



ISLAMIC DEVELOPMENT BANK

FOSTERING INTRA-OIC FDI IN THE AGRICULTURE SECTOR



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**FOSTERING INTRA-OIC FDI
IN THE AGRICULTURE SECTOR**

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Foreword

The food crisis in 2008 resulted in rising food prices, exerting strain on the economies of OIC member countries with its adverse effects on the lives of people especially in the low income groups. This is hampering governments' efforts towards achieving the Millennium Development Goals and the IDB 1440H Vision targets, especially those related to poverty reduction. The problem is further exacerbated in 19 OIC member countries where per capita food production in 2006 was lower than the 2000 levels.

A significant increase in new investment in agriculture in OIC member countries is imperative to address these challenges, eradicate poverty, ease chronic food insecurity and tackle rising food prices. Moreover, the current market conditions present investment opportunities to countries with potential in the agriculture sector. Such investments would not only address the issue of food security, but could prove to be a growth stimulus.

On the other hand, other OIC member countries notably GCC are seeking to secure food supplies by undertaking investments in the agriculture sector. These anticipated investments were widely publicized in the international media, and raised investment expectations among least developed member countries who were seeking FDI. It is against this background that the topic for the Occasional Paper was conceived. Areef Suleman and Isma'eel Na'iyah of the Economic Policy and Statistics Department prepared this paper which examines the experiences of FDI in the agriculture sector and highlights the role of development partners.

In this context, the paper reviews the agriculture sector in OIC member countries, and pays specific attention to issues of productivity and FDI along with determining the potential for further FDI in the sector. In addition, it reviews the experiences of agriculture investment in selected member countries with a view to identify potential roles for countries seeking FDI and their development partners in fostering intra OIC-FDI in the agriculture sector. This paper provides valuable insights on the status and potential for FDI in the agriculture sector in OIC member countries along with the constraints hampering such investments.

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Contents

Executive Summary	iii
I. Introduction	1
II. The Agriculture Sector and Food Crisis in OIC Member Countries	2
1. Importance of Agriculture Sector in OIC Member Countries	3
2. Constraints in the Agriculture Sector.....	5
3. Agricultural Productivity	6
4. The Recent Food Crisis in OIC Member Countries	9
III. Agriculture Potential in OIC Member Countries	12
IV. Foreign Direct Investment	15
1. Determinants of FDI.....	17
2. FDI Trends in OIC Member Countries.....	19
V. Experiences of FDI in the Agriculture Sector	22
1. Investor Country Initiative: Saudi Arabia.....	22
2. Investor Initiatives	27
3. Host Country Initiative: The Republic of Sudan	32
4. Concluding Remarks from Case Studies	39
VI. Stimulating FDI in Agriculture in OIC Member Countries	42
1. Potential Recipient Countries	42
2. Development Partners.....	44
VII. Conclusions	47
Annex:	
Statistical Tables	49
Proposed Modality for Identifying and Exploiting Investment Opportunities.....	75
References.....	77
Abbreviations.....	80

List of Figures, Tables and Text Boxes

Figures

1: Percentage of Rural Population and Agriculture Share in GDP in OIC Countries - 2007.....	4
2: Labour Productivity by Region in OIC MCs, 2000-2005	7
3: Land Productivity by Region in OIC MCs, 2000-2005.....	8
4: Countries with Limited Agriculture Potential.....	13
5: Countries with Moderate Agriculture Potential.....	14
6: Countries with High Agriculture Potential	15
7: Net Inflow of FDI in OIC Member Countries 1998-2007.....	20
8: Factors Underlying Low Investment in Agriculture in Sudan.....	37

Tables

1: Agriculture-Based OIC Member Countries.....	4
2: Summary of Key Constraints in the Agriculture Sector	6
3: Determinants of FDI.....	18
4: FDI Net Inflow in OIC Member Countries, 2007	20

Text Boxes

1: Indian farmers investing in North America and Australia.....	16
2: Zimbabwean Farmers in Nigeria	24
3: The Arab Authority for Agriculture Investment and Development (AAAID)	29
4: Daewoo's Experience of FDI in Agriculture in Madagascar.....	39
5: Agriculture and Rural Development Priorities of MDBs.....	45

Executive Summary

Irrespective of the level of sophistication and technological advancement achieved by mankind, agriculture remains the backbone of human existence and survival. Despite the benefits arising from technological progress, the corresponding higher yields and more resistant crop varieties, the basic need and fundamental problem still facing the world and OIC member countries is food security.

The 2008 food crisis resulted in member countries, mostly the GCC, to explore agriculture investments in other countries. This focus of foreign direct investment (FDI) in agriculture presents a unique opportunity for some OIC member countries which have under-utilized agriculture land.

This Occasional Paper (i) determines the agriculture potential in member countries; (ii) reviews the experiences of agriculture investment in selected member countries; and (iii) identifies potential roles for countries seeking FDI and development partners in fostering intra OIC-FDI in the agriculture sector.

Although 41 (excluding Palestine) out of the 57 OIC member countries are classified as Food-Deficit Countries, there exists significant un-exploited agriculture potential in many member countries (including those that are classified as food deficit). These countries exhibiting potential may be targeted by investors in the agriculture sector.

Due to the dearth of information on FDI at the sectoral level, the lack of readily available information on the status of the various announced investments, and the need to ensure the relevance of the paper, a case study approach was adopted. The case studies focused on FDI in agriculture from the perspectives of a potential recipient government, investor government and private sector. The information obtained allowed for a clearer understanding of the rationale for investment, key constraints being faced by investors, initiatives undertaken to attract FDI, and potential roles of development partners.

Key Findings

There is significant potential to develop the agriculture sector in member countries. However, the potential is yet to be adequately and appropriately exploited to benefit both the investor and recipient country. In terms of the overall agriculture potential index, the countries exhibiting the most potential are Indonesia, Kazakhstan, Turkey, Bangladesh and Sudan. From a resource perspective (Ability) Indonesia and Kazakhstan are the countries with the highest ability to attract FDI. Purely in terms of land available for agriculture development, the largest amounts are available in Kazakhstan and Sudan.

Very little “real” large scale FDI in commercial agriculture has taken place. It must be recognized that from the identification of a specific investment opportunity to the time that the actual investment would take place would take an average of 2-2.5 years. Therefore it is not surprising that at this stage, actual investments have not been undertaken.

There is a mismatch between investor expectations and reality of investment in agriculture. Private sector investors in the GCC region are looking for investments with good returns at acceptable risk with a short-term perspective. The agriculture sector, which is dependent on natural elements, tends to be risky and requires a long-term commitment/outlook.

Food security may not necessarily be achieved only by FDI in agriculture. Although the current focus on the FDI in the agriculture sector is to ensure food security, it was apparent that during times of supply constraints, demand in the recipient country will need to be satisfied prior to crops being made available for export to investor countries. It is therefore imperative that investments also be undertaken in storage facilities in both investor and home countries in order to mitigate this potential risk.

Member Countries may not be adequately equipped to deal with investors in the agriculture sector. Due to an uncoordinated and piecemeal approach to dealing with FDI specifically in the agriculture sector, the government of Sudan has come off “second-best” in its negotiations with the private sector with regards FDI in the agriculture sector. It has allocated/signed off vast tracts of land on long-term leases to private investors at nominal costs, with no performance / investment deadlines. This resulted in the country not extracting maximum benefits from its resources and the potential investments.

There exists several key constraints to the development of the agriculture sector. In the case of Sudan, arguably the key binding constraint to investment in the agriculture sector is the political uncertainty arising from the recent ICC ruling and the situation in Darfur. However, to avoid losing a potentially golden opportunity, many investors have managed to secure leases on large tracts of land at nominal costs, with no agreed upon investment deadlines. Other constraints identified include the lack of appropriate infrastructure and human resources/skills, relevant information on investment opportunities and land ownership problems, low levels of competitiveness and skills shortages.

There is an urgent need for strategic partnerships to unlock the agriculture potential. These strategic partnerships will need to bring on-board technical and managerial partners as an important third element to the financing partners from the GCC and the water and land resources available in Sudan. There is, therefore, an urgent need to seek managerial and technical partners that could complement the potential investment from GCC countries.

It may be noted that agricultural opportunities exist in both member and non-member countries. Although preference might be given to member countries, investment will only occur if the enabling environment is at least as good as those offered in non-member countries. Otherwise, private sector investors will focus on countries offering the best return on investment with the appropriate environment. Therefore, potential recipient member countries along with their development partners including the IDB will need to make concerted efforts if they aim at attracting large amounts of investment into their economies.

Recommendations

The paper proposes that the potential recipient countries embark on an exercise that allows for potential projects to be identified along with undertaking the basic pre-feasibility of such opportunities with a view to marketing these projects to the investor countries. Such an exercise may be undertaken with the support of experts and technical assistance from its development partners.

Governments of recipient countries have, at least, three key strategic roles:

- (i) **Interventionist:** Identify areas of un-utilized potential, map the areas, determine suitable projects, undertake pre-feasibility studies, arrange investor conferences, and undertake strategic investments to address binding constraints.
- (ii) **Catalyst:** Facilitate the development of agriculture clusters/hubs by encouraging private sector efforts and ensuring a conducive environment for this development.
- (iii) **Facilitator:** Assist in resolving land and water issues and in obtaining community buy-in and participation.

Development partners, including the IDB Group, have an important role to play in assisting member countries to create the appropriate enabling environment to attract FDI in the agriculture sector. The envisaged roles would be to (i) offer technical assistance to develop capacity in potential recipient countries; (ii) provide advisory services and act as an “honest broker” between key stakeholders; and (iii) provide financing for potential infrastructure projects and taking equity in other agriculture investments.

Conclusions

At this stage, many of the anticipated investments are in the planning stages, with little real investment “on the ground”. It is expected that several of the investments announced may come to fruition over the next 2-3 years.

It must be recognized that there are some key lessons that can be gleaned from the experience of Sudan. Firstly, countries should adopt a holistic perspective of the investors and type of investments that they wish to attract to their economy specifically in the agriculture sector. There must be a coordinated approach to land allocation with clear performance and investment agreements included in any land allocated/sold to potential investors. Secondly, governments need to gain a better understanding and be appropriately equipped to handle unsolicited requests for land and other potential foreign investments. Thirdly, development partners have important roles to play in fostering FDI in the agriculture sector.

Overall, it must be noted that there are several constraining factors impeding investment in the agriculture sector. Member countries and their development partners will need to address these factors as a matter of urgency should they wish to attract FDI into the agriculture sector. If the environment is not conducive, investors will go to non-member countries as they seek to maximize long-term profit and return on investment; and the opportunity for member countries will be lost.

I. INTRODUCTION

The agriculture sector remains the backbone of human existence, providing it with the fundamental requirements for human survival. With 70 percent of the OIC's Least Developed Member Countries (LDMC's) population living in rural areas, and agriculture contributing approximately 23 percent to their GDP, it is clear that in the developing world, at the core of any sustainable development and poverty reduction strategy is the development of agriculture¹. Gallup (1997) shows that an additional one percent increase in per capita agricultural output would result a 1.6 percent increase in the incomes of the poorest 20 percent of the population. These findings are further supported by Thirtle et al (2001) who on the basis of cross-country analysis found that a 1 percent increase in agriculture yields would reduce the number of people living on less than \$1 a day by 0.83 percent. In addition, the growth linkages/multiplier effects between agriculture and the rest of the economy are relatively strong with every \$1 of additional farm income creating a further \$0.8 non-farm income in Asia (Bell et al, 1982; Hazell and Ramaswamy, 1991). The multipliers are even stronger in the case of Africa where it ranges from \$0.96 in Niger to \$1.68 in Burkina Faso (Delgado et al, 1998).

The importance attributed to the agriculture sector was given further impetus in 2008, when food prices surged, and limited food supplies threatened food security in some OIC member countries, and triggered civil unrest in several others. This resulted in member countries, most notably the GCC, exploring alternatives for investing in the agriculture sector. In the case of the GCC, investing in agriculture is a shift from previous self-sufficiency schemes, and is being undertaken to firstly ensure food security, and secondly to maintain price stability and reduce exposure to market volatilities in their home countries. This presents a unique opportunity for OIC member countries which have under-utilized agriculture land to benefit from the potential FDI in agriculture. As a result of the endeavours by many member countries to ensure their food security via a focus on FDI in the agriculture sector, and the potential benefits that could accrue to these member countries who could benefit from such initiatives, the need for this paper was identified.

The paper contends that despite the significant interest in FDI in the agriculture, and the desire to promote intra-OIC FDI in the agriculture sector, progress with investment remains minimal, and the constraints to the FDI continue to pose a serious challenge for member countries wishing to attract FDI in the agriculture sector.

It is submitted that without appropriate investment in creating an enabling environment in member countries that is at least as good (if not better) than those available in non member countries, investment will not be made in member countries.

Moreover, investment purely in agriculture will not facilitate the achievement of food security without the corresponding investments in storage facilities that could satisfy requirements in both investor and the recipient countries in times of shortages.

¹ IDB. (2008a).

Scope and Objectives

This paper seeks to (i) determine the agriculture potential in member countries; (ii) review the experiences of agriculture investment in selected member countries; and (iii) identify potential roles for countries seeking FDI and their development partners including the IDB in fostering intra-OIC FDI in the agriculture sector.

It may be noted that due to the dearth of information on FDI, especially at the sectoral level, the lack of readily available information on the status of the various announced investments, and the need to ensure the relevance of the paper, a case study approach was adopted. In this regard, discussions were held with officials from a potential investor government, the private/semi-private sector and a potential recipient country in order to ascertain the most appropriate manner to foster FDI in the agriculture sector. This allowed for a clearer understanding of the rationale for investment, key constraints being faced by investors, status of the projects, initiatives undertaken to attract FDI and a potential role for MDBs including the IDB.

The growth in agriculture is dependent on investments at all levels from investments in agriculture inputs, infrastructure and across the value chain. However, most LDMCs do not have the resources to stimulate and develop the agriculture sector. Hence, FDI in the agriculture sector is critical, and an important tool in the fight against poverty, and could also play an integral role in fostering greater cooperation and integration between OIC countries.

In order to accomplish this, the paper briefly assesses the agriculture sector in member countries and highlights its relative importance in their economies. It identifies member countries that could exploit the cross border investments in the agriculture sector. In order to ascertain the investment potential in these member countries, two indices namely the “Ability” and “Suitability” were developed by the authors. These are combined to create an overall Agriculture Potential Index. This is followed by a brief review of FDI in OIC member countries. In order to explore FDI in the agriculture sector, the initiatives to invest in the agriculture sector by the GCC is examined in detail. This leads to the identification of key challenges and agriculture bottlenecks that could hamper investment in this sector. The potential role of the IDB and other MDBs in helping foster intra-OIC agriculture investment throughout the agriculture value-chain is also presented.

II. THE AGRICULTURE SECTOR AND FOOD CRISIS IN OIC MEMBER COUNTRIES

The agriculture sector plays a distinctive role in the development of any economy. It is the only source of food, which is essential in both the developed and the developing countries; contributes to the national income, and provides employment. These roles are even more pronounced in developing economies where the largest proportion of the population lives in rural areas and depends heavily, directly or indirectly on the sector. With the sector being a vital source of employment with over 65 percent of the developing countries labour force depending on agriculture, it is not surprising that

agriculture development is fundamental in any poverty alleviation policy². Despite this, it is surprising that the sector does not receive due prominence from both the governments of developing countries and their development partners. For instance, only 4 percent of development assistance goes to the sector in developing countries. In Sub-Saharan Africa, a region where over 60 percent of the population lives in the rural areas, and the level of dependence on agriculture for overall economic growth is very high, the sector is seriously neglected with public sector spending on agriculture accounting for only 4 percent of total government spending³.

Moreover, agriculture is an important source of investment opportunities for both the private and public sectors and provides raw materials to industries in urban and rural areas.

1. Importance of Agriculture Sector in OIC Member Countries

During the early stages of development, agriculture constitutes an essential component in economic growth. However, as an economy grows, the share of the agriculture sector in GDP begins to decline and the number of people employed by the sector also declines significantly as a result of shift towards mechanized agriculture and the development of manufacturing. The movement of labour from rural to urban areas reflects the efficient transformation of the agriculture sector into a more productive sector and the release of the excess labour to engage in manufacturing jobs. This pattern of agriculture development was observed in many countries ranging from Europe to Asia and the Americas. A similar pattern has not however, been observed in most of Sub-Saharan Africa where despite significant decline in agricultural labour, the sector remains an important component in the GDP. The role of agriculture in the economic growth and development can be observed through its forward and backward linkages by supplying outputs as inputs to other industries and stimulating the demand of intermediate input from other industries. Various empirical studies confirm the unique and vital role of agriculture during the early stages of development. Gollin, Parente, and Rogerson (2002) for example, show that 54 percent of the GDP of 62 countries studied for the period 1960-1990 was accounted for by agriculture.

The agriculture sector is an important component OIC member countries (MCs) economies, contributing 11.2 percent of GDP. In addition, with a rural population of approximately 54 percent that is heavily reliant on the sector, its role in poverty alleviation and economic development is paramount (see Statistical Annex A1). Its importance is more pronounced in Sub-Saharan Africa member countries and LDMCs where it accounted for 29.1 percent and 22.9 percent of GDP respectively (see Figure 1). The MCs with the highest dependence on agriculture for its GDP are Guinea-Bissau (63.6 percent), Comoros (47.0 percent) and Sierra Leone (44.3 percent) (see Statistical Annex A2). On the basis of World Bank classifications, 22 MCs are “agriculture-based countries”. These are countries with agriculture sector contributing more than 20 percent to the GDP and more than 40 percent of the population depends

² World Bank Annual Report (2008 pg.3)

³ World Bank Annual Report (2008)

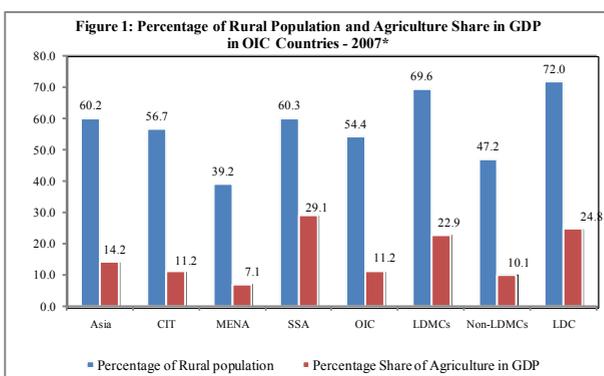
on agriculture⁴. Of these, 15 countries are Sub-Saharan Africa (SSA) MCs, 2 countries (Afghanistan and Guyana) from Asia, 1 country (Syria) from the MENA region, while 4 are from the Countries in Transition (CIT) (see Table 1).

Country	% Share of GDP	% of Rural Population
Guinea-Bissau	63.6	70.2
Comoros	47.0	72.0
Sierra Leone	44.3	62.6
Togo	42.7	58.7
Niger	41.3	83.5
Mali	36.5	68.4
Afghanistan	36.1	76.7
Burkina Faso	33.3	80.9
Kyrgyzstan	33.0	63.9
Gambia	32.6	44.4
Nigeria	32.5	52.4
Benin	32.2	59.2
Sudan	31.5	57.4
Guyana	29.6	71.7
Uganda	29.0	87.2
Mozambique	28.3	63.9
Uzbekistan	24.4	63.2
Chad	23.4	73.8
Côte d'Ivoire	23.4	51.9
Albania	22.8	53.9
Tajikistan	21.4	73.6
Syria	20.4	46.1

Sources: World Bank, WDI Database online accessed on 15 March 2009.
 FAO, FAOSTAT, WDI Database online accessed for 18 March 2009 (estimates for Afghanistan & Iraq)
 DRC Staff computations.

Note: ¹OIC member countries were classified as agriculture based if agriculture contributed more than 20 percent to GDP and over 40 percent of the population was based in rural areas.

At the regional level, SSA and Asia have the highest percentage of their population in rural areas (60 percent), followed by CIT (57 percent) and the MENA region (39 percent). Understandably, non-LDMCs have a smaller percentage of their population (47 percent) in rural areas. Uganda (87 percent) followed by Niger (84 percent) and Burkina Faso (81 percent) have the highest concentration of rural populations.



Sources: World Bank, WDI Database online accessed on 15 March 2009.
 FAO, FAOSTAT, WDI Database online accessed on 18 March 2009 (estimates for Afghanistan & Iraq)
 DRC Staff computations.
 *Population data for 2007, GDP data for 2005-2007

The importance of the agriculture sector as a potential source of employment is evident from the fact that the

⁴ World Bank Annual Report (2008)

agricultural labour force represents 41.7 percent of the total labour force in OIC MCs in 2006. This ranges from 92.1 percent in Burkina Faso to 0.4 percent in Brunei. Regionally, it is not surprising that SSA has the highest agriculture labour force rate of 54 percent compared to 45 percent in Asia, 27 percent in the MENA, and 24 percent in CIT (see Statistical Annex A3).

Based on available data, Uganda (68.7 percent), Sierra Leone (68.5 percent) and Cameroon (60.9 percent) are the most reliant on agriculture as a source of employment (see Statistical Annex A4).

The issue of food security which received widespread attention in 2008 reasserted the importance of agriculture, and it is only through increased investment in the agriculture sector, productivity can be improved and food security can be achieved. In addition, as witnessed in several member countries such as Burkina Faso, Jordan, Morocco, Niger and Yemen, in 2008, the food crises lead to social unrest and riots, thus adversely impacting on political as well as economic stability, thereby affecting investment and economic growth. Given the relative importance of the sector, it is important to highlight some of the constraints hampering the further growth and development of the sector.

2. Constraints in the Agriculture Sector

There are several generic constraints that impact on the agricultural sector. These constraints and challenges will have to be addressed prior to any country being able to attract FDI into the agriculture sector. It must be emphasized that these are overall generic constraints, and each country is unique, and would require careful analysis in order to identify the binding constraints to FDI in the agriculture sector. Despite this limitation, it is useful to present a brief overview of some of the major challenges facing member countries in their quest for stimulating the agriculture sector (see Table 2 below).

Although there are several constraints for the development of the agriculture sector, it remains an important element in economic growth, development and poverty reduction in OIC MCs. It may be noted that food insecurity adversely impacts on economic growth and poverty reduction. However, food security may be achieved by increasing agriculture output, either by increasing productivity or bringing more land under cultivation. Although it is not within the scope of this paper to examine agricultural productivity in OIC-member countries, the analysis would be incomplete without a discussion on productivity in the agriculture sector since levels of productivity and competitiveness impact on the investment decision.

Table 2: Summary of Key Constraints in the Agriculture Sector

Level	Constraints
Local/Community	<ul style="list-style-type: none"> • Lack of basic infrastructure and related services • Unsustainable use and degradation of natural resources • Low level of agriculture productivity • Lack of access to production inputs and related and supporting industries • Weak agriculture cluster • Poor access to and adoption of agricultural innovation and technology • Inequities in resource distribution (land and water) • Complex land tenure and water rights • Lack of local capacity
National	<ul style="list-style-type: none"> • Lack of political stability • Concerns on economic stability • Concerns on governance and macro-economic management • Lack of appropriate legal and regulatory framework • Limited financial resources • Weak institutional capacity • Sub-national/regional level imbalances – differences in production capacities resource endowments and inequities • Inadequate planning and development roadmaps • Administrative bureaucracy
Regional	<ul style="list-style-type: none"> • Problems related to cross-border water sharing agreements • Lack of regional transport infrastructure • Inadequate and weak regional institutions • Intra-trade obstacles (non-tariff barriers – red tape)

Sources: IDB 2008c, AAAID 2009

3. Agricultural Productivity

With a large proportion of population living in rural areas most of who depend on agriculture for their survival, raising agricultural productivity is vital in stimulating growth and development as well as reducing the incidence of poverty. Agriculture must be made efficient and competitive in developing countries in order to empower the rural poor with higher levels of income and food thereby lifting them out of hunger and poverty.

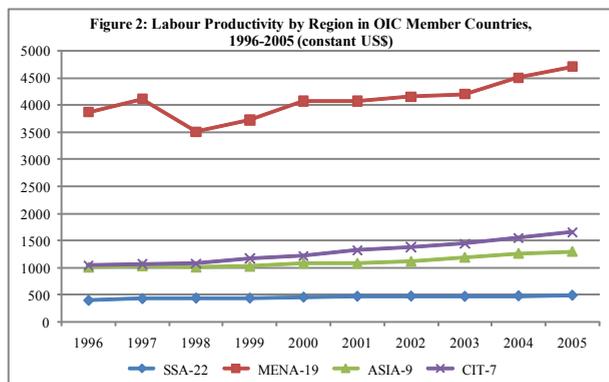
Increasing productivity in the agriculture sector is a key tool in the quest for employment creation and poverty reduction. Mellor (2001) estimated that every 1 percent increase in agricultural output, farm employment increase by between 0.3 and 0.6 percent. In the case of IDB Least Developed Member Countries (LDMCs) where 69 percent of the population is rural-based and agriculture contributes 23 percent to their economies, the central role of agriculture in employment creation, poverty reduction, growth and development cannot be over stated. Hence, increasing agricultural output and productivity would be critical for countries aiming to make a meaningful impact on poverty reduction and achieving the poverty related MDGs. In this context, it is important to explore productivity in agriculture in OIC member countries.

Three indicators are typically used for evaluating the performance of agriculture sector. These are: (i) production, (ii) productivity, and (iii) efficiency, (Chang, H. and Zepeda, L. 2001)⁵. However, productivity is the most widely used indicator due to its simplicity in calculation and interpretation. Productivity measures output obtained per unit of input and as such the quality of input matters. It is expected that yield increases with application of high quality inputs. Productivity can be measured in both total or in partial form. However, since computing total factor productivity is beyond the scope of this study, only labour productivity in the agriculture sector is compared. This approach has its limitations since agricultural productivity depends on many factors other than land and labour such as water, machinery, fertilizer, and pesticides.

Low and sometimes declining productivity in the agriculture sector of developing countries was highlighted as one of the causes of the recent food crisis. It was observed that the poor performance of agriculture sector in developing countries, particularly agriculture-based countries, was largely due to the persistent under-investment in the sector (by the public and private sectors as well as MDBs) coupled with the sharp decline in the share of agriculture in the official development assistance going to these countries⁶. The effect of low public spending on agriculture is that important services such as agricultural research and development (which was identified as key to improving agricultural productivity in developing countries) is neglected (World Bank 2008, Akroyd and Smith 2007)⁷.

Between 1996 and 2005, all OIC member countries except Djibouti, Guinea-Bissau and Togo exhibited increases in labour productivity⁸ albeit at different levels. The CIT and Asia regions exhibited the highest average annual growth between 2001 and 2005 of 5.9 percent and 5.3 percent respectively. However, these are from a relatively low base of just over \$1000.

