 2008, cereals, dairy products and oils and fats declined on the FAO Food Commodity Price Index range, but meats and sugar prices were rising. Then consumers got a little respite during the second half of 2008 and first half of 2009 when prices plunge downwards. After a significant post-August 2008 continual decline; prices for most agricultural commodities have increased sharply during the second half of 2009 through 2010. The FAO Food Price Index hit a new record high in February 2011 while the World Bank's Food Price Index reveals food prices revolving around their 2008 peak levels. It was then postulated that structural forces will keep food prices high for years to come.

The price hikes both in 2008 and 2010/11 are mainly attributed to unexpected supply shortfalls due to unfavorable weather; export restrictions by some big exporting countries; increasing fuel prices and fluctuations in currency markets; high economic growth driving high food demand, partly for high-value food; declining global food production partly affected by global climate change and inducing steep depletion of global cereal stocks; rural-urban population shifts, rising petrol prices that also induced bio-fuel production engendering competition for food grains.

The situation also depicts extreme price volatility (a combination of both variability and uncertainty) in global agricultural markets posing threats to world food security where the number of undernourished people, according to FAO, has increased to close to one billion. As per World Bank assessment, since June 2010, an additional 44 million people fell below the \$1.25 poverty line as a result of higher food prices, which may rise even more in the absence of significant production increase in 2011. The current situation encompasses more preparedness through lessons learned from the recent past (2007/08 crisis) mitigated by substantial

harvests in many food importing countries in 2010, especially in Africa, and much higher carry-over stocks, especially for wheat and rice, thus reducing the threat of an imminent food crisis. Conditions therefore differ in different regions as compared to the 2008 crisis which caught many by surprise as market fundamentals were sound by then. Prices of coarse grains in Africa generally remain lower than last year; those of rice and wheat in Asia hit high levels despite declines in some markets; wheat prices remain high; and prices of wheat and maize are on the increase in South America. With more than 12 million people under famine threat, East Africa region has started to show some significant price increases in recent months. Within the Middle East and North Africa double-digit food price inflation is reported in the first quarter of 2011 in Iran, Egypt, Sudan and Syria, with moderate levels in other parts of the region.

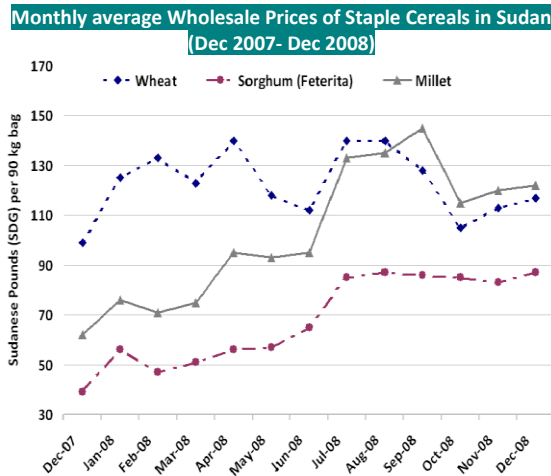
Sudan's 2008 price hikes: enormous price rise of major food grains

Sorghum, millet and wheat form major staple foods in Sudan, with sorghum still playing a leading role in people's diets. Millet's production and consumption is largely localized, while Sudan is a net importer for wheat¹. With growing urbanization and change in consumption habits, wheat and wheat flour imports have been reaching about 1.27 million tons in wheat equivalent in 2009 valued at \$696 million compared to about 0.6 million tons in 1999. Total cereal production in the country accounts for about 65% to total annual grain requirements, the balance being mainly imported ones. According to the 2009 FAO-SIFSIA study, cereals constitute 57% of the total Dietary Energy Consumption (DEC) in Sudan. Hence, any price change will have a crucial impact on people's access to food. This is especially evident as Sudanese on average

¹ Sudan in recent times imports between 1.5 and 2 million MT of wheat every year.



spend about 61% of their income on food. This proportion is about 66% in rural areas and 72% for the lowest 20% of the population (FAO-SIFSIA (August 2010)).



Source: SIFSIA, Sudan Monthly Market Update, January 2008.

