

**Gulf Research Center**  
Knowledge for All

# **Potential for GCC Agro-investments in Africa and Central Asia**

**GRC Report  
September 2008**

Eckart Woertz  
Samir Pradhan  
Nermina Biberovic  
Chan Jingzhong



## Contents

<b>INTRODUCTION</b>	<b>4</b>
<b>FOOD INFLATION AND THE INCREASING NEED FOR GULF FOOD IMPORTS</b>	<b>4</b>
<b>EXAMPLES OF GCC AGRO INVESTMENTS IN AFRICA AND CENTRAL ASIA</b>	<b>6</b>
<b>MACROECONOMIC FRAMEWORK OF TARGETED COUNTRIES IN AFRICA AND CENTRAL ASIA</b>	<b>8</b>
<b>EXPORT POTENTIAL OF TARGETED COUNTRIES IN AFRICA AND CENTRAL ASIA</b>	<b>9</b>
<b>AGRICULTURAL POTENTIAL IN TARGETED COUNTRIES IN AFRICA AND CENTRAL ASIA</b>	<b>12</b>
AGRICULTURAL SECTOR AND IRRIGATION POTENTIAL IN MOZAMBIQUE , SENEGAL, SOUTH AFRICA, TANZANIA AND SUDAN	12
AGRICULTURAL SECTOR AND IRRIGATION POTENTIAL IN CENTRAL ASIAN COUNTRIES AND PAKISTAN	16
MAIN CROPS IN MOZAMBIQUE, SENEGAL, SOUTH AFRICA, TANZANIA AND SUDAN	19
MAIN CROPS IN CENTRAL ASIAN COUNTRIES AND PAKISTAN	19
<b>FOOD EXPORTS VS. FOOD SECURITY</b>	<b>19</b>
<b>GEOPOLITICAL CONSIDERATIONS</b>	<b>20</b>
TRANSPORT SECURITY	20
INCREASED EXPOSURE TO REGIONAL CONFLICTS	21
POSSIBLE CONFLICTS OF INTEREST: WITH RUSSIA IN CENTRAL ASIA AND WITH CHINA IN AFRICA	21
<b>FDI CLIMATE IN AFRICA AND CENTRAL ASIA: A COMPARATIVE OVERVIEW</b>	<b>22</b>
<b>CONCLUSION</b>	<b>24</b>



<b>APPENDIX I:</b>	
<b>MAIN AGRICULTURAL COMMODITIES IN SAMPLE COUNTRIES</b>	<b>26</b>
<b>APPENDIX II:</b>	
<b>POLITICAL BACKGROUND INFORMATION FOR SAMPLE COUNTRIES</b>	<b>29</b>
MOZAMBIQUE	29
SENEGAL	30
SOUTH AFRICA	31
TANZANIA	32
SUDAN	32
PAKISTAN	33
KAZAKHSTAN	34
TAJIKISTAN	34
UZBEKISTAN	35
TURKMENISTAN	35
KYRGYZSTAN	35
<b>APPENDIX III:</b>	
<b>FDI REGULATIONS IN SAMPLE COUNTRIES</b>	<b>37</b>
AFRICA	37
CENTRAL ASIA	39
<b>APPENDIX IV:</b>	
<b>DAM CAPACITY</b>	<b>43</b>



## Introduction

GCC countries have witnessed accelerated inflation rates for three years now. Besides the dominant rent inflation, food inflation has been put in the spotlight in the wake of global food price hikes. The impact of rising global food prices on the GCC countries and possible measures to mitigate this impact have moved to the forefront of the GCC inflation debate in recent months.<sup>1</sup>

Food price inflation constitutes a major strategic challenge for the GCC countries as they have rapidly growing populations but a declining agriculture due to lack of water and arable land. Besides administrative measures like price controls, increased subsidies and build up of strategic food reserves, the GCC countries have envisaged agricultural investments overseas to counter threats to their long-term food security. For this purpose they have mainly eyed African and Asian countries that are geographically close and with which established political and cultural ties exist like Sudan, Pakistan and Kazakhstan.

This report assesses the potential of GCC agricultural investments in such countries of Africa and Central Asia. Most notably it deals with:

- Food export potential and agricultural status quo
- Overall macroeconomic and political framework and possible associated risk factors
- Openness towards foreign direct investments

Against the backdrop of this analysis the question is then asked whether investments in developed markets in Europe and Latin America might offer an important complement to the dominant focus on Africa and Central Asia and whether investments in trading houses and logistical infrastructure like ports could offer a more convenient control of trade flows than the direct investments in agricultural projects.

## Food Inflation and the Increasing Need for Gulf Food Imports<sup>2</sup>

After two decades of low inflation rates, inflation has returned as a global phenomenon. Most notably food inflation affects lower income brackets disproportionately as they have to spend a relatively high share of their disposable income on food. The GCC countries have felt the impact as well; inflation, which was mostly below 1 percent and virtually non-existent until 2002, has developed into a serious problem in the Gulf nowadays. The last two years in particular have seen a marked rise in inflation. The UAE and Qatar were especially affected, with official inflation figures in double digit territory. But, in 2007, other countries like Saudi Arabia and Kuwait also witnessed a pronounced pick up in inflation, reaching more than 6 percent on average. In 2008, this trend has continued and has propelled inflation rates in these countries to around 10 percent, thus reaching the worrying heights of UAE and Qatar inflation rates.

---

<sup>1</sup> See Eckart Woertz, Samir Pradhan, Nermina Biberovic, Christian Koch, Food Inflation in the GCC Countries, GRC Report, May 2008.

<sup>2</sup> For more on this subject, see *ibid.*



Food constitutes a considerable part of imported inflation as import dependency will reach 60 percent in the arid GCC countries by 2010, according to the FAO.<sup>3</sup> In Saudi Arabia, for example, about 15 percent of all imports are food items.<sup>4</sup> The amount spent on food in the GCC is mostly between 10 and 20 percent of disposable household income, according to a Bayt/ YouGov survey.<sup>5</sup> Food price rises in the GCC thus contribute significantly to overall inflation. With growing population, increasing food imports and rising food prices, this ratio is likely to remain on an elevated level. Saudi Arabia and other GCC countries are a price taker for agricultural imports and heavily exposed to the global price hikes in food items. Food inflation can also be the source of significant social unrest, as it hits lower income groups especially hard because they have to spend a relatively high share of their disposable income on food. Especially in smaller Gulf States where the blue collar expatriate workforce forms a majority of the population this could develop into a serious issue.<sup>6</sup>

This poses a major challenge for the GCC countries as their population will double from 30 million in 2000 to nearly 60 million by 2030. This growing population will meet a declining agriculture. Arable land is very limited and conventional water sources in the GCC – currently the feedstock of irrigated agriculture – are predicted to last for 30 years at most. The agricultural sector currently demands around 80 percent of the total water supply in the GCC. The fast growing population and the expected developments on the industrial side will lead to competition for allocation of scarce water resources. By 2025, domestic water demand is expected to double, and the industrial sector will ask for threefold the current water amount. Desalination will hardly be able to function as a large-scale substitute for conventional water sources in agriculture as it is energy-intensive and costly.<sup>7</sup>

The subsidized agricultural schemes that larger GCC countries like Saudi Arabia and the UAE have developed are therefore economically unfeasible and ecologically unsustainable. After the Saudi wheat bonanza of the 1980s that made the country a net wheat exporter, there is a clear trend away from such crops that consume a relatively high amount of water per unit of value added. Recently, the government of Saudi Arabia announced its plan to reduce the purchasing price of wheat by 12.5 percent per year from 2008. The intended goal is to phase out domestic wheat production by 2016 in order to preserve scarce water resources. Instead production will focus more on higher value crops like fruits and vegetables. But growing

---

3. Twenty Seventh FAO Regional Conference for the Near East, Doha, March 13-17, 2004, 6, available at: <ftp://ftp.fao.org/unfao/bodies/nerc/27nerc/J1655e.doc> .

4. Government of Canada, Agri-Food. Past, Present & Future Report, Saudi Arabia, December 2006, 3, available at: [http://atn-riac.agr.ca/africa/4290\\_e.pdf](http://atn-riac.agr.ca/africa/4290_e.pdf) .

5. Bayt.com conducts Consumer Confidence Index (CCI) surveys across the GCC, Levant and North Africa on a quarterly basis in conjunction with YouGovSiraj, a market research and polling company. For reports, see [www.bayt.com](http://www.bayt.com).

6. For a good overview of the issue of GCC migration workers, see Andrzej Kapiszewski, *Nationals and Expatriates. Population and Labour Dilemmas of the Gulf Cooperation Council States* (Reading: Ithaca, 2001).

7. World Bank (2007), *Making the Most of Scarcity. Accountability for Better Water Management Results in the Middle East and North Africa*; UN FAO Statistics available at: <http://www.fao.org> and <http://faostat.fao.org/>; UN FAO Aquastat Statistic available at: <http://www.fao.org/nr/water/aquastat/main/index.stm>, UN ESCWA Compendium of Environment Statistics in the ESCWA Region (2007) available at: <http://www.escwa.un.org/information/publications/edit/upload/scu-2007-2.pdf>. Further see Nermina Biberovic, "Water and Agriculture Issues in the Gulf," *Gulf Monitor* 2, no.1 (January 2008), and Mohamed A. Dawoud, *Water Scarcity in the GCC Countries: Challenges and Opportunities* (Dubai: Gulf Research Center, 2007).



population, declining agriculture and scarce water resources will cause import requirements of the GCC countries to rise further in the future.

The rising need for food imports in the GCC comes at a time when the exportable agricultural surplus worldwide has declined, as food markets are tight and stockpiles declining. Many exporter countries like India and Vietnam have implemented export restrictions in order to supply food to their domestic markets and avoid bread riots that have already occurred in some countries like Mexico, Haiti, Egypt and Indonesia.

## Examples of GCC Agro Investments in Africa and Central Asia

The GCC countries, therefore, will need to deal with their dependence on food imports and geo-economic vulnerability more proactively. Most notably, this vulnerability can be exacerbated in times of political crisis. During the Arab oil boycott of 1973, the US, for example, indicated that there could be a boycott of food deliveries to the region as a retaliatory measure. Besides efforts to increase domestic food production, this threat prompted plans to develop Sudan as a bread basket for the Gulf. These plans were not pursued in the 1980s and 1990s though they did lead to the implementation of some projects like the Rahad scheme, which receives its water from the Rahad River and the Blue Nile.<sup>8</sup> However, now such plans are resurfacing. To attain import security GCC countries have started to envisage agricultural investments in Africa and Asia, mostly in geographically close countries like Sudan and Pakistan with which established political and cultural ties exist.

Since 2002 GCC countries have put extensive financing into the Merowe Dam, 350 km north of Khartoum at the fourth cataract of the Nile. The project was first conceived in 1993 and realization started in 2000.<sup>9</sup> The private equity company Abraaj Capital and other UAE companies and institutions have already acquired 800,000 acres of farmland in Pakistan, and GCC countries now engage in close dialogue with food-producing countries. At the first Middle East-Pakistan Agriculture and Dairy Investment Forum in Dubai in April 2008, investors pledged over \$3 billion worth of new investments in Pakistan's agriculture and dairy sectors, highlighting the country's potential for milk and fruit production.<sup>10</sup>

Agricultural cooperation ranked high during UAE President Shaikh Khalifa bin Zayed Al-Nahyan's recent state visit to Kazakhstan, and the UAE government has also decided to build up a strategic food reserve to reduce exposure to market volatility.<sup>11</sup> Together with the Arab Authority for Agricultural Investment and Development (AAAID), a pan-Arab agency based in

---

8. David E. Spiro, *The Hidden Hand of American Hegemony. Petrodollar Recycling and International Markets* (Ithaca/ London: Cornell University Press, 1999), 26. FAO, Aquastat, "Sudan Country Profile," available at <http://www.fao.org/nr/water/aquastat/countries/sudan/index.stm> .

9. The Saudi Fund for Development contributed \$200 million, the Kuwait Fund for Economic Development and the Abu Dhabi Fund for Development each financed \$150 million, Oman participated with \$106 million and Qatar with \$15 million, see <http://merowedam.gov.sd/en/funding.html> .

10. "Forum Tackles Pakistani Role in Solving Global Food Crisis," *Arabian Business*, May 1, 2008, available at: [http://www.arabianbusiness.com/press\\_releases/detail/17551](http://www.arabianbusiness.com/press_releases/detail/17551) .

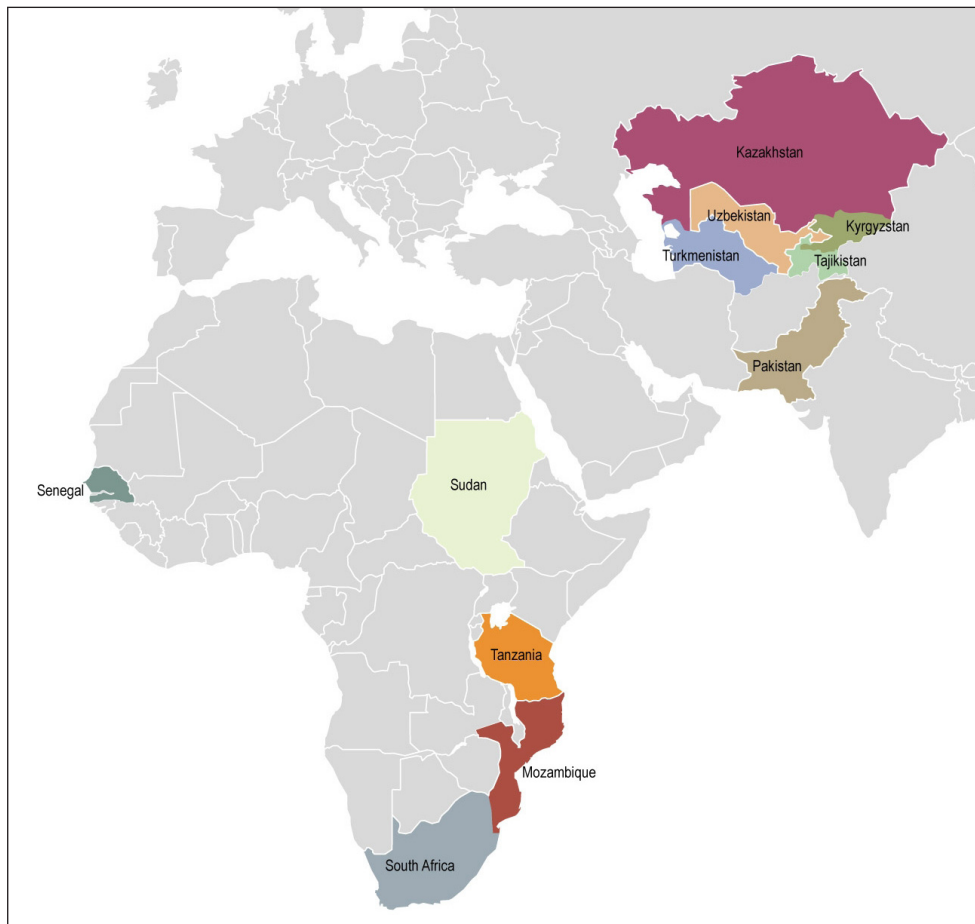
11. *Gulf News*, April 24, 2008; Meena Janardhan, "Gulf Eyes 'Oil-For-Food' Deal With Neighbors," *IPS News*, June 19, 2008, available at: <http://ipsnews.net/news.asp?idnews=42877> .