In absolute terms, MENA countries have the highest labour productivity driven by Brunei Lebanon, UAE and Saudi Arabia (See Figure 2 and Statistical Annex A5). Although the levels of labour productivity are high in the



Sources: World Bank, WDI Database online accessed on 15 March 2009. DRC Staff computations.

⁵ Chang, H. and Zepeda, L. (2001) "Agricultural Productivity for Sustainable Food Security in Asia and the Pacific: the Role of Investment" In Zepeda, L. (ed.) "Agricultural Investment and Productivity in Developing Countries" FAO Economic and social Development Paper No. 148

⁶ World Bank (2008)

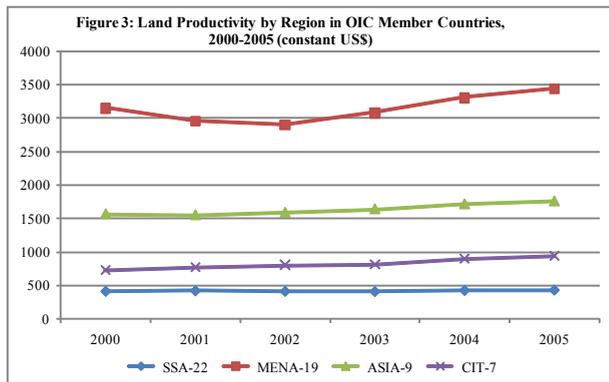
⁷ Data on public spending and development assistance to agriculture sector is very scanty, for a review and country case study, refer to: Akroyd, S. & Smith, L. (2007) Review of Public Spending to Agriculture. A Joint DFID/World Bank Study.

⁸ This is calculated by dividing agriculture value added by the active labour force in agriculture.

region, it must be recognized that the region is unsuitable for agriculture development due to limited water resources and the climatic conditions. In this context the higher levels of labour productivity is probably due to a host of factors including high levels of mechanization and use of fertilizer and pesticides. It may be noted that the levels of labour productivity in the UAE and Lebanon are comparable to those in high income countries.

SSA member countries such as Djibouti, Mozambique and Burkina Faso have the lowest levels of labour productivity, and this has remained at low levels. The low levels of mechanization and fertilizer use in SSA coupled with the high levels of subsistence and small scale farming, and the preference for labour intensive farming methods by these groups are probably the underlying reason for the lower levels of labour productivity. Overall, the levels of labour productivity in SSA is above the average for low income countries globally, but below the average for middle and low income countries combined (see Statistical Annex A5).

In terms of land productivity⁹ the trend is similar to that of labour productivity with SSA lagging behind other regions (see Figure 3 and Statistical Annex A6). The underlying reasons for this phenomenon are related to levels of mechanization, use of pesticides and fertilizers. The IDB (2008a) shows that fertilizer consumption in its MCs¹⁰ was dominated by non-LDMCs in 2005. Excluding Bangladesh, the other top-10 fertilizer consuming IDB MCs were non-LDMCs and the included Egypt, Jordan, Saudi Arabia, Qatar, and Iran from the MENA region. The top ten countries accounted for over 90 percent of IDB MCs consumption of fertilizer (12.4 percent of world).



Sources: World Bank, WDI Database online accessed on 15 March 2009. DRC Staff computations.

Low labour and land productivity coupled with low public and private investments, along with less aid from international donor community are the major causes of the underdevelopment of agriculture sector of the LDMCs particularly the agriculture-based countries from SSA.

In order to increase productivity, farmers need to explore the usage of irrigation systems which may facilitate increased cropping thereby providing benefits from crop varieties in more than one harvest per annum. In addition, access to appropriate technology, new crop varieties and fertilizers could also significantly increase yields.

⁹ This is calculated by dividing agriculture value added by the by the total arable land per hectare.

¹⁰ Excluding Guyana

The availability of transport and logistics infrastructure also plays an important role in productivity enhancement by facilitating market access and efficient source of inputs. It must be recognized that increasing agricultural productivity has the greatest impact in poorer countries that are at the very early stage of development.

The relatively lower levels of productivity in member countries along with other factors contributed to the food crisis in 2008. The underlying causes of the crisis along with its effects are the subject of the next section.

4. The Recent Food Crisis in OIC Member Countries

According to the World Food Summit (1996) “Food security exists when all people, at all times, have physical and economic access to enough safe and nutritious food to meet their dietary needs and food preferences for an active and healthy lifestyle”. A food crisis on the other hand arises when food becomes unaffordable for many, and supply shortages arise due to distributional problems. Between 2006 and 2008, the world food market witnessed persistent sharp rises in the price of food crops such as grains and cereals which led to hikes in retail prices of almost all basic food items. The situation continued to threaten food security in many countries, and it was contended that this wiped away progress made in achieving the MDGs by pushing millions of people mostly from low-income countries back into poverty.

The crisis unlike previous crises was marked with concurrence of hikes in world prices of nearly all major food commodities. The prolonged rise in food crops prices was rarely an issue in the past. Thus, when the issue arose, it rapidly appeared high on the agenda of policymakers throughout 2008.

Effects of the Food Crisis on OIC Member Countries

Although the effects of the food crisis were widespread, its impact on the poor was most severe (especially among the urban poor in low income food importing countries who devoted a higher proportion of their limited disposable income to food). The rural poor in low income food deficit countries were also adversely affected as they could not meet their consumption requirements. This has serious implications for poverty alleviation efforts in such countries. In high income food importing countries such as the GCC, the immediate effect of the food crisis was higher inflation and concerns of food insecurity.

Food exporting countries on the other hand benefited from the increased incomes and rural employment and the positive impact on their poverty alleviation efforts. However, the benefits of the higher prices generally accrue to the large-scale producers and marketers and to the poor who could produce more food than they consume. Rural landless labourers and those poor households that cannot meet their consumption requirements as well as the urban poor even in these countries were the most affected by the rising food prices.

Another effect of the food inflation or “agflation” was political and economic unrest in the form of mass protests, violent riots in some instances, and disputes in many countries of Africa, Asia and Latin America including Cameroon, Mauritania,

Mozambique, Senegal, Uzbekistan, Yemen, Côte d'Ivoire, Egypt, Haiti, Bolivia, and Indonesia¹¹. Other effects of the food crisis could be examined through their macroeconomic impact on LDCs economies. Although it is early to assess such impacts, it is expected that food inflation would have significant effects on the global economy in general and LDCs economies in particular through inflation, balance of payments, and poverty¹².

Causes of the Crisis

The factors that led to the food crisis could be examined from both the supply and demand sides. From the supply side, firstly, the high cost of energy and fertilizer affected the cost of agricultural production through higher costs of inputs and transportation. The price of oil during the period of the crisis reached historic level above \$140 per barrel while the price of fertilizer which is a very important input in agriculture, (for example in the USA, it is estimated at 20 to 25% of the cost of agricultural production) also rose significantly all over the world. Secondly, conflicts in countries mostly in sub-Saharan Africa, displaced thousands of people off their farmlands forcing them to live on rationed food aid. This seriously affected food production and supply in those countries. Thirdly, natural disasters such as droughts in major grain producing countries such as Australia were another cause of rising price of cereals in the world. Fourthly, gradual reduction in the level of stocks of grain mainly cereals in major exporting countries since 1990s, is another cause of rising prices. Global stock levels have declined on average by 3.4 percent per year since 1995. Fifthly, the low public and private sector investment in agricultural sector led to decline in productivity which makes it difficult to meet the rising demand. Sixthly, reduction of subsidies on agriculture by developed countries under the Doha Development Round (DDR) negotiations also negatively affected the supply of grain in world markets. Seventhly, many countries imposed export restrictions on grains thereby exacerbating food prices internationally. For instance, the global food crisis intensified when some of the largest exporters of grains such as Kazakhstan, Russia, Ukraine and Argentina decided to curb wheat exports. Other countries including Indonesia, Vietnam, Egypt, China, Cambodia and India banned exports of grains. As a result, prices of grains increased to record highs in 2008¹³. Lastly, the export bans imposed by important exporters of key commodities (e.g. the ban on rice exports by India) further compounded the problem.

From the demand side, the major causes of rising food prices included population growth and changing demand patterns in emerging economies. The changing structure of demand in the emerging economies of China, India, Brazil and Russia is seen as one of the main causes of rising food prices in the world. Increased incomes in these economies led to diversification of diet away from starchy food towards meat and dairy products, which in turn led to high demand for feed grains. The demand for meat across developing countries more than doubled since 1980. In China, for example, meat consumption increased by 150 percent since 1980. It increased by 40 percent in

¹¹ Financial Times: <http://www.ft.com>

¹² IMF (2008), Food and Fuel Prices – recent Developments, Macroeconomic Impact, and Policy Responses.

¹³ Financial Times: <http://www.ft.com>

India in the past 15 years. Given that it takes 8 kg of grain to produce 1 kg of beef, the demand for feeds which are mainly from corn rose significantly due to this changing demand pattern, leading to higher prices¹⁴. Lastly, the use of agricultural commodities such as wheat, cassava, sugar cane and corn for the production of bio-fuels in the U.S. and the European Union constrained export of grains causing scarcity in the world market.

The FAO food price index shows that prices of major food items such as meat, dairy, cereals, sugar, oils and fats rose steadily between 2000 and 2005 (from 90 to 115), and accelerated from 122 in 2006 to its peak of 214 in June 2008¹⁵. However, the prices of food, oil, and other commodities have since declined but remain higher than their 2005 levels. A recent study¹⁶ shows that international prices of major grains are still higher than their 10 year averages. For instance, prices of rice, maize, soybean and wheat in the first quarter of 2009 were 49%, 43%, 36%, and 31% above their respective ten-year averages. Since the factors underlying the food crisis remain largely unresolved, it is being contended that the food crisis may erupt again as soon as the financial crisis has healed¹⁷. Hence, given the tight supply and demand situation, the slightest changes in conditions could trigger price increases as experienced in 2008.

Food Situation in OIC Countries

For simplicity, this section adopts Ng and Aksoy's (2008)¹⁸ narrow definition of food which consists of grains and cereals, meats and dairy products, and vegetable and fruits excluding processed food products, cash crops and seafood. This definition which is based on trade differs from that used by the FAO to classify countries as low-income food-deficit countries (LIFDC). Using data from the UN COMTRADE database, Ng and Aksoy (2008) assessed the net food importing country by examining the net imports of 196 countries including all OIC countries excluding Palestine (see Statistical Annex A7).

Out of the 56 countries for which data were available, 15 MCs are food surplus countries of which 9 countries are non-LDMCs, while 41 MCs are food deficit. Out of the 41 net food importers, 20 are non-LDMCs. SSA countries have the highest number of net food importing countries (17 countries), followed by the MENA region (15 countries), ASIA (6 countries), and CIT (3 countries). With regard to LDMCs, 5 countries (Benin, Comoros, Guinea Bissau, Senegal, and Yemen) had net imports greater than 10 percent of their total imports in 2004/2005 with Comoros having the highest percentage (19.6%) of net imports followed by Guinea Bissau (11.6%). Moreover, most of the LDMCs have been persistently net food importers even though the shares of food imports to total imports are not very significant. It may be noted that some of the countries became net importers as a result of conflict. For example, Afghanistan was net food exporter prior to 2000/2001, but became food-

¹⁴ Arab News; Sunday, April 13, 2008.

¹⁵ FAO Food Price Index www.fao.org/worldfoodsituation/FoodPrice/Index/en

¹⁶ Conceicao, P., and Mendoza, R. (18 April 2009a) "Is the Food Crisis Over?"

¹⁷ Ibid.

¹⁸ Ng and M. Ataman Aksoy (2008), "Who are the Net Food Importing Countries?" The World Bank

deficit from that period. Bangladesh has the largest food deficit (\$674 million) in 2004/2005, followed by Yemen (\$379 million), Senegal (\$281 million) and Benin (\$214 million).

In terms of food deficiency in non-LDMCs, 14 countries are from the MENA region, 3 countries from Asia, 2 in SSA, and one (Turkmenistan) from CIT. The majority of these countries have huge food deficit in terms of value, even though the shares in total imports are not very high (less than 10%) with only Algeria having net imports above 7% of total imports in 2004/2005. Saudi Arabia has the largest net imports of \$2,807 million in 2004/2005, followed by Algeria \$1,430, and UAE. \$1,032 in the same period. It may be noted that most of the food deficit countries in this group are also oil exporting countries.

It must be reiterated that food security does not only involve food availability, but also food accessibility and utilization by all people. A country may be net food exporter but finds itself in food crisis like the case of Cameroon and Somalia where although they are net food exporters, they have been also adversely affected by food crisis. This is largely as a result of being unable to resolve transport and logistical issues to the population.

Increasing productivity and production in the agriculture sector is often considered as necessary for the development of the sector and ensuring international food security. This is only possible via investment into the agriculture sector. Currently, the sector has low levels of investment, and this is compounded by the current financial crisis making it difficult to attract the huge investment requirements needed to stimulate the sector¹⁹.

Nonetheless, investments will flow to where there is potential return. In this context, the next section explores the potential for FDI in the agriculture sector in MCs.

III. AGRICULTURE POTENTIAL IN OIC MEMBER COUNTRIES

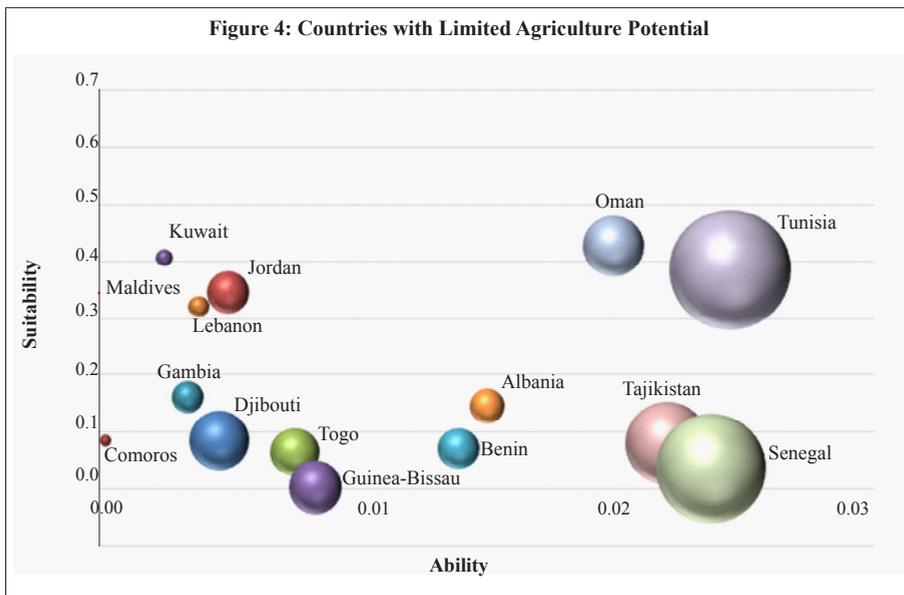
Many OIC member countries have large tracts of under-developed arable land, sufficient water resources and high levels of unemployment in rural areas. These countries will need to be identified in order to ascertain their potential for encouraging investment in the agriculture sector. In order to determine the potential to attract investment into the agriculture sector, two indices were computed. The first is based on the agricultural ability of the country ("Ability Index"). The "Ability Index" was computed using three variables, namely, water resource availability, land available for agriculture development and transport infrastructure (amount of paved roads was used as a proxy for transport infrastructure). The second index computed was the "Suitability Index". This was derived by combining the net FDI inflows to the country (as an indicator of the attractiveness of the country for FDI / investment climate) with the "ease of doing business index" (as an indicator of the overall business environment). Thus, the suitability index may be viewed as a proxy for the overall enabling environment. By combining these two indices, it was possible to determine the overall potential of

¹⁹ Conceicao, P., and Mendoza, R. (2009b). "Aggregate Income shocks, Poor Households and Children: Transmission channels and policy responses." UNICEF Social Policy Working Paper. New York UNICEF.

a country to attract FDI specifically into the agriculture sector (See Statistical Annex A8).

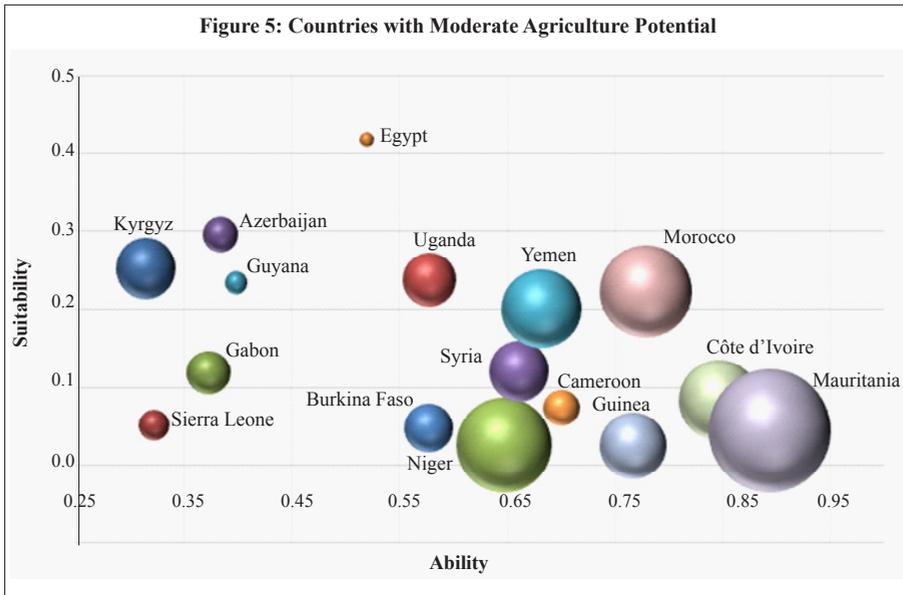
In Figures 4-6, member countries are classified into three groups based on their ability to attract FDI into their agriculture sector. The horizontal axis show the resource “ability” of the country with regards to arable land, renewable water resources and availability of infrastructure. The vertical axis portrays the “suitability” of the country as a destination for FDI based on historic FDI flows and the conduciveness of the business and investment climate. The size of the “bubble” depicts the available land size for FDI in the agriculture sector (the larger the size of the bubble, the more land is available for agriculture development).

It may be noted that the countries are classified based on an overall availability of agriculture land, water resources and infrastructure. This does not in any manner suggest that there are no potentials for agriculture. Clearly specific investment opportunities may well exist, and yield potentially high rates of return. Rather, the information presented must be viewed as highlighting countries that could generally be targeted for FDI in the agriculture sector.



Sources: Author’s computations based on Tables A9, A13, A16 and www.doingbusiness.org

Figure 4 shows countries with limited ability to attract FDI in the agriculture sector. Countries such as Comoros, Djibouti, Togo and Guinea Bissau have both limited ability and suitability for attracting FDI in the agriculture sector. Whilst countries like Tunisia and Oman show relatively high levels of suitability for FDI, with a limited ability for that FDI to be attracted to the agriculture sector. Thus, the focus of such countries would ideally be in the non-agriculture sector.



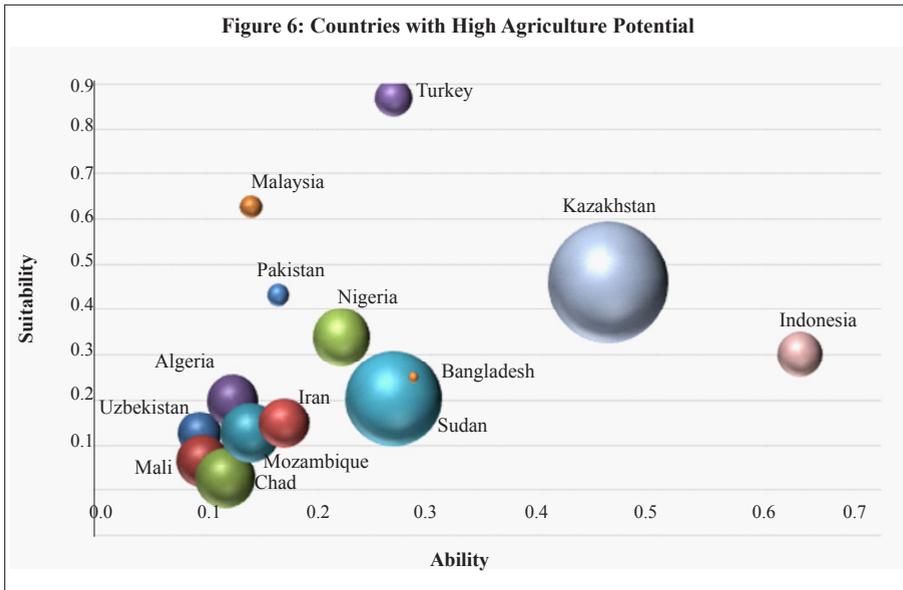
Sources: Author's computations based on Tables A9, A13, A16 and www.doingbusiness.org

In Figure 5, countries exhibiting moderate ability to attract FDI in the agriculture sector are highlighted. It may be noted that although these countries as classified as moderate, there might exist several opportunities for specific investment in agriculture sector. Such countries include among others Egypt and Morocco. In the case consideration of Egypt, due to the relatively stronger investment climate, it may well be a target for FDI. Other countries which may also receive consideration are Morocco and Yemen which also have large tracts of un-utilized agriculture land that could be exploited along with a reasonable business and investment climate.

The countries highlighted in Figure 4 and 5 have limited and moderate potential to attract FDI into the agriculture sector to exploit un-utilized potential, given the limited availability of arable land and water resources. As such, they need to focus on improving levels of productivity, and increasing yields on existing agricultural land. To some extent FDI to enhance yields/productivity tend to have less commercial and political risk associated with it (due to partnering with an existing farmer), and could bring much needed technical expertise and technology to the recipient country.

Figure 6 shows OIC member countries with a high agriculture ability to attract FDI in the agriculture sector.

In terms of the overall agriculture potential index, the countries exhibiting the most potential are Indonesia, Kazakhstan, Turkey, Bangladesh and Sudan. From a resource perspective (Ability), Indonesia and Kazakhstan are the countries with the highest ability to attract FDI. Purely in terms of land available for agriculture development, the largest amounts are available in Kazakhstan and Sudan.



Sources: Author's computations based on Tables A9, A13, A16 and www.doingbusiness.org

From an investor perspective, with a focus on specific projects, Turkey emerges as arguably the first choice given its very strong business climate and is reasonable ability for agriculture. In terms of suitable business and investment climate for FDI, the top ranking countries are Turkey, Malaysia and Bahrain. Hence although Turkey does not have as much un-utilized agriculture land as countries like Iran and Mozambique, due to the very conducive business and investment environment, it features prominently as a potential destination for FDI in the agriculture sector.

It may be noted that the above research provides an overall country level perspective, and gives an indication of the potential of member countries' economies to attract FDI in the agriculture sector. There is still a need to identify specific projects and investment opportunities. In countries with limited land availability, there may exist excellent agriculture projects that could yield high returns on investments. If the other issues surrounding the investment are easily resolved, then such countries may be among the early recipients of FDI in the agriculture sector. However, from the perspective of broadly targeting specific countries, then the study provides a good indication of which destinations make the most sense to be considered first.

On the basis of the above analysis, it is clear that there exists significant potential for the development of the agriculture sector in several member countries. However prior to examining the experiences of FDI in the agriculture sector, a brief overview of FDI and its determinants is warranted.

IV. FOREIGN DIRECT INVESTMENT

It is important to bear in mind that companies and not countries compete. This was aptly highlighted by the globalization drive witnessed during the 1990's. Globalization

started as the freeing up of the movement of goods, investment funds and even people. However, the nineties saw globalization taking on a new perspective with international companies utilising new opportunities for FDI to reposition their global production by either increasing efficiencies or strengthening their supply/distribution chains. Although an initial glance at this may highlight an apparent dichotomy between host country and firm level objectives (countries/governments pursue objectives such as employment creation, balanced growth, etc., whereas firms pursue sustainable profitability), there are several synergies between the two objectives. For example, employment creation vs sustainable profitability may seem somewhat conflicting. However, if the host government creates an environment conducive to the development of specific skills required by the manufacturer to be competitive, the increased competitiveness of the firm will result in increased demand for its products, an expansion of the manufacturing activity and thus the absorption of more labour into the activity.

It is therefore not surprising that FDI has largely been viewed as a catalyst for development and of benefit both to the investor and recipient country. From the investor's perspective, it allows for greater efficiency, market access, and increased competitiveness (due to procuring inputs generally at lower costs) among others.

Box 1: Indian Farmers Investing in North America and Australia

As farmland becomes more expensive in India, particularly in Punjab region, an area well known for the role it played during the Green Revolution, many Indian farmers have been migrating to USA, Canada and Australia where better opportunities opened up for them. Hundreds of Punjab farmers were reported to have sold their farmlands to buy land in the United States, Canada, and Australia. Factors that attracted Indian farmers include incentives given to farmers in form of subsidies, brighter prospects, and economics of agricultural production in the west.

Although the US, Canada and Australia encourage immigration of farmers to fill the shortfalls in their farming sector, in addition to the capital requirement farmers must have some experience in farm management, mechanized farming, and be familiar with the latest western agricultural techniques. Farmers who do not possess these skills undergo one month intensive training at Punjab Agricultural University to acquaint themselves with requirements which the immigration officers look at before issuing immigrant visa to farmers.

These farmers are investing in the western world where land ownership laws are clear, and infrastructure is relatively well developed. In addition, they are focusing on crops (lentils etc.) that are an important component of the "Indian" diet, but that are not preferred by the countries that they are investing in. Thus, the risks of export restrictions are minimized due to this. Additionally, they have managed to minimize the political and commercial risks of their investments by investing in developed countries.

OIC member countries will need to ensure that their business and investment climates are at least as good (if not better) than other economies should they wish to exploit the agriculture potential in their countries be successful in attracting FDI in the agriculture sector.

Sources: www.dnaindia.com; www.cicnews.com; <http://timesofindia.indiatimes.com>

From the recipient country's perspective, FDI could be seen as an important source of capital, driver of economic development, technology transfer, employment and growth.

In order to attract FDI, various measures have been implemented at the country level. FDI promotion policies have evolved over-time as the objectives of merely attracting large quantities of the FDI to the domestic economy have shifted towards attracting quality FDI that is in line with the country's social and economic growth strategies. In this regard, measures including investment incentives and supply side support measures including subsidies were instituted. However, many of these measures have fallen under the scrutiny of the WTO and have subsequently been phased out by many countries. These led to country focusing on alternate investment promotion policies which focus on removing bureaucratic red-tape in streamlining administrative procedures. This was traditionally accomplished by the establishment of investment promotion agencies in host country that functioned as a "one stop shop" for investors.