Price changes of sorghum and millet are usually influenced by the level of local marketable surplus, although international prices might play an important role. For wheat, the bulk of local supply (around 80%) is from imports and its domestic prices are highly determined by international prices. Starting 2000, prices had a fairly normal increasing trend up to 2006. However, the trend dramatically changed from 2007. Sorghum prices steadily increased from September 2007 to more than triple by September 2008. The surge in wheat prices occurred as of June 2007 where, following a drop in March 2008, they rebounded to a record high level in August 2008, a peak of 2.23 folds from their June 2007 level. Millet prices witnessed a steady rise from May 2007 to a surge of 3.2 times by August 2008. Following August 2008, there was a substantial drop in wheat and millet prices and a relatively stable trend for sorghum, but by the end of the year they were still much higher than the pre-mid-year levels and their previous five years averages.

Although grain prices differ by markets in the country due to geographic, production and social security conditions, they largely move together indicating high internal market integration². Wheat price increases in different markets of Sudan ranging from 53% to 130% while the general inflation rate was 13.7% during the first half of 2008. The rise was in large part a transmission of world-market prices as reflected by a correlation coefficient of 0.89. But domestic factors, such as high production costs, low productivity, the structure of taxes and levies and some controls on bread prices are also determinants of domestic prices. Wheat-bread consumers began to endure high prices before the rise in grain or flour prices, exerting high pressure on the poor, especially in urban areas. Marketing margins to both millers and bakers were relatively high while those to grain traders were lower. Obviously, millers and bakers are expected to face higher marketing costs than traders, but their high marketing margins are indicative of substantial profit gains. Small scale producers are the least beneficiaries in price hikes as they are forced to sell at harvest time when prices are low and buy as net consumers when price are high during hunger period.

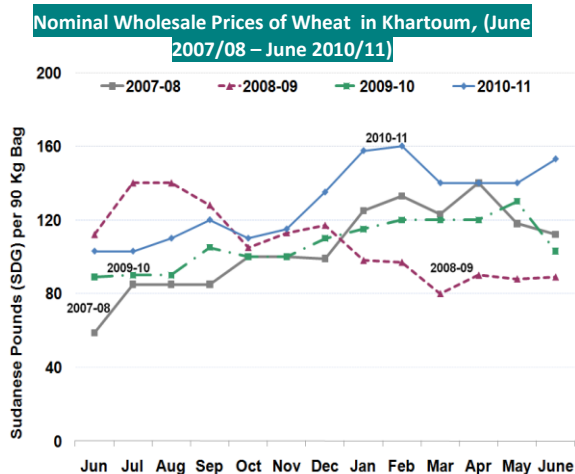
Post-2008 surges: above-average grain prices harm net consumer households

After the 2008 surges, prices of the major cereal grains followed different patterns, although generally remaining at high levels. Sudan sorghum prices were stable for the second half of 2008. However, prices continued to gallop from January 2009

² On the other hand, average sorghum grain retail prices as compared to wholesale prices were generally 33% higher with no clear trend of the price markup, Khartoum flour prices were 58% more and those of sorghum bread were 60% over their grain equivalent. This might reflect high marketing and processing costs but would also indicate a heavy burden on consumers.

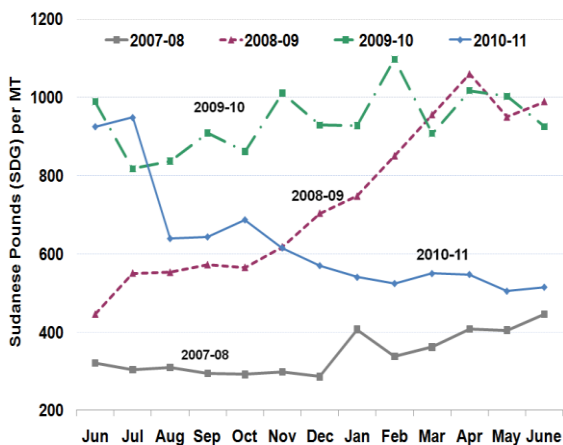


through July 2010, mainly due to poor local production performances of 2009/10 season. The 2010/11 good performances again changed the trend resulting in a significant price swing in which sorghum prices declined reaching to a level of 33% lower in June 2011 compared to same time of the previous year. However, prices remained relatively high – June sorghum prices were about 37% higher than their previous five year average levels. On the other hand, wheat prices started to escalate from mid-2010 in response to the global price trends. They surpassed the 2008 high level by the beginning of 2011 and reached their historical record high level in February 2011.