Khartoum, the Abu Dhabi Fund for Development is preparing to launch a large-scale agricultural project in Sudan to develop more than 70,000 acres of land.<sup>12</sup> It has held preliminary talks on similar issues with Senegal and Uzbekistan.

Saudi Arabia is also in talks with Sudan for agricultural investments and has approached the World Bank to connect it with countries in Africa and Central Asia in order to facilitate investments in food production.<sup>13</sup> Finally, Qatar and Sudan have established a joint holding company, with the aim of serving Arab food markets. It is expected to focus on crops like wheat, corn and oil seeds and will target food industries and animal husbandry too.<sup>14</sup> Additionally, Qatar Livestock Company is investing \$1 billion in corporate farms in Pakistan. FAO representatives have urged the GCC countries to undertake multi-billion dollar agro investments and to buy up farmland in regions like the Horn of Africa and Asia in order to curb supermarket prices at home. The urgency attributed to the situation can be gauged from the fact that the FAO, which had only a small national representation in Abu Dhabi since May 2005, now wants to expand this office to 50 technical advisors and support workers during 2008.<sup>15</sup>

### Potential for GCC Agro-investments: Sample Countries



Source: GRC

12. "Abu Dhabi Looks to Sudan to Secure Food Supply," *Financial Times*, June 3, 2008.

13. Ibid.

14. "Qatar, Sudan in Farming Tie-up," *Gulf Times*, July 22, 2008.

15. "Qatar Seeks Solution to Food Crisis," *The Peninsula*, July 25, 2008, available at: [http://www.gulfintimedia.com/index.php?id=418737&news\\_type=Top&lang=en](http://www.gulfintimedia.com/index.php?id=418737&news_type=Top&lang=en).



## Macroeconomic Framework of Targeted Countries in Africa and Central Asia

In terms of population, GDP and GDP per capita, there is a clear difference between South Africa on the one hand and Sudan, Senegal, Tanzania and Mozambique on the other. The former has a considerable industrial sector and a much higher GDP. Its GDP per capita of nearly \$6,000 is way beyond those of the other African countries in the sample, which range between \$369 and \$1,242. GDP per capita figures in the central Asian countries are mostly below \$1,000 with the exception of the two energy exporters in the sample, Turkmenistan and Kazakhstan, which are in the same league as South Africa with \$5,189 and \$6,868, respectively. With around \$3 billion the absolute GDP figures for Kyrgyzstan and Tajikistan are very low and only equal the size of a larger GCC construction project, thus revealing the lack of infrastructure and of economic development in the two landlocked countries.

All countries in the sample have witnessed considerable GDP growth, especially energy producers Sudan and Turkmenistan, but growth could be affected should imbalances in foreign trade persist. With the exception of Turkmenistan and Uzbekistan, all countries in the sample run current account deficits, which are very high in comparison to their GDP, especially in the case of Mozambique, Senegal and Sudan where the ratio is in double digit territory. This means that there is considerable need for capital imports and there should be a natural interest in developing more export items to achieve a more balanced foreign trade position.

### Macroeconomic Data

Country	Population, Millions	Population Growth Rate, 2000-05 (%)	GDP Current Prices in Billion USD	Real GDP Growth 2007	GDP per Capita, Current Prices	Current Account Balance, Billion USD	CAB percent of GDP	Share of Agriculture in GDP %
Mozambique	20.5	2.42	7.56	7	369	-0.95	-11.29	23.0
Senegal	12.2	2.6	11.12	5	910	-1.33	-10.34	16.7
South Africa	47.9	1.09	282.63	5.1	5906	-22.89	-7.74	3.2
Tanzania	38.4	2.5	16.18	7.3	415	-1.50	-9.24	42.8
Sudan	36.9	2.02	46.16	10.2	1242	-5.43	-11.77	31.8
Kazakhstan	15.2	0.34	103.8	8.5	6868	-6.9	-6.6	5.8
Kyrgyzstan	5.2	1.01	3.7	8.2	713	-0.2	-6.5	30.9
Tajikistan	6.6	1.19	3.7	7.8	578	-0.4	-9.5	23.4
Turkmenistan	4.8	1.42	26.9	11.6	5189	4.5	16.8	11.5
Uzbekistan	26.6	1.46	22.3	9.5	815	5.3	23.8	29.4
Pakistan	158.1	1.82	143.8	6.4	909	-7.1	-4.9	19.6

Source: IMF, UN, CIA Factbook

Agricultural products would be candidates for such export development, but it has to be kept in mind that the population growth in the African countries is still very high at more than 2 percent; only South Africa shows some demographic transition with 1.09 percent. Thus, a considerable amount of new food production would be demanded by a growing population and agricultural production would need to be increased beyond the growth rate of the population





to achieve an exportable surplus. With the exception of Pakistan, the Asian countries in the sample show considerably lower population growth, most notably in Kazakhstan, where the growth rate is at 0.34 percent only.

About 20 percent of Sub-Saharan GDP is generated by agriculture; in terms of employment its importance is even more significant, with more than 50 percent of the labor force working in agriculture in many countries. The share of agriculture in the African sample countries ranged from 16.7 percent in Senegal to a staggering 42.8 percent in Tanzania. Only in South Africa the share is at a low level like in the industrialized countries with 3.2 percent. In most Central Asian sample countries and Pakistan, agriculture accounts for about 20-30 percent of GDP. Only Kazakhstan and Turkmenistan have lower shares with 5.8 and 11.5 percent, respectively. All sample countries showed strong GDP growth in real terms in 2007, but considerable social polarization remains and has the potential to threaten overall political stability.

## Export Potential of Targeted Countries in Africa and Central Asia

In their search to secure food imports, the GCC countries have thus not turned to major international food-exporting countries like the EU, Russia, Canada, USA, Brazil or Australia from where they mostly incur their food imports so far and have focused instead on neighboring countries because of the advantage of logistical and cultural proximity and established political channels. There is some rationale to this logic as the rise in fuel costs contributed about a fifth to grain price inflation between 2004 and 2008 and a considerable part of fuel expenditure came from transportation.<sup>16</sup> But it must be carefully assessed how large the food export potential in African and Central Asian countries can really be, as they face considerable structural weaknesses in their agricultural sectors, often have to feed rapidly growing populations, and currently are mostly net food importers themselves!

The GCC countries' most urgent import need in the future will be cereals, as they phase out their own production and refocus on more value added crops like fruits and vegetables. With the exception of Pakistan, none of the countries that the GCC have singled out for investment in agricultural projects rank among the most important wheat and rice exporters as can be seen from the following table.

### Country Share of Global Wheat and Rice Exports

Countries	% of Global Wheat Exports	Countries	% of Global Rice Exports
USA	26.0	Thailand	30.2
Australia	16.0	India	16.6
Canada	13.9	Viet Nam	10.6
France	13.0	USA	9.9
Argentina	7.1	Pakistan	7.0

16. New Energy Finance, "Food Price Increases: Is It Fair to Blame Biofuels?" Research Note – Executive Summary, May 27, 2008, available at: [http://www.renewableenergyworld.com/assets/documents/2008/NEF\\_RN\\_2008-05-27\\_Food\\_Price\\_Drivers\\_Executive\\_Summary.pdf](http://www.renewableenergyworld.com/assets/documents/2008/NEF_RN_2008-05-27_Food_Price_Drivers_Executive_Summary.pdf)

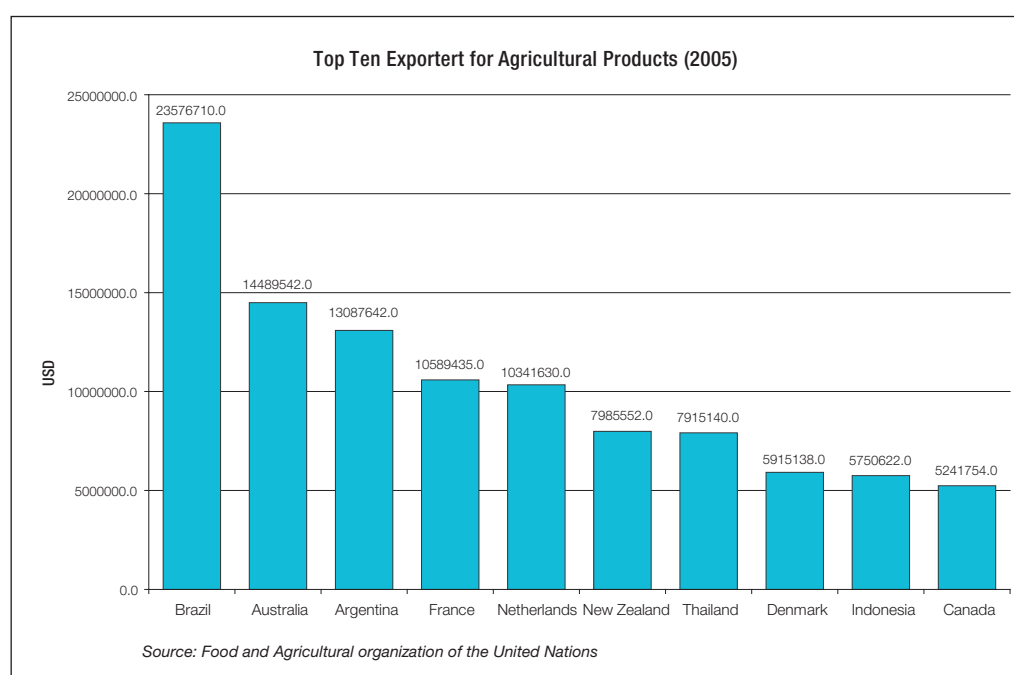


Germany	2.7	Italy	3.5
Kazakhstan	1.9	Egypt	2.6
Russian Federation	1.7	Uruguay	2.0
India	1.7	Spain	1.3
United Kingdom	1.1	Argentina	0.8

Source: FAO

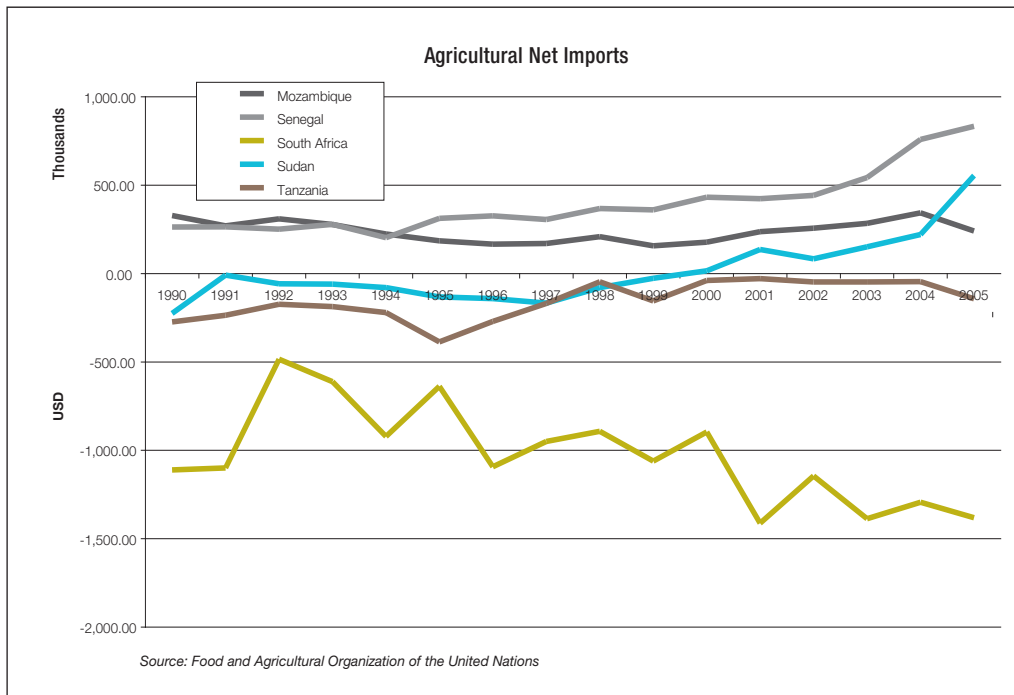
If total net exports of agricultural products<sup>17</sup> are taken into consideration, the picture does not change either, as Brazil, Australia and Argentina head the ranking due to large meat exports, but none of the countries targeted by the GCC appear in the list.

This is not surprising as can be seen from the following table. Among targeted African countries, only South Africa commands considerable net exports and Tanzania is able to turn out a small agricultural surplus in dollar terms. Mozambique, Sudan, and Senegal, however, are net food importers and, in the case of the latter two, imports are on the rise. It has to be kept in mind that almost all countries in Africa are currently net importers of cereals; their relative share in worldwide cereal production has been highly volatile and has at best remained stable. Considerable production increases would be needed to feed a growing population and, in addition, achieve an exportable surplus.

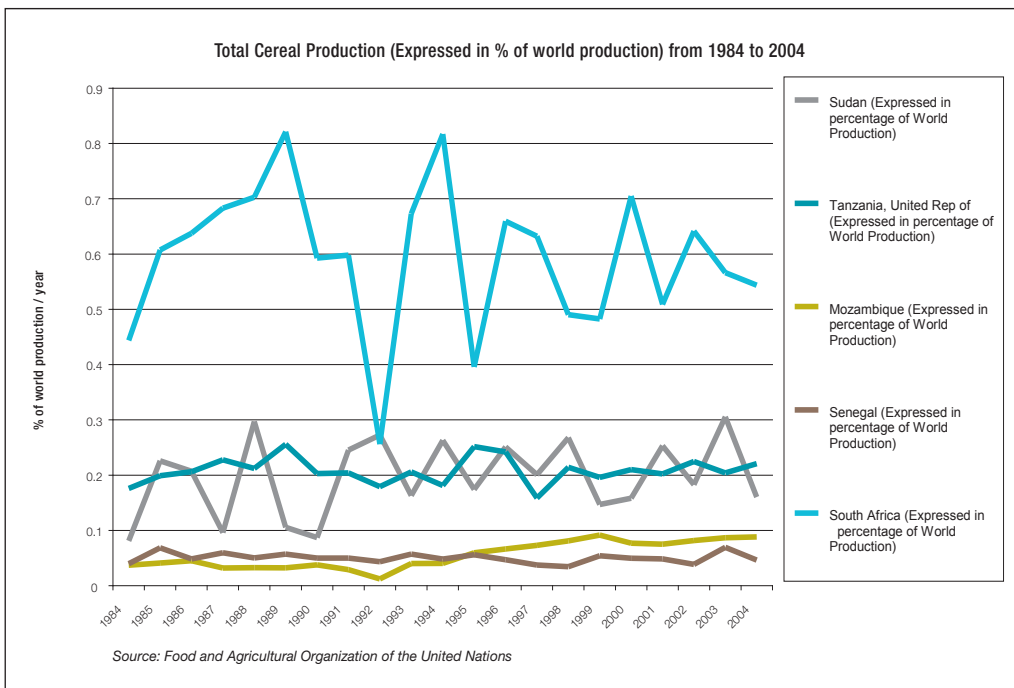


Mozambique has shown declining net imports of food and some relative upward trend as a percentage of global cereal production in recent years, but like Senegal it was a recipient of food aid shipments as late as 2005. While Mozambique has considerable reserves of arable land and water resources for irrigation that could be used for agricultural production once investments are undertaken; however, the potential to increase agricultural production in Senegal is difficult due to climatic conditions and scarcity of rainfall in the north of the country.

17. The definition of agricultural products, according to the FAO, goes beyond food, as it comprises any product derived from plants or animals and thus also includes cotton, hides, leather etc., but, by and large, it can be used as a proxy for food production.