Successful FDI destinations have adopted a more pro-active stance and have focused on ensuring that the overall enabling environment within the country is conducive to investment, growth and development. In this regard, specific strategies and the development of vibrant, competitive clusters are part of their overall investment promotion strategy. It is increasingly being recognized that an excellent marketing tool for FDI is other successful foreign investors who could be used as "live" marketing tools. By leveraging on the success of investors, the recipient country can enjoy the additional positive exposure that it receives as a good investment destination. Thus, the FDI benefits the country beyond just the initial investment. In this regard, a strong focus on the post-investment stage is imperative in order to sustain existing investments and ensure long-term success, sustainability and attractiveness of the country to FDI.

In light of the importance of FDI to economic growth and development of a country, it is useful to explore the key determinants of FDI.

1. Determinants of FDI

The determinants and consequences of FDI have received widespread attention in literature, and although it is not within the scope of this paper to provide a detailed exposition of this, the analysis will provide some of the key drivers of FDI. There are three broad determinants that are necessary in order to attract FDI. These are the economic conditions prevalent in the economy; government policies towards the private sector in general and FDI in particular; and the investment strategies of the foreign investors (multinational companies). These are highlighted in greater detail in Table 3.

Although these are not specific to the agriculture sector, these are related to FDI in general, and it is contended that for the agriculture sector, there will be additional considerations beyond these. The specific determinants for FDI in the agriculture sector will be discussed in greater detail in the next section.

Table 3: Determinants of FDI		
Determinant	Focus	Issue
Economic Conditions	Market	<ul style="list-style-type: none"> • Size of market • Political and economic stability • Economic growth prospects • Ease of access to regional markets • Per capita income levels
	Resources	<ul style="list-style-type: none"> • Availability of natural and physical resources • Geographical location
	Competitiveness	<ul style="list-style-type: none"> • Labour availability, cost, skills, trainability • Availability of managerial and technical skills • Access to inputs • Quality and availability of physical, financial and technological infrastructure • Existence of related and supporting industries.
Host country policies	Macro policies	<ul style="list-style-type: none"> • Management of crucial macro variables • Ease of remitting funds • Access to foreign exchange • Legal and regulatory framework.
	Private sector	<ul style="list-style-type: none"> • Promotion of private ownership • Clear, stable and predictable policies • Easy entry/ exit for capital and labour • Efficient financial markets • Other support.
	Trade and industry	<ul style="list-style-type: none"> • Openness of economy to trade • Regional integration and access to markets • Ownership controls • Competition policies • Support for SMEs.
	FDI policies	<ul style="list-style-type: none"> • Ease of entry • Restrictions on ownership, • Investment protection • Investment incentives • Access to inputs, • Access to foreign exchange • Transparent and stable policies • Ease of repatriating funds.
Investor strategies	Risk perception	<ul style="list-style-type: none"> • Perceptions of country risk, based on political factors, macro management, labour markets, policy stability.
	Location, sourcing, integration transfer.	<ul style="list-style-type: none"> • Company strategies on location, sourcing of products/inputs, • Integration of affiliates, • Strategic alliances, • Training, • Technology.

Source: ADB, (2007); IMF, 2003); OECD, (2000); Porter, M (1994); (Lall, S. (1997).

It is apparent from the table above that there are several over-arching areas that need to be addressed in order for any country to be an attractive destination for FDI.

In terms of economic conditions, concerns around political and economic stability, availability and cost of suitably skilled manpower, quality and availability of physical infrastructure are among the various issues that investor would consider prior to undertaking an investment. From the recipient country perspective, it needs to ensure that the policies with regard to the economy, private sector, FDI, trade and industry are appropriate in order to attract investment (both domestic and foreign). Appropriate policies with regards repatriation of funds, restrictions on ownership, access to foreign exchange, stable, predictable and transparent policies are among the key policies that need to be investor-friendly. From the investor perspective, its own perceptions of the country's risk profile, its strategies on location and sourcing of inputs, the forging of strategic alliances and availability of key inputs are among the key considerations that form part of its investment decision. The quality of governance (corruption, regulations etc.) have an important affect on growth in general and FDI specifically.

Although the above brief exposition provides an indication of the key determinants of FDI, it must be noted that the rationale for FDI is not homogeneous. It varies according to the sector in which the company is based. Natural resource based industries will base their investment decision on location and availability of resources whilst export intensive industries will focus on areas that offer cost advantages (e.g. steel industry would look for low cost energy, whilst clothing and footwear requires low labour costs). In the agriculture sector, availability of suitable land and water resources are the key determinants of investment. In addition, the importance ascribed to the factors will also vary by sector, investor and investment destination. After this brief theoretical perspective on FDI, it is useful to examine the extent of FDI in OIC member countries. This will give an indication of the investment climate in these countries.

2. FDI Trends in OIC Member Countries

FDI inflows into OIC member countries have been increasing since 1998, highlighting the increasing level of integration and globalization. In 2007, the FDI flows into OIC countries reached \$141.5 billion compared to \$6.2 billion in 1998. As a percentage of GDP, this translated into 4.4 percent in 2007 compared to 1.2 percent in 1998. It may be noted that a substantial portion of the growth took place between 2004 and 2007, when FDI inflows increased from \$50.3 billion to \$141.5 billion (see Statistical Annex A9 & A10).

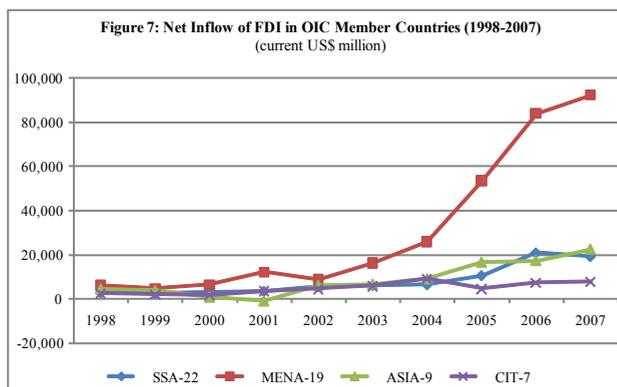
With the exception of Azerbaijan, all MCs recorded positive net inflow in 2007, with 19 countries received net inflow of over than \$1 billion (See Statistical Annex A11). At the country level, Saudi Arabia, Turkey and United Arab Emirates accounting for over 50 percent of total FDI inflows in 2007 (see Table 4). A closer look at Table 4 reveals that largest FDI beneficiary countries are oil producing, and to a large extent these flows were related to investments in the energy sector. In terms of the MCs receiving the least FDI inflows, 7 are from SSA, one each from Asia, MENA and CIT.

Table 4: FDI Net Inflow in OIC Member Countries, 2007 (US\$ million)

	Country	2007
Top 10	Saudi Arabia	24,318.4
	Turkey	22,029.0
	United Arab Emirates	13,253.1
	Nigeria	12,453.7
	Egypt	11,578.1
	Kazakhstan	10,259.4
	Malaysia	8,403.1
	Indonesia	6,928.0
	Pakistan	5,333.0
	Lebanon	2,844.6
Bottom 10	Sierra Leone	81.0
	Senegal	78.0
	Togo	69.0
	Gambia	63.7
	Benin	48.0
	Niger	27.0
	Palestine	20.9
	Maldives	15.0
	Guinea-Bissau	7.0
	Comoros	0.8

Source: Data Resource Centre, EPSD, staff computation using UNCTAD online database accessed in April 2009

Overall, the bulk of the FDI to MCs was destined for the MENA region which accounted for more than 65 percent of the total net FDI inflow to OIC countries in 2007 (see Figure 7). This is largely due to the development of the energy sector. The Asia region was the second highest beneficiary of FDI at \$22.2 billion (2.7 percent of GDP), followed by SSA which received \$19.2 billion in 2007 (5.7 percent of GDP). In the case of SSA, this was lower than the 2006 amount of \$20.8 billion (7.2 percent of GDP). The CIT attracted the least FDI inflows in 2007 of \$7.4 billion (4.1



Sources: World Bank, WDI Database online accessed on 15 March 2009. DRC Staff computations.

percent of GDP), representing an increase of approximately 5 percent on the 2006 value (see Figure 7).

From the perspective of economic groupings, the inflows of FDI into OIC member countries vary widely between the non-LDMCs and LDMCs, with non-LDMCs receiving the largest share. The highest annual net FDI inflows for non-LDMCs were \$137.6 billion (4.7 percent of GDP) in 2007, compared to \$120.7 billion (4.6 percent of GDP) in 2006. LDMCs on the other hand received a significantly lower \$3.9 billion (1.3 percent of GDP) in 2007, which was below its 2006 level of \$8.6 billion (3.5 percent of GDP) (see Statistical Annex A9 and A10).

In order to understand the dynamism of net FDI inflows, the coefficient of variation (CV) is utilized to examine the volatility of the FDI over the period. The average net FDI inflows for OIC MCs over the period 1998-2002 amounted to \$16.7 billion which increased significantly to \$88.1 billion in 2003-2007. In both instances medium volatility was witnessed²⁰. In terms of the top 10 FDI recipients in 2007, seven showed high volatility, two medium volatility and one (Indonesia) low volatility between 2003-2007 (See Statistical Annex A11 & A12).

At the regional level, MENA received the bulk of the net FDI inflows in both periods of \$54.3 billion in 2003-2007 compared to \$7.7 billion in 1998-2002 albeit at higher levels of volatility. All regions exhibited medium to high volatilities of FDI inflows within the periods under review with the exception of CIT which had low volatility of FDI in 2003-2007 (see Statistical Annex A11 and A12). The volatility of net FDI inflows to the OIC countries as a group is comparable to that of developed economies in the 2003-2007 period. However, the overall volatility masks wide differences between the different regions and countries.

In all probability, FDI in agriculture sector to developing countries is low compared to FDI in other sectors such as energy. Unfortunately, data on sectoral FDI especially agriculture is hard to come by. However, according to the Vietnamese Deputy Minister of Agricultural and Rural Development: “Foreign direct investment in the agricultural sector is low and far below potential”²¹. This is attributable to the relatively high risks, less attractive policies and agriculture’s special vulnerability to the global economic recession²².

At the practical level, it is important to understand the key factors driving the investment decision. In order to accomplish this, the rationale and salient features leading to the decision of private sector to invest in the agriculture sector overseas have been determined using case studies which were prepared following discussions in three countries, Sudan, Saudi Arabia, and United Arab Emirates. The case studies focused on 2 broad groups: an investor country initiative – King Abdullah Initiative for Saudi Investment in Agriculture (KAI) and a set of investors namely: Abraaj Capital Al Qudra Holdings, Abu Dhabi Fund for Development, and Kenana Sugar

²⁰ We define 0-29.9 points as ‘low volatility’, 30-59.9 as ‘medium volatility’, and 60 points and above as ‘high volatility’.

²¹ VietNamNet Bridge (December 18, 2008) <http://www.lookatvietnam.com/2008/12/vietnam-eyes-more-fdi-in-agriculture.html>

²² VietNamNet Bridge (2/2/2009) <http://english.vietnamnet.vn/biz/2009/02/826703/>

Company. In addition, to ascertain government's perception on the needs of investors, and their ability to attract FDI in the agriculture sector, discussions were held with the Government of Sudan in an attempt to gauge their understanding of the needs of the private sector. These discussions are covered under host country initiative (the Republic of Sudan).

V. EXPERIENCES OF FDI IN THE AGRICULTURE SECTOR²³

The rising oil prices from 2005 through July 2008, resulted in an increased focus on bio-fuels as an alternative and viable source of energy. This coupled with subsidies on bio-fuels resulted in the diversion of croplands away from production for food towards bio-fuels. The overall impact was a scarcity of key agriculture commodities, and higher food prices. This exposed an important vulnerability and created panic in some member countries (specifically the GCC). In response to this phenomenon, there was an increased desire to acquire land and secure food resources by these countries. Many private sector investors and governments hastened to secure agriculture land that exhibited potential in anticipation that this land would be used to secure food supplies for their home countries. The increased activity surrounding FDI in the agriculture sector peaked towards the end of 2008, with new announcements published in the media on virtually a weekly basis from GCC investors stating their intentions to undertake FDI in the agriculture sector. In this context, countries identified as potential recipients of FDI included Sudan, Morocco, Algeria, Egypt, Syria, Kazakhstan, Indonesia, Pakistan, Turkey, Vietnam, Philippines and South Africa. In many instances, Sudan was highlighted as the initial destination of choice, with some announcements stating that investments were already being undertaken in Sudan.

Simultaneously, many member countries that are well endowed with arable land and sufficient water resources sought to benefit from this revived interest in agriculture and welcomed the additional attention their economies were receiving from foreign investors²⁴.

Although one cannot generalize from these limited discussions on the key issues, it is possible to get some indications of the private and public sector perspectives on this important subject. Lessons learnt and best-practices from the case study may also provide an indication to other investors and recipient countries of some of the key issues affecting the investment decision.

1. Investor Country Initiative: Saudi Arabia

The King Abdullah Initiative for Saudi Investment in Agriculture Abroad (KAI) was announced with the aim of achieving national food security through building integrative partnerships with countries that have high agricultural potential to develop and manage agricultural investments in various strategic crops. It is still in its infancy, and consists of a ministerial team led by the Ministry of Commerce and Industry, and

²³ Due to the focus on strategic crops for FDI in the agriculture sector, in terms of this section of the paper, the definition of agriculture excludes livestock, forestry and fishing.

²⁴ Due to Sudan being highlighted by many potential investors as a preferred destination, it was decided to use it as a case study.

includes the Ministries of Agriculture, Foreign Affairs, Finance. A steering committee and technical working teams were formed from the main committee. These teams have visited many countries all over the world that exhibit agriculture and investment potential. In addition, the government announced the formation of a holding company that will provide financing for agricultural investments abroad.



Agriculture Project in Saudi Arabia

The wisdom behind the Initiative is also to move away from providing aid to stimulating growth and employment opportunities

in LDCs that are abundant in natural resources (trade not aid). The KAI aims at stimulating and encouraging the Saudi Arabian private sector to invest in agriculture abroad. A positive externality that arises from this initiative is that it will contribute towards the achievement of the OIC intra-trade target of 20 percent.

The Role of KAI

The KAI acts as an investment facilitator, and its role in a potential host country begins by undertaking bilateral discussions on behalf of the Kingdom. It will focus on paving the way in making it easy for investors to undertake FDI in third countries. Important elements of their focus and role would include:

- Facilitating the identification of potential investment opportunities;
- Securing land and undertaking negotiations with the host country to ensure appropriate quality and quantity of land is made available to the Saudi investor in a manner which is conducive to long-term development; and
- Undertaking discussions with host countries to ensure that an appropriate incentive basket is made available to Saudi investors. This to a large extent will focus on ensuring that other investors are not receiving preferential treatment as opposed to the Saudi investor.

The focus of the investment facilitated by the King Abdullah Initiative is strategic in nature focusing to a large extent on food security as opposed to purely economic merit. Although economic merit is an important element of the investment decision, the investment destination and investment supported would be of a strategic nature, this would allow the Initiative to assist Saudi investors undertake strategic investment while simultaneously meeting the objectives of facilitating development in these third countries. Thus focus on development via trade and investment as opposed to merely aid.

Box 2: Zimbabwean Farmers in Nigeria

Nigeria has an estimated land area of 910,770 square kilometers of which 740,000 square kilometers is agricultural land including 32 million hectares arable land. With a population of over 140 million people, Nigeria is the most densely populated country in Africa. Approximately 53 percent of the population is based in rural areas and agriculture contributes around 32 percent to the GDP.

As part of the “Back to the Land Strategy” in Kwara State, Nigeria 200 Zimbabwean farmers (whose land in Zimbabwe was redistributed) were offered approximately 1000 hectares of land each on a 25 year renewable lease to undertake large scale commercial farming. The aim of the strategy was to revitalize the agriculture sector in the state through engaging in large scale farming and at the same time integrating the small scale farmers. It is envisaged that the scheme will provide employment opportunities for the people as well as guarantee increased productivity in the agricultural production.

In order to entice the Zimbabwean farmers’ to the land, the state government granted various incentives to the farmers including providing irrigation infrastructure, electricity, roads, housing and upgraded the Ilorin Airport to facilitate exports. The government also guaranteed the farmers’ access to financing from local banks to enable them to import the required equipment duty free. Although not all of the above has materialized, progress is being made in the delivery of these critical infrastructural elements

In order to ensure community participation and buy-in, as part of the project, local farmers were to benefit from the technical skills of the commercial farmers, along with benefits from the upgraded infrastructure.

For other member countries, the lessons from the Nigerian experience are to target experienced farmers with the requisite technical skills and ability to undertake agriculture projects. Focus purely on investors without the requisite technical skills may not yield the desired outcomes in a timely manner. Moreover, with political will and financial commitment from the government is an important element in attracting FDI in the agriculture sector.

Sources: www.iwpr.net; www.afrika.no; www.kwarastate.gov.ng; www.cms.privatelabel.co.za; www.csmonitor.com.

In addition, the investment mindset is based on a “win-win” principle where the interests of the Kingdom as well as the receiving country are protected. In this regard, it is anticipated that the agricultural produce from the investment should be exported to the Kingdom, with reasonable proportion of the produce going to the markets in which they are produced. Although preference is laid on production of strategic crops such as rice, wheat and barley, the investing firms will have the freedom of choosing the type of crops they grow.

The Initiative will only support agriculture investments in countries with abundant agricultural resources that are long-term in nature, based on either land ownership or long-term leases. It is envisaged that the Initiative will sign bilateral agreements between Saudi Arabia and the government of receiving country as a means of paving the road for Saudi investment in the agriculture sector. In addition, the KAI pays attention to the proximity of the country to Saudi Arabia. At the time of discussion with the representatives of the KAI (in March 2009), Missions were already undertaken to

among others Senegal, Turkey, Ukraine, Egypt, Sudan, Kazakhstan, Ethiopia, South Africa, and Brazil. The logic behind considering many countries is simply to spread risk and capitalize on the best opportunities.

A key feature of the KAI is that it will only entertain discussion on Saudi investment in agriculture abroad in instances where the host/recipient country is not a net importer. It will also not focus on countries that are not keen on attracting FDI in Agriculture (e.g. India and China). In addition, countries that impose restrictions on the trade of agriculture output will be disregarded.

Although the KAI is intended to be short-term, a longer term mechanism in the form of an agricultural holding company is under establishment. This holding company will be 100 percent government owned (via the Public Investment Fund) and is called Saudi Company for Agricultural Investment and Animal Production. It will be an important source of financing for the investors, and act as a catalyst and facilitator, fostering cooperation at government level in order to ensure that the private sector can undertake the necessary investments. However, its *modus operandi*, actual focus areas and nature of its assistance are being finalized.

It is anticipated that it will provide soft loans to investors in the agriculture sector along with undertaking equity participation where applicable and subsidizing to some extent the investment. In addition, the holding company may be responsible for off-take agreements to purchase the output of the FDI investment in agriculture.

Factors Determining the Investment Destination

The key issues considered by the KAI to ascertain the suitability of a country as an investment destination include²⁵:

- **Security of tenure/land ownership:** A minimum renewable lease period of 25 years is considered suitable, with the ideal situation being land ownership.
- **Availability of suitable land, water, and infrastructure:** Electricity; transport and logistics are among the key success factors for potential investments.
- **Government and political stability** is an important consideration by the investor.
- **Existing relationship with host government:** Countries that have mutual relationships may be the first to be targeted for investments. The underlying purpose for the investments are to guarantee food supply from the source country and as such, existing relationships with potential host governments would facilitate access to resources and output even in times of crisis.
- **Appropriate legal and regulatory framework:** It is contended that the legal and regulatory framework of the potential recipient country must be conducive for investors.
- **Friendly investment policies:** Consideration is also given to the willingness of government to attract FDI in the agriculture sector and an appropriate policy environment.

²⁵ It may be noted that many of the above elements were highlighted as important determinants of FDI in section four.

- **Proximity to Saudi Arabia:** The distance of the receiving country to the investor country is essential because cost and security issues before the food reaches the destination.

The KAI has recognized that in order to facilitate security of investment, local communities in the host countries should benefit from the investments in the form of having access to some of the output along with employment, technology and knowledge transfer. Although the KAI expressed preference for investments to flow to Muslim world, it is recognized that the investment is undertaken by the private sector who seek to maximize profitability and rate of return on their investments and long-term sustainability of the projects. Thus, the investment will go to the country that offers the best overall “package” for the investor, and the decision will not be made on an emotional basis, but rather based on economic merit.

In addition, the focus will be on large scale commercial farming predominantly on unutilized agricultural land. However, in order for the projects to be viable, appropriate infrastructure must be put in place. Downstream beneficiation would take place either in the recipient country or closer to market depending on economic merit and competitiveness.

Envisaged Role for Development Partners

The KAI was clear that development partners such as MDBs have an important role to play in facilitating FDI in the agriculture sector. The soon to be established holding company will play a complementary role to that of MDBs who may assist by:

- Adopting a more proactive approach to agriculture through the provision of funding to host / recipient countries for de-bottlenecking infrastructure (e.g. electricity, transport and logistics) that could unlock the agriculture potential in their member countries and facilitate the flow of FDI into the agriculture sector in these countries;
- Committing funds for technical assistance grants (TAs) in order to assist in the training of labour in recipient country, to benefit more directly from the investment from the perspective and employability and ability to assimilate new technology. The TAs could also be utilized to set-up appropriate research institutions;
- Engaging their member countries in dialogue on the guiding principles and requirements to attract FDI specifically in the agriculture sector. This could provide additional security to the investment;
- Sharing of risk via equity participation in the actual commercial enterprises, and providing insurance and guarantees. MDBs “putting their money where their mouth is” will not only reduce the commercial risk, but also the political risk given their relationship and leverage with their member countries;
- Undertaking detailed studies on the agriculture potential of their member countries including their legal and regulatory environments, land ownership regulations, status of infrastructure and willingness to attract FDI into these countries.

Status of Investments

At this stage, no investment has been made via the KAI, the holding company is not yet in existence and as such has not facilitated any investment. All investments announced in the media remain announcements without any further developments having taken place. Some Saudi companies have in fact gone on their own to third countries to pursue investment opportunities, but the details of such investments are not readily available. Overall the strategy by the King Abdullah Initiative and the newly established holding company appears to be appropriate. It must however be recognized, that any investments arising from this Initiative will take a few years to reach maturity.

The nature of investment in the agriculture sector is such that the risks are higher and the return is over a long term. Although it is premature to assess the success of the KAI, it is apparent that its private sector focus is a step in the right direction.

2. Investor initiatives

(A) Abraaj Capital

Abraaj Capital is a Dubai based private equity investment firm with a focus on the MENA and South Asian (MENASA) regions. The firm is widely recognized as an important player in private equity in the region and has undertaken several key investments across the MENASA region. It has also received several awards including ‘Middle Eastern Private Equity of the Year’ in 2005, 2006 and 2007; the Banker Middle East Award for ‘Best Private Equity Institution’ in 2006 and ‘Best Private Equity House’ at the World Private Equity Awards in 2007.

The Role of Abraaj

Abraaj as a private equity investor follows an investment strategy that is based on the acquisition of controlling or significant interests with board representation in stable, mature, well-managed businesses. It aims to create value through operational and financial improvements and management incentives. In some instances, it focuses on a ‘Buy and Build’ strategy where it will help further develop a company that exhibits growth potential. Its focus is on businesses that maximize shareholder return through strong operational growth and significant capital appreciation.

As a private equity investor, it has clear exit strategies up-front, and embarks on investments with the ultimate aim of profitably exiting from these investments. The ultimate objective of the firm is to attain “value through structured exits to strategic and trade buyers or onto public markets in the region and beyond, within a three to five year investment horizon”. The focus of Abraaj in the agriculture sector is that of a financial and strategic partner that would be in a position to provide overall strategic and management expertise. However, the nature of the firm is such that it needs to find suitable technical partners with experience in the management of large scale commercial agriculture in order to invest in the sector. Based on its modus operandi, it is not part of its business model to start-up new projects, but rather to buy existing well managed entities, and increase their value by bringing in specific management skills, and increasing productivity and efficiency. This would allow it to increase the

value of the business, and yield a healthy profit for its shareholders on exiting the investment.

Factors Determining the Investment Destination

As a private equity firm, the focus of Abraaj is largely on maximizing value for shareholders. Hence, any investments undertaken are based on this fundamental principle. In this regard, the agriculture sector will compete with other sectors for investment funds. Abraaj's key considerations of regarding FDI in the agriculture sector include:

- **Access and availability of water resources:** Their focus is on water surplus countries, and it was acknowledged that there are very few water surplus countries in the world.
- **Land ownership / security of tenure:** The minimum lease period that is considered by Abraaj is 25 years, and this should ideally be on a renewable basis. This will allow it sufficient time to increase the value of the investment, and sell to a third party who would have sufficient time (over 15 years lease remaining) to capitalize on the investment. Any shorter lease period would make exiting the investment with a suitable return more difficult.
- **Availability of suitable infrastructure:** Suitable road, electricity and telecommunications infrastructure are among the key elements considered from an infrastructure perspective.
- **Security of personnel:** The safety and ease of movement of personnel outside the project area is of paramount importance for the investor to be in a position to attract skilled manpower from outside the recipient country.
- **Skilled manpower:** The availability of appropriate human resources with experience in large scale commercial farming is also a key consideration. In many respects, semi-skilled manpower is available in potential recipient countries. However, expertise and experience in large scale mechanized commercial farming that is globally competitive is severely long.
- **Spreading of risks / risk sharing:** The ability to attract other investors to the project also plays an important role in determining the investment destination. In order to spread risk there is a strong preference for equity participation from like-minded partners. In addition investing in several countries spread the geographic and political risk.
- **Overall investment and business climate:** The extent of law and order, the legal and regulatory framework and ability to enforce contracts along with the business and investment climate are examined in order to ensure that the environment is conducive, and facilitates the achievement of the key objective of maximizing shareholder value.

Status of Investments

At this stage, Abraaj is in discussions with other potential partners to facilitate investment in Pakistan. There has been some media coverage of this, but due to the

sensitive nature of such discussions, it is not possible to determine the status thereof. It is however acceptable to assume that no investment has materialized as yet. The funding model (of buying into an existing business), the short-term time horizon along with the desire to exit strategy of Abraaj Capital does not lend itself to the agriculture sector since “farmers” have emotional attachments to the land, and would not be keen on their land / investment being sold off to highest bidder. In addition, without a strong technical partner with agriculture expertise, it would be difficult for Abraaj to commit finances to this sector.

Box 3: The Arab Authority for Agriculture Investment and Development (AAAID)

The AAAID was established in 1976 by the governments of Arab states to enhance agricultural production and food security in member countries. This is accomplished through investment in agricultural production and related activities including training, applied agricultural research and development.