Source: SIFSIA, Sudan Monthly Market Update, July 2011

Nominal Wholesale Prices of Sorghum in Khartoum, June 2007/08 – June 2010/11



Source: SIFSIA, Sudan Monthly Market Update, July

Millet prices remained high during 2010 revolving around their 2008 peak. Save the unexplained peak in April 2009, millet prices were largely stable below their 2008 peak. In effect, while world market prices highly determine domestic wheat prices, prices of sorghum and millet were more shaped by domestic supply conditions and partly by international trends. In all cases, recurring price surges of major food grains and persistent and recurrent volatility continued to exert pressure and uncertainty on consumers. Although above-average cereal prices may bring gains to surplus producers, poor net consuming households frequently dependent on the market for their food needs will continue to face deterioration in their incomes as they lose much of their purchasing power.

Prices of other agricultural commodities hiked; livestock terms of trade favored

Price rises were recorded for a number of other relevant food commodities but at varying degrees. Those of rice – mainly imported commodity of lower importance in the Sudanese diet - hiked steeply by 73% in July compared to March 2008; being mainly driven by international price increase. The June 2011 prices remained close to the all time highs in March/April 2011. Prices of this



largely imported item continued its upward trend and in June 2011, it was 49 percent higher than same time last year (which was already high). Price variability measured by the coefficient of variation is very high for sorghum compared to wheat and millet. In addition, price variabilities were recorded to be much higher during the 2008-09 level compared to the 2010-11 period. Within oil crops, the situation is suggestive of high price spikes in wholesale groundnuts markets, rising on average by 59% from January 2007 to June 2008. After the peak price in 2008, groundnut prices continuously declined in 2009 and 2010, reaching their lowest levels in 2010 and then started to rise in 2011. Sesame prices in five regional markets assumed high rises during the 2008 months that exceeded corresponding ones of 2007 by 88%-200%. Peak prices of sesame were recorded around April 2008 and then declined sharply in 2009, then persistently increased through 2011. The critical steep rise in sesame oil prices occurred from January to July 2008, when prices escalated by 90% at Khartoum and by varying levels in other markets, surpassing the surge in, and becoming more correlated with, groundnuts oil prices. Along with crop prices, vegetable oil prices also surged, with groundnuts oil peaking in February 2008 by up to 88% in some regional markets. The June 2011 prices are about 30% higher compared to same time of the previous year.

Unlike other products, during 2007-08 annual prices of live sheep and cattle in most regional markets as well as their monthly averages in the biggest terminal market of Khartoum did not record price hikes; they seem to move within the general pattern of inflation. A similar pattern was depicted for mutton and beef prices, which did not have a strong relation to the soaring food prices worldwide. However, during 2009 and 2010 sheep prices have been steeply rising especially as of May 2009, increasing by 78% by November and further soared during 2010 by another 78%

over their November 2009 level, driven by rising sheep demand in the Gulf States. Given the relatively mild sorghum prices rise during 2009 and their decline during 2010, livestock owners would be expected to have realized gains via improved grain-livestock terms of trade. This was illustrated by a persistent increased amount of sorghum grain that can be purchased per head value of sheep. Milk prices on the other hand, seemed to rise slightly higher in 2007 and 2008 than in most of the rise in individual pair of years since 2000; not a price surge.

As reported by the Central Bank of Sudan, during the period 2002-2007 the inflation rate was in the region of 7.0 to 8.5%. Sudan's inflation rates hit their historical record highs in 2008, reaching as high as 25% in September 2008. Then the lowest level was recorded at the early months of 2009, going below 10%. The year 2010 marks a double digit inflation period reaching as high as 17% in December 2010. The double digit figures continued in 2011 remaining more than 15% during the first six months of 2011. Recent developments in food prices in Sudan are driven by both domestic and global factors. There had been a slight decrease during mid 2011 largely due to the slight ease in food price inflation (cereals, rice, vegetables and fruits), which decreased to 16.3 percent in July 2011 compared to 20.4 percent in March 2011. Imported inflation increased to 12.4 percent in April 2011 compared to 9.1 percent in December 2010. This is largely attributed to the pass-through of the exchange rate impact on imported consumer goods and the cost of locally produced goods (through higher cost of imported raw materials and very high labour cost).