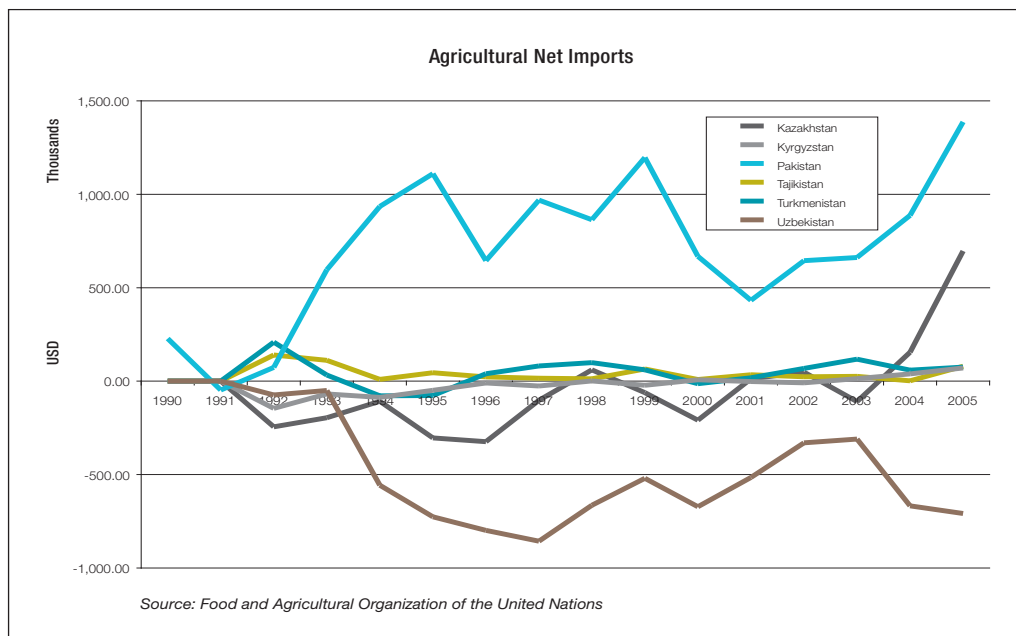
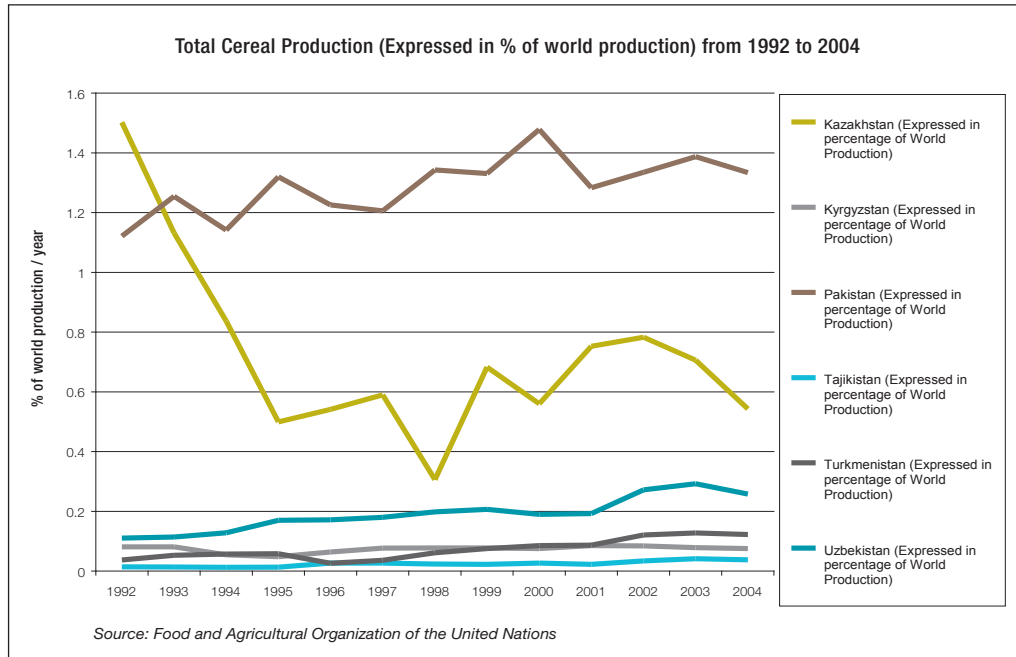
The central Asian countries in the sample show a more stable and less volatile share in global cereal production, and in most countries, the share has even grown slightly. Kazakhstan is an exception as its share plummeted at the beginning of the 1990s, in the wake of the decline of the Soviet Union and consequent economic repercussions, and has fallen again in recent years after it had shown some recovery in the second half of the 1990s.



Still, Uzbekistan is the only net exporter in the sample, a surplus that is largely derived from export of cotton, a crop that is not edible and might affect future agricultural productivity negatively as its huge requirements of water have led to the drying up of the Aral lake and caused severe ecological damage. There has been a sharp rise in net imports in Pakistan and Kazakhstan since the beginning of this decade, which does not bode well for their future export potential.



The food export potential of the targeted countries in Africa and Central Asia may therefore be described as limited to non-existent at this stage. Considerable potential may exist, however, in some countries after large-scale investments have taken place. In other countries, even very intense investment activity might not be able to overcome constraints of climatic endowments and the availability of water and arable land. The GCC countries will need to carefully assess the potential of production increases via irrigation and mechanization in the targeted countries and must be aware of the magnitude of the task involved.



## Agricultural Potential in Targeted Countries in Africa and Central Asia

### Agricultural Sector and Irrigation Potential in Mozambique , Senegal, South Africa, Tanzania and Sudan

Mozambique and Tanzania command high average precipitation rates with over 1000



mm/yr, while Senegal, Sudan and South Africa are less well endowed with 686 and less than 500 mm/yr. Precipitation can vary considerably between different regions in the respective countries. While the south of Sudan sees high, but very seasonal rainfall, its northern parts have to rely largely on the Nile waters for irrigation. In the case of Mozambique, strong rainfall can also be a curse as the floods that hit the country in 2000 and 2001 have shown. They affected about a quarter of the population and destroyed a good deal of the country's infrastructure. Mozambique's geographical location, along the Indian Ocean with a coastline of more than 2,500 km<sup>2</sup>, gives it a degree of higher exposure to tropical depressions of various magnitudes and makes it one of the countries most vulnerable to natural catastrophes such as heavy floods and cyclones. The regions in the south and the inward plateaus, on the other hand, have a dry and semi-arid climate and can be exposed to droughts because of strong seasonality and sometimes scarcity of rainfall.<sup>18</sup> Senegal is characterized by a typical Sahel climate with seasonality of rainfall that diminishes towards the north.

The differences in average precipitation are mirrored in the available internal freshwater resources per capita which are significantly lower in Sudan and South Africa than in the other countries in the sample. Mozambique, once again, has the highest endowment although it is lower than the world average.

The FAO sees strong potential for irrigation improvement in Africa:

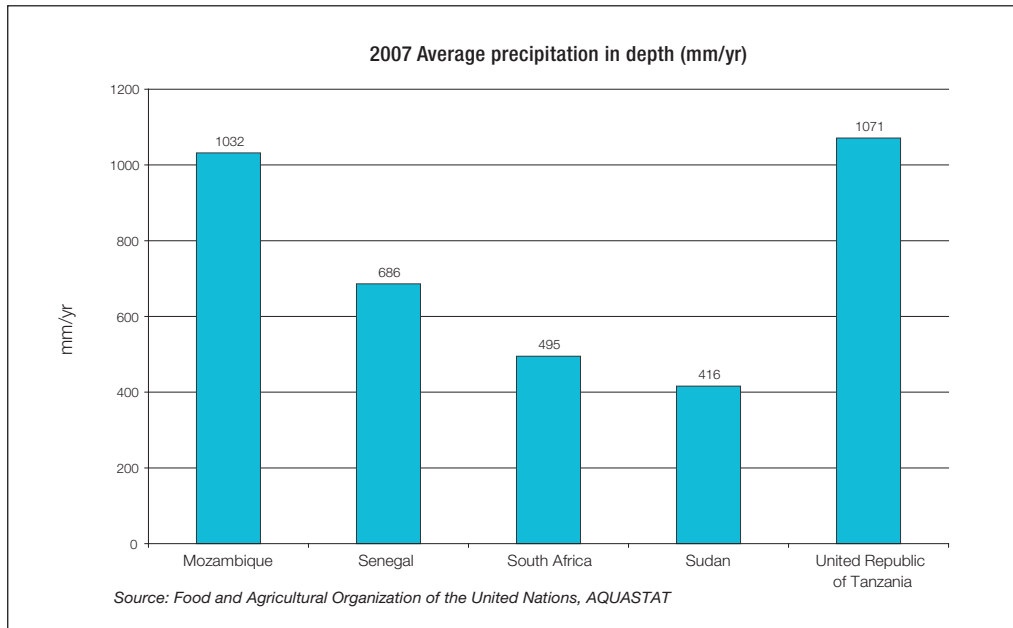
"Although Africa is, after Oceania, the driest continent in the world, it uses few of its renewable water resources: 5.5% against 20.4% in Asia. Looking at sub-Saharan Africa, it uses only 2.9% of its renewable water resources, against 62.5% in the Near East & North Africa region and 52.1% in South Asia. Sub-Saharan Africa is also the region where irrigated agriculture is least developed. Just 3.5% of its cultivated area is irrigated, against 42.2% in South Asia and 33.6% in the Near East & North Africa region."<sup>19</sup>

In terms of freshwater withdrawal as a percentage of internal resources, all African countries in the sample show strong upward potential except for Sudan, which uses more water than its internal resources. It has to be kept in mind, however, that the definition of internal water resources excludes rivers whose sources are in neighboring countries. In the case of Sudan, the Nile is the single most important source of water and irrigation, but it emanates in neighboring Ethiopia and Uganda with some sources as far as Rwanda and Tanzania. Thus, Sudan has more potential for agricultural improvement via enhanced irrigation than its internal freshwater resources would suggest. It already has the largest irrigated area in Sub-Saharan Africa and the second largest in the whole of Africa after Egypt. Partly due to investments by oil-rich Gulf States in the 1970s, large-scale irrigated agriculture expanded from 1.17 million ha in 1956 to more than 1.68 million ha by 1977. The potential for productivity gains via irrigation is illustrated by the fact that now irrigated land constitutes 10.2 percent of total Sudanese cropland but provides more than half of total agricultural production.

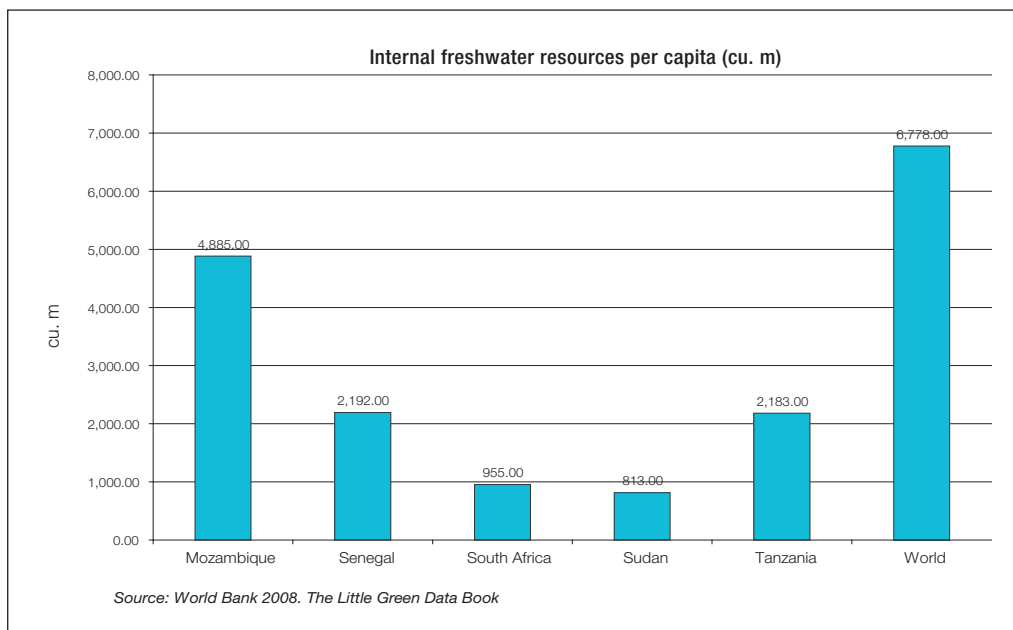
---

18. For further details see UNDP Reports, <http://www.undp.org/cpr/disred/english/regions/africa/mozambique.htm> (accessed July 17, 2008). Furthermore see "Background to Natural Disasters in Mozambique," available at: [http://www.sarprn.org.za/documents/d0001856/5-2Mozambique\\_WB\\_Apr2005.pdf](http://www.sarprn.org.za/documents/d0001856/5-2Mozambique_WB_Apr2005.pdf) (accessed July 16, 2008).

19. FAO/ Aquastat, "Dams and Agriculture in Africa," May 2007.



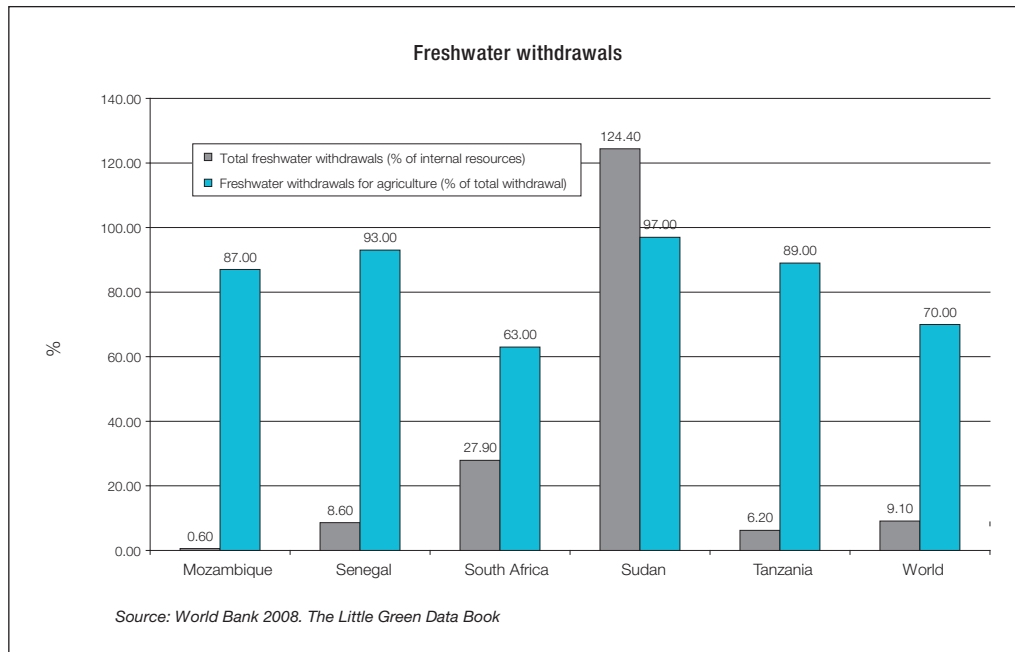
In Mozambique especially there is clear upward potential for irrigation. It has the highest rainfall among the sample countries; rainfall is concentrated in the center and the north of the country and close to the coastline. It also has the highest total renewable water resources and the smallest withdrawal of such resources. Irrigated crops only make up 3 percent of agricultural production in Mozambique. As rainfall shows a strong seasonality, irrigation schemes could enhance agricultural production. In 2002, the cultivated area was estimated at 4.44 million ha, of which 4.20 million ha was arable land and 0.24 million ha was under permanent crops. The total cultivable land was estimated to be much larger at 36 million ha, which is an astonishing 45 percent of the total area of the country and indicates clear room for expansion. Minefields left from the civil war could be a possible impediment to agriculture in some regions.