AAAID Agriculture Project

The AAAID invests in agriculture related companies through equity participation, and financing and loan activities. As at the end of 2008, the AAAID had investments

worth \$515 million in 25 companies operating throughout the Arab world predominantly in Sudan. This has facilitated combined investments of \$2.45 billion with the public and the private sectors contributing 56.3% and 30.1% respectively.

The bulk of the funding was for agricultural processing (44.7 percent) followed by plant production (28.2 percent) and animal production (23.8 percent). Over the years the AAAID made a contribution to the agriculture sector of Arab countries through its investments, research, and development activities.

The achievements by the AAAID can to a large extent be attributed to their determination, political will, and strategic partnerships with technically and managerially skilled entities. The problems identified by AAID as facing agriculture investment include: lack of a conducive environment for agriculture investment, inappropriate legal and regulatory framework, lack of adequate basic infrastructure, inadequate skilled manpower, and bureaucratic red-tape.

Member countries and potential investors in agriculture could benefit by partnering with the AAAIDs and learning from its experience in Sudan, and the rest of the Arab world.

Source: AAAID (2007).

(B) Al-Qudra Holdings

Al-Qudra Holding is an Abu Dhabi based, private joint stock investment company focusing on strategic investments with a view to contributing to the sustainable development of the Middle East region. The company is involved in several key sectors including real estate, infrastructure development, utilities production and distribution, industrial production and agriculture. It is exploring various investment

opportunities and has facilitated the development of various projects to meet local and regional market needs.

In order to devote sufficient attention to the agriculture sector, it established Al-Qudra Agriculture which is committed to meeting the higher demand for food and reducing the effects of rising food prices. In July 2008, the company announced its plan to acquire 400,000 hectares of farmlands in the Middle East (Syria), Africa (Sudan, Morocco, and Algeria), and Asia (Pakistan, Vietnam, Thailand and India). Its focus on FDI in agriculture stems from the recent crisis and the resultant higher prices along with expectations of lower levels of food supply from the West²⁶. It is on this basis that strategic investments are being sought in the agriculture sector.

The Role of Al-Qudra Agriculture

Al-Qudra could best be classified as a “strategic semi-private investor”. Its focus is on exploring potential for investment in the agriculture sector from both the perspective of ensuring food security and obtaining a return on investment. Al-Qudra sees itself as undertaking assessments on a country-by-country basis to identify potentials, and acquiring appropriate agricultural land. It proposes using advanced technology to provide efficient solutions to the sector. Its investment time horizon is long-term and is in line with the timelines for investment in the agriculture sector.

Being semi-private, an additional constraint for Al-Qudra is the issue of outright purchase of land in host countries (as a result of sovereignty issues- there are political issues and considerations that arise when a company linked to a government tries to buy land in a third country). Hence, the preference and less problematic, cheaper alternative of long-term renewable leases (minimum 25 years) as opposed to out-right land acquisition.

It is envisaged that from a business perspective, it will function purely as a private investor that will operate on sound management principles. However, its focus will be on strategic crops that can firstly address the food requirements of the UAE, secondly the Muslim world, and then the rest of the world. Although it will function to a large extent as financier, and have equity participation, it will also be involved in the management of the projects. Given its strong linkages to the government of Abu Dhabi, its focus will be on strategic crops, and it will have upfront off-takes agreements with the government. Therefore, from the market perspective, the risk is minimized.

In light of the above, with the guaranteed markets and relatively lower risk, the focus for Al-Qudra is on strategic crops as opposed to high value crops (such as papino, mangoes and vegetables) that have higher risk and markets that are not guaranteed. However, in instances where there is still surplus capacity to undertake high value crop production, these may be exploited.

²⁶ In light of the recent financial crisis, access to credit from the banking and financial sectors will become more restrictive. In addition, the financial crisis resulted in governments re-focusing limited sources away from subsidizing food production towards stemming the adverse impacts of the financial crisis. The potential net resultant affect would be lower levels of the production in the West, and further strain on limited supply of agriculture output for human consumption.

Factors Determining the Investment Destination

The factors considered by Al-Qudra holdings prior to embarking on an investment in the agriculture sector is similar to that of Abraaj Capital. This is not surprising as both operate on private sector principles. Nonetheless, for the sake of completeness, the key factors considered prior to undertaking an investment in agriculture include:

- Resource availability (land and water);
- Availability of suitable infrastructure;
- Contractual laws to govern the investment from a long-term security perspective which will minimize the investment risk;
- Long-term land tenure guarantees / cover by international law;
- Ease of movement for personnel and investor both in and out of the country and within the country;
- Ease of doing business for foreign investment;
- Support from recipient government in addressing community-based issues²⁷, securing land and water rights;
- Proximity to the Gulf region; and
- Level of inter-governmental relationships, bilateral agreements between governments, stability and security in host country government.

Envisaged Role for Development Partners as Identified by the Private Sector²⁸

Both Abraaj Capital and Al-Qudra Holdings highlighted that development partners including the IDB could play an important role in the stimulating of FDI in the agriculture sector. The MDBs could, among others, facilitate FDI in the agriculture sector by:

- Making available finance for:
 - o Funding infrastructure projects that unlock key constraints inhibiting the development of the agriculture sector;
 - o Equity participation in projects. By “putting their money where their mouths are”, development partners could take equity stakes in the potential investments. This would assist in reducing the risk exposure, and also increase confidence in the investment and business climate in the recipient country. It may also serve the dual purpose of marketing the country as an investment destination to other private sector investors;
- Providing advisory services by, among others, acting as an honest broker between the various parties to facilitate public-private dialogue, and ensure a level playing field.

²⁷ Box 4 highlights the potential ramifications of not consulting with communities on the investment.

²⁸ This section covers the considerations by both Abraaj Capital and Al-Qudra Holdings. Where the issue is relevant for only one of the investors, it is identified as such.

Status of Investments

At this stage, as a result of the food crisis, no actual investment has been made by Al-Qudra which is still studying various options available. In terms of investment horizon, it is apparent that from the time an opportunity is identified, it takes up to 12 months to complete the technical and financial feasibilities. It is only thereafter that the project can be seriously considered from an investment perspective. Al-Qudra highlighted that realistically, it is a minimum of two years from the identification of a potential opportunity to the date that an actual investment is made “on the ground”.

Investor Perspective on Key Impediments to Investment in Agriculture

On the basis of details provided by KAI, Abraaj Capital, Al-Qudra Holdings, and the Abu Dhabi Fund for Development several constraints were identified with regard to investment in the agriculture sector. These include

- Lack of access to information on specific investment opportunities and other key factors relating to specific potential projects. The requirement from the private sector is for clearly identifiable / identified opportunities in the form of bankable projects that have at the very least scoping / pre-feasibility undertaken by reputable independent third party;
- Lack of professionalism by recipient governments in dealing with prospective investors. This is to a large extent due to a mismatch between the actual regulations and what is implemented. Also, investors (even where backed by their governments) find that the bureaucracy related to foreign investment is onerous. The lack of clear upfront commitment, clear channels of communication and single point of contact, long term-contractual guarantees, openness, good governance and transparency from recipient governments further compounds the problem.

3. Host Country Initiative: The Republic of Sudan

In terms of land size, Sudan is the largest country in Africa and tenth largest in the world. It had a population of 37 million in 2006, occupying land area of about 2.4 million square kilometres. Sudan has abundant water resources coming from the Nile River which runs about 800 km in the country with the White and the Blue Nile meeting at Khartoum. The country is rich in mineral resources including: petroleum, natural gas, gold, silver, chrome, asbestos, manganese, gypsum, mica, zinc, iron, lead, uranium, copper, kaolin, cobalt, granite, nickel and tin. Nonetheless, agriculture remains Sudan’s most important sector employing 80% of the workforce and contributing about 39% of GDP. Prior to the production and export of oil, agriculture constituted



AAAID Project in Sudan.

about 95 percent of the country's exports, and provided raw materials for the industry which was largely agricultural.

Sudan's agriculture was dominated by crop cultivation using rain fed farming methods in the central parts of the country and irrigation, mostly along the Nile River. Land use indicators show that 7.2 percent of the country's 2.4 million square kilometres of land was arable in 2005 compared to 5.5 percent in 1990. This means that the increase in food production in particular and agricultural production in general from 1990 -2006 was not due to increase in productivity but largely a result of cultivating more land. Earnings from export of agricultural crop are estimated to reach \$4.5 billion by 2011.

Apart from crop production, livestock is another agricultural activity widely practiced in most parts of Sudan. This sub-sector is also a major contributor to the economy through export of livestock and as a source of employment a very large number of people. It was estimated that proceeds from export of livestock will increase from \$274 million in 2008 to \$635 million in 2011.

Although fishing is mostly practiced by the traditional sector, Sudan has large potential in the sub-sector which presently provides fish mostly for the local market. The Nile River and Lake Nubia are the major sources of fresh water fish while the Red Sea provides huge untapped potential for salt water fish. According to government sources proceeds of exports of fish resources are expected to increase from \$44 million in 2008 to about \$100 million in 2011.

The forestry sub-sector also exhibits good potential predominantly in the South. In the North, gum arabic production is booming and has become one of the most important export commodities after cotton.

However, with the production and export of crude oil, the level of dependence of the country on oil increased significantly as crude oil constitutes over 90 percent of the export earnings. It is therefore not surprising that the agriculture sector started to shrink as it became more neglected by the government. In order to avoid falling victim to the "Dutch Disease" as was the case with most African resource-based countries, the Government of Sudan has initiated the "Executive Programme for the Agricultural Revival" under the auspice of the Vice President of Sudan in 2008. The aim of the Programme is to reinvigorate the sector and increase its contribution and importance to the GDP of the economy.

Investment Climate for Agriculture Sector

General: Sudan is one of the few countries in the world that has both surplus arable land and water resources. The challenge it faces is how best to exploit these resources to the benefit of its people, the Arab world and the world in general. The efficient exploitation of the arable land will, to a large extent, depend on the manner in which the potentials are developed. The country is currently unable to exploit its abundant resources due to a lack of financial, technical, managerial and physical resources. It

is therefore not surprising that Sudan is the member country that receives the most attention when it comes to FDI in the agriculture sector.

Cognizant of the importance of investment to stimulating economic growth and development, the Government of Sudan has established the Ministry of Investment. The Ministry of Investment in Sudan is aware of the high quality and amount of arable land and rich water resources available in the country that remain un-exploited. In light of this, it has increased its focus on the agriculture sector which it views as the “real oil of Sudan”. Therefore, there has been a strong focus on encouraging investment and ensuring an enabling environment for the development for both foreign and local investment. To this effect, this law has recently (2007) been updated to ensure its relevance and it may be noted that the investment law does not discriminate between foreign and local investors. An important element of the law is the ease of movement/repatriation of funds and capital. In addition, a one stop-shop for investors has been established with a view to removing red-tape and bureaucracy for the investment community.

In terms of the agriculture sector specifically, the Higher Council for the Development of the Agriculture chaired by the Vice President of Sudan also instituted the “Executive Programme for the Agricultural Revival”. The Programme was initiated in response to the challenges and risk of the country becoming dependant on oil, along with the countries accession to the WTO. The Programme aims to study the status of the agriculture sector and develop a vision and action plan to revive the sector.

In order to stimulate the agriculture sector domestically, the Central Bank has made available additional resources for on-lending to the agriculture sector, and is subsidizing the cost of borrowing for the agriculture sector²⁹.

Political Situation: The current political climate in Sudan is portrayed as uncertain despite the signing of the Comprehensive Peace Agreement (CPA)³⁰. This coupled with the fact that Sudan is on the Office of Foreign Asset Control (OFAC) list³¹ impedes investment in the country. The recent International Criminal Court (ICC) arrest warrant issued against the President of Sudan has caused further jitters amongst potential investors who are already concerned about the stability of Sudan.

Land: The Sudanese land law is in the process of being reformed in order to align/harmonize it with the country’s investment and company laws. This is intended to make it easier to invest in Sudan. However, the situation at present is somewhat different. In the South, on the basis of the CPA, the land belongs to the communities. In the North, the land belongs to the government (in some instances national and other states) except where customary law prevails, with all unregistered land belonging to

²⁹ Subsidizing lending is not an efficient an appropriate investment as it increases the possibility unethical behaviour. Historically, the Central Bank put in floors with regard to lending to the agriculture sector. This has subsequently been replaced by other incentives for funding the sector.

³⁰ The CPA was signed between the Government of Sudan and the Sudan People’s Liberation Movement in January 2005 with the aims of ending the civil war in Sudan and establishing a democratic government in Sudan.

³¹ The OFAC falls under the US Department of Treasury and enforces economic and trade sanctions based on US foreign policy and its security objectives. The sanctions allow OFAC to impose controls on transactions and freeze assets under US jurisdiction. It may be noted that the many of the sanctions are based on UN and other international mandates and involves close cooperation with ally government.

the government. The process of registration of land is ongoing and is currently being undertaken by the Ministry of Justice. In addition, the national land commission law will be tabled in the parliament shortly and this should positively impact on the ability to acquire land. Once this has been promulgated, it will be followed by the state land commission law.

The bulk of the land that is available for agriculture development is far from the surface water, and cannot be exploited due to lack of basic infrastructure required to develop the agriculture sector. Where underground water resources are available, its extent is not readily known, and requires geographic mapping and geological surveys. The country also urgently requires the completion of its land use map which will allow it to gain a clear understanding of the availability of water resources, land, soil types and agriculture stability.

Water: This resource is widely available in the country and there exist significant scope for the extension of areas to have access to water. A key challenge facing the government is how to effectively manage this valuable resource? In this regard, the Ministry of Irrigation and Water Resources (MIWR) has acquired knowledge and monitors the water situation in the country, providing guidance and information on areas where water resources can be exploited for agriculture and areas where this may not be possible. As part of its operations, it periodically informs the state government on the availability of water for projects in order to ensure long-term sustainability of water resources. Unfortunately, many investors who have acquired land at the state level still require approval from the MIWR prior to embarking on the project. It is, therefore, imperative that investors engage in discussions at both the state level (to acquire land) and the national level (to acquire water) depending on the nature of investment in water infrastructure, the investor will need to pay a nominal charge for the cost and maintenance and operations of the infrastructure or alternatively if the investment in infrastructure is made by the investor, he will undertake his own maintenance and operations.

Infrastructure Development: The Government of Sudan recognized the importance of infrastructure in the overall development of the economy in the agriculture sector specifically. Given its limited resources, it is looking towards public-private partnerships as a mechanism to deliver key infrastructure. The country suffers from a lack of suitable infrastructure more so in rural areas. Among the key infrastructure bottlenecks identified are lack of electricity, roads and telecommunications. In instances where surfaced water is available appropriate infrastructure to bring the water to the project area is lacking. In most instances, this needs to be installed by the project promoters. In such cases, the costs of bringing water to the project area are higher due to the need for underground water piping. Although surface canals would be a cheaper alternative, there are instances of local communities tapping into this infrastructure resulting in insufficient water going to the project area. In order to prioritize its investment expenditure, the Government is also in the process of identifying critical infrastructure that will unlock the economic potentials in previously under-developed areas.

Foreign Exchange Policy: The exchange rate policy of Sudan is based on the managed float system with the overall foreign exchange controls being fairly liberalized. Foreign investors are at liberty to work directly with their own banks abroad. However, for information purposes they are required to provide reports to the Central Bank. The Central Bank monitors and intervenes in the market only when necessary, with Sudan having expected a relatively stable exchange rate over the last decade.

Coordination: Despite agriculture being widely recognized as an important element of the growth and development agenda of Sudan, there appears to be scope for further cooperation between ministries at national level and also between national and state levels. Although this may appear contentious at first glance, this is evident from the fact that investors are able to acquire large tracks of land for use in the production of animal feed stock for export while the others have acquired land where issues of water rights have not been resolved with national government.

Historically, it was difficult to do business in Sudan due to high levels of bureaucracy and red-tape. Although significant progress has been made in improving the investment climate, this has to some extent been on paper with the reality on the ground being somewhat different. The contrast between actual and envisaged implementation is widely acknowledged within the country and government is making a concerted effort to ensure consistency between implementation and promulgation of the law. In this regard, an awareness campaign highlighting the strides made by the government to improve the business and investment climate needs to be undertaken.

Constraints to Growth in Agriculture

Despite efforts to stimulate investment and improve the business and investment climate in the agriculture sector, there remain key constraints stifling the growth and development of the sector. In the figure below, the actors underlying low levels of investment are presented. It may be noted that some of these elements have been highlighted earlier by the private sector as important elements in their investment decision.

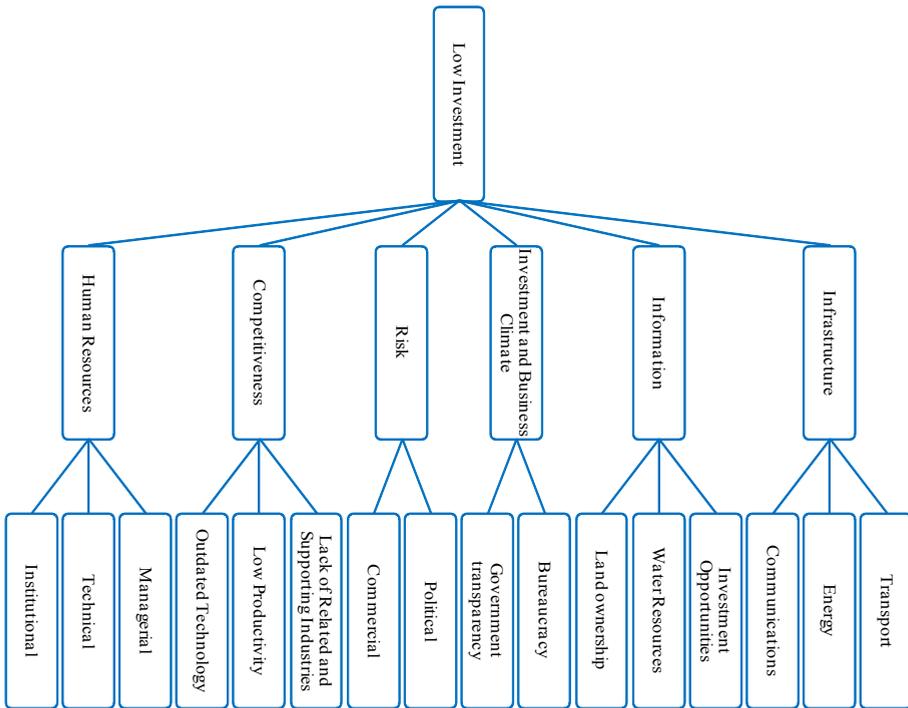
Figure 8 highlights that the low levels of investment in the agriculture sector in Sudan are as a result of several key factors. These include lack of infrastructure and information, a poor investment and business climate, relatively higher risk, low levels of competitiveness and under developed human resources. Although all the issues are important, for the purposes of this paper, only one or two are explained in greater depth:

- **The lack of suitable information on project opportunities and investment potentials.** Presently, the Government of Sudan is unaware of the specific potential investment opportunities that could be promoted to the private sector as pre-feasibility and feasibility studies have not been undertaken. Although the Government is aware that significant opportunity for exploiting the agriculture sector exists, the type of project, crops, irrigation and other key issues remain unknown. This resulted in Sudan being to some extent at the mercy of

private investors who propose projects that might not necessarily be the most appropriate in the project area or that utilize water resources inefficiently.

- **Lack of competitiveness.** This is due to the low levels of productivity due to inefficient production techniques, inefficient use of water and lack of technical and technological knowledge. This has adversely impacted on both competitiveness and quality of output. The lack of supporting services such as storage facilities (both dry and cold), availability of suitable packing further compound the problem of competitiveness of the agriculture sector.

Figure 8: Factors Underlying Low Investment in Agriculture in Sudan



Source: Based on author's discussions with the public and private sector.

Arguably **the key binding constraint** to investment in the agriculture sector in Sudan is the political uncertainty arising from the recent ICC ruling and concerns on Darfur. This is probably the underlying cause behind the lack of willingness by the private and public sectors to undertake large scale investment in Sudan. However, to avoid losing a potentially golden opportunity, many of these investors have managed to secure leases on large tracts of land at nominal costs, with no agreed upon investment deadlines.

Key to unlocking the agricultural potential would be the formation of strategic partnerships in the agricultural sector. Based on inputs from the Government of

Sudan and the private sector in GCC countries, it is apparent that without strategic partnerships large-scale investment in agriculture will not be forthcoming. These strategic partnerships will need to bring on-board technical and managerial partners as an important third element to the financing partners from the GCC and the water and land resources available in Sudan. There is, therefore, an urgent need to seek managerial and technical partners that could complement the potential investment from GCC countries. The country has not been successful in converting good intentions (financing) into good investment.

Role of Development Partners

There has always been strong interest in the agriculture sector in Sudan due to the large agriculture land availability and abundant water resources. This has not been translated into actual investment even in the instances where land has been acquired by investors. The rationale for this poor performance is largely attributable to the constraints highlighted earlier. The Government of Sudan along with its development partners need to urgently address the above issues, if it wishes to ensure the growth of the agriculture sector and its competitiveness in Sudan. Development partners including the IDB could play an important role in three areas:

- i. Offering technical assistance to:
 - Fund new technologies that may improve overall productivity of the agriculture sector;
 - Support and build capacity in the Ministry of Investment and its investment promotion authority;
 - Develop capacity at the state and national level to enable government of Sudan to effectively negotiate with foreign direct investors; and
 - Fund training workshops that transfer the requisite skills to key government ministries that will allow them to adequately skill the relevant staff to deal with development partners and the private sector
- ii. Acting as an “honest broker” between key public and private sector stakeholders;
- iii. Providing Financing by:
 - Becoming an equity partner;
 - Funding / co-funding agricultural infrastructure such as roads, electricity, water, harvesting services and relating and supporting industries;
 - Acting as lead financier / facilitator and could structure the deal in the project; and
 - Providing wholesale financing for on-lending to small-scale farmers to facilitate effective participation with large-scale commercial agriculture. This financing could either go to agricultural banks, commercial banks or relevant institutions involved in funding the agriculture sector. Such

measures may assist in mitigating the political and commercial risks arising of the project, and avoid a repeat of the situation in Madagascar (see Box 4).

Box 4: Daewoo's Experience of FDI in Agriculture in Madagascar

Madagascar is the fourth largest island located in the Indian Ocean and East of Mozambique, with population of 19.7 million, of which 71% lives in rural areas. The country's economy is highly dependent on agriculture with it contributing 26.5% of the GDP. Out of a total land area of 582 thousand square kilometers, 2.95 million hectares are arable land. Similar to many African economies, the agriculture sector in Madagascar has is under-developed and exhibits significant potential.

Daewoo (Korea) sought to secure food supplies for Korea by undertaking FDI in the agriculture sector in Madagascar. In November 2008, Daewoo secured a lease on 1.3 million hectares of arable land for 99 years at a nominal cost in remote Western Madagascar to grow corn for export to South Korea. The investment was anticipated at US\$ 6 billion (the biggest agriculture FDI in the history) over a 25 year period, and could potentially create between 45,000 and 70,000 new jobs. Unfortunately, civil society including rural communities and farmers were not consulted. The resultant public outcry and subsequent violent protests claimed at least 100 lives. This coupled with the negative public sentiment lead to the collapse of the government. The deal was cancelled by the new government who claimed that it was unconstitutional and the people were not consulted.

There are key lessons that OIC member countries seeking to undertake FDI in the agriculture sector can learn. These include:

1. Recipient countries and investors must ensure that communities are widely consulted and receive tangible benefits from the project via either being part of the overall project, or benefitting from extension services and technical support from the investment.
2. Countries must undertake detailed feasibility studies and ensure that the land tenure system meets the community concerns and investor requirements considering the political history of the country and social justice.
3. In the case of large-scale agriculture investment land lease, failure to have balanced deal and proper consultation with the concerned communities will lead to many disappointments in both parties, particularly the host country.
4. The investment should be of a reasonable size suitable for large-scale commercial farming (and not excessive as in the case of Daewoo).
5. The cost of the lease should be realistic and not merely a nominal fee as it contributes to negative perceptions that the "country is being given away" to foreigners.

Source: www.africanagriculture.blogspot.com; www.en.afrik.com; www.bloomberg.com; www.rjkoehler.com

4. Concluding Remarks from Case Studies

With oil prices having experienced a sharp decline since mid-July 2008 (resulting in the viability of bio-fuels production not being as lucrative) and the drop in commodity prices, the situation appears to have changed somewhat. The initial excitement and scramble for land appears to have tapered off, and a more rational approach to FDI in the agriculture sector is being considered.

In the case of Sudan, large tracts of land have been given to potential investors on long-term leases with no clearly defined investment deadlines. These investors have acquired the land on long-term leases at nominal costs, and there is, therefore, no incentive to fast-track the development due to the relatively low opportunity cost. This has negative implications on the host country since land is being tied up by the private sector and cannot be utilized for agriculture purposes as originally intended. The private sector on the other hand, has acted rationally, and has secured arable land resources (which is scarce globally) at nominal costs on long-term leases. This will allow them to carefully consider their investment by undertaking detailed feasibility studies, bringing on board suitable technical and financial partners, and monitoring the political situation in the country. All these issues could be addressed at leisure since there is no real risk of losing the land resource.

Although private sector investors are seeking huge tracks of land for agriculture, in reality a very little (if any) is being utilized for actual farming purposes. Potential investors that were part of the case studies have also indicated their preference for starting small and expanding their production thereafter. From the country perspective, the problem with this approach is that large tracks of land are being committed to private investors of which a very small percentage of land being farmed. In addition, the Government of Sudan has no control over the timing as to when the entire land allocated to the private sector will be put under production.

As such, it may be useful to retrospectively re-visit these contracts with a view to adding performance / investment deadlines to the land allocations. Although this may negatively impacts on the perceptions of the country as a viable investment destination, it must be recognized that unless this is done, the country will be unable to develop the agriculture sector rapidly, and will be at the mercy of private sector investors who may not develop the land in the medium- to long-term. However, the problem in the case of Sudan is further compounded since many of the “agriculture investments” have a political dimension with land being allocated on the basis of bilateral negotiations with investor countries at the national government level.

Thus, it appears that due to an uncoordinated and piecemeal approach to dealing with FDI specifically in the agriculture sector, the Government of Sudan has come off “second-best” in its negotiations with the private sector specifically with regards FDI in the agriculture sector.

For new contracts and contracts in the process of being negotiated, the Government could charge an up-front commitment fee to the potential investor where if the land is not utilized within the pre-agreed upon investment period the commitment fee would be lost and the land will go back to the Government. In instances where the investment takes place, the government will re-pay the investor the commitment fee. This would ensure that only those investors that are serious and will follow through on their investment will seek to acquire land.