Determinants of price surges: a synergy of internal and external factors

Price changes are a product of many mixed internal and external factors. Although the



relatively stable exchange rates were rather in favor of price stability during the 2008 price hikes, later local currency depreciation was commensurate with high food inflation during 2010. Sudan's foreign trade policy is associated with generally high import tariff, but not for major grains, such as sorghum and wheat. Yet, successive increases in the value added tax over a short period are counterproductive. Furthermore, policy attempts to regulate commodity export and supervise domestic price movement with the view of price stabilization have not been effective. There are, however, interventions affecting internal prices, such as export licensing and indicative price announcement for sorghum, livestock and oil seeds; technical barriers installed by importers of live sheep, groundnuts and sesame exports; and sorghum purchases by the Strategic Research Corporation (SRC). Among sectoral policies that affect domestic supply and eventually domestic food prices is the share of agriculture in financial sector spending, revolving around 9% as compared to 21% in 2000. However, the Agricultural Bank of Sudan boosted its credit portfolio to agriculture by 42% in 2008 over its 2007 level while microfinance agenda are adopted by the Central bank of Sudan urging commercial banks to allocate at least 12% of their finance portfolio to microfinance and build enabling institutional capacities. In addition, interventions through the Agricultural Revival Program (2007 – 2011) seem to affect the price changes.

Policies during these price surge period should generally be in favor of price reduction or at least price stability, indicating that the world market situation has significance in domestic price setting. This is evident from the high correlations coefficients of about 0.9 for local and international prices of sorghum and wheat. The domestic dimension is nevertheless important in causing and/or exacerbating the rise in food prices. Sudan sustains a chronic situation of high domestic

prices induced by high production costs due to persistently low yields and high trade costs amplified by high taxation jeopardizing Sudan's export potential. Opening of sorghum exports combined with the general price rises have accentuated price increases. Furthermore, location-specific supply shortage reported through interviews in nine out of the 11 monitored states in the country in 2008 must have contributed to the price rise. Limited subsidies, low productivity, high transport costs loaded by road levies, declining strategic grain reserve and lack of statistics on consumption have further increased prices. Other price-inducing agents include weather disruptions, high cost of oil and energy, increased demand due to use of food crops in biofuel production (and biofuel subsidies in western countries choices); speculations³; increasing and changing demand in China and India, under-investment in rural infrastructure and agricultural innovation, increasing urbanization, civil conflict in some areas, smuggling into neighboring countries, some bans on inflow of cross-border trade, rising cereals consumption for both human and livestock and monopsony/ monopoly behavior of traders and big farmers as well as speculative behavior of commercial banks providing large credit amounts in oil-seed auction markets. The oil-seed industry and bakeries are burdened by high processing costs due to high input and electricity prices and rising value-added taxes.

³ According to the 2009 WB and FAO studies, relative to other episodes of grain price spikes, volatility in the real grain price for the last few years has not been particularly high. There is no evidence of a change in the global grain price regime. Supplies in the market during the crisis were sufficient to meet food demands without jumps in price had exporters not panicked, leading to a cascade of export bans and taxes that cut off importers from their usual suppliers.



Impacts of price hikes and volatility: unclear benefits to producers, high traders' gains, deprived the poor

Price hikes of 2008 - 2011 have had impact on producers, traders, processors and consumers. That on producers was generally positive with signs of area expansions in some states. However, reaping full benefits was jeopardized by weak positions of small scale and subsistence crop producers and price instability as well as fragile trade-off between rewards from own production and demand for own consumption. Impact on livestock producers was negative in 2008 and beginning of 2009 due to worsened terms of trade favoring sorghum producers. That has, however, dramatically shifted from April 2009 onwards as terms of trade continue to favor livestock. This continued to persist through 2010 and first half of 2011. Traders seem to be the highest gainers; buying at relatively low prices, performing storage and transmitting the market price rise to consumers. Yet, SRC sorghum purchases during 2010/11 had contributed to stabilize prices which would have been depressed due to the bumper harvest during the season. Processors in bakeries tended to reduce bread weight (rather than increasing prices) to allow more flexibility in bread sales to consumers, reduce their wheat flour purchases, or resort to a blend of imported and local wheat flour to reduce costs.

Generally, reductions in bread sales seemed to be short-lived; consumers shifting to substitutes in response to the initial price shock but gradually reverting to the habitual wheat bread consumption further indicating the inelastic nature of basic food items. In effect, bakers encountered rising processing costs and accordingly lower profit margins. Oil millers had to reduce their oil output but all produced quantities were quickly sold. Their production costs remain stable irrespective of the price level of raw material while price rises are directly transmitted to the

consumers. The most striking impact was on consumers facing food price rises non-proportional to their purchasing power, thus highly compromising their food security and livelihoods. With household budgetary allocation largely disturbed, consumers were coping by reducing consumption quantities and/or number of meals, resorting to low-nutritive substitutes, and sacrificing other basic necessities of schooling, medical expenses, housing, etc. The effect was especially dramatic on poor households who faced deprivation in food consumption and resorted to migration, school drop-outs, smuggling and socially unacceptable chores. Among the affected groups are also the public workforce who, despite some mitigation support by various government institutions, had to sustain livelihood hardships.