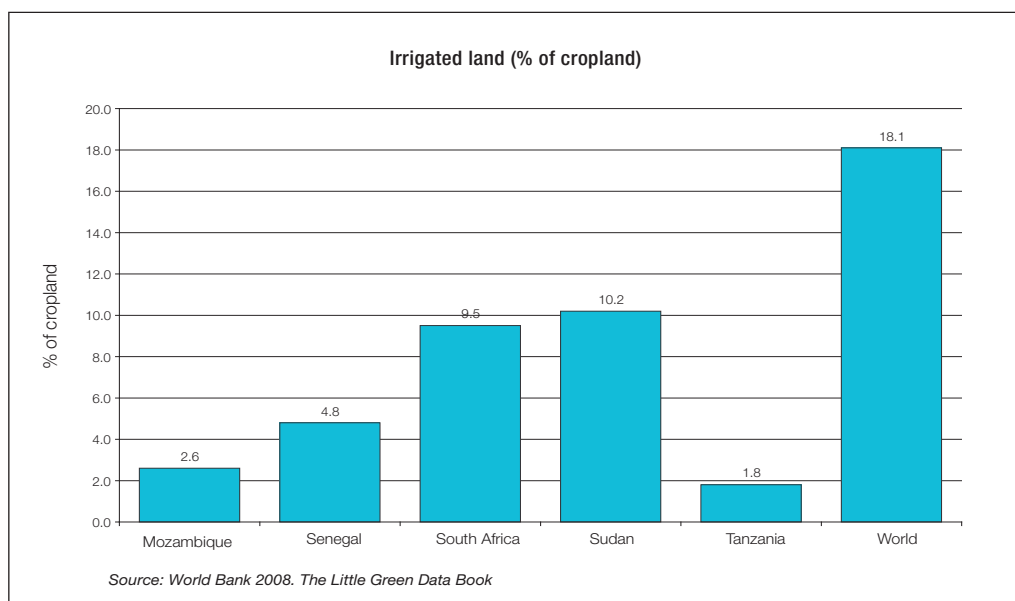
In comparison, the larger South Africa has only 14.6 million ha cultivable land, which is about 12 percent of the total land area of the country. In Senegal, total cultivable land is only 2.5 million ha, which is 13 percent of its total land area. Sudan is the largest country in Africa and its cultivable land is estimated at about 105 million ha, which is equivalent to 42 percent of the total



land area. In 2002, only 7 percent of the total land area and 16 percent of the cultivable area were actually cultivated thus showing strong upward potential, should irrigation be extended, which currently covers 10.2 percent of all available cropland.<sup>20</sup>



Agriculture in Africa is still dominated by small plot family farms which often produce for subsistence or local markets and do not have access to larger national and international markets. Often there is a pronounced divide between urban and rural economies, with the former obtaining their food from more competitive international food markets and the rural areas largely producing for subsistence. While considerable productivity gains could be expected by larger plots and the advent of irrigation and mechanization, any responsible development strategy needs to consider possible conflicts with established land and water rights of the traditional agricultural sector and its small-scale farmers. The integration into larger markets could lead to social unrest if the local population is sidelined and gains are distributed unevenly.

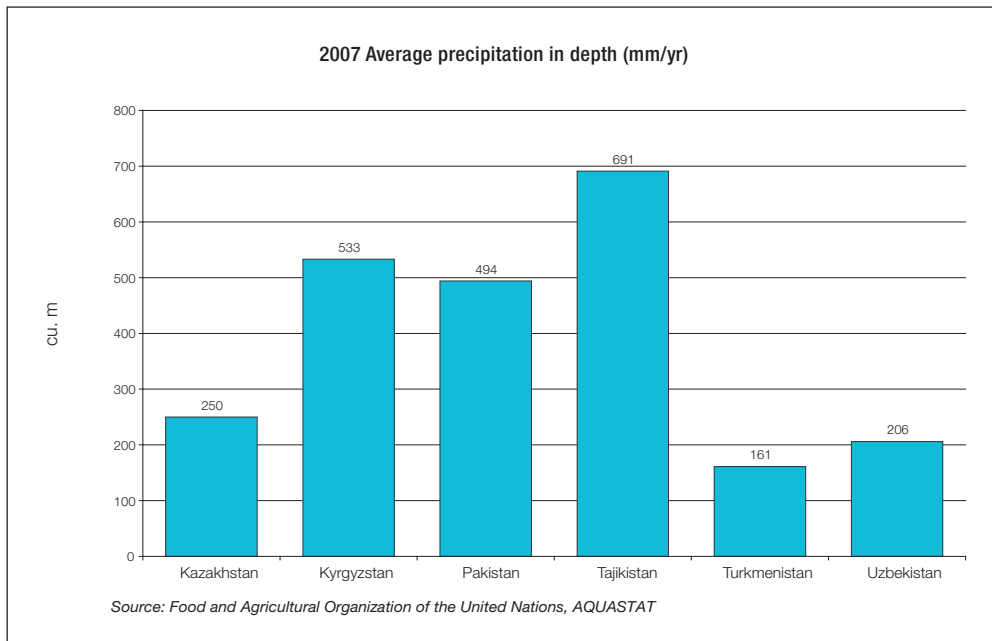


20. FAO, Aquastat Statistics, available at <http://www.fao.org/nr/water/aquastat/countries/index.stm>

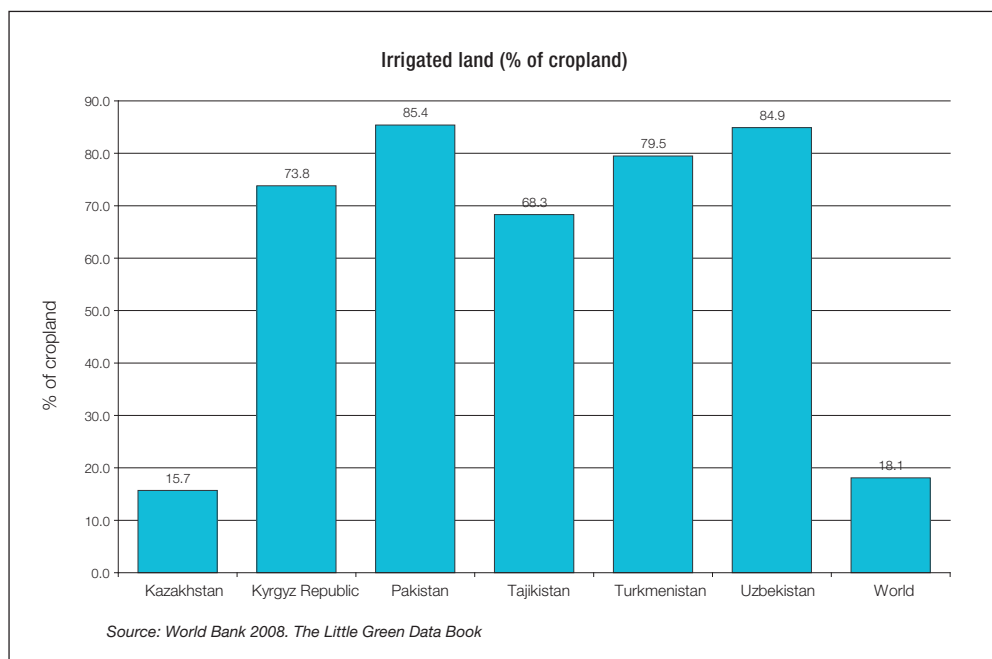


## Agricultural Sector and Irrigation Potential in Central Asian Countries and Pakistan

Average precipitation in the Asian sample countries are considerably lower than in the African ones. In the case of Kazakhstan, Uzbekistan and Turkmenistan they are at or below 250 mm/yr and thus considerably below sufficient precipitation levels required for rain-fed agriculture.



Thus, agriculture in these countries has to rely on large-scale irrigation, which is fed by rivers, the Aral and the Caspian Sea. In all countries, except Kazakhstan, the percentage of irrigation of overall crop land ranges between two thirds and 85 percent.

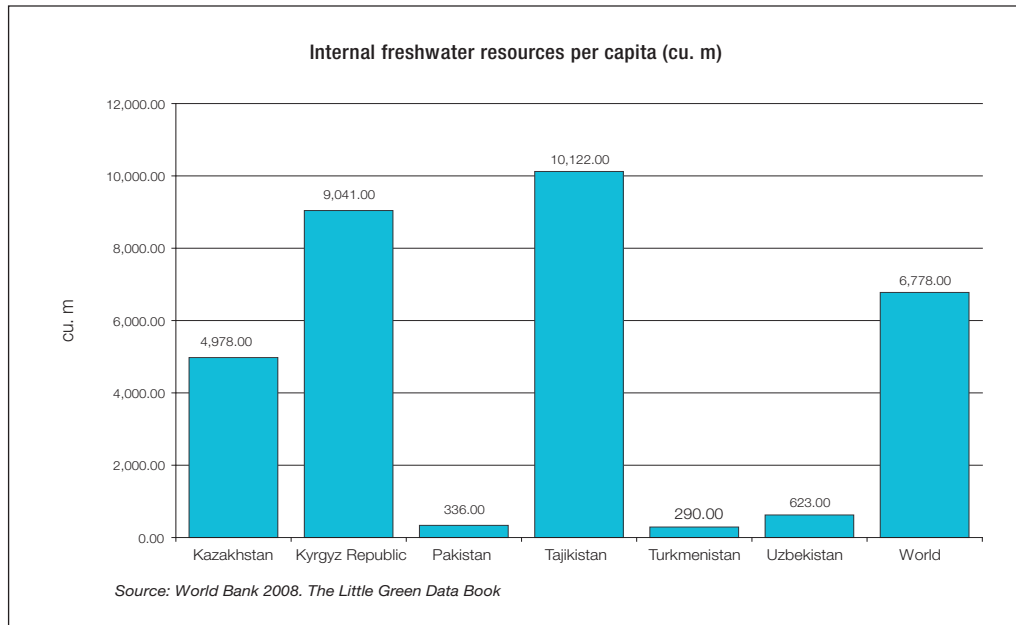


The internal freshwater resources available per capita are sufficiently high in Kazakhstan, Kyrgyzstan and Tajikistan, because of low population density, large land mass and rivers. They

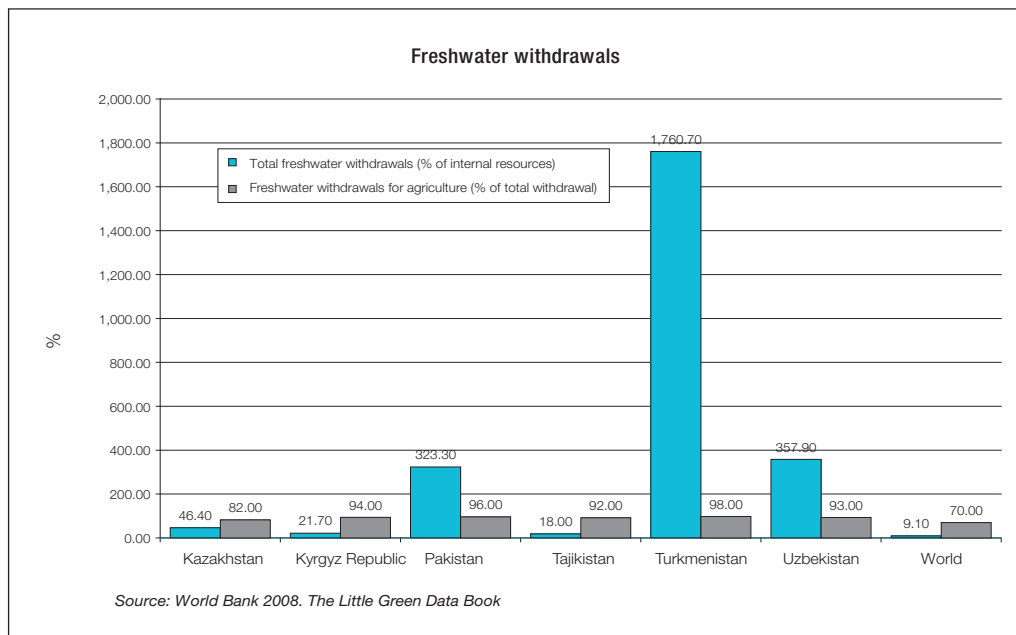




are, however, very low in the case of Pakistan, Turkmenistan and Uzbekistan and severely limit the potential of enhanced irrigation.



This is also exacerbated by the fact that these three countries withdraw freshwater excessively above their available internal resources. This is particularly striking in the case of Turkmenistan, which uses over 1700 percent (sic) of its internal water resources.



As internal water resources do not take into account sources from neighboring countries, like the Indus in Pakistan, the Amu Darya in Uzbekistan or the Syr Darya in Kazakhstan, available water resources are more, but their excessive use has led to severe ecological damage like the catastrophe of the Aral Sea, which has shrunk to 10 percent of its original size since 1960!<sup>21</sup> It has split into three lakes, two of which now have salinity rates that have led to the disappearance of fish. The third, northernmost lake has recovered after a dam was built in 2005, but the two

21. Philip Micklin and Nikolay V. Aladin, "Reclaiming the Aral Sea," *Scientific American*, March 2008, available at <http://www.sciam.com/article.cfm?id=reclaiming-the-aral-sea&sc=rss>.



southern lakes are about to become dead lakes unless a politically sensitive multi-billion re-engineering project of the Amu Darya is implemented. The Aral Sea gets almost all its water from the Amu Darya and Syr Darya rivers that emanate in Kyrgyzstan and Afghanistan/Tajikistan, respectively. During the Soviet era, large-scale irrigation projects were implemented using the water of these two rivers, mainly for water intensive cotton plantations. The Aral Sea area has also been affected by heavy pollution stemming from weapons testing, industrial projects and the runoff of pesticides and fertilizer.

Currently, water shortage limits agriculture; in Uzbekistan, for example, for lack of water only 20 percent of the cultivable land area is actually cultivated. Water shortage also necessitates coordination between the Central Asian states about water rights as this is a constant source of conflict between them.

### Map of Kazakhstan and Central Asia



Source: CIA Factbook

Since the disintegration of the Soviet Union, the Central Asian countries have faced similar political, economic and social challenges, such as continuing predominance of state-owned enterprises, decline of traditional markets in the former Soviet Union, and difficulties in opening new trade channels (see Appendix II for political background information). Besides, there has been considerable deterioration in infrastructure and social services and a rise in poverty. Agriculture and food trading is still dominated by large state farms; in Kazakhstan, *sovkhoz* (state farms) and *kolkhoz* (collective farms) accounted for more than 90 percent of the cultivated land at the beginning of the 1990s and large-scale privatization has been limited since then. Similarly, in Uzbekistan, there are extensive state controls over the economy. State interventions in business operations through para-state industrial associations, a variety of state plans, and other administrative tools are common. Private property rights suffer from repeated violations by state enforcement organs, and the overall business climate often remains unfriendly. In Turkmenistan, most of the cotton and wheat crops are grown under the state order system and the state procures them at or below-market prices. The problems for potential FDI in agriculture can be imagined.