Once the political uncertainty in the country is addressed, the key to unlocking the agriculture potential would be the formation of strategic partnerships in the

agriculture sector. Based on discussions held within Sudan and the private sector in GCC countries, it is apparent that without strategic partnerships large-scale investment in agriculture will not be forthcoming. These strategic partnerships will need to bring on-board technical and managerial partners as an important third element to the financing partners from the GCC and the water and land resources available in Sudan. There is, therefore, an urgent need to seek managerial and technical partners that could complement the potential investment from investor countries such as the GCC. Overall, the country has unfortunately not been successful in converting good intentions (investment) into good investment.

Although there is significant land available, these are not serviced and require significant investment and infrastructure and services in order to effectively undertake agriculture projects. Perhaps a more effective investment mind-set would be to look at areas that are currently being cultivated with a view to embarking on joint ventures on existing farms in a manner that significantly increases productivity and reduces cost.

The strategic objectives of food security are beneficial to the investor from the demand side as a source of readily available market. Although the private sector is risk-takers, it must be recognized that the risk has to be carefully managed in order to ensure profit maximization for shareholders. Moreover, the investment decision is not an emotional one, but rather driven to by economic and financial merit of the project, with minimum real IRR of 12 percent excluding risk being sought on FDI in agriculture. If risks were to be added to the required rate of return this would increase to between 15 percent and 20 percent³². From a market perspective, the investors focus would be on satisfying domestic demand in instances of supply shortages in the recipient country and exporting the surplus to their home countries. Theoretically, this is a win-win situation for both the investor and recipient country and would work well in instances where there is no global food crisis. However, if a situation were to arise where there are chronic shortages globally including in the recipient country, the implication would be that no (or limited) produce from these projects would be available in the investor nation. Given that, the current focus on the FDI in the agriculture sector is driven to some extent by the need for food security specifically during times of supply constraints, it is at the times of food crisis that the benefits of the FDI will not accrue to the investing country. In this regard, investment in agriculture on its own will not address the issue of food security at the time of crisis. It is therefore imperative that any such investments (if there are meant to be strategic) be coupled with investments in storage facilities in both the recipient and investor country. This will assist in mitigating the risk of not being able to access output at the times of food shortages.

Although it is unwise to generalize from the case of Sudan, it must be recognized that there are some key lessons that can be gleaned from its experience. Firstly countries need to adopt a holistic perspective of the investors and type of investments that they wish to attract to their economy specifically in the agriculture sector. There needs to be a co-ordinated approach to land allocation with clear performance and investment agreements. These need to be standardized across all such lease agreements,

³² Although these required rates of return on investment may appear high, similar expectations were expressed by Abraaj Capital and Al-Qudra Holdings, with the expectations from the Abu Dhabi Fund for Development being slightly lower.

with minimal changes possible at the state level. Land that has been allocated for development that has not been developed may be taken back by the Government due to “non-delivery” by the private sector. Secondly, governments need to gain a better understanding and be appropriately equipped to handle unsolicited requests for land and other such foreign investments. Host governments need to recognize that the foreign private investor has the objective of long-term profit maximization/return on investment for shareholders. The objectives of economic development that the government has that may be positively impacted upon by the investment is secondary for these companies, and as such, governments need to ensure that such national objectives are accommodated for within the investment. A word of caution in this regard is that governments should not unnecessarily burden the project with social responsibility/socio-economic development issues that result in the project being unviable for the private investor.

VI. STIMULATING FDI IN AGRICULTURE IN OIC MEMBER COUNTRIES

There is significant potential for FDI in IDB member countries specifically in the agriculture sector. However, these potentials remain largely untapped. Issues considered by potential investors were highlighted earlier. Countries wishing to successfully attract FDI will have to take cognizance of these factors and create an environment that is conducive to FDI. In the case of Sudan, some of the key bottlenecks hampering FDI were discussed. Potential recipient countries along with their development partners will need to make a concerted effort if they aim at attracting large amounts of investment into their economies.

1. Potential Recipient Countries

The changing environment warrants new directions to be explored, and special efforts made, to mobilize capital for sustainable agriculture by member countries rich in arable land. These countries need to exploit the potential investment opportunities available and ensure that they have a favourable investment climate to entice suitable investors. The benefits would thus accrue both to the investor nation in the form of securing food supplies and reducing the price volatilities in their home countries, while the investment destination would benefit from the FDI (including assistance in its own endeavours at ensuring food security) and the corresponding job creation that would follow. Thus, it emerges as a “win-win scenario” for the host and investor nations. Hence, a shift from a protected and isolated approach to economic development in which international competitiveness, regional co-operation and a more diversified economic base is paramount.

Recipient countries need to be cognizant that the opportunities to promote FDI in the agriculture sector need to be exploited as a matter of urgency since such investments could result in the “crowding-in” of other investors, with the resultant positive externalities to the domestic economy. Recipient countries need to pursue an industrial strategy that is directed at both a sectoral (industrial clusters specifically agriculture) and spatial level (to exploit the under-utilized potential in terms of arable

land, water resources, etc.). This form of “targeting” is particularly appropriate in the current environment of readily available markets. However, due to lack of financing specifically in LDMCs, huge tracts of arable land remain un-exploited.

Although it is important for these economies to attract such investments, it is important that such FDI also meet objectives of the recipient country which should include:

- Addressing its own food security needs;
- Generating economic growth and development in underdeveloped areas;
- Mobilising foreign (and domestic) private sector investment;
- Generating long-term and sustainable employment;
- Exploiting the spin-off opportunities that arise from this relative crowding-in of private and public sector investments for the development of SMEs and the empowerment of the local communities;
- Taking advantage of under-utilized locational and economic advantages for export orientated growth; and
- Attracting modern technology into the agriculture sector.

On the basis of the above-mentioned objectives, it is proposed that the potential recipient countries embark on an exercise that allows for potential projects to be identified along with undertaking the basic pre-feasibility of such potentials with a view to marketing these potentials to the investor countries. Such an exercise could be undertaken with the assistance of experts and technical assistance from MDBs such as the IDB.

In this context, recipient governments will have three key strategic roles that could be played namely: (i) interventionist (ii) catalytic and (iii) facilitator. At the interventionist level, it would be to identify the potential areas of un-utilized potential, map the area, identify suitable projects, undertake pre-feasibility studies, arrange investor conferences, and undertake strategic investments in de-bottlenecking projects etc. The catalytic role will, to a large extent, follow the investment where government could play an indirect, supporting role. In this regard, governments should attempt to facilitate the further development of agriculture clusters / hubs by encouraging private sector efforts and ensuring an environment that is conducive for these developments. Recipient governments may also need to undertake local skills audits. Importantly, the identification of potential demand levels and skills determinations will have to be undertaken with key stakeholders involvement. Moreover, mechanisms to ensure effective skills transfer from foreign companies to form competent local farmers will need to be explored and agreed upon. As a facilitator, governments could play a proactive role in stimulating the agriculture sector by creating a conducive environment for agriculture development. In this regard, a key role would be to assist in resolving land issues, and facilitating dialogue between the investors and local communities to ensure community buy-in and participation on the project. This could assist in mitigating some of the political risks on the project (see Box 4 where lack of such consultations resulted in the project being cancelled). Investments in transport infrastructure, agriculture research and related infrastructure could also contribute

towards these efforts. From the financial perspective, access to finance is still a key stumbling block for the farming communities. Innovative financing solutions that are not overly burdensome on small scale farmers needs to be devised and effectively implemented. Access to appropriate technology, technical support and new crop varieties could also be made available to small scale agriculture enterprises via public-private partnerships. Arguably a most important element is security of investment through land ownership and property rights. This would encourage farmers to take risk and the land could be used as security in accessing finance.

In order to attract investors, the possibilities of preferential agreements regarding wages, labour flexibility, subcontracting and training to assist with the development of these labour intensive industries could be explored. The recipient government could also examine the possibility of giving the investors “tax holidays” / “tax breaks” on condition that they will provide extension services to the local farmers, and help with skills transfer and technology diffusion.

In addition, from the perspective of investors, there are several areas in which the host country government could play an important facilitatory role. These include:

- Providing access to suitable water resources;
- Identification of suitable large tracks of land;
- Providing security of tenure;
- Good governance and transparency;
- Facilitating discussions with local communities;
- Ensuring microeconomic stability; and
- Provision of key infrastructure.

If the above areas related to general enabling environment are addressed, then investment opportunities could potentially be exploited. OIC member countries are competing for FDI with the rest of the world. If they cannot provide a business and investment climate that is at the very least as good as the rest of the world, they will not be in a position to attract investors (even though they share common OIC membership). Investment funds will flow to those countries that offer the best overall package. As such, in the case of Sudan, the specific issues identified earlier and those highlighted by potential investors will have to be addressed. This will require commitment from local, provincial and national governments and coordinated efforts to ensure the success of such endeavours.

2. Development Partners

Multilateral Development Banks including the IDB have viewed the support and financing to the agriculture sector as an integral element of their efforts at moving people out of poverty. With approximately 75 percent of the Worlds residing in rural areas, the sector is crucial to addressing this key challenge. Since inception, at the sectoral level, 11 percent of IDB financing, 6 of World Bank financing between 1990 and 2008 and 17 percent African Development Bank went to the agriculture sector. Given the importance of this sector, it was expected that it would receive a significantly

higher percentage of these development institutions financing allocations. However, many infrastructure projects funded by these institutions may assist in addressing some of the constraints in this sector. In order to provide more effective development assistance to the agriculture (and rural sector), strategic priorities were identified by these institutions (see Box 5).

There has been a global response to prevent a catastrophe arising out of the higher food prices and supply shortages. Notably, the World Bank launched its initiative

Box 5: Agriculture and Rural Development Priorities of MDBs

IDB

The IDB will focus on four major strategic priority areas:

- Supportive Rural Infrastructure – water, roads, and electricity.
- Agricultural productivity – crops, livestock and fisheries.
- Productivity and value addition in rural non-farm economy – agro-processing, MSMEs.
- Market access – production and processing inputs, outputs, and services.

World Bank

The World Bank's rural development strategy "Reaching the Rural Poor" has identified five strategic priority areas:

- Fostering an enabling environment for broad-based and sustainable rural growth.
- Enhancing agricultural productivity and competitiveness.
- Encouraging non-farm economic growth.
- Improving social well-being, managing and mitigating risks, and reducing vulnerability.
- Enhancing sustainability of natural resource development.

Asian Development Bank

ADB's medium to long-term priorities for assistance to agriculture and rural development sector include the following: enhancing productivity growth, increasing investments in infrastructure (irrigation systems, farm to market roads, post-harvest processing facilities), promoting bio-safety, expanding rural financing, improving market access and income diversification, encouraging better risk management, improving access to information and communication technology, strengthening institutions, enhancing capacity and skills, and promoting good governance. In its long-term strategic framework (2008-2020), the ADB identifies agriculture and rural development as one of its priority sectors for support mainly through infrastructure for rural transport, irrigation and water systems, natural resources management, and micro-finance.

African Development Bank, NEPAD, and African Union

Strategic priorities identified under the NEPAD Comprehensive Africa Agriculture Development Programme (CAADP) has identified the strategic priorities as grouped under the following four pillars:

- Extending the area under sustainable land management and reliable water control systems.
- Improving rural infrastructure and trade related capacities for market access.
- Increasing food supply and reducing hunger.
- Agricultural research, technology dissemination and adoption.

Source: IDB (2008d)

the “New Deal for Global Food Policy” wherein it will provide cash transfers, food-for-work programmes and assist with measures to increase agriculture productivity. It has also stated that it will double its agriculture financing to Africa to US\$800 million per annum. The International Fund for Agriculture Development (IFAD), the African Development Bank (AfDB) and the Asian Development Bank (AsDB) have also announced similar initiatives. Moreover, many donors have pledged support to the most severely affected countries.

The IDB has also launched its own initiative commonly known as the “Jeddah Declaration” wherein its assistance package of US\$1.5 billion to be financed over a period of 5 years was approved in May 2008³³. It is intended to cater for both the urgent and medium to long term needs. “The programme aims at regenerating the agriculture sector in the IDB member countries by supporting agriculture to become more productive and commercially oriented so as to increase the income level of the farmers and livestock raiser, and promote economic growth”³⁴. In terms of the Jeddah Declaration, it is apparent that all private sector entities in the IDB Group have an important role to play albeit for different activities. Under the Jeddah Declaration, both recipient and investor countries could potentially benefit from the IDB Group initiative. Investor nations could be assisted by the financing activities, whilst recipient countries could also obtain short-term assistance specifically with regards to meeting immediate food security needs.

It was highlighted earlier that development partners are key to fostering FDI in the agriculture sector. The nature of the interventions by development partners would be to create the appropriate enabling environment to attract FDI in the agriculture sector. Their role would be at three levels namely, (i) provision of technical assistance; (ii) advisory services (acting as an “honest broker”) and (iii) financing. These three roles are within the expertise of the MDBs including the IDB and could complement existing activities and operations. In this regard, it is proposed that development partners may consider:

- Provision of technical assistance to:
 - o Build domestic capacity in the agriculture sector;
 - o Assist recipient countries by provision of information / undertaking appropriate studies and project appraisals;
 - o Fund skills development programmes in the agriculture sector using their technical assistance budgets. In this regard, the focus should not be on establishing/maintaining large training centres on site, rather on on-the-job training (both theoretical and practical) and the utilisation of outside training providers for basic/generic training;
 - o Strengthen relevant institutions; and

³³ For more details see IDB (2008). Report and Recommendations of the President on IDB Group Response to the Food Crisis in IDB Member Countries and IDB (2008). The Jeddah Declaration on the Initiative of the IDB Group for the Support of Member Countries Affected by the World Food Crisis.

³⁴ IDB (2008:12). Report and Recommendations of the President on IDB Group Response to the Food Crisis in IDB Member Countries.

- o Establish centres of research similar to International Centre for Biosaline Agriculture (ICBA) that could undertake strategic research in the agriculture sector.
- Advisory Services
 - o Honest Broker: In this context, the focus may be on facilitating policy dialogue between the private sector, public sector and other social partners; in promoting public private partnerships (specifically around infrastructure development); and in communicating the concerns of key stakeholders and communities to project owners;
 - o Package projects for Investor Conferences and participate therein; and
 - o Facilitate implementation of projects, and the forging of strategic partnerships.
- Financing
 - o Take up equity in such projects.

VII. CONCLUSIONS

Despite the wide publicity in recent times about foreign direct investment in the agriculture sector following the food crisis, it is interesting to note that little real investment has been made on the ground. Investors have undertaken preliminary discussions with potential recipient countries, but these are still at the early stages. In order for investors to progress to the stage where actual investments occur, pre-feasibility and feasibility studies, along with key infrastructure are pre-requisites. The current status of investments is not surprising given the time lag of approximately 2 years between identification of a specific new investment opportunity and the actual investment. Consequently, it is anticipated that it may take 2-3 years before the announced investments may come to fruition (if there are no additional investment constraints). However the easing of commodity prices coupled with the financial crisis and subsequent recession, resulted in proponents of FDI in the agriculture sector taking a more pragmatic and cautious approach. It is therefore expected that this timeline might shift out with priorities shifting.

Although member countries such as Turkey, Indonesia and Sudan, have a strong 'ability' to attract FDI into their agriculture sectors, 'ability' on its own is not sufficient to attract investors. Of paramount importance is the need for an appropriate business and investment climate ('suitability'). In terms of the enabling environment for the agriculture sector, Turkey emerged as a preferred destination given its very strong business climate and reasonable 'ability' for agriculture. This is regardless of the fact that it has less un-utilized agriculture land than countries such as Iran and Mozambique. In this regard, it is important to note that without an appropriate investment and business climate, foreign investors will be cautious.

The decision to invest in a country is a rational one, based on the risks and returns associated with the project. On the issue of risk, there are several constraints that may hamper the investment decision. As long as these constraints are not addressed, foreign

direct investment in member countries will remain elusive. In the agriculture sector, the investment time horizon is typically between 5 to 7 years in order to determine the ex-ante rate of return on the investment. Investors (specifically from the GCC region) are seeking short-term quick returns on investment while the agriculture sector tends to require a longer-term commitment.

Overall, it must be recognized that investment will flow to countries that offer good returns with lower associated risk. Therefore, potential recipient member countries must ensure that the investment climate is at the very least as good as those offered in alternate investment destinations (including non-member countries). If this externally imposed market discipline is not adhered to, member countries may find it extremely difficult to attract FDI into the agriculture sector.

Assuming the enabling environment is suitable, the missing link would then be the technical and managerial expertise required to successfully undertake investments in the agriculture sector. This is as an important third ingredient to the potential investment funds from the GCC and the ability to undertake agriculture (abundant water and land resources) in some member countries.

In addition, there is a need for partnerships between recipient governments, investors and development partners. These partnerships are required in order to increase risk adjusted returns on investment. Potential recipient countries along with their development partners will need to address the business and investment climate by rationalizing procedures, building capacity at the institutional level, training the workforce, tackling governance issues, and building productive infrastructure. These will enable countries to provide a suitable business and investment climate that is attractive to foreign investors.

The experience of Sudan highlights some key lessons for countries wishing to attract FDI into their agriculture sectors. Firstly, they should adopt a holistic perspective of the investors and type of investments that they wish to attract to their economy specifically in the agriculture sector. There must be a coordinated approach to land allocation with clear performance and investment agreements included in any land allocated/sold to potential investors. Secondly, governments need to develop clear guidelines and mechanisms to handle unsolicited requests for land and other investments. Thirdly, development partners have an important role to play in fostering FDI in the agriculture sector.

It must be recognized that there are several constraining factors impeding investment in the agriculture sector. Member countries and their development partners will need to address these as a matter of urgency. If the business and investment environment is not conducive, investors will go to non-member countries as they seek to maximize long-term profit and return on investment resulting in a lost opportunity for member countries.

Statistical Tables

Technical Note	51
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Tables

A1: Rural Population as % of Total Population (2007).....	53
A2: Agriculture Value Added as % of GDP (2003-2007)	54
A3: Agriculture Labor Force (Absolute Value as % of Total Labor Force).....	55
A4: Agriculture Employment (2000-2007).....	56
A5: Labour Productivity (1996-2005).....	57
A6: Land Productivity (2000-2005).....	59
A7: Net Raw Food Exports, Imports and Net Imports.....	60
A8: Potential for FDI in Agriculture	62
A9: Net Inflows of Foreign Direct Investment (1998-2007)	63
A10: Foreign Direct Investment as % of GDP.....	64
A11: Volatility of Foreign Direct Investment (2003- 2007).....	65
A12: Volatility of Foreign Direct Investment (1998- 2007).....	66
A13: Agricultural Land (% of Land Area) (2003-2005)	67
A14: Agricultural Land (Sq. Km.) (2003-2005)	68
A15: Land Area (2007).....	69
A16: Arable Land (2003-2005) (hectares).....	70
A17: Arable Land (2003-2005) (hectares per person)	71
A18: Irrigated Land (2001-2003).....	72
A19: Fertilizer Consumption (1990-2005).....	73

Technical Note					
Regional and Economic Groupings of the 57 OIC (OIC-57) Member Countries					
Least Developed Member Countries (LDMC-28)	Non Least Developed Member Countries (Non-LDMC-29)	Sub-Saharan Africa Member Countries (SSA-22)	Middle East and North Africa Member Countries (MENA-19)	Asian Member Countries (ASIA-9)	Countries in Transition (CIT-7)
Afghanistan	Algeria	Benin	Algeria	Afghanistan	Albania
Albania	Bahrain	Burkina Faso	Bahrain	Bangladesh	Azerbaijan
Azerbaijan	Brunei	Cameroon	Egypt	Brunei	Kazakhstan
Bangladesh	Cameroon	Chad	Iran	Guyana	Kyrgyz
Benin	Côte d'Ivoire	Comoros	Iraq	Indonesia	Tajikistan
Burkina Faso	Egypt	Côte d'Ivoire	Jordan	Malaysia	Turkmenistan
Chad	Gabon	Djibouti	Kuwait	Maldives	Uzbekistan
Comoros	Guyana	Gabon	Lebanon	Pakistan	
Djibouti	Indonesia	Gambia	Libya	Suriname	
Gambia	Iran	Guinea	Morocco		
Guinea	Iraq	Guinea-Bissau	Oman		
Guinea-Bissau	Jordan	Mali	Palestine		
Kyrgyz Rep.	Kazakhstan	Mauritania	Qatar		
Maldives	Kuwait	Mozambique	Saudi Arabia		
Mali	Lebanon	Niger	Syria		
Mauritania	Libya	Nigeria	Tunisia		
Mozambique	Malaysia	Senegal	Turkey		
Niger	Morocco	Sierra-Leone	UAE		
Palestine	Nigeria	Somalia	Yemen Rep.		
Senegal	Oman	Sudan			
Sierra-Leone	Pakistan	Togo			
Somalia	Qatar	Uganda			
Sudan	Saudi Arabia				
Tajikistan	Suriname				
Togo	Syria				
Uganda	Tunisia				
Uzbekistan	Turkey				
Yemen Rep.	Turkmenistan				
	UAE				

Table A1: Rural Population as % of Total Population (2007)			
Country	Rural Population (millions)	Total Population (millions)	% Rural Population
Afghanistan	20.0	26.1	76.7
Albania	1.7	3.2	53.9
Algeria	12.0	33.9	35.4
Azerbaijan	4.1	8.6	48.2
Bahrain	0.1	0.8	11.5
Bangladesh	116.3	158.6	73.3
Benin	5.3	9.0	59.2
Brunei Darussalam	0.1	0.4	25.6
Burkina Faso	11.9	14.8	80.9
Cameroon	8.2	18.5	44.1
Chad	7.9	10.8	73.8
Comoros	0.5	0.6	72.0
Côte d'Ivoire	10.0	19.3	51.9
Djibouti	0.1	0.8	13.1
Egypt	43.3	75.5	57.3
Gabon	0.2	1.3	15.4
Gambia	0.8	1.7	44.4
Guinea	6.2	9.4	66.0
Guinea-Bissau	1.2	1.7	70.2
Guyana	0.5	0.7	71.7
Indonesia	112.0	225.6	49.7
Iran (Islamic Republic of)	22.8	71.0	32.1
Iraq	0.0	0.0	33.3
Jordan	1.2	5.7	21.6
Kazakhstan	6.6	15.5	42.3
Kuwait	0.04	2.7	1.7
Kyrgyzstan	3.3	5.2	63.9
Lebanon	0.5	4.1	13.2
Libyan Arab Jamahiriya	1.4	6.2	22.6
Malaysia	8.1	26.5	30.6
Maldives	0.2	0.3	63.5
Mali	8.4	12.3	68.4
Mauritania	1.8	3.1	59.2
Morocco	13.7	30.9	44.3
Mozambique	13.7	21.4	63.9
Niger	11.9	14.2	83.5
Nigeria	77.5	148.0	52.4
Oman	0.7	2.6	28.4
Pakistan	104.4	162.4	64.3
Palestine	1.1	3.9	28.2
Qatar	0.04	0.8	4.4
Saudi Arabia	4.5	24.2	18.6
Senegal	7.2	12.4	57.9
Sierra Leone	3.7	5.8	62.6
Somalia	5.6	8.7	63.9
Sudan	22.1	38.6	57.4
Suriname	0.1	0.5	25.4
Syrian Arab Republic	9.2	19.9	46.1
Tajikistan	5.0	6.7	73.6
Togo	3.9	6.6	58.7
Tunisia	3.5	10.2	33.9
Turkey	23.5	73.9	31.8
Turkmenistan	2.6	5.0	51.8
Uganda	27.0	30.9	87.2
United Arab Emirates	1.0	4.4	22.2
Uzbekistan	17.0	26.9	63.2
Yemen	15.7	22.4	69.9
OIC-57	791.1	1,455.0	54.4

Sources: - World Bank, WDI Database online accessed on 15 March 2009.
- FAO, FAOSTAT, WDI Database online accessed on 18 March 2009 (estimations for Afghanistan & Iraq)

Table A2: Agriculture Value Added as % of GDP (2003-2007)	
Country	2003-2007
Afghanistan	36.10
Albania	22.81
Algeria	8.46
Azerbaijan	6.26
Bahrain	..
Bangladesh	18.87
Benin	32.20
Brunei Darussalam	0.70
Burkina Faso	33.28
Cameroon	19.41
Chad	23.42
Comoros	47.00
Côte d'Ivoire	23.40
Djibouti	3.86
Egypt	12.97
Gabon	5.27
Gambia	32.65
Guinea	16.73
Guinea-Bissau	63.57
Guyana	29.57
Indonesia	13.83
Iran (Islamic Republic of)	8.98
Iraq	8.57
Jordan	3.08
Kazakhstan	6.57
Kuwait	0.46
Kyrgyzstan	32.99
Lebanon	6.14
Libyan Arab Jamahiriya	..
Malaysia	8.51
Maldives	..
Mali	36.54
Mauritania	12.54
Morocco	12.44
Mozambique	28.34
Niger	41.26
Nigeria	32.52
Oman	1.86
Pakistan	19.55
Palestine	..
Qatar	..
Saudi Arabia	2.81
Senegal	14.72
Sierra Leone	44.27
Somalia	..
Sudan	31.51
Suriname	5.16
Syrian Arab Republic	20.37
Tajikistan	21.42
Togo	42.73
Tunisia	10.93
Turkey	8.86
Turkmenistan	19.59
Uganda	29.03
United Arab Emirates	2.25
Uzbekistan	24.42
Yemen	14.34
OIC-57	11.18
<i>Sources:</i> - FAO, FAOSTAT, WDI Database online accessed on 18 March 2009 - World Bank, WDI Database online accessed on 15 March 2009. - DRC Staff computations.	