Responses to price hikes and volatility: limited actions in tackling the underlying causes

For the past four years, unprecedented food price hikes and their volatility and frequency has negatively affected millions in Sudan and becoming a major impediment to livelihood development, recovery and rehabilitation. As population and urbanization grows without a parallel increase in economic growth and development, the number of people affected by the persistent upsurge and uncertainty increases. The effect had been widespread ranging from the poorest of the poor households to a high level Government decision body⁴. It further undermines some of the MDG gains of the last decade and compromises humanitarian assistance

⁴ The poor who are spending more than 80% of their income on food are attempting to cope via various irreversible coping mechanisms as they are forced to sell productive assets. The Government is also changing their priorities in subsidizing the widely consumed items and also in banning exports, which would have helped to diversify the sole dependence of oil and promote economic growth.



communities' efforts and Zakat chamber as much more resources are required to tackle the same level of problems. Several adhoc measures during the 2008 and 2010/11 crisis had limited or no impact and the volatility and high level prices persisted and were neither able to generate additional effective demands nor resulted in immediate increase in quantity supply. The interventions (measures) so far had been short term (temporary), localized, uncoordinated, limited to the micro level such as targeted consumer subsidies and safety net programs, or even counterproductive, such as export restrictions which compounded uncertainty and undermined the role of trade and diversification. There had been limited or no systematic and sustainable remedial measures in tackling the underlying causes of price increases and its sporadic nature. Understanding the causes and consequences of price anomalies will help decision makers take appropriate actions.

Unless the current trend is reversed, it will also continue to have a deleterious impact on the poor, who invariably rely on the market to meet their food needs for major parts of the year. With over one-third⁵ of the Sudan population subsisting on a dollar a day or less, and with most poor people spending more than two-thirds of their income on food, protection of consumers from the adverse effects of current swings and price rises remain both a marketing and a social policy challenge. Business as usual does not seem to be no longer working- even in a normal year, high level prices quickly translate into household food access problem. Even in periods of stabilized prices and steady supplies, more than 3 million people continue to lack sufficient productive resources and

⁵ One out of three Sudanese suffered from food deprivation in 2009, which is the Millennium Development Goal (MDG) indicator 1.9 on hunger reduction, based on the 2009 Sudan NBHS data. The prevalence of undernourishment was 31 and 34 percent for urban and rural populations, respectively.

continue to be net-consumers and extremely vulnerable because of conflict, food poverty, inadequate purchasing power and failure to acquire enough food through traditional coping mechanisms and safety net programs. Hence, the underlying problem is structural, which goes beyond the simple interplay of demand and supply.

Emerging global and national changes and challenges should be tackled innovatively. This concern, which is exacerbated by on going conflicts and significant climate variability and change, needs to be tackled in a concerted effort. As much as the solution needs a coordinated multi-sectoral national strategy, it also requires a strong knowledge and assessment of the international market situation⁶. Although *domestic* food price inflation and volatility that determines the poverty and food security impacts of the food crises, monitoring the international prices is critical and the sources of price volatility and increase should be accurately identified.

There is no "one size fits all" solution - the mix of policy and programmatic options has to be specifically adapted to local conditions and agreed upon by the key stakeholders. In the short term, saving lives and protecting livelihoods would be the major principle. Social safety nets, humanitarian aid, and trade policies will affect how well the poor copes with soaring food prices.

In the medium to long run, solution lies in the process of pro-poor economic development (enabling the rural poor to respond to

⁶ In recent years, Sudan import dependency in terms of food energy availability has fluctuated between 20 and 25%, with a tendency to increase due to higher per capita consumption of food products based on wheat (bread, pasta, etc.), milk and edible oils. Wheat and wheat flour constitute 45% of total food imports, followed by dairy products (8.5 per cent), edible oil (6.4%) and tea (5.8%). Correlation results indicate that Sudan domestic prices are more connected to international prices than they were before.



changing markets), should improve market functioning and increase countries' resilience to shocks, sustainable conflict resolution, effective utilization of natural and human resources, export promotion and diversification, and transforming the rural economy from one based on low productivity agriculture to a high productivity and more commercialized one which will further promote dietary diversification. In general, all policy options, especially of the coordinated ones, will require significant investments. However, the cost of not responding is much higher than the cost that it demands – more humanitarian emergencies, increased malnutrition, food price inflation, and destabilization, etc.