A detailed assessment of agricultural potential of the sample countries in Africa and Central Asia is beyond the scope of this study and any GCC agro-investment decision would require in depth case by case studies – climatic endowments, economic structures and government policies are too diverse. But a rough conclusion can be drawn: While African countries mainly suffer from an economic water shortage that could be overcome by investments, Central Asian countries and Pakistan suffer from a physical water shortage, which makes the potential for enhanced irrigation and agricultural productivity more limited. They already withdraw more than 75 percent of river water for human purposes, while tropical African countries like Mozambique and Tanzania draw less than 25 percent.<sup>22</sup> Another important question relates to crops which are mainly planted in the respective countries and to what extent this matches the GCC import requirements, which focus largely on cereals. Here the situation is reverse, with the Central Asian countries being strong in wheat and Pakistan in rice, while African countries, thus far, have focused on typical crops of their continent like cassava and sorghum, for which the demand in GCC countries is lower.

## **Main Crops in Mozambique, Senegal, South Africa, Tanzania and Sudan**

In terms of crops and relative importance on a global scale (see Table in Appendix I), South Africa scores with regard to sugarcane, maize and fruits (oranges, apples and grapes). Mozambique is important for cassava and pulses, while Senegal is less important in absolute and relative numbers and focuses on cereals and oil crops. Tanzania is a major cassava producer with a world production share of 3.39 percent. In absolute terms, it also produces significant amounts of cereals, maize and sorghum. Sudan's share in worldwide production is particularly high in the case of sorghum (4.43 percent), groundnuts (3.29 percent) and millet (1.8 percent). In absolute terms, its cereal production is considerably below that of Tanzania or South Africa.

## **Main Crops in Central Asian Countries and Pakistan**

Crops in Central Asia are dominated by wheat, cereals, potatoes and cotton (see Table in Appendix I). Kazakhstan is a major producer of wheat and barley and its share of world production is 1.57 percent and 0.9 percent, respectively, while Uzbekistan produces 5.06 percent of all cotton and 3.94 percent of all fiber crops worldwide and is also a major wheat producer with a share of 0.85 percent. Turkmenistan has similar shares in cotton and wheat production and produces 3.94 percent of sugar beets worldwide. Kyrgyzstan and Tajikistan play only a minor role in absolute and relative terms. In international comparison, Pakistan is a major producer of sugarcane (4.01 percent), wheat (3.08 percent) and rice (1.24 percent). These figures pale, however, in comparison to its staggering share in worldwide cotton and fiber production (10.41 and 8.17 percent, respectively).

## **Food Exports vs. Food Security**

Any investment decision is influenced by the political conditions in the targeted countries. The political orientation of the leaders, their cooperation with international institutions like the

---

22. For a map of global economic and physical water scarcity, see <http://www.fao.org/nr/water/art/2007/scarcity.html>



WTO, political stability and related security questions are of crucial importance to investors. In the case of agricultural investments, it will be important for GCC countries to engage in a close dialogue with governments and local communities and ameliorate social tensions associated with food inflation. Otherwise, FDI in the agricultural sector could be perceived as an infringement on already-stretched food security in the respective African and Asian countries. Only with a joint effort and a strong growth in agricultural production, can the diverging interests of African and Asian food security and GCC export interests be balanced.

The importance of this issue is underlined by the fact that the sample countries themselves face challenges of food inflation and have reacted to it with various measures. In South Africa, for example, the government has announced an increase in disability and old age payments from April 2008, and adjusted the amounts paid in social grants to the poor. In Senegal, which normally imports half of its cereal consumption, the government has subsidized the purchase of wheat flour by 40 percent, waived tariffs and imposed price controls. Maize prices in Mozambique's capital Maputo were 43 percent higher in March 2008 than a year ago. In 2007, the Kazakhstan government devised a plan for buying several months-worth of basic food supplies to stabilize prices in the future and, in April 2008, temporarily suspended wheat exports until the beginning of the harvest season in September 2008 in order to improve food security.

The UAE is already aware of how crucial such conflicts between local food security and investments for food exports can be. During its negotiations for agro-investments in Pakistan it has tried to get "a blanket exemption" from Pakistani export restrictions, which the country has implemented for reasons of domestic food security. While the UAE wants to have exemption for all possible projects, the Pakistani side is willing to give such privileges only for specifically proposed agricultural free zones and has cautioned that a possible investment deal is not "to do away with precious farmland but in fact to raise the productivity of our farms and turn barren land in to fertile farmland."<sup>23</sup>

## Geopolitical Considerations

### Transport Security

Oil-consuming countries are very much aware of the issue of transport security. Oil, which is produced far away from home, needs to reach them in a timely fashion with limited risks involved. Choke points like the Straits of Hormuz and Malacca or the Suez Canal, therefore, play a prominent role in discussions about energy security.

The GCC countries' position with regard to food imports is not very much different: Food needs to reach the Gulf's shore once it is harvested in Africa or Asia and any disruption of supply routes would be a matter of great concern. Thus, security of the Strait of Hormuz is not only crucial for oil exports, but also for imports of food, machinery and raw materials. Actually only a minority of ships that pass the Strait are oil tankers and the GCC countries will need to

---

23. "UAE May Invest US\$ 500m in Pakistan Farms," The National, June 8, 2008, available at: <http://www.thenational.ae/article/20080608/BUSINESS/290093676/1118/rss>; "UAE Investors Buy Pakistan Farmland," Arab Build, May 12, 2008, available at: [http://www.arabbuild.net/index.php?option=com\\_content&task=view&id=518&Itemid=1](http://www.arabbuild.net/index.php?option=com_content&task=view&id=518&Itemid=1)



give greater attention to the issue of maritime security in the Red Sea and around the Horn of Africa should its food imports from Africa increase.<sup>24</sup>

While Africa and Pakistan present great advantages for the GCC countries in terms of transport security because of open sea routes, the landlocked Central Asian position is less suitable. Kazakhstan uses transport services about 20 times more than the economies of Western Europe (about 6 ton-Km compared to 0.3 ton-Km) and is among the most freight intensive economies in the world, even more than other countries with vast land masses like Canada and Australia. Kyrgyzstan, in turn, is largely dependent on Kazakhstan's transport network to export to foreign markets. Most importantly, food exports from Central Asia would need to pass Iran, Afghanistan or Russia and the Caucasus if not freighted by air. The corresponding risk could be substantial should existing conflicts like the ones in Afghanistan and Georgia or the Iranian nuclear standoff exacerbate.

## Increased Exposure to Regional Conflicts

GCC countries must be aware that any large-scale FDI comes with involvement in local politics and increased international scrutiny and accountability in case of political conflicts. China, for example, has attracted international criticism for its investments in the Sudanese oil sector in the wake of the Darfur conflict, with some voices even calling for a boycott of the Olympic Games. Other conflicts in the targeted sample countries involve a legacy of civil war in Mozambique, authoritarian regimes and adverse human rights reports in some Central Asian countries, and Pakistan's exposure to Islamist radicalism and the conflicts in Afghanistan and Kashmir (see political background information in Appendix II). The GCC countries, thus far, had a tendency to stay out of the international limelight, but they must be aware that such conflicts could not only threaten their respective agricultural investments, but also their international standing, should they become involved in local politics.

## Possible Conflicts of Interest: With Russia in Central Asia and with China in Africa

Relations between the GCC countries and Russia and China are cordial overall and have improved significantly in recent years in the wake of high profile visits by heads of state. Trade and economic relations are booming as well, especially with China. The possibility of conflict of interest, therefore, seems to be far fetched; an expansive agricultural strategy of the GCC countries in Africa and Central Asia could, however, develop into a bone of contention in a more distant future.

With oil prices above \$100 Russia has regained its national ambition and the ability to back it with financial power. Relations with Central Asia are close due to a common history under the umbrella of the former Soviet Union. Much of Central Asian infrastructure that was built at the time was directed towards Russia as the center of the former SU. Russia has clearly restated its national interest in the Caucasus and Central Asia. Besides economic considerations like higher

---

24. See also GRC Security & Terrorism Research Bulletin, Issue 8, May 2008 on "Maritime Security in the Gulf" (Dubai: Gulf Research Center, 2008).



prices and access to retail markets, it has used its gas exports and pipelines as a foreign policy tool in its interactions with various countries such as Ukraine, Belarus, Turkmenistan, Western Europe and Georgia. In 2007, it signed an agreement with Kazakhstan and Turkmenistan to export gas via the Russian pipeline system and it has initiated new projects like the Blue Stream and South Stream pipelines in order to ward off competing pipeline projects such as the Nabucco project by the EU or the Trans Caspian Pipeline project by Turkmenistan, Azerbaijan, Turkey, and Georgia.

The recent decision to establish a Russian state company for food trading exports has led to international concerns that Russia may try to use this state company as it has used Gazprom to leverage its influence in world gas markets. It is expected that the state company could take hold of up to 50 percent of Russia's cereal exports, which are the fifth largest in the world.<sup>25</sup> There could be a natural interest to include the substantial wheat export potential of Kazakhstan under such a strategy and this in turn would conflict with GCC interests to establish a foothold in Central Asian food markets.

China, on the other hand, does not only procure raw materials like oil, metals and timber from Africa on a large scale – like the GCC, it has eyed the continent as a possible solution for its problems of food security. Although still largely self-sufficient in agricultural production, China became a net food importer in 2004. It needs to feed 20 percent of the world's population on only 7 percent of the world's arable land. Production is likely to stagnate or fall due to loss of agricultural land to construction and ecological damage, while consumption will rise due to richer diets and some population growth, which is relatively small in comparison to the GCC and many developing countries but very large in absolute terms due to the sheer size of the Chinese population. The China-Africa summit in November 2006 in Beijing led to agreements to set up 10 agricultural centers in Africa.<sup>26</sup> A conflict of interest between China and the GCC in a scramble for African food exports is, therefore, conceivable.

## FDI Climate in Africa and Central Asia: A Comparative Overview

In Africa, South Africa occupies the top slot in terms of both FDI inflows as well as stocks. Remarkable is the strong performance of Mozambique; although its GDP and GDP per capita are considerably lower than Senegal's, it has attracted more FDI as a percentage to its Gross Fixed Capital Formation (GFCF) and as percentage of GDP. Sudan showed a strong FDI performance because of substantial inflows in its oil sector, most notably from China. Like Kazakhstan, its dependence on FDI for GFCF is well above 40 percent. In the Central Asian region, Kazakhstan is the leading destination for FDI followed by Pakistan which witnessed increasing inflows despite political instability (see Table).<sup>27</sup>

---

25. "Moscow to Seize Grain Export Controls," Financial Times, July 31, 2008, available at [http://www.ft.com/cms/s/0/debdeb184-5f3f-11dd-91c0-000077b07658.html?nclink\\_check=1](http://www.ft.com/cms/s/0/debdeb184-5f3f-11dd-91c0-000077b07658.html?nclink_check=1).

26. Royal Bank of Scotland, "Global Food Inflation: China is a Minor Player, For Now," Research Note, April 2, 2008; Marie Lillo, "Ensuring Food Security: For the GCC, the Answer Lies in a Partnership with Africa," GRC Analysis, July 1, 2008; Martin Walker, "Chinese Prosperity Will Set Off Global Food Inflation," available at: [http://www.terraviva.com/reports/Chinese\\_Prosperty\\_Will\\_Set\\_Off\\_Global\\_Food\\_Inflation\\_999.html](http://www.terraviva.com/reports/Chinese_Prosperty_Will_Set_Off_Global_Food_Inflation_999.html)

27. This section is based on a summary of the country FDI profile database of the UNCTAD posted on November





## Summary of FDI (Million Dollars)

	FDI flows, 2002-2005 (annual average)	FDI flows as a percentage of GFCF, 2002-2005 (annual average)	FDI stock, 2005	FDI stock as a percentage of GDP, 2005
Mozambique	259.1	26.0	2386.1	35.5
Senegal	65.4	4.0	1125.9	13.5
South Africa	2167.3	7.4	69372.0	29.0
Sudan	1469.5	44.8	7849.8	--
Tanzania	475.0	21.5	6028.8	49.6
Kazakhstan	1277.1	46.0	15354	62.9
Kyrgyzstan	13.0	18.9	435.1	27.1
Tajikistan	94.03	27.5	305.8	--
Turkmenistan	318.5	24.2	2393.4	--
Uzbekistan	207.1	14.7	1331.6	13.8
Pakistan	1169.0	13.1	10480	--

Notes: --data not available. GFCF = Gross Fixed Capital Formation. Sources: UNCTAD, FDI online Database and The World Bank, Doing Business 2008, available online at <http://www.doingbusiness.org>, accessed on 07/07/08.

One explanation for this seeming divergence in performance is the comparative costs and durations of doing business (See Table), which decisively vary from country to country depending on the FDI climates. A brief comparative overview of FDI climate in these countries would substantiate this. Mozambique, for example, has implemented a couple of reform measures in recent years and was more active than Senegal and South Africa in this respect.

## Comparative Costs of Regulation in Africa, Central Asia and the GCC

Economy and Regions	Procedures (number)	Duration (days)	Cost (% GNI per capita)	Paid in Min. Capital (% of GNI per capita)
Mozambique	10	29	21.6	115.8
Senegal	10	58	107	255
South Africa	8	31	7.1	0
Sudan	10	39	57.9	0.0
Tanzania	12	29	47.1	0.0
Kazakhstan	8	21	7.6	22.9
Kyrgyzstan	8	21	8.8	0.5
Tajikistan	13	49	39.6	311.0
Turkmenistan	--	--	--	--
Uzbekistan	--	--	--	--
Pakistan	11	24	14.0	0.0
Kuwait	13	35	1.6	99.9
Oman	9	34	4.3	541.8

2006, available online at [www.unctad.org](http://www.unctad.org).



Saudi Arabia	7	15	32.3	0
United Arab Emirates	11	62	36.9	312.4
Sub-Saharan Africa	<b>10.8</b>	<b>56.3</b>	<b>148.1</b>	<b>188.8</b>
Middle East & North Africa	<b>9.7</b>	<b>38.5</b>	<b>66</b>	<b>487.7</b>
East Asia & Pacific	8.7	46.5	34.9	50
Eastern Europe & Central Asia	8.8	26.2	11.1	45.3
Latin America & Caribbean	9.8	68.3	43.6	13.1
OECD	6	14.9	5.1	32.5
South Asia	7.6	33.4	40.7	0.7

Source: The World Bank, *Doing Business 2008*, available online at <http://www.doingbusiness.org>, accessed on 07/07/08.

While considerable efforts have been made during recent decades to improve investment regulations (see Appendix III), there are several structural policy rigidities affecting foreign investors in Africa and Central Asia. These include high perception of risk for business transactions, relatively weak institutional development, slow pace of economic, legal and institutional reforms (implementation gap), underdeveloped physical infrastructure, weak regional cooperation, including limited intra-regional trade and in the case of Central Asia, an overwhelming presence of public sector and consequent administrative barriers to foreign direct investment. Moreover, supply side constraints as reflected in shortages of skilled labor and infrastructure inadequacy, also increasingly impact FDI flows. Thus, GCC investors need to look particularly at the higher investment risks and the cost of doing business, red tape and rent-seeking behaviors such as licensing and inspections, and corrupt tax and customs administrations.<sup>28</sup>

## Conclusion

Mozambique, Sudan and South Africa could prove to be important destinations of agricultural investments by GCC countries as they seek to improve their food security. However, the infrastructure development required is considerably larger than in the case of developed markets and would need to be accompanied by a comprehensive development strategy. Mozambique has vast unused water resources and arable land that could be put into production. It also has improved its investment environment considerably in recent years. South Africa offers some potential as well and could be used as a gateway to other countries in southern Africa. Zimbabwe, for example, used to be the “bread basket of Africa” and could offer potential if the harmful policies of its current president Robert Mugabe are reversed. In terms of logistics, South Africa is also close to the Gulf by sea, while Senegal has a clear disadvantage in this regard. Senegal is also less suitable for a major agricultural expansion and actually has to import about half of its cereals consumption and has witnessed rising net food imports in recent years. Finally, Sudan has large idle land areas that could be used for agricultural production, provided the necessary dams and irrigation schemes are put in place.