Table A3: Agriculture Labour Force (Absolute Value as % of Total Labour Force)					
Country	Total Population 2006	Total Economically Active Population (millions) 2006	Economically Active Population in Agriculture (millions) 2006	Male Economically Active Population in Agriculture (millions) 2006	Agric. Labour Force Rate (%) 2006
Afghanistan	26.1	10.1	6.5	3.5	64.9
Albania	3.2	1.6	0.7	0.4	44.4
Algeria	33.4	13.2	3.0	1.4	22.7
Azerbaijan	8.5	4.1	1.0	0.5	24.3
Bahrain	0.7	0.4	0.0	0.0	0.8
Bangladesh	156.0	82.8	41.2	19.8	49.8
Benin	8.8	4.1	2.0	1.1	48.1
Brunei Darussalam	0.4	0.2	0.0	0.0	0.4
Burkina Faso	14.4	6.9	6.4	3.4	92.1
Cameroon	18.2	7.7	4.0	2.2	52.3
Chad	10.5	4.8	3.3	1.6	69.3
Comoros	0.6	0.4	0.3	0.1	71.0
Côte d'Ivoire	18.9	7.7	3.3	2.0	42.6
Djibouti	0.8	0.4	0.3	0.2	76.1
Egypt	74.2	29.1	8.5	4.3	29.4
Gabon	1.3	0.6	0.2	0.1	30.4
Gambia	1.7	0.8	0.6	0.3	76.9
Guinea	9.2	4.5	3.7	1.9	81.5
Guinea-Bissau	1.6	0.7	0.6	0.3	81.2
Guyana	0.7	0.3	0.1	0.0	16.4
Indonesia	223.0	116.3	51.6	28.8	44.3
Iran (Islamic Republic of)	70.1	28.6	6.8	3.7	23.8
Iraq	29.6	8.1	0.6	0.3	7.6
Jordan	5.5	2.0	0.2	0.1	9.7
Kazakhstan	15.3	7.8	1.2	0.9	15.3
Kuwait	2.6	1.5	0.0	0.0	1.0
Kyrgyzstan	5.2	2.5	0.5	0.4	22.3
Lebanon	4.1	1.5	0.0	0.0	2.5
Libyan Arab Jamahiriya	6.0	2.2	0.1	0.0	4.1
Malaysia	26.1	11.8	1.7	1.3	14.7
Maldives	0.3	0.1	0.0	0.0	17.6
Mali	12.0	5.6	4.3	2.3	77.4
Mauritania	3.0	1.4	0.7	0.4	51.1
Morocco	30.5	12.9	4.1	1.7	32.1
Mozambique	21.0	10.8	8.6	3.5	79.7
Niger	13.7	6.5	5.6	2.9	86.4
Nigeria	144.7	57.8	16.2	9.9	28.1
Oman	2.5	1.0	0.3	0.3	31.5
Pakistan	159.0	65.1	28.6	16.3	44.0
Palestine	3.8	1.1	0.1	0.0	9.8
Qatar	0.8	0.5	0.0	0.0	0.9
Saudi Arabia	23.7	9.2	0.6	0.5	6.5
Senegal	12.1	5.4	3.9	2.0	71.7
Sierra Leone	5.7	2.2	1.3	0.7	58.9
Somalia	8.4	3.8	2.6	1.3	68.4
Sudan	37.7	14.9	8.3	5.1	55.5
Suriname	0.5	0.2	0.0	0.0	17.7
Syrian Arab Republic	19.4	6.8	1.7	0.6	25.3
Tajikistan	6.6	2.7	0.8	0.4	29.9
Togo	6.4	2.8	1.5	0.9	56.0
Tunisia	10.1	4.5	1.0	0.6	22.4
Turkey	73.0	36.2	15.2	5.2	41.9
Turkmenistan	4.9	2.3	0.7	0.3	31.1
Uganda	29.9	14.5	11.2	5.7	77.0
United Arab Emirates	4.2	2.6	0.1	0.1	3.7
Uzbekistan	26.5	12.5	3.0	1.6	23.8
Yemen	21.7	7.2	3.2	1.8	44.3
OIC-57	1458.9	653.4	272.3	142.5	41.7
<i>Of which:</i>					
SSA-22	380.6	164.5	89.0	47.6	54.1
MENA-19	416.0	168.5	45.6	20.6	27.1
ASIA-9	592.1	287.0	129.8	69.8	45.2
CIS-7	70.2	33.4	7.9	4.5	23.7
LDMC-28	455.3	215.3	122.3	61.8	56.8
Non-LDMC-29	1003.6	438.1	150.0	80.7	34.2
<i>Sources:</i> - FAO, FAOSTAT, WDI Database online accessed on 18 March 2009 (estimations for Afghanistan & Iraq). - DRC Staff Computations.					

Table A4: Agriculture Employment (2000-2007)*

Country	Year	Total Employment (000)	Agriculture Employment (000)	Agriculture Employment (%)
Algeria	2004	7,798	1,616	20.7
Azerbaijan	2007	4,014	1,547	38.6
Bahrain	2001	291	4	1.5
Bangladesh	2005	47,357	22,767	48.1
Brunei Darussalam	2001	146	2	1.4
Cameroon	2001	5,806	3,519	60.6
Egypt	2006	20,444	6,371	31.2
Guyana	2002	240	51	21.4
Indonesia	2006	95,177	42,323	44.5
Iran, Islamic Republic of	2007	21,092	4,809	22.8
Iraq	2004	6,015	1,022	17.0
Jordan	2003	43	2	3.6
Kazakhstan	2004	7,182	2,406	33.5
Kuwait	2003	1,147	..	..
Kyrgyzstan	2006	2,096	760	36.3
Malaysia	2007	10,538	1,558	14.8
Maldives	2006	110	13	11.5
Mali	2004	2,371	985	41.5
Morocco	2006	9,928	4,303	43.3
Oman	2000	282	18	6.4
Pakistan	2007	47,651	20,780	43.6
Palestine	2007	666	104	15.6
Qatar	2006	529	16	3.0
Saudi Arabia	2007	7,766	364	4.7
Senegal	2006	3,153	1,063	33.7
Sierra Leone	2004	1,933	1,323	68.5
Suriname	2004	157	13	8.0
Syrian Arab Republic	2003	4,336	1,170	27.0
Tajikistan	2004	2,453	1,361	55.5
Turkey	2007	21,189	5,601	26.4
Uganda	2003	9,260	6,362	68.7
United Arab Emirates	2005	2,480	122	4.9

Sources: International Labour Organization (ILO) Database online, KILM 5th Edition, accessed on 23 March 2009.
*Data are not available for the missing countries.

Country	Table A5: Labour Productivity (1996-2005) (constant 2000 US\$)													Average Annual Growth %	
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1996-2000	2001-2005			
Afghanistan		
Albania	1,272	1,172	1,250	1,272	1,348	1,387	1,416	1,309	1,453	1,495	2.0	1.8			
Algeria	2,143	1,799	1,947	1,944	1,795	1,981	1,905	2,222	2,233	2,219	-2.7	3.9			
Azerbaijan	741	689	732	785	881	974	1,033	1,086	1,132	1,212	4.9	5.4			
Bahrain	..	..	..	..	..	..	..	..	..	..	..	..
Bangladesh	263	276	283	294	314	322	320	328	340	346	4.3	2.1			
Benin	390	407	428	441	463	470	497	500	520	536	4.3	3.1			
Brunei Darussalam	22,481	50,059	51,895	57,693	61,477	65,070	68,441	76,177	85,311	86,426	24.0	8.2			
Burkina Faso	142	134	153	152	143	163	162	174	165	179	1.5	2.1			
Cameroon	455	485	514	545	567	585	604	623	649	666	5.8	3.4			
Chad	192	205	210	211	217	211	217	217	202	225	1.1	0.3			
Comoros	369	388	378	384	407	422	431	435	427	436	1.9	0.6			
Côte d'Ivoire	662	665	698	688	767	768	752	766	801	817	3.3	1.9			
Djibouti	66	64	62	61	60	61	62	62	64	65	-2.1	1.6			
Egypt, Arab Rep.	1,678	1,721	1,767	1,813	1,859	1,915	1,972	2,014	2,072	2,128	2.6	2.6			
Gabon	1,290	1,358	1,377	1,391	1,485	1,544	1,492	1,536	1,578	1,663	3.1	2.1			
Gambia, The	188	195	188	236	253	268	187	218	237	243	8.1	0.4			
Guinea	149	153	160	171	169	178	185	187	190	193	3.8	1.9			
Guinea-Bissau	256	272	213	225	229	226	220	229	238	246	-4.0	2.5			
Guyana	3,283	3,413	3,250	3,686	3,349	3,528	3,651	3,673	3,778	3,383	1.2	-0.5			
Indonesia	524	524	512	518	523	537	552	570	583	596	-0.1	-0.5			
Iran, Islamic Rep.	2,182	2,179	2,383	2,186	2,240	2,155	2,363	2,491	2,504	2,632	0.6	4.7			
Iraq	..	1,769	1,935	2,265	2,022	2,068	2,448	1,756	..	..	..	..
Jordan	1,350	1,199	1,315	904	927	933	1,153	1,281	1,407	1,392	-9.8	10.5			
Kazakhstan	1,073	1,099	920	1,155	1,151	1,374	1,444	1,499	1,520	1,652	1.9	4.3			
Kuwait	13,032	12,630	11,082	10,891	10,307	11,348	13,310	13,521	..	..	-6.0	..	
Kyrgyz Republic	654	736	758	822	845	908	935	966	1,006	966	6.4	2.0			
Lebanon	18,388	18,839	20,049	21,837	23,797	24,663	26,086	27,357	30,440	32,501	6.9	7.3			
Libya	..	..	..	..	..	..	..	..	..	..	..	..
Malaysia	3,978	4,036	3,960	4,201	4,316	4,342	4,520	4,845	5,154	5,378	1.6	5.8			
Maldives	..	..	..	..	..	..	..	..	..	..	..	..
Mali	212	219	221	237	209	228	215	248	231	244	0.5	2.1			
Mauritania	665	507	503	494	442	414	367	374	338	356	-8.1	-3.8			

Country	Table A 5: Labour Productivity (1996-2005) (Cont'd.) (constant 2000 US\$)													Average Annual Growth %	
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1996-2000	2001-2005			
Morocco	1,659	1,217	1,555	1,325	1,166	1,387	1,453	1,766	1,901	1,657	-0.6	6.4			
Oman	1,102	1,180	1,158	1,202	1,153	1,202	1,226	1,254	1,350	..	1.2	..			
Pakistan	685	671	686	685	713	682	669	683	686	716	1.0	1.2			
Palestine	..	..	..	..	..	..	..	..	..	..	..	..
Qatar	..	..	..	..	..	..	..	..	..	..	..	..
Saudi Arabia	10,018	10,744	11,294	12,031	13,007	13,554	14,199	14,848	15,842	16,651	6.6	5.3			
Senegal	222	215	212	236	237	234	178	210	209	227	2.2	0.9			
Sierra Leone	..	..	..	..	..	..	..	..	..	..	..	..
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
Sudan	545	635	646	641	633	683	700	685	649	666	3.2	-1.3			
Suriname	2,998	2,909	2,726	2,834	2,925	3,240	3,125	3,259	3,278	3,166	-0.8	0.0			
Syrian Arab Republic	2,989	2,834	3,386	2,809	3,100	3,345	3,524	3,265	3,136	3,382	0.6	-0.9			
Tajikistan	245	254	267	276	312	345	396	432	479	485	5.8	9.1			
Togo	369	375	354	364	338	335	351	342	347	353	-2.0	0.9			
Tunisia	2,384	2,420	2,367	2,595	2,542	2,465	2,173	2,616	2,854	2,686	2.0	4.6			
Turkey	..	..	..	..	..	..	..	..	..	..	..	..
Turkmenistan	494	556	685	852	986	..	..	..	..	..	19.9	..
Uganda	203	201	201	209	216	221	224	223	229	235	1.6	1.5			
United Arab Emirates	17,102	20,088	20,438	23,283	26,777	23,349	24,770	24,106	25,931	27,487	11.0	2.1			
Uzbekistan	1,174	1,242	1,295	1,396	1,415	1,469	1,553	1,655	1,818	1,927	4.8	7.2			
Yemen, Rep.	283	300	335	333	341	355	349	328	..	..	4.9	..	
OIC-57	2,111	2,204	2,225	2,300	2,499	2,488	2,572	2,620	2,798	2,908	3.9	4.0			
<i>Of which:</i>															
SSA-22	406	437	448	447	464	480	483	479	489	499	3.0	0.9			
MENA-19	3,866	4,113	3,505	3,719	4,071	4,072	4,132	4,199	4,504	4,705	0.03	3.8			
ASIA-9	1,009	1,035	1,011	1,025	1,084	1,083	1,117	1,193	1,267	1,302	1.4	5.1			
CIT-7	1,048	1,073	1,085	1,175	1,219	1,320	1,386	1,455	1,561	1,657	4.0	5.9			
LDMC-28	458	480	495	511	528	551	574	590	644	674	3.5	5.3			
Non-LDMC-29	2,532	2,668	2,602	2,710	2,946	2,952	3,039	3,095	3,281	3,412	3.2	3.7			
Memo:															
Least Developed Countries	223	229	231	235	236	244	242	243	249	257	1.5	1.3			
Low & Middle Income	480	482	508	517	524	539	543	563	582	603	2.5	3.0			
High Income	16,789	17,971	18,833	20,545	21,941	22,026	22,926	23,476	25,583	27,309	6.9	5.5			
World	781	792	816	840	859	861	865	879	915	938	2.5	2.3			

Sources: - World Bank, World Development Indicators database online, accessed on 15 March 2009.

- DRC Staff calculations.

Table A6: Land Productivity (2000-2005)							
	(constant 2000 US\$)						Average Annual Growth %
Country	2000	2001	2002	2003	2004	2005	2001-2005
Afghanistan	..	..	..	..	..	..	..
Albania	1,651	1,687	1,714	1,687	1,747	1,793	1.4
Algeria	600	687	682	821	847	868	7.1
Azerbaijan	465	513	546	576	602	646	5.7
Bahrain	..	..	..	..	..	..	..
Bangladesh	1,434	1,485	1,495	1,546	1,614	1,649	2.9
Benin	346	347	357	352	358	374	1.5
Brunei Darussalam	6,831	5,915	5,703	5,860	6,562	6,173	2.3
Burkina Faso	178	185	186	197	192	214	3.3
Cameroon	346	359	372	385	402	413	3.6
Chad	160	173	172	171	161	165	-1.4
Comoros	1,225	1,303	1,362	1,407	1,414	1,476	2.9
Côte d'Ivoire	814	814	747	757	742	753	-1.6
Djibouti	17,060	17,572	18,099	18,643	19,481	20,066	3.4
Egypt, Arab Rep.	5,538	5,623	5,677	5,896	5,978	6,100	2.2
Gabon	969	998	950	964	976	1,008	0.5
Gambia, The	466	459	329	376	395	415	-0.2
Guinea	608	636	636	624	591	609	-1.6
Guinea-Bissau	374	379	377	402	426	452	4.9
Guyana	384	397	411	406	417	366	-1.4
Indonesia	1,256	1,208	1,250	1,241	1,276	1,311	1.8
Iran, Islamic Rep.	925	851	937	994	1,005	1,065	5.3
Iraq	256	246	288	204	..	..	..
Jordan	897	904	1,112	1,383	1,299	1,467	11.9
Kazakhstan	69	78	79	81	82	88	2.6
Kuwait	13,399	12,221	12,422	13,521	..	..	..
Kyrgyz Republic	345	374	385	398	417	415	2.9
Lebanon	5,636	6,093	5,942	5,736	6,055	6,116	0.3
Libya	..	..	..	..	..	..	..
Malaysia	4,370	4,393	4,507	4,761	4,985	5,115	4.1
Maldives	..	..	..	..	..	..	..
Mali	202	224	214	247	235	253	3.4
Mauritania	567	545	494	516	477	502	-2.0
Morocco	561	690	732	881	949	829	6.4
Mozambique	227	243	256	270	289	294	5.2
Niger	47	53	54	57	..	..	..
Nigeria	..	..	..	..	..	..	..
Oman	10,222	10,569	10,617	10,978	6,945	..	..
Pakistan	838	812	809	843	875	933	3.6
Palestine	..	..	..	..	..	..	..
Qatar	..	..	..	..	..	..	..
Saudi Arabia	2,596	2,605	2,639	2,660	2,820	2,854	2.5
Senegal	336	326	253	305	306	333	2.4
Sierra Leone	..	..	..	..	..	..	..
Somalia	..	..	..	..	..	..	..
Sudan	306	330	339	306	293	282	-4.5
Suriname	1,591	1,762	1,700	1,742	1,694	1,689	-0.9
Syrian Arab Republic	1,027	1,112	1,209	1,130	1,095	1,173	0.1
Tajikistan	265	294	339	371	413	420	9.5
Togo	181	184	197	195	202	210	3.0
Tunisia	838	848	755	911	1,003	975	5.8
Turkey	1,132	1,044	1,126	1,133	1,140	1,224	3.4
Turkmenistan	354	..	..	..	..	..	..
Uganda	398	414	430	431	445	459	2.5
United Arab Emirates	41,057	33,918	32,366	38,042	41,733	44,237	8.2
Uzbekistan	924	960	1,018	1,037	1,142	1,213	6.0
Yemen, Rep.	630	704	670	640	..	..	..
OIC-57	2,184	2,072	2,076	2,179	2,322	2,400	4.1
<i>Of which:</i>							
SSA-22	406	413	406	402	419	424	0.8
MENA-19	3,151	2,956	2,905	3,081	3,306	3,439	4.4
ASIA-9	1,565	1,547	1,584	1,637	1,710	1,755	3.3
CIT-7	723	763	799	811	887	934	5.2
LDMC-28	838	859	868	882	961	983	3.8
Non-LDMC-29	2,489	2,363	2,358	2,483	2,626	2,720	4.0

Sources: - World Bank, World Development Indicators database online, accessed on 15 March 2009
- DRC Staff calculations.

Table A7: Net Raw Food Exports, Imports and Net Imports																				
Country	Exports (\$ million)					Imports (\$ million)					Net Imports (\$ million)					Net Imports as % of Total Imports				
	1980/1	1990/1	2000/1	2004/5	2004/5	1980/1	1990/1	2000/1	2004/5	2004/5	1980/1	1990/1	2000/1	2004/5	1980/1	1990/1	2000/1	2004/5		
	Afghanistan	23	17	29	37	119	0	6	82	119	23	12	-53	-82	8.6	2.9	-8	-3.1		
Albania	16	19	2	4	142	1	40	64	142	15	-22	-62	-138	10.4	-5.9	-5.7	-6.4			
Algeria	5	17	16	27	1,456	600	711	902	1,456	-595	-694	-886	-1,430	-6.5	-8.2	-9.4	-7.3			
Azerbaijan	..	..	30	73	224	..	..	108	224	..	..	-78	-151	..	..	-5.4	-3.4
Bahrain	0	0	3	1	163	44	73	124	163	-43	-72	-121	-162	-1.2	-3.8	-5	-4.2			
Bangladesh	13	25	24	23	697	237	220	340	697	-224	-196	-317	-674	-13.4	-6.6	-4.4	-6.4			
Benin	0	1	1	5	219	15	61	105	219	-15	-60	-104	-214	-2.5	-14.5	-7.6	-10.5			
Brunei	0	0	1	0	52	27	53	48	52	-26	-52	-47	-52	-4.4	-3.3	-3.6	-3.5			
Burkina Faso	6	12	12	19	7	10	16	7	7	-4	-4	4	12	-1.6	-1.3	0.9	1.4			
Cameroon	33	78	203	267	161	26	27	60	161	8	50	143	106	0.6	4.4	9.4	5.9			
Chad	0	0	0	0	5	1	3	0	5	-1	-3	0	-5	-4.1	-2	0	-1.4			
Comoros	0	0	0	0	18	4	7	17	18	-4	-7	-17	-18	-6.1	-6.5	-9.9	-19.6			
Côte d'Ivoire	133	176	319	412	281	150	179	257	281	-17	-4	62	131	-0.8	-0.2	2.2	5.5			
Djibouti	6	1	4	11	32	30	23	15	32	-24	-22	-10	-21	-7.4	-2.1	-2.8	-2.8			
Egypt	132	184	347	871	1,805	1,231	983	1,537	1,805	-1,099	-799	-1,190	-933	-11.9	-7.2	-6.8	-4			
Gabon	0	0	0	0	79	35	43	51	79	-34	-43	-51	-79	-4.9	-5.7	-6.5	-6.3			
Gambia	0	3	2	3	28	5	19	11	28	-5	-16	-8	-25	-5.3	-7.4	-2.6	-4.6			
Guinea	0	2	3	2	48	13	20	23	48	-13	-18	-20	-46	-4.1	-3.4	-2.9	-4.1			
Guinea-Bissau	0	0	0	0	18	9	6	3	18	-9	-6	-3	-17	-9.9	-5.9	-3.2	-11.6			
Guyana	39	18	61	51	22	14	9	21	22	25	9	40	29	7.7	3.8	9.7	5.1			
Indonesia	84	210	96	177	1,050	539	342	865	1,050	-455	-132	-769	-873	-4.3	-0.7	-2.5	-1.3			
Iran	26	87	383	345	719	865	996	950	719	-839	-910	-567	-373	-9.6	-5.9	-3.8	-1.1			
Iraq	37	20	25	64	593	528	411	357	593	-491	-391	-332	-530	-3.9	-12.9	-7.5	-5.5			
Jordan	100	69	139	83	480	124	336	292	480	-24	-267	-153	-397	-0.9	-12.6	-4	-5.3			
Kazakhstan	..	..	441	478	121	..	..	54	121	..	..	388	357	..	..	7.4	2.3
Kuwait	5	5	5	23	631	342	186	354	631	-337	-180	-349	-607	-5.6	-5	-5.5	-5.3			
Kyrgyz Republic	..	..	17	32	26	..	..	16	26	..	..	2	7	..	..	0.3	0.4
Lebanon	99	87	102	104	366	210	177	306	366	-111	-90	-204	-262	-3.8	-3.4	-3.9	-3.7			

Country	Table A7: Net Raw Food Exports, Imports and Net Imports (Cont'd.)															
	Exports (\$ million)				Imports (\$ million)				Net Imports (\$ million)				Net Imports as % of Total Imports			
	1980/1	1990/1	2000/1	2004/5	1980/1	1990/1	2000/1	2004/5	1980/1	1990/1	2000/1	2004/5	1980/1	1990/1	2000/1	2004/5
Libya	0	3	1	0	340	302	156	236	-340	-299	-155	-236	-3.2	-5.9	-3.9	-0.2
Malaysia	29	335	334	336	394	671	1,067	1,284	-365	-336	-732	-948	-3.4	-1.2	-1	-0.9
Maldives	0	0	0	0	1	7	17	22	-1	-7	-17	-22	-2.4	-4.1	-5.5	-4
Mali	8	4	6	6	8	14	10	31	-1	-10	-4	-25	-0.3	-2.9	-0.5	-2.1
Mauritania	0	0	0	0	26	33	29	63	-26	-33	-28	-63	-8	-7.5	-4.8	-6.2
Morocco	414	648	567	1,107	389	203	650	684	24	445	-83	423	0.7	7.1	-0.9	2.6
Mozambique	84	22	5	12	37	135	65	190	46	-113	-61	-178	8.7	-16.2	-4.9	-8.6
Niger	2	1	7	4	5	9	7	8	-3	-8	0	-4	-0.9	-3.4	0.1	-0.7
Nigeria	5	1	8	12	578	9	563	905	-573	-8	-555	-893	-4.1	-0.1	-5.9	-5.3
Oman	2	3	22	12	53	119	252	223	-51	-116	-230	-211	-3.7	-5.8	-5.3	-3.7
Pakistan	230	210	619	706	74	210	107	240	155	0	512	465	3.9	0	7.3	2.7
Qatar	0	0	2	6	34	71	142	173	-34	-71	-140	-167	-2.9	-5.3	-4.8	-2.3
Saudi Arabia	18	262	239	175	1,281	1,948	2,231	2,982	-1,263	-1,686	-1,992	-2,807	-4.6	-6.5	-6.2	-6.1
Senegal	10	7	17	32	116	112	187	314	-106	-105	-170	-281	-21.4	-10	-9.2	-10.7
Sierra Leone	1	0	0	1	16	13	19	26	-15	-13	-19	-25	-6.4	-7.6	-5.8	-5.1
Somalia	129	74	67	82	58	25	18	48	71	49	48	34	19.1	27.1	17.1	9.8
Sudan	190	56	85	169	43	91	76	169	146	-35	9	1	9.8	-3.4	0.6	0
Suriname	78	52	40	29	14	14	16	25	64	37	24	4	15.4	10	5.3	0.5
Syria	80	215	303	632	81	224	196	373	-1	-9	107	259	0	-0.4	2.5	3.1
Tajikistan	..	..	28	35	..	..	34	29	..	..	-6	6	..	..	-1.8	0.6
Togo	0	2	6	8	14	44	33	98	-14	-42	-27	-90	-3.3	-6.6	-3.2	-5.1
Tunisia	47	92	77	132	219	199	314	334	-173	-107	-238	-203	-5.8	-2.2	-2.9	-1.7
Turkey	430	1,028	1,101	1,538	44	314	339	554	386	714	763	984	8.7	4.1	1.9	1.2
Turkmenistan	..	..	2	4	..	..	17	16	..	..	-15	-12	..	..	-1.4	-0.6
UAE.	36	134	329	601	303	525	1,194	1,633	-267	-390	-866	-1,032	-3.9	-3	-2.4	-1.3
Uganda	0	3	7	14	7	4	7	37	-6	-1	0	-23	-1.9	-0.1	0	-2.2
Uzbekistan	..	..	108	305	..	..	73	33	..	..	35	272	..	..	1.7	8.9
Yemen	1	1	26	53	149	155	292	433	-148	-153	-267	-379	-11.1	-13.9	-10.7	-10.4

Note: Food is defined as raw food, excluding all cash crops, processed food products and seafood
Source: Adopted from Frances Ng and M. Ataman Aksoy (2008), «Who are the Net Food Importing Countries?». Based on partner data from UN COMTRADE Statistics.