Remedial policy or programmatic choices: phased and interlinked multi-sectoral approach – immediate life saving combined with long term sustained development visions

The required response options or measures to soaring or volatile prices can be grouped into short and medium/long-term interventions, taking into consideration complementarities for effectiveness that may exist among temporal levels:

1. Short-term and immediate measures

○ Consumers would find it very difficult to survive extended periods of very high level prices while other income sources continue to dwindle. By limiting food access, *higher and volatile cereal prices will result in deterioration in the nutritional status of children*. High prices will undermine the value of the guaranteed transfers to be made by Zakat and other humanitarian agencies, most of which were meant to be made in the form of cash rather than food. As staple prices rise, the food equivalent of this cash amount continues to erode and exacerbate the already poor condition of these net-consumers.

○ Hence, *short run solutions* would significantly help *in saving lives of the poorest of the poor and protecting livelihoods of the upper scale of the poor* so that they would not lose their productive assets in gratifying their immediate needs. This can be divided into two: steps taken in anticipation of price shocks (*ex ante*) to reduce their impact, and steps taken after the shocks occur (*ex post*) to help people and businesses cope with price volatility. In all cases, various kinds of analysis and assessments are recommended: livelihoods analysis which can help save lives and protect livelihoods; vulnerability assessment and gap analysis which can predict impacts of food-price rises; and market analysis which is essential to understanding livelihood recovery and then development.

○ Decision makers should focus on '*rapid impact*' measures with clear exit strategy and investigate new areas of short run interventions in mitigating the negative impacts and control the current price hikes and volatility. Direct and well-targeted productive safety nets aimed at increasing the productive assets or production capacity of households looks to be important. With the current high level cereal prices, widespread provision of cash assistance may need to be examined to fight against potential unintended negative effects, such as further upward pressure on cereal prices.

○ Provision of *targeted input subsidies* (including seed aid) and provision of seed protection rations to vulnerable groups, would also play a significant role in maintaining food security and increase the asset base, at least for the time of crisis. Employment-generation schemes, credit provision for agricultural inputs (seed and fertilizer) or income transfer programs targeted to the food insecure could temporarily help them deal with the negative consequences of short term increases in food prices. The Zakat resources,



used innovatively can also assist low income households in coping with food price increases by off-setting their need to purchase food when prices are highest.

- **Input vouchers and input trade fairs (seeds, fertilizer and tools) for vulnerable farmers** - farmers can decide which inputs of seeds, fertilizer and tools they want to get and strengthen the local seed system. It is cheaper to distribute input vouchers than to distribute food to the vulnerable which can improve the welfare of the poor.
- **Reinforce capacity (training and equipment) in income generating activities** through value addition on agricultural and food products which will stimulate economic growth and provide jobs and income generating opportunities, meets demand of urban consumers. **Immediate support to production in family gardens** - rapid production of short cycle crops in peri-urban areas and on irrigated land could increase certain food items supply and prices of certain items could be reduced and if targeting is effective. This can be supplemented via provision of mechanical and financial support for cropped area increase – which can enhance production and food availability in the next season.
- **Safety net - cash transfers or food vouchers** - transfers or food vouchers through *Zakat* Chamber will serve beneficiaries to have additional resources to purchase food and can contribute to maintaining diet quality but should be based on assessments as it may have inflationary effects. Vouchers could serve as a parallel currency where markets do function well and where food is available and targeting is effective through cash/vouchers for work or other geographical and household-level targeting. It should always be plain unconditional distribution when situations are extreme. This minimizes the impacts of imported food aid on local markets and production.
- **Government actions that could exacerbate the situation**, such as devaluation, bulk purchase of sorghum, fuel price hike, etc. **should be scrutinized** and in some cases to be postponed to minimize the impact on staple food prices during the hunger season. In addition, **make government policies more predictable** in which changes are phased in. Eliminating government and/or private systems that limit competition among grain traders and opening markets with neighboring countries to overcome market stagnation due to market thinness would also help. The government should contain market monopoly or oligopoly by supervision of commodity movements in quantity and quality. Contain inflation and exchange rate variation to bring more stability along with economic efficiency. Improve the financial system and the provision of credit, and strengthen cereal and agricultural banks. Regulatory measures should aim primarily at enhancing confidence in the good functioning of the market. This can be achieved by increasing transparency and the amount of available information on trading by improving, not banning, speculative trading in order to foster market performance.
- **Tax policies** - abandon the series of levies along the commodity value chain, especially those not connected with provision of services, and rationalize taxes, especially in the processing industry. Reduce or remove value added taxes or remove road blocks and state level road level taxes on major food items lowers the prices of food, facilitates flow of commodities and reduces price differential between producers and consumers and is more effective if there is competition on the domestic market. Tax reduction on fuel for transport will also reduce price differential between producers and consumers but difficult to target food or agricultural commodities with high risk of leakages.