Central Asian countries are less well endowed with water resources and face considerable ecological damage as the Aral Sea disaster shows. While African countries mainly suffer an

28. For further details, see World Bank, “Country Focus” and also ADB, FDI Review, 2007.





economic water shortage that could be overcome by investments, Central Asian countries and Pakistan suffer from a physical water shortage, which makes the potential for enhanced irrigation and agricultural productivity more limited. Furthermore, food exports from the landlocked Central Asian countries constitute a logistical challenge, while transport security is much more guaranteed in the case of the east African countries and Pakistan.

Given the limited agricultural potential of Central Asia, the required magnitude of agro-investments in Africa, and institutional shortcomings in both regions, GCC investments in agricultural trading companies and in developed agro markets like Europe and Latin America might be a safer bet and a necessary diversification in the emerging GCC strategy of agricultural investments. Besides more available land and water resources, Latin America and Europe would offer established markets, with better rule of law and safety of FDI, as well as existing know-how and infrastructure. Furthermore, the EU has now abandoned its decade-old strategy of temporary fallowing schemes in order to stabilize prices. Fallow land in the EU, therefore, could be put into production easily. Related investments would undoubtedly be less risky and could lead to faster results, although GCC investment monies are not really needed in these countries and their potentially beneficial impact would be less pronounced than in Africa, where huge productivity gains could be expected by large-scale investments in agricultural development.

The option of indirect access to food trade flows via investments in trading companies and trading infrastructure like ports could also be more available in these developed markets. Such investments offer the opportunity to lower food procurement costs by cutting out middlemen and agency fees and could be generally contemplated as possible alternatives to direct investments in food production, a field in which the GCC countries have arguably less experience and which would require a pretty comprehensive infrastructure development strategy in undeveloped markets like Africa. This does not mean that the GCC should abandon their current focus on Africa and Central Asia when it comes to agro-investment, but they should envisage other regions as well in order to ensure diversity of supplies. Besides local proximity and cultural closeness, they also should consider economic factors.

A major challenge for any Gulf investment program that aims at food exports from Africa and Central Asia and Pakistan is the consideration of local needs of food consumption, as most of the countries in question are, at this stage, net food importers themselves. Investments would need to be on such a scale that they could improve local food security and thereby social and political stability, and produce an exportable surplus on top of it. The magnitude of this challenge and related works on infrastructure and logistics can be imagined. The task will be achievable only in close cooperation with the respective African and Central Asian farmers, governments and communities.



## Appendix I: Main Agricultural Commodities in Sample Countries

### Production (Tsd Tons) | 2004

Top Ten Commodities	South Africa	Percentage of the world's production	World
Sugarcane	19,095	1.43	1,332,144
Cereals (Rice Milled Eqv)	12,351	0.60	2,070,533
Maize	9,965	1.38	724,589
Fruit Primary	5,463	1.07	512,123
Vegetables Primary	2,366	0.27	874,643
Potatoes	1,819	0.55	330,300
Grapes	1,683	2.51	67,100
Wheat	1,680	0.27	632,595
Oranges	1,154	1.80	64,261
Apples	708	1.12	63,400
Top Ten Commodities	Mozambique	Percentage of the world's production	World
Cassava	6,413	3.16	203,163
Cereals (Rice Milled Eqv)	1,948	0.09	2,070,533
Maize	1,437	0.20	724,589
Sugarcane	400	0.03	1,332,144
Sorghum	337	0.57	58,711
Fruit Primary	335	0.07	512,123
Coconuts	265	0.48	54,661
Pulses	205	4.92	4,164
Rice, Paddy	177	0.03	606,268
Groundnuts in Shell	128	0.35	36,436
Top Ten Commodities	Senegal	Percentage of the world's production	World
Cereals (Rice Milled Eqv)	986	0.05	2,070,533
Sugarcane	829	0.065	1,332,144
Groundnuts in Shell	603	1.65	36,436
Vegetables Primary	576	0.07	874,643
Cassava	402	0.20	203,163
Maize	401	0.06	724,589
Millet	324	1.17	27,768
Watermelons	276	0.29	95,619
Oilcakes Equivalent	255	0.10	253,408
Oil crops Primary	204	0.15	133,662
Top Ten Commodities	Tanzania	Percentage of the world's production	World
Cassava	6,890	3.39	203,163
Cereals (Rice Milled Eqv)	4,793	0.23	2,070,533
Maize	3,230	0.45	724,589
Sugarcane	2,000	0.15	1,332,144
Fruit Primary	1,335	0.26	512,123



Vegetables Primary	1,193	0.14	874,643
Sweet Potatoes	970	0.76	127,228
Vegetables	955	0.39	247,656
Sorghum	800	1.36	58,711
Rice, Paddy	680	0.11	606,268
<b>Top Ten Commodities</b>	<b>Sudan</b>	<b>Percentage of the world's production</b>	<b>World</b>
Sugarcane	5,500	0.41	1,332,144
Cereals (Rice Milled Eqv)	3,638	0.18	2,070,533
Sorghum	2,600	4.43	58,711
Vegetables Primary	1,867	0.21	874,643
Groundnuts in Shell	1,200	3.29	36,436
Fruit Primary	1,161	0.23	512,123
Oilcakes Equivalent	751	0.30	253,408
Tomatoes	700	0.56	124,422
Oilcrops Primary	548	0.41	133,662
Millet	500	1.80	27,768
<b>Top Ten Commodities</b>	<b>Kazakhstan</b>	<b>Percentage of the world's production</b>	<b>World</b>
Cereals (Rice Milled Eqv)	12,242	0.59	2,070,533
Wheat	9,937	1.57	632,595
Vegetables Primary	2,739	0.31	874,643
Potatoes	2,261	0.68	330,301
Barley	1,388	0.90	154,139
Watermelons	667	0.70	95,619
Tomatoes	491	0.39	124,422
Seed Cotton	467	0.67	69,936
Maize	458	0.06	724,589
Sugar Beets	398	0.16	249,118
<b>Top Ten Commodities</b>	<b>Uzbekistan</b>	<b>Percentage of the world's production</b>	<b>World</b>
Cereals (Rice Milled Eqv)	5,794	0.28	2,070,533
Wheat	5,378	0.85	632,595
Seed Cotton	3,535	5.06	69,936
Vegetables Primary	3,488	0.40	874,643
Fruit Primary	1,365	0.27	512,123
Tomatoes	1,245	1.00	124,422
Fiber Crops Primary	1,170	3.94	29,729
Oilcakes Equivalent	1,028	0.41	253,408
Vegetables	900	0.36	247,656
Potatoes	896	0.27	330,301
<b>Top Ten Commodities</b>	<b>Kyrgyzstan</b>	<b>Percentage of the world's production</b>	<b>World</b>
Cereals (Rice Milled Eqv)	1,703	0.08	2,070,533
Potatoes	1,363	0.41	330,301



Wheat	998	0.16	632,595
Vegetables Primary	832	0.10	874,643
Sugar Beets	642	0.26	249,118
Maize	453	0.06	724,589
Barley	233	0.15	154,139
Fruit Primary	190	0.04	512,123
Tomatoes	168	0.14	124,422
Carrots	127	0.52	24,504
<b>Top Ten Commodities</b>	<b>Tajikistan</b>	<b>Percentage of the world's production</b>	<b>World</b>
Cereals (Rice Milled Eqv)	843	0.04	2,070,533
Vegetables Primary	832	0.10	874,643
Wheat	631	0.10	632,595
Seed Cotton	557	0.80	69,936
Potatoes	527	0.16	330,301
Fruit Primary	238	0.05	512,123
Tomatoes	199	0.16	124,422
Onions, Dry	178	0.31	56,923
Fiber Crops Primary	172	0.58	29,729
Oilcakes Equivalent	172	0.07	253,408
<b>Top Ten Commodities</b>	<b>Turkmenistan</b>	<b>Percentage of the world's production</b>	<b>World</b>
Cereals (Rice Milled Eqv)	2,748	0.13	2,070,533
Wheat	2,600	0.85	632,595
Seed Cotton	1,000	5.06	69,936
Vegetables Primary	725	0.40	874,643
Fruit Primary	279	0.27	512,123
Tomatoes	250	1.00	124,422
Sugar Beets	230	3.94	29,729
Watermelons	230	0.41	253,408
Oilcakes Equivalent	227	0.36	247,656
Fiber Crops Primary	218	0.27	330,301
<b>Top Ten Commodities</b>	<b>Pakistan</b>	<b>Percentage of the world's production</b>	<b>World</b>
Sugarcane	53,419	4.01	1,332,144
Wheat	19,500	3.08	632,595
Rice, Paddy	7,537	1.24	606,268
Seed Cotton	7,279	10.41	69,936
Fruit Primary	5,121	1.00	512,123
Vegetables Primary	4,745	0.54	874,643
Oilcakes Equivalent	2,978	1.18	253,408
Maize	2,797	0.39	724,589
Fiber Crops Primary	2,428	8.17	29,729
Potatoes	1,938	0.59	330,301

Source: Primary Corps Production, FAO Statistics Division 2008, available at: <http://faostat.fao.org/site/408/default.aspx>



## Appendix II: Political Background Information for Sample Countries

### Mozambique

Mozambique gained independence from Portugal in 1975. Civil war and conflicts with the neighboring white-ruled states of Rhodesia and South Africa characterized the first decade of Mozambique's independence. Between 1977 and 1992, an estimated million Mozambicans died from fighting and famine in a war which has left the country with a legacy of landmines, amputees, refugees and orphans. By mid-1995, more than 1.7 million Mozambican refugees who had sought asylum in neighboring countries had returned to their homes as part of the largest repatriation witnessed in sub-Saharan Africa while a further estimated four million internally displaced persons returned to their areas of origin. The period of conflict ended in 1992 with a UN-backed peace accord in Rome between the ruling party Front for the Liberation of Mozambique (FRELIMO) and the Mozambican National Resistance (RENAMO).

The political settlement in 1992 was followed by stability and rapid economic growth. After three presidential and parliamentary elections (1994, 1999, 2004) and a presidential transition, the country is considered to be politically stable, although RENAMO protested against fraud in the 2004 election and denounced its results, which gave it roughly a third of the votes and FRELIMO two thirds.<sup>29</sup> The next presidential and parliamentary elections are scheduled for 2009 and it remains to be seen whether tensions and rivalries between RENAMO and FRELIMO supporters could spill over into violence. In terms of foreign relations Mozambique currently faces no significant external threats. It is a member of the South African Development Community and is negotiating access to the South African Customs Union. With its long coastline, it is considered as an essential link to global markets for several neighboring landlocked countries and has ample growth potential through its economic ties to the industrial heartland of South Africa.<sup>30</sup>

Albeit Mozambique has shown high economic growth and politico-economic progress since the end of the civil war, significant socio-political and socio-economic weaknesses remain: Poverty is widespread, with more than 50 percent of Mozambicans living on less than \$1 a day. The UN, accordingly, ranks Mozambique as a "least developed country" on a global scale.<sup>31</sup> Aid dependency ranks high – notwithstanding debt relief – violent crime is widespread, and illiteracy, unemployment, pests and health epidemics (including HIV/AIDS) pose enormous challenges for the country's outlook.

---

29. For an analysis on the elections in 2004 and 1999, see "Observing the 2004 Mozambique Elections," The Carter Center, 2005. Available at: <http://www.cartercenter.org/documents/2218.pdf> (accessed July 16, 2008).

30. World Bank, "Country Brief: Mozambique," available at: <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/MOZAMBIQUEEXTN/0,menuPK:382142~pagePK:141132~piPK:141107~theSitePK:382131,00.html#background>: (accessed July 16, 2008). Furthermore, see USAID, "Mozambique," available at: <http://www.usaid.gov/policy/budget/cbj2006/afr/mz.html> (accessed July 17, 2008).

31. UN Office of the High Representative for the Least Developed Countries, "Landlocked Developing Countries and Small Island Developing Countries," available at <http://www.un.org/special-rep/ohrls/ohrls/prsp.htm> (accessed 16.07.2008).



## Senegal

Senegal, the most western state of Africa, gained independence in 1960, after 300 years of French colonial rule. It is considered as an example for a successful post-colonial democratic transition among African states. Starting in the 1980s, the country faced a conflict in the southern part of the country (Casamance) aimed at independence from Senegal. The conflict ended with the signing of a peace agreement between the government and the MFDC (Mouvement des forces démocratiques de Casamance). In February 2000, the 40-year rule of Senegal's Socialist Party ended in peaceful presidential elections, which brought opposition leader Adoulaye Wade to power. In February 2007, Mr. Wade was re-elected president gaining an absolute majority of votes. Together with Thabo Mbeki of South Africa, and in close cooperation with the UN and other international institutions, he was a leading initiator of the New Partnership for Africa's Development (NEPAD) in 2001, which aimed at economic liberalization and improved governance but has been slammed by many NGOs for its lack of participatory elements. In an about-turn, Wade recently criticized NEPAD for being inefficient.<sup>32</sup>

Senegal has gone through a remarkable period of democratic transition which has given impetus to good governance and the consolidation of democratic values in the country and the West African sub-region as a whole. As an integral component of this transition, constitutional concessions have gained in importance. In the early 90s, for example, the National Assembly approved several constitutional amendments, among them the restoration of the post of Prime Minister with the intention to limit the president's power.

Senegal is part of the West African Economic and Monetary Union (WAEMU) and the Economic Community of West African States (ECOWAS). Due to the prime location on the west coast of the rapidly growing West African region, Senegal is considered as a gateway to these markets. Strong trade relationships between Senegal and other WAEMU countries have been facilitated by the shared WAEMU currency, the African Financial Community franc (CFA franc). Senegal has one of the best infrastructure systems in West Africa, which includes an extensive road and rail network, three international airports, a large deepwater seaport and an advanced telecommunications system.<sup>33</sup> The country's relationship with neighboring countries and international organizations are overall positive.

Senegal is aiming for a new growth model, which tries to improve the business environment, diversify exports and build up infrastructure. Macroeconomic developments in 2007 were positive with a GDP growth of 5 percent, mainly driven by services and the construction sector. But the main challenge for the country remains poverty reduction. Although poverty declined from 68 percent in 1994 to 51 percent in 2005, it remains particularly high in rural areas.

---

32. World Bank, "Country Brief: Senegal," available at: <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/SENEGALXTN/0,menuPK:296312~pagePK:141132~piPK:141107~theSitePK:296303,00.html> (accessed July 17, 2008). World Bank, "Senegal at a Glance," available at [http://devdata.worldbank.org/AAG/sen\\_aag.pdf](http://devdata.worldbank.org/AAG/sen_aag.pdf) (accessed July 16, 2008.) Institute for Security Studies, "Senegal. History and Politics," available at: <http://www.iss.co.za/af/profiles/Senegal/Politics.html> (accessed July 17, 2008). USAID, "Senegal," available at <http://www.usaid.gov/policy/budget/cbj2006/af/sn.html> (accessed July 17, 2008).