Table A8: Potential for FDI in Agriculture

Country	Ability Index	Suitability Index	Overall
Albania	0.02	0.14	0.08
Algeria	0.12	0.20	0.16
Azerbaijan	0.04	0.29	0.17
Bahrain	0.00	0.57	0.29
Bangladesh	0.28	0.25	0.27
Benin	0.01	0.07	0.04
Burkina Faso	0.06	0.05	0.05
Cameroon	0.07	0.07	0.07
Chad	0.12	0.03	0.07
Comoros	0.00	0.08	0.04
Côte d'Ivoire	0.08	0.08	0.08
Djibouti	0.00	0.08	0.04
Egypt, Arab Rep.	0.05	0.42	0.23
Gabon	0.04	0.12	0.08
Gambia, The	0.00	0.16	0.08
Guinea	0.08	0.02	0.05
Guinea-Bissau	0.01	0.00	0.00
Guyana	0.04	0.23	0.14
Indonesia	0.63	0.30	0.46
Iran, Islamic Rep.	0.17	0.15	0.16
Jordan	0.01	0.34	0.17
Kazakhstan	0.46	0.46	0.46
Kuwait	0.00	0.40	0.20
Kyrgyz Republic	0.03	0.25	0.14
Lebanon	0.00	0.32	0.16
Malaysia	0.14	0.63	0.38
Maldives	0.00	0.34	0.17
Mali	0.10	0.06	0.08
Mauritania	0.09	0.04	0.07
Morocco	0.08	0.22	0.15
Mozambique	0.14	0.13	0.13
Niger	0.06	0.03	0.05
Nigeria	0.22	0.34	0.28
Oman	0.02	0.42	0.22
Pakistan	0.17	0.43	0.30
Senegal	0.02	0.04	0.03
Sierra Leone	0.03	0.05	0.04
Sudan	0.27	0.20	0.24
Syrian Arab Republic	0.07	0.12	0.09
Tajikistan	0.02	0.08	0.05
Togo	0.01	0.06	0.04
Tunisia	0.02	0.38	0.20
Turkey	0.27	0.87	0.57
Uganda	0.06	0.24	0.15
Uzbekistan	0.10	0.12	0.11
Yemen, Rep.	0.07	0.20	0.13

Source: Author's computations based on Tables A9, A13, A16 and www.doingbusiness.org

Table A9: Net Inflows of Foreign Direct Investment (1998-2007)
million current (US\$)

Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Afghanistan	-0.01	6.0	0.2	0.7	50.0	57.8	186.9	273.2	241.6	288.4
Albania	45.0	41.2	143.0	207.3	135.0	178.0	337.5	262.4	325.3	655.8
Algeria	606.6	291.7	438.0	1,196.0	1,065.0	633.8	881.9	1,081.3	1,795.4	1,664.6
Azerbaijan	948.0	355.0	30.0	220.0	1,393.0	3,227.0	3,535.0	1,679.0	-601.0	-4,817.0
Bahrain	179.5	453.7	363.6	80.4	217.0	516.7	865.3	1,048.7	2,914.9	1,756.0
Bangladesh	576.5	309.1	578.7	354.5	328.3	350.2	460.4	845.3	792.5	666.4
Benin	32.7	39.3	59.7	43.9	13.5	44.7	63.8	53.0	53.2	48.0
Brunei	573.3	747.6	549.2	526.4	1,035.3	3,374.9	334.3	288.5	433.5	183.9
Burkina Faso	4.4	7.9	23.1	6.3	15.0	29.1	14.3	34.2	33.6	600.0
Cameroon	215.1	-15.5	158.8	73.3	601.7	383.0	319.3	224.7	309.0	284.3
Chad	21.4	26.6	114.8	459.9	924.1	712.7	495.4	612.9	700.0	602.8
Comoros	0.4	0.3	0.1	1.1	0.4	0.8	0.7	0.6	0.6	0.8
Côte d'Ivoire	380.0	323.7	234.7	272.7	212.6	165.4	283.0	311.9	318.9	426.9
Djibouti	3.5	4.2	3.3	3.4	3.5	14.2	38.5	59.0	163.6	195.4
Egypt	1,075.5	1,065.3	1,235.4	509.9	646.9	237.4	2,157.4	5,375.6	10,042.8	11,578.1
Gabon	99.2	-217.7	-42.6	-89.1	37.0	206.1	193.7	59.7	267.8	269.3
Gambia	23.7	49.5	43.5	35.5	42.8	14.9	49.1	44.7	71.2	63.7
Guinea	17.8	63.5	9.9	1.7	30.0	82.8	97.9	105.0	108.0	111.0
Guinea-Bissau	4.4	0.7	0.7	0.4	3.5	4.0	1.7	8.7	17.7	7.0
Guyana	44.0	46.0	67.1	56.0	43.6	26.1	30.0	76.8	102.4	152.4
Indonesia	-207.0	-1,838.0	-4,495.0	-2,926.0	232.0	-507.0	1,896.0	8,337.0	4,914.0	6,928.0
Iran	37.6	15.6	29.2	58.5	107.8	399.6	306.3	917.9	317.1	754.5
Iraq	7.1	-6.9	-3.1	-6.5	-1.6	0.0	300.0	515.3	383.0	447.9
Jordan	310.0	156.4	814.8	179.8	121.6	443.2	816.4	1,774.0	3,219.3	1,835.4
Kazakhstan	1,151.5	1,471.7	1,282.5	2,835.0	2,590.2	2,092.0	4,157.2	1,971.2	6,223.6	10,259.4
Kuwait	59.1	72.3	16.3	-175.0	3.6	-68.0	23.8	234.0	122.0	123.0
Kyrgyzstan	109.2	44.4	-2.4	5.0	4.7	45.5	175.5	42.6	182.0	207.9
Lebanon	1,134.9	871.7	964.1	1,451.2	1,336.0	2,977.0	1,993.1	2,791.5	2,739.4	2,844.6
Libya	-148.0	-128.1	141.0	-113.0	145.0	143.0	357.0	1,038.0	2,013.0	2,541.0
Malaysia	2,714.0	3,895.3	3,787.6	553.9	3,203.4	2,473.2	4,624.2	3,967.2	6,047.5	8,403.1
Maldives	11.5	12.3	13.0	11.7	12.4	13.5	14.7	9.5	13.9	15.0
Mali	8.9	2.2	82.4	121.7	243.8	132.3	101.0	223.8	83.4	360.0
Mauritania	-0.3	15.1	40.1	76.7	67.4	101.9	391.6	814.1	154.6	152.9
Morocco	400.3	1,363.9	422.2	2,807.7	481.3	2,314.5	894.8	1,653.4	2,450.3	2,577.1
Mozambique	234.9	381.7	139.2	255.4	347.3	336.7	244.7	107.9	153.7	427.4
Niger	-1.2	0.3	8.4	22.9	2.4	11.5	19.7	30.3	50.5	27.0
Nigeria	1,210.1	1,177.7	1,309.7	1,277.4	2,040.2	2,171.4	2,127.1	4,978.3	13,956.5	12,453.7
Oman	101.4	39.0	83.2	5.2	122.2	494.1	228.9	1,687.9	1,622.9	2,377.1
Pakistan	506.0	532.0	309.0	383.0	823.0	534.0	1,118.0	2,201.0	4,273.0	5,333.0
Palestine	218.2	188.6	62.0	19.2	9.4	18.0	48.9	46.5	18.6	20.9
Qatar	347.3	113.3	251.6	295.5	623.9	624.9	1,199.0	1,298.2	159.0	1,138.0
Saudi Arabia	94.0	123.0	183.0	504.0	453.0	778.5	1,942.0	12,097.0	18,293.0	24,318.4
Senegal	60.3	153.2	62.9	31.9	78.1	52.5	77.0	44.6	220.3	78.0
Sierra Leone	0.1	0.5	38.9	9.8	10.4	8.6	61.2	83.2	58.6	81.0
Somalia	0.0	-0.8	0.3	0.0	0.1	-0.9	-4.8	24.0	96.0	141.0
Sudan	370.7	370.8	392.2	574.0	713.2	1,349.2	1,511.1	2,304.6	3,541.4	2,436.3
Suriname	9.1	-61.5	-148.0	-26.8	145.5	200.7	286.2	398.5	322.7	315.7
Syria	82.0	263.0	270.0	110.0	115.0	180.0	275.0	500.0	600.0	885.0
Tajikistan	29.9	6.7	23.5	9.5	36.1	13.6	272.0	54.5	338.6	400.6
Togo	19.5	31.7	41.5	63.6	53.4	33.7	59.4	77.0	77.3	69.0
Tunisia	668.1	367.9	778.8	486.4	821.3	583.9	638.9	782.4	3,311.8	1,617.9
Turkey	940.0	783.0	982.0	3,352.0	1,133.0	1,751.0	2,785.0	10,031.0	19,989.0	22,029.0
Turkmenistan	62.3	125.0	131.0	170.0	276.0	226.0	353.7	418.2	730.9	804.0
Uganda	132.6	140.2	180.8	151.5	184.6	202.2	295.4	379.8	400.2	367.9
UAE	257.7	-985.3	-506.3	1,183.8	1,314.3	4,256.0	10,003.5	10,899.9	12,806.0	13,253.1
Uzbekistan	139.6	121.2	74.7	82.8	65.3	70.4	187.4	87.7	194.5	262.0
Yemen	-219.4	-307.6	6.4	135.5	101.7	5.5	143.6	-302.1	1,121.0	464.3
OIC-57	15,703.0	13,109.7	11,778.7	17,937.8	24,815.3	34,721.8	50,270.6	84,965.0	129,289.7	141,487.8
<i>Of which:</i>										
SSA-22	2,838.3	2,555.2	2,902.4	3,394.0	5,625.1	6,056.8	6,440.9	10,582.0	20,836.2	19,203.4
MENA-19	6,151.9	4,740.4	6,532.1	12,080.8	8,816.4	16,289.0	25,860.7	53,470.5	83,918.5	92,225.8
ASIA-9	4,227.3	3,648.8	661.8	-1,066.5	5,873.6	6,523.4	8,950.7	16,396.9	17,141.1	22,285.9
CIT-7	2,485.6	2,165.2	1,682.4	3,529.6	4,500.2	5,852.6	9,018.3	4,515.6	7,393.9	7,772.8
LDMC-28	2,792.4	2,064.0	2,171.1	2,905.8	4,869.4	7,110.5	8,879.6	8,005.9	8,611.1	3,933.3
Non-LDMC-29	12,910.6	11,045.7	9,607.6	15,032.0	19,945.8	27,611.3	41,390.9	76,959.1	120,678.7	137,554.4
Memo:										
Developing Economies	190,751.6	228,180.7	256,624.1	214,391.3	170,966.0	180,114.2	283,617.6	316,407.3	412,972.0	499,720.5
Developed Economies	506,766.4	851,840.8	1,134,564.0	600,291.2	442,927.6	361,050.1	403,711.0	611,319.5	940,879.6	1,247,661.5
World	705,543.6	1,088,508.0	1,398,188.8	824,444.8	625,167.9	561,056.3	717,695.5	958,697.5	1,411,018.2	1,833,324.0

Source: Data Resource Centre, EPSD, staff computation using UNCTAD online database accessed in April 2009.

Table A10: Foreign Direct Investment as % of GDP

Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Afghanistan	..	..	..	0.0	1.2	1.3	3.1	4.2	2.6	2.5
Albania	1.7	1.2	3.9	5.1	3.0	3.1	4.5	3.1	3.6	6.2
Algeria	1.3	0.6	0.8	2.2	1.9	0.9	1.0	1.1	1.5	1.2
Azerbaijan	21.3	7.7	0.6	3.9	22.3	44.4	40.7	12.7	-2.9	-15.4
Bahrain	2.9	6.9	4.6	1.0	2.6	5.3	7.7	6.5	..	..
Bangladesh	1.3	0.7	1.2	0.8	0.7	0.7	0.8	1.4	1.3	1.0
Benin	1.4	1.6	2.6	1.8	0.5	1.3	1.6	1.2	1.2	0.9
Brunei	14.2	16.3	9.2	9.4	17.7	51.5	4.2	3.0	3.7	..
Burkina Faso	0.2	0.3	0.9	0.2	0.5	0.7	0.3	0.6	0.6	8.9
Cameroon	2.2	-0.1	1.6	0.8	5.5	2.8	2.0	1.4	1.7	1.4
Chad	1.2	1.7	8.3	26.9	46.5	26.0	11.2	10.4	11.1	8.5
Comoros	0.2	0.1	0.0	0.5	0.2	0.2	0.2	0.1	0.1	0.2
Côte d'Ivoire	3.0	2.6	2.3	2.6	1.9	1.2	1.8	1.9	1.8	2.2
Djibouti	0.7	0.8	0.6	0.6	0.6	2.3	5.8	8.3	21.3	23.5
Egypt	1.3	1.2	1.2	0.5	0.7	0.3	2.7	6.0	9.3	9.0
Gabon	2.2	-4.7	-0.8	-1.9	0.7	3.4	2.7	0.7	2.8	2.5
Gambia	5.7	11.5	10.3	8.5	11.6	4.1	12.3	9.7	13.9	9.9
Guinea	0.5	1.8	0.3	0.1	0.9	2.3	2.5	3.2	3.4	2.4
Guinea-Bissau	2.1	0.3	0.3	0.2	1.8	1.7	0.6	2.9	5.8	2.0
Indonesia	-0.2	-1.3	-2.7	-1.8	0.1	-0.2	0.7	2.9	1.3	1.6
Iran	0.0	0.0	0.0	0.1	0.1	0.3	0.2	0.5	0.1	0.3
Iraq	0.1	0.0	0.0	0.0	0.0	0.0	..	..	..	..
Jordan	3.9	1.9	9.6	2.0	1.3	4.3	7.2	14.1	22.8	11.6
Kazakhstan	5.2	8.7	7.0	12.8	10.5	6.8	9.6	3.5	7.7	9.9
Kuwait	0.2	0.2	0.0	-0.5	0.0	-0.1	0.0	0.3	0.1	..
Kyrgyz	6.6	3.6	-0.2	0.3	0.3	2.4	7.9	1.7	6.5	5.9
Lebanon	6.7	5.1	5.7	8.4	7.1	15.0	9.3	12.9	12.0	11.9
Libya	-0.5	-0.4	0.4	-0.4	0.8	0.6	1.2	2.5	4.0	4.4
Malaysia	3.8	4.9	4.2	0.6	3.4	2.4	3.7	2.9	3.9	4.6
Maldives	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.3	1.5	1.4
Mali	0.3	0.1	3.4	4.6	7.3	3.0	2.1	4.2	1.4	5.2
Mauritania	0.0	1.3	3.7	6.8	5.9	7.9	25.3	44.3	5.8	5.8
Morocco	1.0	3.4	1.1	7.4	1.2	4.6	1.6	2.8	3.7	3.5
Mozambique	5.5	8.6	3.3	6.3	8.3	7.2	4.3	1.6	2.2	5.5
Niger	-0.1	0.0	0.5	1.2	0.1	0.4	0.7	0.9	1.4	0.6
Nigeria	3.8	3.4	2.8	2.7	3.5	3.2	2.4	4.4	9.5	7.5
Oman	0.7	0.2	0.4	0.0	0.6	2.3	0.9	5.5	4.5	..
Pakistan	0.8	0.8	0.4	0.5	1.1	0.6	1.1	2.0	3.4	3.7
Palestine	5.5	4.5	1.5	0.6	0.3	0.6	1.4	1.2	0.5	0.5
Qatar	3.4	0.9	1.4	1.7	3.2	2.7	3.8	3.1	..	..
Saudi Arabia	0.1	0.1	0.1	0.3	0.2	0.4	0.8	3.8	5.1	6.4
Senegal	1.2	3.0	1.3	0.7	1.5	0.8	1.0	0.5	2.4	0.7
Sierra Leone	0.0	0.1	6.1	1.2	1.1	0.9	5.7	6.8	4.1	4.8
Somalia	..	..	..	..	..	..	..	..	..	..
Sudan	3.3	3.5	3.2	4.3	4.8	7.6	7.0	8.4	9.7	5.1
Suriname	1.0	-6.9	-16.6	-3.5	13.5	15.8	19.2	22.4	15.3	14.1
Syria	0.5	1.7	1.4	0.5	0.5	0.8	1.1	1.8	1.8	2.3
Tajikistan	2.3	0.6	2.4	0.9	2.9	0.9	13.1	2.4	12.0	10.8
Togo	1.2	2.0	3.1	4.8	3.6	1.9	2.9	3.6	3.5	2.8
Tunisia	3.4	1.8	4.0	2.4	3.9	2.3	2.3	2.7	10.7	4.6
Turkey	0.3	0.3	0.4	1.7	0.5	0.6	0.7	2.1	3.8	3.4
Turkmenistan	2.4	5.1	4.5	4.8	6.2	3.8	5.2	5.2	7.0	6.2
UAE	0.5	-1.8	-0.7	1.7	1.8	4.8	9.6	8.4	..	..
Uganda	2.0	2.3	3.1	2.7	3.2	3.2	4.3	4.3	4.2	3.3
Uzbekistan	0.9	0.7	0.5	0.7	0.7	0.7	1.6	0.6	1.1	1.2
Yemen, Rep.	-3.5	-4.1	0.1	1.4	1.0	0.0	1.0	-1.8	5.9	2.1
OIC-57	1.2	0.9	0.7	1.2	1.5	1.8	2.3	3.2	4.5	4.4
<i>Of which:</i>										
SSA-22	2.7	2.4	2.5	2.8	4.1	3.7	3.2	4.4	7.2	5.7
MENA-19	0.7	0.5	0.6	1.3	0.9	1.4	1.9	3.1	4.9	5.0
ASIA-9	1.5	1.1	0.2	-0.3	1.4	1.3	1.6	2.7	2.3	2.7
CIT-7	5.0	4.6	3.6	7.1	8.6	9.2	10.9	4.3	5.1	4.1
LDMC-28	2.2	1.6	1.6	2.2	3.5	4.4	4.7	3.7	3.5	1.3
Non-LDMC-29	1.1	0.9	0.7	1.1	1.3	1.6	2.0	3.1	4.6	4.7
Memo:										
Developing C.	3.3	4.1	4.3	3.5	2.7	2.6	3.4	3.2	3.5	3.5
High Income	2.1	3.3	4.4	2.3	1.7	1.2	1.2	1.7	2.5	3.1
World	2.4	3.5	4.4	2.6	1.9	1.5	1.7	2.1	2.9	3.4

Source: Data Resource Centre, EPSD, staff computation using UNCTAD online database accessed in April 2009.

Table A11: Volatility of Foreign Direct Investment (2003- 2007)				
Country	Mean (\$ mill)	StDev	Coef Var (%)	Status
Afghanistan	209.6	93.3	44.5	Medium Volatility
Albania	351.8	181.3	51.5	Medium Volatility
Algeria	1,211.4	501.4	41.4	Medium Volatility
Azerbaijan	604.6	3,444.8	569.8	High Volatility
Bahrain	1,420.3	949.9	66.9	High Volatility
Bangladesh	623.0	212.7	34.1	Medium Volatility
Benin	52.6	7.2	13.8	Low Volatility
Brunei	923.0	1,373.6	148.8	High Volatility
Burkina Faso	142.2	256.0	180.0	High Volatility
Cameroon	304.1	57.4	18.9	Low Volatility
Chad	624.7	87.7	14.0	Low Volatility
Comoros	0.7	0.1	16.9	Low Volatility
Côte d'Ivoire	301.2	93.5	31.1	Medium Volatility
Djibouti	94.1	80.3	85.3	High Volatility
Egypt	5,878.3	4,892.6	83.2	High Volatility
Gabon	199.3	85.4	42.8	Medium Volatility
Gambia	48.7	21.7	44.6	Medium Volatility
Guinea	100.9	11.2	11.1	Low Volatility
Guinea-Bissau	7.8	6.2	78.8	High Volatility
Guyana	77.5	52.7	68.0	High Volatility
Indonesia	4,313.6	3,621.7	84.0	High Volatility
Iran	539.1	279.6	51.9	Medium Volatility
Iraq	329.2	200.5	60.9	High Volatility
Jordan	1,617.7	1,079.2	66.7	High Volatility
Kazakhstan	4,940.7	3,445.3	69.7	High Volatility
Kuwait	87.0	114.2	131.3	High Volatility
Kyrgyzstan	130.7	80.0	61.2	High Volatility
Lebanon	2,669.1	388.1	14.5	Low Volatility
Libya	1,218.4	1,038.2	85.2	High Volatility
Malaysia	5,103.0	2,248.2	44.1	Medium Volatility
Maldives	13.3	2.2	16.7	Low Volatility
Mali	180.1	114.2	63.4	High Volatility
Mauritania	323.0	296.7	91.9	High Volatility
Morocco	1,978.0	702.5	35.5	Medium Volatility
Mozambique	254.1	130.8	51.5	Medium Volatility
Niger	27.8	14.6	52.6	Medium Volatility
Nigeria	7,137.4	5,683.1	79.6	High Volatility
Oman	1,282.2	895.8	69.9	High Volatility
Pakistan	2,691.8	2,052.4	76.2	High Volatility
Palestine	30.6	15.7	51.3	Medium Volatility
Qatar	883.8	481.7	54.5	Medium Volatility
Saudi Arabia	11,485.8	10,211.7	88.9	High Volatility
Senegal	94.5	71.9	76.1	High Volatility
Sierra Leone	58.5	30.0	51.3	Medium Volatility
Somalia	51.1	64.5	126.3	High Volatility
Sudan	2,228.5	874.7	39.3	Medium Volatility
Suriname	304.8	71.4	23.4	Low Volatility
Syria	488.0	278.6	57.1	Medium Volatility
Tajikistan	215.9	172.7	80.0	High Volatility
Togo	63.3	18.1	28.6	Low Volatility
Tunisia	1,387.0	1,154.2	83.2	High Volatility
Turkey	11,317.0	9,432.8	83.4	High Volatility
Turkmenistan	506.6	249.3	49.2	Medium Volatility
Uganda	329.1	81.2	24.7	Low Volatility
United Arab Emirates	10,243.7	3,604.3	35.2	Medium Volatility
Uzbekistan	160.4	80.0	49.9	Medium Volatility
Yemen	286.5	541.7	189.1	High Volatility
OIC-57	88,147.0	47,002.6	53.3	Medium Volatility
<i>Of which:</i>				
SSA-22	12,623.8	7,004.6	55.5	Medium Volatility
MENA-19	54,352.9	33,800.6	62.2	High Volatility
ASIA-9	14,259.6	6,429.0	45.1	Medium Volatility
CIT-7	6,910.6	1,751.8	25.3	Low Volatility
LDMC-28	7,308.1	2,005.2	27.4	Low Volatility
Non-LDMC-29	80,838.9	47,979.8	59.4	Medium Volatility
Memo:				
Developing Economies	338,566.3	122,601.3	36.2	Medium Volatility
Developed Economies	712,924.3	376,715.9	52.8	Medium Volatility
World	1,096,358.3	522,258.0	47.6	Medium Volatility

Source: Data Resource Centre, EPSD, staff computation using UNCTAD online database accessed in April 2009

Table A12: Volatility of Foreign Direct Investment (1998- 2002)				
Country	Mean(\$mill)	St.Dev.	Coef. Var.(%)	Status
Afghanistan	11.4	21.7	191.1	High Volatility
Albania	114.3	70.8	61.9	High Volatility
Algeria	719.5	394.2	54.8	Medium Volatility
Azerbaijan	589.2	565.4	96.0	High Volatility
Bahrain	258.8	149.0	57.6	Medium Volatility
Bangladesh	429.4	136.2	31.7	Medium Volatility
Benin	37.8	16.9	44.6	Medium Volatility
Brunei	686.4	213.7	31.1	Medium Volatility
Burkina Faso	11.3	7.7	67.9	High Volatility
Cameroon	206.7	237.5	114.9	High Volatility
Chad	309.3	387.7	125.3	High Volatility
Comoros	0.5	0.4	86.5	High Volatility
Côte d'Ivoire	284.7	67.9	23.9	Low Volatility
Djibouti	3.6	0.4	10.8	Low Volatility
Egypt	906.6	310.9	34.3	Medium Volatility
Gabon	-42.7	121.7	..	..
Gambia	39.0	9.9	25.4	Low Volatility
Guinea	24.6	24.1	98.1	High Volatility
Guinea-Bissau	2.0	1.9	95.8	High Volatility
Guyana	51.3	10.2	19.8	Low Volatility
Indonesia	-1,846.8	1948.6	..	..
Iran	49.7	36.0	72.4	High Volatility
Iraq	-2.2	5.7	..	..
Jordan	316.5	287.5	90.8	High Volatility
Kazakhstan	1,866.2	785.8	42.1	Medium Volatility
Kuwait	-4.7	99.4	..	..
Kyrgyzstan	32.2	46.8	145.5	High Volatility
Lebanon	1,151.6	243.7	21.2	Low Volatility
Libya	-20.6	149.9	..	..
Malaysia	2,830.9	1358.8	48.0	Medium Volatility
Maldives	12.2	0.6	4.9	Low Volatility
Mali	91.8	98.7	107.6	High Volatility
Mauritania	39.8	32.9	82.8	High Volatility
Morocco	1,095.1	1038.9	94.9	High Volatility
Mozambique	271.7	96.2	35.4	Medium Volatility
Niger	6.6	9.8	149.8	High Volatility
Nigeria	1,403.0	360.0	25.7	Low Volatility
Oman	70.2	47.6	67.7	High Volatility
Pakistan	510.6	196.8	38.6	Medium Volatility
Palestine	99.5	97.5	98.0	High Volatility
Qatar	326.3	187.7	57.5	Medium Volatility
Saudi Arabia	271.4	192.6	71.0	High Volatility
Senegal	77.3	45.6	59.0	Medium Volatility
Sierra Leone	12.0	15.8	132.5	High Volatility
Somalia	-0.1	0.4	..	..
Sudan	484.2	153.9	31.8	Medium Volatility
Suriname	-16.3	107.6	..	..
Syria	168.0	90.8	54.1	Medium Volatility
Tajikistan	21.1	12.7	60.3	High Volatility
Togo	41.9	17.4	41.5	Medium Volatility
Tunisia	624.5	193.2	30.9	Medium Volatility
Turkey	1,438.0	1077.2	74.9	High Volatility
Turkmenistan	152.9	78.9	51.6	Medium Volatility
Uganda	158.0	23.6	15.0	Low Volatility
United Arab Emirates	252.8	1012.8	400.6	High Volatility
Uzbekistan	96.7	32.0	33.1	Medium Volatility
Yemen	-56.7	197.1	..	..
OIC-57	16,668.9	5135.4	30.8	Medium Volatility
<i>Of which:</i>				
SSA-22	3,463.0	1245.8	36.0	Medium Volatility
MENA-19	7,664.3	2870.1	37.4	Medium Volatility
ASIA-9	2,669.0	2812.5	105.4	High Volatility
CIT-7	2,872.6	1134.4	39.5	Medium Volatility
LDMC-28	2,960.5	1129.4	38.1	Medium Volatility
Non-LDMC-29	13,708.3	4037.3	29.5	Low Volatility
Memo:				
Developing Economies	212,182.7	33143.5	15.6	Low Volatility
Developed Economies	707,278.0	285045.6	40.3	Medium Volatility
World	928,369.4	315734.0	34.0	Medium Volatility

Source: Data Resource Centre, EPSD, staff computation using UNCTAD online database accessed in April 2009

Table A13: Agricultural Land (2003-2005)
(% of Land Area)