2. Medium/long-term measures

Trade and Market measures

- Without *a proper market strategy*, the poor or net consumers of all food commodities face the highest risks and take the highest burden in the current volatile and unstable environment. Unstable prices create food insecurity by reducing people's real incomes and access to food or prevent people from better managing their household expenditures. The poor, whose production is always limited by inadequate land, labor and capital reserves, depend on the market to fill a majority of their food needs every year. Nevertheless, all interventions should be guided by a serious and robust analysis of marketing cycles, volatilities, chains and price trends.
- *Reduce import taxes and provide tax breaks on basic food items and grain export bans when needed* – with an ever growing urban demand and significant dependency on imported items, decreasing import taxes will reduce the price of imported food item and encourages more imports which will then stabilize prices. This can also be combined with provision of financial support or loans to private sector for funding imports of basic food commodities (e.g. oil, sugar, wheat and wheat flour, etc); and reducing customs procedures and other formalities for food import. Reduced, banned or taxed exports of strategic food commodities which will help in containing prices but should be done with a proper market assessment – how much can be exported without distorting the market needs to be analyzed without having a medium- to long-term negative implications on producers and also by minimizing risk of smuggling. Revise and rationalize import tariff structure for *pareto optimality* that eases import flow while encouraging local producers. Resort should be to tariff manipulation rather than quantitative restrictions.
- *Strengthen the current Food and Agricultural Market Information System (FAMIS)* - the FAMIS other than increasing its spatial and commodity coverage, should also include reliable, disaggregated and accurate information on regular stocks and deficits to support the achievement of food security. Wider dissemination of information will help economic operators to be better informed on opportunities existing in the market, limits market segmentation and farmers and small traders will be in a stronger bargaining position to negotiate prices, and market problem areas can be identified. Improvement of publicly accessible market information systems can also contribute to mobilize significant new resources in the private sector to cut marketing costs and improve efficiency of grain markets over the medium term.
- *Conduct a value chain analysis* - Given that there is limited knowledge of the price structure of most domestic supply chains, it is recommended to analyze determinants of food prices and distribution of value added and profit along food chains (conducting value chain analysis for key food commodities in order to identify corrective action); and check whether prices are transmitted to producers. This sub-sector analysis will help to avoid monopsonistic behaviors over the value chain, and to raise the share of price increase for producers, and to “shortening the chain” for higher added value to producers. It also strengthens farmers bargaining power over chain governance to reduce vulnerability over price grips.
- *Build efficient marketing institutions*; facilitate competing, curb banks speculative tendency as well as capacity building of farmers and players in the market and provision of market information in line with FAO program for efficient market functioning. Build good-quality data and information on markets and trade,



consumption and expenditure patterns for formulating appropriate investment, production, marketing and trade policies linking local to external demand for food and feed. Moreover, *stepping up domestic distribution (logistics and transportation), customs facilitation and efficient grain storage* can further have significant benefits for consumers, while generating a favorable supply response.

- *Make/facilitate contract farming arrangements* - provide a greater assurance of a market for farmers and thus remove some of the risk from farming (including using insurance), open possibilities for obtaining technical support and, on occasions, input supply on credit terms and contribute to enhanced investment.
- **Lower the cost of distribution** - in Sudan, marketing costs (such as transport, handling, storage, other logistics, and processing) are a key component of food prices and are generally far higher than the international benchmarks of around 9%. According to a recent field review by the Ministry of Agriculture, transportation cost alone covers about 20% of imported and exported cereals. For sorghum, handling and shipping costs represent about 31% in 2007 to the overall export cost while marketing costs for imported wheat represents 23% of consumer prices. The highest cost recorded item was transportation from Port Sudan to Khartoum accounting about 37.5% of total marketing cost. Therefore, lowering the overall cost of domestic distribution will partly help in minimizing the very high level marketing costs and hence contain price hikes.
- *Strategic Reserve Support* - to minimize the adverse effects of high level and volatile prices on the poor, it will be essential to *achieve some degree of price stabilization*. Stabilizing operations provide the means to support the incomes of the poor while also mobilizing food for relief and buffer stock