33. "Agri-Food Past, Present & Future Report, Senegal," June 2006. Available at: [http://ats-sea.agr.gc.ca/sahara/4151\\_e.htm](http://ats-sea.agr.gc.ca/sahara/4151_e.htm) (accessed July 16, 2008)



The UN ranks Senegal as a “least developed country.”<sup>34</sup> Wealth is distributed unequally, albeit social indicators are improving, mainly due to substantial government and donor investments in education, health, and other social services.<sup>35</sup> Overall, the country has maintained a relatively stable political and social environment even though separatism in the Casamance continues to exist on a low-level. An important factor for Senegal will be the way in which President Wade is committed to the success of the development programs which have been launched.<sup>36</sup>

## South Africa

In 1994, South Africa went through a transition from apartheid to constitutional democracy, building up its international position as a key player in **Africa**. The African National Congress (ANC) has won each democratic election since the fall of the apartheid regime. In the second round of post-apartheid local government elections in March 2006, it took two-thirds of the vote. In the 1999 elections, Thabo Mbeki, who had succeeded Nelson Mandela as head of the ANC, became South Africa’s new president. During the December 2007 ANC Conference, Jacob Zuma prevailed over President Mbeki and was elected party president. For Zuma, this meant a comeback as Mbeki had earlier discharged him from the post of Deputy President in 2005 following corruption charges against him that persist to this day and are the subject of a pending lawsuit. Parliamentary and presidential elections are to be held in 2009, and the populist left-wing leanings of Zuma have raised some concern that he might embark on policies that could be detrimental to international investors, should he win the presidency. But as the case of President Lula and Brazil has already illustrated, systems are more likely to shape presidents than the other way around. In the case of Brazil, fears of instability after a heated election campaign soon gave way to the realities of governing and Lula developed a decidedly business friendly attitude. Zuma has already tried to alleviate fears about his political goals and may follow the Brazilian example should he win the presidency in 2009. Still, the country currently faces considerable domestic tensions also because of a looming electricity shortage.

In 1996, the South African government introduced the Growth, Employment and Redistribution (GEAR) strategy, a neo-liberal reform program aiming at economic liberalization, privatization and a favorable investment climate. Although it succeeded in bringing down the fiscal deficit and opened the economy by cutting tariffs and exchange rate controls, economic growth has been largely jobless and FDI inflows did not increase substantially.

The exclusionary nature of apartheid and the country’s international isolation until the 1990s has left major weaknesses in and challenges for the political, economic and social life of South Africa. It is a country with extreme differences in incomes and wealth, and its economy is in a process of transition as the government seeks to address the inequities of apartheid,

---

34. UN Office of the High Representative for the Least Developed Countries, “Landlocked Developing Countries and Small Island Developing Countries,” available at: <http://www.un.org/special-rep/ohrls/ohrls/prsp.htm> (accessed 16.07.2008).

35. See USAID, “Senegal,” <http://www.usaid.gov/policy/budget/cbj2006/afr/sn.html> (accessed July 16, 2008)

36. “Trade, Standards and Poverty: Evidence from Senegal,” November 2006, available at <http://www.agrifoodstandards.net/en/filemanager/active?fid=27> (accessed July 16, 2008)





stimulate growth, and create jobs. Nearly 50 percent of the population lives in developing country conditions, and malnutrition, child mortality, unemployment, and HIV/AIDS rates are among the highest in the world.<sup>37</sup> Other areas of concern are a high crime rate and electricity shortages due to an inadequate of power generation capacity since 2007.

Although pro-poor reorientation of spending has contributed to improved social development indicators in a range of areas like access to services and education, overall the Millennium Development Goals (MDGs) of the UN are unlikely to be met. In 2006, the government launched the Accelerated and Shared Growth Initiative for South Africa (ASGISA). One of ASGISA's main goals is to bridge the divide between the formal and informal sectors and a widespread dualism in the economy.<sup>38</sup>

## Tanzania

A one-party state from its independence until the mid 1980s, Tanzania has held three multi-party elections since 1995. Each election has been dominated by the ruling Chama Cha Mapinduzi (CCM) party. In 2005, Jakaya Kikwete won the presidential elections. The country is classified as politically stable, although there have been outbreaks of violence between supporters of the two competing parties, CCM and CUF, in the wake of the elections of 2000.<sup>39</sup>

Poverty and aid dependency are among the most pressing issues of the country. According to the World Bank, Tanzania is one of the poorest countries in Sub-Saharan Africa and also worldwide. Child mortality, malnutrition, malaria and HIV/AIDS constitute enormous challenges. Tanzania plays an important role in the Great Lakes peace process and has been home to refugees from Rwanda, Burundi and Democratic Republic of Congo (DRC).

## Sudan

The largest African country by land area with an estimated population of 37 million people gained independence in 1956. Conflicts between the predominantly Muslim and Arab North and the predominantly Christian and animistic South led to a civil war that lasted until 1972. After a hiatus of 10 years, conflict broke out again in 1983. Since January 9, 2005 a Comprehensive Peace Agreement (CPA) is in place and a Government of National Unity (GoNU) was formed between the Sudanese government based in Khartoum and the south-based Sudan People's Liberation Army/ Movement (SPLA/ M). It grants southern Sudan autonomy for six years and is supposed to be followed afterwards by a referendum about

---

37. USAID, "South Africa," available at <http://www.usaid.gov/policy/budget/cbj2006/afr/za.html> (accessed June 16, 2008).

38. South African Government Information, "Accelerated and Shared Growth Initiative for South Africa (ASGISA)," available at <http://www.info.gov.za/asgisa/> (accessed July 16, 2008).

39. World Bank, "Country Brief: Tanzania," available at <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/TANZANIAEXTN/0,,menuPK:287345~pagePK:141132~piPK:141107~theSitePK:258799,00.html> (accessed July 23, 2008). OECD, "Tanzania," available at <http://www.oecd.org/dataoecd/26/62/38563053.pdf> (accessed July 23, 2008). World Bank, "Armenia. Trade Brief, 2008," available at <http://info.worldbank.org/etools/wti2008/docs/brief9.pdf> (accessed July 24, 2008). Australian Government, Department of Foreign Affairs and Trade. "Armenia Country Brief," available at [http://www.dfat.gov.au/geo/armenia/armenia\\_brief.html](http://www.dfat.gov.au/geo/armenia/armenia_brief.html) (accessed July 24, 2008).





independence. The CPA has created the position of a co-vice president and has allowed the north and south to split oil deposits equally, but it has also left both the north's and south's armies in place.

Yet, the CPA is only partly and slowly being implemented after initial progress in setting up the Government of National Unity (GoNU), the Government of South Sudan (GoSS), and two Multi-Donor Trust Funds by the World Bank (MDTFs).<sup>40</sup> Implementation delays led to a major crisis with the SPLM withdrawal from the GoNU on October 11, 2007. SPLM rejoined the GoNU at the beginning of 2008 after a cabinet reshuffle that brought in key SPLM members, such as the Secretary General of the SPLM. The fifth population census, a key precursor to the upcoming national elections and an element of the CPA, is now underway after major threats of a boycott by the GoSS. Midterm elections will be held in 2008 or 2009.<sup>41</sup>

Another conflict in Sudan has gained international notoriety in recent years, just as the conflict in the South has come to a possible close. Against the backdrop of conflicts between African agricultural tribes and Arab pastoral tribes over access to land, rebels of the southern part of the Darfur region have fought against the central government, with the latter taking the side of the Janjaweed militias, who belong to northern tribes and have been blamed for a large portion of the human rights abuses that have occurred during the conflict. In 2004, then US Secretary of State Colin Powell termed the Darfur conflict a “genocide;” the conflict has caused 200,000 to 400,000 deaths, according to various estimates, and has displaced about 2.5 million people.

In 2006, the Darfur Peace Agreement (DPA) was finally signed between the GoNU and the Sudan Liberation Movement (SLM). But it was not accepted by all rebel groups and fighting has continued. Fighting also involved conflict between Sudan and neighboring Chad<sup>42</sup> before a Saudi brokered peace deal was signed in 2007. In a recent development, the International Criminal Court in The Hague has filed charges against Sudan’s President Omar Al-Bashir on grounds of war crimes, genocide and crimes against humanity.

## Pakistan

General Pervez Musharraf took power in a military takeover in October 1999. In order to extend his presidency after controversial elections in October 2007 he suspended the constitution on November 3, 2007 and declared a state of emergency which lasted until December 15, 2007. He resigned however from his post as Chief of Army Staff amidst efforts to remove him from office on November 28, 2007. The February 2008 elections brought about a change in government as Musharraf’s party, the Pakistan Muslim League, was ousted. No single party

---

40. The CPA includes a permanent ceasefire and accords on wealth and power-sharing, and establishes major transformation processes, including reforming the political system to reflect democratic principles and uphold respect for human rights. “OHCHR in Sudan (2008-2009),” available at <http://www.ohchr.org/EN/Countries/AfricaRegion/Pages/SDSummary0809.aspx> (accessed 29.07.2008).

41. Emily Schroeder, “Elections in Sudan 2008/2009. A Complex Challenge in Need of Urgent Donor Attention,” available at <http://www.ploughshares.ca/libraries/Briefings/brf072a.pdf> (accessed July 29, 2008)

42. UNHCR, Chad and Sudan Situation. available at <http://www.unhcr.org/home/PUBL/474ac8c911.pdf> (accessed July 29, 2008).



was able to gain a parliamentary majority in these elections. Pakistan's People Party (PPP) and Pakistan's Muslim League (PML) formed a coalition following the elections.

After the resignation of President Musharraf in August 2008, concerns about the security situation in Pakistan persist amidst a continuous strong role of the military in national politics. The government is challenged by autonomous tribal forces in Waziristan and by radical Islamist opposition groups. Internationally, its involvement in the Kashmir conflict and the war in Afghanistan could affect the stability of the country.

## Kazakhstan

Kazakhstan gained independence in 1991 after the break-up of the Soviet Union. Like in other Central Asian republics, the country's political landscape is characterized by a continuation of autocratic rule. Nursultan Nazarbayev, the Kazakh Communist Party first secretary, became president. He is the key political force in Kazakhstan. He has consolidated his power by gradually restricting the country's new democratic freedoms, winning a referendum to cancel the 1996 election and securing a new seven-year term in a 1999 poll that was widely condemned as rigged.<sup>43</sup> Rivalries between the factions associated with the president's family members appear to have increased in recent years. The August 2007 election has resulted in a one-party parliament, with all deputies representing the president's party. The governing party, Nur Otan (Light of the Fatherland), won 88.1 percent of the votes and all 98 contested seats. The victory further consolidated power in the hands of Nazarbayev. Although per capita income is expected to rise, rural poverty remains particularly high. HIV/AIDS infection rates are increasing very fast, although from a small base. Among the major socio-political and socio-economic challenges for the future is the building up of human capital given the country's acute skills shortage.

Kazakhstan is facing a number of environmental challenges, including industrial pollution, land degradation and desertification, and the nuclear heritage of the Semipalatinsk polygon – all these aspects have to be taken into account when evaluating agricultural investment in Kazakhstan. The state will have to adopt a sound agricultural policy that defines the degree and modalities of state intervention in agriculture.

## Tajikistan

The first decade of Tajikistan's independence was characterized by war which lasted from 1992 till 1997. From a political and institutional perspective, the current situation in Tajikistan is ambivalent and complex. The weakness of the public administration, an uncertain legislative and fiscal framework, corruption and drug trafficking are major challenges.

Agriculture is the most important employment sector in Tajikistan, albeit arable land marks only a relatively small share of the country's total territory. Cotton is almost a monoculture in Tajikistan given the favorable climate conditions. Yet, it is often characterized by social constraints such as child labor and low or unpaid working conditions.

---

43. See country briefing on Kazakhstan by the Economist. Available at <http://www.economist.com/COUNTRIES/Kazakhstan/> (accessed July 24, 2008).



Among the major socio-economic challenges are: Poverty and unemployment which continue to be the most important problems particularly among the rural population. It has to be taken into account that Tajikistan has suffered serious setbacks caused by natural catastrophes. The capital Dushanbe is highly vulnerable to earthquakes.

## Uzbekistan

The current domestic political situation in terms of power structure is not transparent. The process of decentralization is only partly implemented. Law enforcement is still insufficient and the fight against corruption needs to be intensified.

The geo-political and geo-economic focus of Uzbekistan has shifted rapidly towards Russia and China since 2005. Its new orientation is also reflected on the one side by the cancellation of the membership in the GUAM (Georgia, Ukraine, Uzbekistan, Armenia, Moldova) union, and on the other by strengthening ties to neighboring countries. Thus Uzbekistan entered into several contractual relationships like the accession to EurAsEC, the Organization of Collective Security Agreement (led by Russia), and negotiated a de-mining agreement with Tajikistan and the Kyrgyzstan. Cross-border cooperation with Turkmenistan is improving since the visit of the two presidents in November 2004. Privatization is being gradually pursued especially in key sectors like energy and agriculture. Uzbekistan managed to attract investment in exploration industries from China, Malaysia, Russia and India. Most of the cotton production is committed to the main trade partners Russia and China. Uzbekistan is targeting accession to the WTO; however, the main obstacles remain the lack of proper legal frameworks and trade liberalization. The Uzbek government is gradually improving the infrastructure, such as transport, telecommunications and energy transport networks. A legal framework is being created for the development of domestic insurance, leasing and credit markets, however, the efficiency of local banks handling international credit facilities leaves a lot to be desired.

## Turkmenistan

Turkmenistan was ruled from 1990 to 2006 by the former First Secretary of the Turkmen Communist Party Saparmurat Atayevich Niyazov. President Niyazov had organized a Stalinist personality cult around himself and had close control of the country's economy and its key industrial sectors. After the death of Niyazov, Gurbanguly Berdymukhamdeov was elected President in February 2007, in elections that have been widely condemned as rigged. Niyazov's personality cult is on the wane now and the president's privilege to rename any landmarks, institutions, or cities has been abolished in a highly symbolic move. A comprehensive structural reform agenda and a program to restore and develop the agricultural sector have been announced, but the regime still remains largely autocratic with widespread government control of the economy and various social, political and religious aspects of society.

## Kyrgyzstan

The current situation in the Kyrgyzstan is ambivalent. Concerns about the domestic and foreign stability and the security situation have aggravated. Domestically, violence, unrest, corruption and the infiltration of organized criminal groups into the national security services are



rated high among the challenges by international observers. A clear and coherent reform program is missing, as is political consensus among the ruling elite. Power might intensify and increase the politically unstable situation. The position of the government towards adherence to international commitments as well as the avoidance of conflicts with Uzbekistan is still an issue of concern.

The major socio-political challenges are the deterioration of social services as a consequence of reduced government spending (pensions, salaries, etc.), high unemployment rates, poverty (with almost 40 percent of the population living under the poverty line), and a rapid spread of diseases such as HIV/AIDS. Kyrgyzstan has suffered serious setbacks caused by natural catastrophes (e.g. earthquakes, particularly in the South) with devastating impacts on the economy and the most vulnerable social groups.



## Appendix III: FDI regulations in Sample Countries

### Africa

Foreign investment in **South Africa** is subject to the same laws as domestic investment and does not require government approval in most cases.<sup>44</sup> Non-residents are allowed to invest directly through a resident company, branch or partnership. The 1973 Companies Act and The Close Corporation Act of 1984 (Act 69) permits the establishment of a private or public limited-liability company. The rights of foreign owners are not legally restricted, except in banking, and there is no overall limit on the amount of foreign ownership. Foreigners are free to acquire freehold title to land anywhere in the country. Certain industrial sites offer land for long-term lease only. In many parts of the country, land rights are separate from mineral rights. The new investment promotion agency, 'Trade and Investment of South Africa,' showcases South Africa's attractiveness as a global destination for FDI. South Africa has comprehensive economic and double taxation agreements with several foreign countries at different stages of operations. In terms of these agreements, the foreign resident undertaking will only be taxable in South Africa if it conducts business in South Africa through a permanent establishment. The government provides export subsidy that is payable under the General Export Incentive Scheme. South Africa is a member of most international conventions for protecting intellectual property. Patents, trademarks, copyrights and industrial designs, and models are all legally recognized in South Africa, which was one of the first signatories to the Trademarks Laws Treaty at the World Intellectual Property Organization in 1994. Overall, South Africa compares reasonably well on several institutional aspects of the investment climate. Though the broad institutional framework is favorable for FDI, there are concerns with respect to efficiency of government, crime and corruption.<sup>45</sup> One of the main concerns is the black economic empowerment (BEE) program which involves the issue of transferring equity and the issue of clarity regarding the exact requirements of compliance by firms. Moreover, labor market regulation in South Africa is less flexible and acts as an institutional weakness. However, there is an important trade-off between flexibility to promote investment and growth, on the one hand, and an adequate level of protection for employees and the promotion of broader BEE objectives, on the other. A report on South Africa FDI<sup>46</sup> shows legislation, productivity and skills to be of greatest concern, while costs are viewed more favorably. In terms of GCC FDI, Dubai World subsidiary Istithmar is developing the Cape Town waterfront in a joint venture.

**Mozambique** enacted a new investment code as per the Law of Investment (Law No. 3/93) with simplified procedures and a streamlined decision-making process for investment proposals. There is also a separate code for investment in petroleum and mining sectors. As per Mozambican laws, companies established under the Investment Code must obtain authorization from The Centro de Promocao de Investimentos (CPI) and register their investment at the Ministry

---

44. UNCTAD, "South Africa Country Profile," posted on November 2006, available online at [www.unctad.org](http://www.unctad.org) (accessed August 2, 2008).

45. Reg Rumney, "EU Key to Investment in SA," January 17 2006, available online at <http://www.southafrica.info/business/investing/incentives/fdi-eu-170106.htm>, (accessed August 10, 2008).

46. BusinessMap Foundation, "Foreign Direct Investment in South Africa: The Initial Impact of the Trade, Development and Cooperation Agreement between South Africa and the European Union," London, 2006.



of Finance and the Bank of Mozambique. Regulatory policies governing FDI includes labor and tax laws, and incentives exist in the form of repatriation of profits. In order to attract large-scale FDI into the private sector, Mozambique has made significant efforts to upgrade existing infrastructure. The Maputo Corridor project is one such venture that facilitates bilateral transport links with South Africa to further boost their close economic ties. Since market size is important to the prospective investors, Mozambique has taken prudent measures since the end of the Civil War in 1992 to improve its attractiveness by forging closer economic and business ties with the US, Japan and most European countries and is now actively engaged with South Africa and other members of Southern African Development Community (SADC), the Common Market for Eastern and Southern Africa (COMESA), the African Union (AU), New Partnership for Africa's Development (NEPAD) and other western donors. Although Mozambique has maintained a good macroeconomic policy, there are still key barriers to FDI such as poor infrastructure, lack of skilled labor and labor issues in general, onerous administrative procedures regarding investments, complex expatriate visa requirements, and difficulties in cross-border clearance of goods.<sup>47</sup> Mozambique has attracted FDI from the GCC, as Dubai Ports World owns 60 percent of Maputo International Ports Services (MIPS)<sup>48</sup> and has invested in a \$200 million tourist resort in Bilene.<sup>49</sup>

As per the Senegalese Investment Law No. 87-25 of 1987, all FDI proposals in **Senegal** need to comply with certain minimum criteria, including: an invested capital of at least 5 million FCFA or its equivalent in US dollars, the provision of employment for at least three Senegalese nationals and the entertainment of regular accounts in the standard Senegalese format. The Senegalese Investment Code provides equitable treatment for foreign firms and grants special incentives to companies willing to locate outside the Dakar region. In addition, the code offers tax holidays and tax-free export processing zones; there are no barriers regarding total ownership of businesses by foreigners and foreign investment is exempted from the Minimum Personal Income Tax and the Business License Tax. The "Guichet Unique" serves as a one-stop window at the Ministry of Finance to reduce delays in examining and approving private investment programs. In comparison to other African nations, Senegal has wider market access on account of its membership of the WTO and other exclusive regional trading agreements (RTAs) namely Economic Community of West African States, the West African Economic and Monetary Union, New Partnership for Africa's Development and the African Union. Foreign investors face a difficult regulatory environment, particularly on labor issues, and also weak commercial law enforcement due to a lack of resources and specialized judicial expertise. Like other African countries, Senegal too has attracted FDI from Dubai Ports World, which manages port facilities in Dakar; additionally, several large-scale real estate developments have been contemplated by UAE investors.<sup>50</sup>

---

47. UNCTAD, "Asian Foreign Investment in Africa: Towards a New Era of Cooperation among Developing Countries," 2007, 137.

48. Agencia de Informacao de Mocambique (Maputo), "Maputo Port - Exit Britons, Enter Arabs," January 11, 2008, available at <http://allafrica.com/stories/200801110764.html> (accessed July 21, 2008).

49. "Dubai World Africa plans Mozambique Eco Projects," *Gulf News*, February 16, 2008, available at <http://www.gulfnews.com/business/Shipping/10190391.html> (accessed July 21, 2008).

50. Dubai World's unit JAFZA has signed an \$800 million deal to construct and operate a special economic zone outside the Senegalese capital, offering reduced tax rates and logistics services to companies looking to export to the





In addition to oil and the mining sectors, **Sudan** is abundantly endowed with potential agricultural resources and other non-hydrocarbon sectors provide sufficient inter-sector linkages. In recent years, these sectors have attracted foreign investment. The Sudanese Ministry of Investment implements an investment policy with a suitable legal and institutional framework. The Ministry of Investment is a member of the World Association of Investment Promotion Agencies (WAIPA). Foreign investment in the Sudan is protected by binding international instruments. Sudan is a member of World Bank's Multilateral Investment Guarantee Agency (MIGA), and the International Center for the Settlement of Investment Disputes (ICSID). Sudan is also a member of the African Development Bank, the Islamic Development Bank, the Inter-Arab Investment Guarantee, and the Agreement on Promotion and Guarantee of Investment among the member states of the Organization of the Islamic Conference. Considerable GCC investments have been made in telecom, banking and agriculture sectors. However, administrative and regulatory bottlenecks still persist and affect the flow of FDI; important among them is lack of transparency and legal enforceability.

As per the National Investment (Promotion and Protection) Act of 1990, FDI in **Tanzania** requires a minimum investment of at least £250,000. The Act offers three kinds of incentives for potential investors, relating to tax holidays, permission to retain a certain amount of foreign exchange earnings in external account, and rights regarding the access to land. Foreign investors are guaranteed ownership rights as well as the right to transfer foreign exchange. The country has wide market access by virtue of its membership in the African Union, East African Community, the Southern African Development Community and is an eligible member of the United States' market access initiative for African countries – the Africa Growth and Opportunity Act – as well as the Cotonou Agreement for the renegotiation of the trade and aid links between the African, Caribbean and Pacific countries with the European Union. Despite reasonably stable macroeconomic policy in Tanzania, there are a number of factors that hinder FDI inflows and these are mainly related to the sluggish pace of reforms because of the slow changes in attitudes and inadequate recognition by the civil service of the potential contribution of the private sector. Importantly, out of the several regulatory and administrative barriers affecting FDI operations, land acquisition is difficult, particularly for start-ups. Among GCC investments, RAK Properties is involved in a mixed-use project in Kigamboni near Dar es Salaam.

## Central Asia

The Central Asian Republics (CAR, comprising Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) and Pakistan witnessed increasing flow of FDI in recent years. With impressive economic growth and key reforms, CARs have managed to attract FDI from emerging economies like China and the Gulf countries. Similarly Pakistan, despite political uncertainties, has attracted huge FDI, particularly from the GCC countries such as UAE in important sectors like telecommunication and energy. CARs and Pakistan have introduced several policy reforms and privatization programs in key sectors to attract investment.

In November 1996, the State Committee on Investments was established as a one-stop

---

US and Europe. For details see, "The New Wave of Arabs Investments in Africa," March 10, 2008, available at <http://chartsandnumbers.com/2008/03/10/the-new-wave-of-arabs-investments-in-africa/>, (accessed July 21, 2008).



shop to streamline investment procedures in **Kazakhstan**. Under the 2003 new investment law (Law of the Republic of Kazakhstan “On Investments” No. 373-II 3PK), foreign investors have the right to set up their businesses and own property. Land is available on lease. Foreign investors have the right to invest in any type of activity, except for those which are exempted by legislative acts of Kazakhstan. The 2003 Law guarantees legal protection of investors' activities in the country, guarantees the use of income and the conditions of contracts between investors and the government, and provides a mechanism for the settlement of disputes. The investment privileges provided to approved projects in priority areas promoted by the government include: deduction of cost of fixed assets brought in as part of the investment project from aggregate annual income; relief from property tax and land tax; exemption from customs duty; and state grants in kind (not more than 30 percent of the volume of capital investment). Under the law, protection against expropriation and guarantee of repatriation of capital, profits and dividends are provided. In June 2008, Alnair Capital Holding of UAE bought a 25 percent stake in Kazakhstan's largest bank by assets, Kazkommertsbank.

Since acceding to the World Trade Organization on December 20, 1998, **Kyrgyzstan** has been pursuing market-based reforms, privatization of state-owned enterprises and promotion of FDI to support economic development. The government has taken steps to improve the legal, regulatory and institutional frameworks for investment and foreign investors are entitled to the same treatment as local investors. The New Investment Law of 2003 provides the legal framework and ensures fair and equal treatment for investors and the protection of their investments in Kyrgyzstan. The law also regulates legal relationships between investors and governmental bodies of Kyrgyzstan, allowing investors to resolve any disputes that may arise through international arbitration proceedings. Ownership of land by foreign investors is restricted. However, land can be leased. Kyrgyzstan has established four free economic zones under the 1992 Law “On Free Economic Zones in the Kyrgyz Republic,” which was amended in 2002. Foreign investors may establish wholly foreign-owned enterprises or joint ventures, acquire shares in existing entities, and participate in privatization programs. In 2001, the government established the Investment Promotion Center (IPC) under the State Committee of the Kyrgyz Republic on State Property and Direct Investments. IPC acts as a one-stop shop to assist foreign investors on investing in the country.

**Tajikistan** has attracted FDI following the restructuring of various sectors and encouragement of private sector development. On the basis of the Law “On Foreign Investment in the Republic of Tajikistan,”<sup>51</sup> foreign investments on the territory of Tajikistan cannot be nationalized or confiscated, unless in cases of natural disasters, accidents, epidemics and other circumstances of emergency nature (and then by decision of the Parliament), and in those cases, investors shall be compensated. Upon investors' request, the compensation can be repatriated abroad. Investors enjoy a guaranteed right to repatriate profits and other amounts in foreign currency, provided that they have been received legally from made investments. Foreign investors can use several options such as: equity participation in entities and companies jointly with legal and physical persons; establishment of companies, which are fully owned by foreign

---

51. The Embassy of Tajikistan in the United States of America, available online at <http://www.tjus.org/investment.htm> (accessed August 7, 2008). This is the only source on Tajikistan FDI available on FDI Net.





investors; acquisition of assets, including shares and other securities; acquisition of title to use land and other natural reserves, as well as other proprietary rights independently or with participation of local legal and physical persons; enter into agreements with local legal and physical persons, which provide for other form of foreign investments. An investor may also participate in privatization of assets, which are owned by the state or communal authorities in a manner provided for by prevailing legislation.

**Turkmenistan's** Law on Foreign Investment, 1993 defines opportunities for foreign investment, and allows foreign investors to act as depositors, creditors and buyers and also protects foreign investors against changes in Turkmen legislation, and provides equal protection for property.<sup>52</sup> Turkmenistan has also given substantial tax incentives for foreign investment. Investors are fully exempt from profits tax in the first year if at least 70 percent of their total revenue comes from production or processing of agricultural goods, production of consumer goods, or production of construction materials. This profits tax exemption can also be extended for up to three years. In March 1997, a comprehensive hydrocarbon law was passed which regulates projects, licenses and contracts with foreign companies. It sets out duties for the government, such as defining a development strategy and organizing statistical reports on hydrocarbon resources. The law brings Turkmenistan's regulations in line with international petroleum project standards.

With the purpose of attracting FDI for creating joint ventures, **Uzbekistan** approved the "Program of creation of enterprises with the foreign investments in regions of the republic" by resolution of the Cabinet of Ministers # 459.<sup>53</sup> According to the resolution, it is proposed to create enterprises with foreign investment in all spheres of the economy, such as: agricultural goods and stock-breeding, light industry (textile production, yarns, cotton products and etc), construction materials, food, chemical, electronic and other high-tech products, machine building and other areas. There are various options for foreign investors: they can set up joint ventures, or enterprises with 100 percent foreign capital, acquire part or entire issues of shares of privatized companies as well as set up groups of projects in different spheres of economy including agriculture, transport, telecommunications, construction, public health, tourism and other.

**Pakistan** has substantially liberalized FDI policy since the 1997 Investment Policy which allowed investment in key areas such as agriculture, service, infrastructure and social sectors. Now investment is allowed in almost all sectors with foreign equity up to 100 percent. Government permission is not a requirement except in a few strategic sectors. Pakistan offers incentives for foreign investment that include remittance of capital, profits, royalty, technical and commercial franchise fees, etc. Imports of raw materials for export processing are exempted from duties. There is a 0-5 percent custom duty, but no sales tax and no withholding tax on import of machinery. FDI in Pakistan is fully protected as per the Foreign Private Investment (Promotion & Protection) Act 1976 and The Protection of Economic Reforms Act 1992. Pakistan has signed bilateral investment protection agreements with 47 countries and Avoidance of Double Taxation

---

52. The Embassy of Tajikistan in the United States of America, available online at <http://www.turkmenistanembassy.org/turkmen/business/oview.html> (accessed August 7, 2008). This is the only source on Tajikistan FDI available on FDI Net.

53. Portal of the State Authority, Government of Uzbekistan, available online at <http://www.gov.uz/en/ctx.scm?sectionId=119&contentId=1949>, (accessed August 7, 2008).



agreements with 52 countries.<sup>54</sup> One major drawback to FDI in Pakistan is its labor laws, which are overprotective and complicated, discouraging job creation, inhibiting business expansion and, thereby, discouraging much-needed productive investment. Labor disputes are common, creating problems for management, and productivity losses have acted as an impediment to foreign investment. Given Pakistan's image as an extremely corrupt country with widespread political and military strife, FDI inflows have been seriously affected. However, in recent years, FDI from GCC countries to Pakistan has increased substantially. Some of the recent deals include: Etisalat's 26 percent stake in Pakistan Telecom for \$2600 million; IPIC investment worth \$5,000 million in Khalifa refinery; Omantel investment of \$193 million in Worldcall Telecom; QIIC and QIIB investment of \$650 million in the joint venture, Pak-Qatar General Takaful and Family Company.<sup>55</sup>

---

54. Pakistan Board of Investment, available online at [http://www.pakboi.gov.pk/pdf/IG/12\\_17.pdf](http://www.pakboi.gov.pk/pdf/IG/12_17.pdf), (accessed August 7, 2008).

55. Compiled from UNCTAD FDI database.



## Appendix IV: Dam Capacity