programs. In light of the current volatile and escalating food prices and with the recent change in grain stock-holding policies of big grain global suppliers, *improving the current role of Strategic Reserve Corporation (SRCo)* in creating a well-designed grain buffer stock policy which physically carry over grain surpluses (domestic or imported) from low price seasons to high price seasons continue to be pertinent. The market stabilization role should have its own regular committed resources and Government should facilitate finance of adequate proper storage at national, state, public institutions, commercial and household levels. This stabilizing process should not necessarily be done at larger scale as the SRCo presence in the market will always have a much more magnified psychological (confidence boosting) impact on the market. It should also be noted that when stocks decline to a minimum feasible level, the price becomes much more sensitive to small net shocks. This should be done with a proper market and capacity assessment as decision about the size of stock would reflect both the advantages of secure supplies and the substantial costs of acquisition, storage, and administration.

- Price volatilities have a significant impact on farmers' and consumers' decisions and hence *Government should take precautionary measures before prices go to another extreme*. Persistent low prices, if it goes below the production costs, could negatively impact producers who rely on market sales which could further have an impact on the next year's harvest. The decrease in sorghum price so early in the season is particularly worrying as sorghum serves as a major source of income for so many grain producers. Of course, there is an obvious benefit of lower prices for poor households with limited means to access food in the market. Better and transparent information



systems are essential for policy decisions and management of stocks.

Production and productivity incentives

- *Investing in agriculture* with a long-term view is necessary to prevent a repetition of the food crisis. Stable and sustainable long-term investment in agriculture is a necessary condition for addressing the challenges in food security. With these investments, national governments should reinforce local capacity and resilience of food production systems. Investment (including foreign ones) at all levels should respect the plurality of knowledge systems, including environment sustainability and national capacity.
- Significant increase in farming and expansions on small scale processing industries (like oil, flour industries, etc.) looks to be pertinent to meet the growing demand in urban and rural areas. **Utilize the opportunity of high food prices** to exploit Sudan's huge agricultural potential and increase food supply through productivity enhancement, investment in technology, finance enhancement, incentive provision to the private sector including through prudent taxation, and rationalization of cross-border trade. Strengthen extension and technology transfer activities and provide subsidized improved seeds, fertilizers, sustainable intensification of crop production systems and establishment of simple water harvesting techniques to expedite adoption of available technology. A significant expansion in funding for agricultural research and development is recommended. Strengthening the ARC will contribute to long-term solutions to food insecurity, especially in the context of land degradation, water scarcity and climate change. Local engagement with farmers in adaptive research is also crucial.
- The Government should explore incentives for the reduction of waste in the food system

including *addressing post harvest losses and promote longer shelf-life products*, reduce cost of transportation and create access to the nutritious food which are immediately available in rural areas in turn profit through added-value goes to the rural poor and employment and income for non-farming rural dwellers will be achieved.

Coordination and Activating Food Security Action Plan

- The vast array of instruments (such as those identified in this paper including social protection) is an incomplete means of tackling the underlying causes of food insecurity problem in the country. They should be *coordinated and synchronized to achieve the maximum impact* and to fit the food security strategy of the country. Market-stabilizing and development role should not be solely left to one institution. A coordinated and a more harmonized support effort is critical in tackling the underlying issues.
- *Coordination and coherence among various agencies engaged in stabilization efforts* is critical to avoid speculation and consequent price hikes and unintended negative effects. All efforts need further need to be linked to longer-term development activities and markets so as to control unpredicted future damages. Making use of experiences elsewhere in the world in favor of large-scale diversified cooperatives and coordination's is important.
- *Food security is multi-dimensional and hence requires a comprehensive multi-sectoral response*. The current food security action plan should be revised to include policies to reduce, manage and cope with price volatilities and price hikes through diversifying and improving income sources and purchasing power. Sudan needs to **reactivate its comprehensive food security action plan** which should involve updating



of the current one via objective assessment of the existing food security policies and programs, identification of gaps, and working towards building the internal institutional capacity to address them. All policies should become part and parcel of national food security action plan and poverty reduction strategies. There should be an inter-sectoral national coordination structure, including civil society, private

sector and farmers' organizations representatives, to coordinate implementation of the national food security action plan. Policies should be coherent and upto date. Governments need information systems to be able to assess hunger and malnutrition, provide early warnings and target appropriate assistance effectively. Contingency planning further improves operational anticipation and flexibility.

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