Country	2003	2004	2005
Afghanistan	58.3	58.3	58.3
Albania	40.9	40.9	41.0
Algeria	16.8	17.3	17.3
Azerbaijan	57.5	57.5	57.6
Bahrain	14.1	14.1	14.1
Bangladesh	69.3	69.2	69.2
Benin	31.3	32.2	32.2
Brunei	4.6	4.6	4.7
Burkina Faso	39.8	39.8	39.8
Cameroon	19.7	19.7	19.7
Chad	38.8	38.8	39.1
Comoros	79.0	79.5	79.5
Côte d'Ivoire	62.6	63.8	63.8
Djibouti	73.4	73.4	73.4
Egypt, Arab Rep.	3.4	3.5	3.5
Gabon	20.0	20.0	20.0
Gambia, The	79.4	81.4	81.4
Guinea	50.7	51.1	51.2
Guinea-Bissau	58.0	58.0	58.0
Guyana	8.8	8.8	8.8
Indonesia	26.3	26.3	26.4
Iran, Islamic Rep.	39.5	39.6	29.2
Iraq	22.9	22.9	22.9
Jordan	11.4	11.7	11.5
Kazakhstan	77.0	76.9	76.9
Kuwait	8.6	8.6	8.6
Kyrgyz Republic	56.5	56.2	56.0
Lebanon	38.3	37.9	37.9
Libya	8.8	8.9	8.9
Malaysia	24.0	24.0	24.0
Maldives	46.7	46.7	46.7
Mali	32.4	32.4	32.4
Mauritania	38.6	38.6	38.6
Morocco	68.1	68.1	68.1
Mozambique	61.8	61.8	61.8
Niger	30.4	30.4	30.4
Nigeria	79.7	80.2	81.2
Oman	3.5	5.8	5.8
Pakistan	35.3	35.1	35.1
Palestine	61.8	61.8	61.8
Qatar	6.5	6.5	6.5
Saudi Arabia	..	..	..
Senegal	42.4	42.6	42.8
Sierra Leone	39.7	40.2	40.2
Somalia	70.6	70.7	70.7
Sudan	57.0	57.0	57.6
Suriname	0.6	0.6	0.6
Syrian Arab Republic	75.2	75.4	76.2
Tajikistan	30.4	30.4	30.4
Togo	66.7	66.7	66.7
Tunisia	63.0	63.3	62.9
Turkey	52.8	53.5	53.6
Turkmenistan	70.1	70.1	70.4
Uganda	63.2	64.0	64.5
United Arab Emirates	6.7	6.7	6.7
Uzbekistan	65.6	65.6	65.6
Yemen, Rep.	33.6	33.6	33.6
OIC-57	41.5	41.7	41.2
<i>Of which:</i>			
SSA-22	47.7	47.9	48.1
MENA-19	25.4	25.7	24.0
ASIA-9	32.5	32.5	32.5
CIS-7	71.7	71.7	71.7
LDMC-28	47.4	47.5	47.6
NON-LDMC-29	37.5	37.7	36.8
<i>Sources:</i> - World Bank, World Development Indicators database online, accessed on 15 March 2009 - DRC Staff calculations			

Table A14: Agricultural Land (2003-2005)			
(square km)			
Country	2003	2004	2005
Afghanistan	380,480	380,480	380,480
Albania	11,210	11,220	11,230
Algeria	399,070	411,440	411,500
Azerbaijan	47,546	47,549	47,586
Bahrain	100	100	100
Bangladesh	90,190	90,120	90,110
Benin	34,670	35,670	35,670
Brunei	240	240	250
Burkina Faso	109,000	109,000	109,000
Cameroon	91,600	91,600	91,600
Chad	488,300	488,300	492,300
Comoros	1,470	1,480	1,480
Côte d'Ivoire	199,000	203,000	203,000
Djibouti	17,010	17,010	17,010
Egypt, Arab Rep.	34,090	34,780	35,200
Gabon	51,600	51,600	51,600
Gambia, The	7,940	8,140	8,140
Guinea	124,600	125,650	125,700
Guinea-Bissau	16,300	16,300	16,300
Guyana	17,400	17,400	17,400
Indonesia	476,000	477,000	478,000
Iran, Islamic Rep.	642,650	644,860	476,310
Iraq	100,190	100,190	100,100
Jordan	10,040	10,360	10,120
Kazakhstan	2,077,840	2,075,980	2,075,980
Kuwait	1,540	1,540	1,540
Kyrgyz Republic	108,400	107,700	107,450
Lebanon	3,920	3,880	3,880
Libya	154,500	155,850	155,850
Malaysia	78,700	78,700	78,700
Maldives	140	140	140
Mali	394,790	394,790	394,790
Mauritania	397,500	397,500	397,620
Morocco	303,760	303,930	303,950
Mozambique	485,800	486,300	486,300
Niger	385,000	385,000	385,000
Nigeria	726,000	730,000	740,000
Oman	10,800	18,050	18,050
Pakistan	272,300	270,300	270,700
Palestine	3,720	3,720	3,720
Qatar	710	710	710
Saudi Arabia	--	--	--
Senegal	81,580	81,980	82,480
Sierra Leone	28,450	28,800	28,800
Somalia	442,760	443,760	443,760
Sudan	1,353,700	1,353,370	1,368,370
Suriname	890	910	910
Syrian Arab Republic	138,240	138,550	140,080
Tajikistan	42,550	42,550	42,550
Togo	36,300	36,300	36,300
Tunisia	97,840	98,300	97,690
Turkey	406,440	412,100	412,230
Turkmenistan	329,650	329,650	330,650
Uganda	124,620	126,120	127,120
United Arab Emirates	5,590	5,600	5,600
Uzbekistan	278,900	278,900	278,900
Yemen, Rep.	177,340	177,150	177,150
OIC-57	12,300,966	12,341,619	12,207,156
<i>Of which:</i>			
SSA-22	5,597,990.0	5,611,670.0	5,642,340.0
MENA-19	2,490,540.0	2,521,110.0	2,353,780.0
ASIA-9	1,316,340.0	1,315,290.0	1,316,690.0
CIS-7	2,896,096.0	2,893,549.0	2,894,346.0
LDMC-28	5,670,266.0	5,674,999.0	5,695,456.0
NON-LDMC-29	6,630,700.0	6,666,620.0	6,511,700.0
Memo:			
LDCs	7,829,090.0	7,853,720.0	7,884,110.0
Low & middle income	36,717,872.0	36,802,337.0	36,694,236.0
High income	11,097,065.0	11,080,322.0	11,125,229.0
World	47,814,937.0	47,882,659.0	47,819,465.0
OIC as % of World	25.7	25.8	25.5
<i>Sources:</i> - World Bank, World Development Indicators database online, accessed on 15 March 2009			
- DRC Staff calculations			

Table A15: Land Area (2007)	
(square kilometre)	
Country	2007
Afghanistan	652,090
Albania	27,400
Algeria	2,381,740
Azerbaijan	82,660
Bahrain	710
Bangladesh	130,170
Benin	110,620
Brunei Darussalam	5,270
Burkina Faso	273,600
Cameroon	465,400
Chad	1,259,200
Comoros	1,861
Côte d'Ivoire	318,000
Djibouti	23,180
Egypt, Arab Rep.	995,450
Gabon	257,670
Gambia, The	10,000
Guinea	245,720
Guinea-Bissau	28,120
Guyana	196,850
Indonesia	1,811,570
Iran, Islamic Rep.	1,628,550
Iraq	437,370
Jordan	88,240
Kazakhstan	2,699,700
Kuwait	17,820
Kyrgyz Republic	191,800
Lebanon	10,230
Libya	1,759,540
Malaysia	328,550
Maldives	300
Mali	1,220,190
Mauritania	1,030,700
Morocco	446,300
Mozambique	786,380
Niger	1,266,700
Nigeria	910,770
Oman	309,500
Pakistan	770,880
Palestine	6,020
Qatar	11,000
Saudi Arabia	2,000,000
Senegal	192,530
Sierra Leone	71,620
Somalia	627,340
Sudan	2,376,000
Suriname	156,000
Syrian Arab Republic	183,780
Tajikistan	139,960
Togo	54,390
Tunisia	155,360
Turkey	769,630
Turkmenistan	469,930
Uganda	197,100
United Arab Emirates	83,600
Uzbekistan	425,400
Yemen, Rep.	527,970
OIC-57	31,628,431
<i>Of which:</i>	
SSA-22	11,727,091
MENA-19	11,812,810
ASIA-9	4,051,680
CIT-7	4,036,850
LDMC-28	11,959,021
Non-LDMC-29	19,669,410
Memo:	
Least developed countries	20,179,551
Low & middle income	96,140,066
High income	33,504,521
World	129,644,587
<i>Sources:</i>	- World Bank, World Development Indicators database online, accessed on 15 March 2009
	- DRC Staff calculations

Table A16: Arable Land (2003-2005)			
(hectares)			
Country	2003	2004	2005
Afghanistan	7,910,000	7,910,000	7,910,000
Albania	578,000	578,000	578,000
Algeria	7,504,000	7,492,000	7,450,000
Azerbaijan	1,838,500	1,840,700	1,843,200
Bahrain	2,000	2,000	2,000
Bangladesh	7,974,000	7,952,000	7,951,000
Benin	2,650,000	2,750,000	2,750,000
Brunei Darussalam	13,000	13,000	14,000
Burkina Faso	4,840,000	4,840,000	4,840,000
Cameroon	5,960,000	5,960,000	5,960,000
Chad	3,800,000	3,800,000	4,200,000
Comoros	80,000	80,000	80,000
Côte d'Ivoire	3,300,000	3,500,000	3,500,000
Djibouti	1,000	1,000	1,000
Egypt, Arab Rep.	2,906,000	2,965,000	3,000,000
Gabon	325,000	325,000	325,000
Gambia, The	330,000	350,000	350,000
Guinea	1,100,000	1,200,000	1,200,000
Guinea-Bissau	300,000	300,000	300,000
Guyana	480,000	480,000	480,000
Indonesia	23,000,000	23,000,000	23,000,000
Iran, Islamic Rep.	16,197,000	16,365,000	16,533,000
Iraq	5,750,000	5,750,000	5,750,000
Jordan	176,000	208,000	184,000
Kazakhstan	22,550,000	22,364,000	22,364,000
Kuwait	15,000	15,000	15,000
Kyrgyz Republic	1,344,000	1,334,000	1,284,000
Lebanon	186,000	186,000	186,000
Libya	1,815,000	1,750,000	1,750,000
Malaysia	1,800,000	1,800,000	1,800,000
Maldives	4,000	4,000	4,000
Mali	4,800,000	4,800,000	4,800,000
Mauritania	488,000	488,000	500,000
Morocco	8,484,000	8,486,000	8,480,000
Mozambique	4,350,000	4,400,000	4,400,000
Niger	14,482,000	14,482,000	14,482,000
Nigeria	30,500,000	31,000,000	32,000,000
Oman	37,000	62,000	62,000
Pakistan	21,578,000	21,295,000	21,275,000
Palestine	106,000	107,000	107,000
Qatar	18,000	18,000	18,000
Saudi Arabia	3,600,000	3,500,000	3,500,000
Senegal	2,460,000	2,500,000	2,550,000
Sierra Leone	570,000	600,000	600,000
Somalia	1,250,000	1,350,000	1,350,000
Sudan	18,052,000	18,019,000	19,434,000
Suriname	58,000	60,000	60,000
Syrian Arab Republic	4,661,000	4,729,000	4,873,000
Tajikistan	930,000	930,000	930,000
Togo	2,510,000	2,500,000	2,490,000
Tunisia	2,790,000	2,791,000	2,729,000
Turkey	23,372,000	23,871,000	23,830,000
Turkmenistan	2,200,000	2,200,000	2,300,000
Uganda	5,200,000	5,300,000	5,400,000
United Arab Emirates	64,000	64,000	64,000
Uzbekistan	4,700,000	4,700,000	4,700,000
Yemen, Rep.	1,537,000	1,515,000	1,515,000
OIC-57	283,525,500	284,881,700	288,053,200
<i>Of which:</i>			
SSA-22	107,348,000	108,545,000	111,512,000
MENA-19	79,220,000	79,876,000	80,048,000
ASIA-9	62,817,000	62,514,000	62,494,000
CIT-7	34,140,500	33,946,700	33,999,200
LDMC-28	94,184,500	94,630,700	96,549,200
Non-LDMC-29	189,341,000	190,251,000	191,504,000
<i>Sources:</i> - World Bank, World Development Indicators database online, accessed on 15 March 2009			
- DRC Staff calculations			

Table A17: Arable Land (2003-2005)			
(hectares per person)			
Country	2003	2004	2005
Afghanistan	0.342	0.329	0.316
Albania	0.186	0.184	0.183
Algeria	0.235	0.231	0.227
Azerbaijan	0.223	0.222	0.220
Bahrain	0.003	0.003	0.003
Bangladesh	0.054	0.053	0.052
Benin	0.333	0.334	0.324
Brunei Darussalam	0.036	0.036	0.037
Burkina Faso	0.370	0.358	0.347
Cameroon	0.350	0.342	0.335
Chad	0.401	0.387	0.414
Comoros	0.139	0.136	0.133
Côte d'Ivoire	0.184	0.192	0.188
Djibouti	0.001	0.001	0.001
Egypt, Arab Rep.	0.041	0.041	0.041
Gabon	0.260	0.256	0.252
Gambia, The	0.217	0.223	0.216
Guinea	0.127	0.136	0.133
Guinea-Bissau	0.200	0.194	0.188
Guyana	0.651	0.650	0.649
Indonesia	0.107	0.106	0.104
Iran, Islamic Rep.	0.242	0.240	0.239
Iraq	0.214	0.209	0.205
Jordan	0.034	0.039	0.034
Kazakhstan	1.513	1.490	1.476
Kuwait	0.006	0.006	0.006
Kyrgyz Republic	0.267	0.262	0.250
Lebanon	0.047	0.047	0.046
Libya	0.319	0.302	0.296
Malaysia	0.073	0.071	0.070
Maldives	0.014	0.014	0.014
Mali	0.439	0.426	0.413
Mauritania	0.174	0.169	0.169
Morocco	0.287	0.284	0.281
Mozambique	0.222	0.219	0.214
Niger	1.171	1.131	1.092
Nigeria	0.226	0.225	0.226
Oman	0.015	0.025	0.025
Pakistan	0.145	0.140	0.137
Palestine	0.031	0.031	0.030
Qatar	0.025	0.024	0.023
Saudi Arabia	0.163	0.155	0.151
Senegal	0.220	0.218	0.217
Sierra Leone	0.110	0.111	0.107
Somalia	0.162	0.170	0.165
Sudan	0.509	0.499	0.527
Suriname	0.130	0.133	0.133
Syrian Arab Republic	0.260	0.257	0.258
Tajikistan	0.146	0.144	0.142
Togo	0.425	0.412	0.399
Tunisia	0.284	0.281	0.272
Turkey	0.331	0.336	0.331
Turkmenistan	0.468	0.462	0.476
Uganda	0.192	0.189	0.187
United Arab Emirates	0.017	0.016	0.016
Uzbekistan	0.184	0.182	0.180
Yemen, Rep.	0.077	0.074	0.072
OIC-57	0.208	0.205	0.203
<i>Of which:</i>			
SSA-22	0.306	0.302	0.302
MENA-19	0.200	0.199	0.196
ASIA-9	0.113	0.111	0.108
CIF-7	0.503	0.495	0.490
LDMC-28	0.228	0.224	0.223
Non-LDMC-29	0.199	0.196	0.194
Memo:			
Least Developed Countries	0.206	0.203	0.202
Low & Middle Income	0.198	0.196	0.194
High Income	0.367	0.364	0.361
World	0.225	0.223	0.221
<i>Sources:</i> - World Bank, World Development Indicators database online, accessed on 15 March 2009 - DRC Staff calculations			

Table A18: Irrigated Land (2001-2003)			
(% of cropland)			
Country	2001	2002	2003
Afghanistan	33.8	33.8	33.8
Albania	48.6	49.5	50.5
Algeria	7.0	6.9	6.9
Azerbaijan	69.0	69.0	68.9
Bahrain	66.7	66.7	66.7
Bangladesh	52.1	54.5	56.1
Benin	0.4	0.4	0.4
Brunei Darussalam	6.3	5.9	5.6
Burkina Faso	0.5	0.5	0.5
Cameroon	0.4	0.4	0.4
Chad	0.8	0.8	0.8
Comoros	..	..	..
Côte d'Ivoire	1.1	1.1	1.1
Djibouti	..	..	..
Egypt, Arab Rep.	100.0	99.9	100.4
Gabon	1.4	1.4	1.4
Gambia, The	0.6	0.6	0.6
Guinea	5.8	5.6	5.4
Guinea-Bissau	4.6	4.6	4.5
Guyana	29.4	29.4	29.4
Indonesia	12.8	12.8	12.4
Iran, Islamic Rep.	46.6	46.8	47.0
Iraq	58.6	58.6	58.6
Jordan	26.1	26.5	27.1
Kazakhstan	16.0	15.6	15.7
Kuwait	86.7	72.2	72.2
Kyrgyz Republic	72.8	72.8	72.8
Lebanon	33.2	32.4	31.3
Libya	21.9	21.9	21.9
Malaysia	4.8	4.8	4.8
Maldives	..	..	..
Mali	5.0	5.0	4.9
Mauritania	9.8	9.8	..
Morocco	15.4	15.6	15.4
Mozambique	2.8	2.7	2.6
Niger	0.5	0.5	0.5
Nigeria	0.8	0.8	0.8
Oman	86.4	88.9	90.0
Pakistan	80.4	80.8	82.0
Palestine	7.2	7.1	6.8
Qatar	61.9	61.9	..
Saudi Arabia	42.7	42.7	42.7
Senegal	4.4	4.8	4.8
Sierra Leone	5.3	5.0	4.7
Somalia	18.7	16.3	15.7
Sudan	11.3	11.2	10.2
Suriname	76.1	76.1	75.0
Syrian Arab Republic	23.2	24.6	24.3
Tajikistan	68.0	68.2	68.3
Togo	0.3	0.3	0.3
Tunisia	7.0	7.3	7.1
Turkey	19.8	19.6	20.0
Turkmenistan	94.0	94.0	79.5
Uganda	0.1	0.1	0.1
United Arab Emirates	29.0	28.6	29.9
Uzbekistan	88.6	88.7	84.9
Yemen, Rep.	31.3	30.0	33.0
OIC-57	20.6	20.5	19.9
<i>Of which:</i>			
SSA-22	6.0	5.8	5.2
MENA-19	27.8	27.9	26.9
ASIA-9	35.3	35.5	35.7
CIT-7	35.7	35.5	33.5
LDMC-28	16.9	16.6	16.7
Non-LDMC-29	23.8	23.7	22.5
Memo:			
Least Developed Countries	10.4	10.5	10.2
Low & Middle Income	20.3	19.9	20.5
High Income	..	..	..
World	18.0	17.7	18.1
<i>Sources:</i>	- World Bank, World Development Indicators database online, accessed on 15 March 2009		
	- DRC Staff calculations		

Table A19: Fertilizer Consumption (1990-2005) (metric tons)																
Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Afghanistan	44.5	48.6	45.8	40.0	..	..	5.0	5.0	7.0	5.0	5.0	18.4	..	..	..	..
Albania	102.0	31.3	23.5	17.9	14.8	11.0	6.5	5.2	25.0	10.6	18.7	18.7	49.4	49.2	53.6	57.5
Algeria	127.0	91.5	96.8	130.9	119.3	46.4	38.0	97.0	108.0	93.0	92.3	105.3	72.8	45.0	155.9	107.4
Azerbaijan	75.0	75.0	75.0	54.0	39.0	39.0	16.6	23.7	15.8	13.8	4.1	11.9	19.2	16.7	25.3	32.1
Bahrain	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.6	1.1	0.4	0.3	0.3	17.9	0.2	0.2	1.8
Bangladesh	933.6	1,004.4	998.8	945.6	1,049.4	1,195.0	1,230.5	1,109.2	1,170.5	1,365.7	1,320.2	1,449.6	1,556.8	1,578.5	1,663.9	1,757.3
Benin	11.0	11.8	15.3	17.2	17.1	36.0	30.7	39.0	37.7	56.7	35.2	31.1	41.7	2.1	0.1	0.0
Brunei	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Darussalam	4.2	4.4	4.5	3.0	..	..	..	..	..	..	..	..	..	..	..	..
Burkina Faso	21.2	20.7	21.3	21.0	22.7	24.3	24.1	42.6	50.2	43.4	33.9	1.7	2.0	22.7	25.0	61.1
Cameroon	21.8	18.1	20.9	22.3	30.0	30.0	34.0	39.2	39.5	49.5	46.1	52.5	34.9	45.9	75.7	46.9
Chad	5.8	8.6	10.1	5.3	7.0	8.6	11.9	7.9	16.8	17.5	17.5	17.5	..	..	..	..
Comoros	..	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	..	..	..	..
Côte d'Ivoire	37.0	38.7	37.0	54.0	65.0	66.0	70.5	110.0	90.0	70.6	67.1	68.7	86.9	82.2	76.2	49.8
Djibouti	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Egypt, Arab Rep.	958.9	963.4	877.4	988.1	843.2	1,126.4	1,157.5	1,078.7	1,171.1	1,179.5	1,259.7	1,308.3	1,269.9	1,824.2	1,930.8	2,199.2
Gabon	1.1	0.6	0.5	0.4	0.4	0.4	0.2	0.2	0.4	0.3	0.3	0.3	1.8	1.2	1.7	0.9
Gambia, The	0.6	0.9	0.8	0.8	0.8	0.9	0.8	1.1	2.5	1.2	0.8	0.8	..	..	..	..
Guinea	1.2	1.9	0.5	1.6	4.0	5.1	4.2	1.8	3.3	3.2	3.2	3.2	2.4	2.0	4.0	3.4
Guinea-Bissau	0.6	0.5	0.2	0.3	0.3	0.3	0.3	0.3	0.6	0.6	0.6	2.4	..	..	..	..
Guyana	12.0	15.6	12.2	12.0	11.1	15.0	13.3	15.7	14.9	18.9	12.6	13.0	14.9	10.4	20.2	7.8
Indonesia	2,500.8	2,400.1	2,583.0	2,317.0	2,467.0	2,529.2	2,715.9	2,227.6	2,727.7	2,524.5	2,493.5	2,638.3	3,165.1	2,884.1	3,673.4	3,442.8
Iran, Islamic Rep.	1,161.0	1,149.0	1,350.0	901.1	1,004.0	1,017.2	1,079.3	1,207.2	1,268.0	1,330.4	1,393.6	1,325.6	1,134.8	1,138.0	405.7	1,260.1
Iraq	207.0	134.7	210.0	348.0	384.0	333.9	354.4	356.8	383.3	388.1	371.2	639.2	..	..	..	..
Jordan	16.8	20.4	15.7	16.3	14.0	16.0	19.2	24.0	23.4	23.0	20.6	22.3	310.1	162.2	99.6	145.0
Kazakhstan	475.0	475.0	475.0	324.0	121.0	95.0	131.0	56.1	13.0	34.2	37.0	50.4	123.3	134.6	180.6	143.7
Kuwait	..	..	0.8	1.0	1.0	1.0	2.0	1.2	1.0	1.1	0.6	1.0	21.2	0.0	0.0	47.8
Kyrgyz Republic	32.0	32.0	32.0	28.0	28.0	28.0	31.0	31.0	29.1	28.1	29.2	27.6	9.5	14.8	16.5	28.7
Lebanon	25.4	29.7	34.0	36.2	28.0	44.0	56.0	62.2	63.7	63.7	63.7	58.6	46.5	31.8	33.3	25.3
Libya	77.6	84.8	86.1	110.9	74.5	89.0	62.4	61.7	50.5	86.5	55.0	73.2	120.3	60.0	90.4	117.5

Table A19: Fertilizer Consumption (1990-2005)
(metric tons) (Contd.)

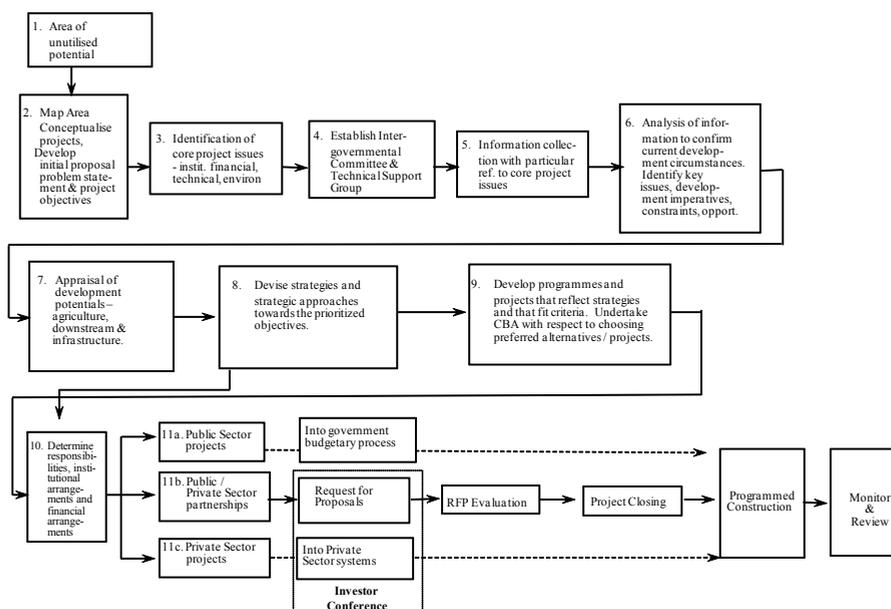
Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Malaysia	909.5	941.0	964.9	1,031.0	1,157.3	1,092.0	1,131.0	1,252.0	1,406.0	1,323.8	1,188.3	1,130.7	1,189.9	1,324.4	1,767.2	1,517.8
Maldives	..	..	..	..	..	..	..	..	..	..	..	..	0.0	0.0	0.0	0.1
Mali	15.2	15.0	27.3	25.0	25.0	27.0	27.3	47.8	45.9	49.8	39.8	42.0	..	..	..	..
Mauritania	3.9	5.2	7.3	4.6	4.0	4.0	5.0	1.7	1.8	2.4	..	2.9	..	..	..	..
Morocco	350.0	288.7	290.9	334.4	295.1	282.2	290.0	327.3	325.0	364.5	367.4	360.2	550.8	500.8	588.1	361.0
Mozambique	2.6	5.1	4.9	3.2	6.3	7.8	8.1	6.5	8.0	8.0	14.3	24.9	26.6	35.4	24.4	7.1
Niger	2.3	0.5	1.4	1.5	6.1	10.0	9.0	0.7	0.5	4.2	4.5	5.0	8.5	6.5	5.1	4.6
Nigeria	400.4	429.2	440.0	461.0	296.0	183.0	173.5	137.7	163.2	167.7	187.5	221.0	166.2	229.7	152.2	215.2
Oman	9.5	8.1	8.0	9.0	7.6	7.8	6.7	5.4	8.2	7.3	5.8	10.4	11.9	7.0	13.7	38.2
Pakistan	1,892.9	1,884.1	2,147.9	2,146.8	2,183.6	2,515.1	2,413.0	2,659.3	2,578.1	2,833.0	2,962.5	2,944.5	3,043.0	3,324.5	..	4,069.3
Palestine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Qatar	1.4	1.5	1.5	2.0	6.0	6.0	1.2	1.2	1.0	0.8	0.5	0.9	0.5	0.0	49.4	7.3
Saudi Arabia	489.0	508.0	538.6	455.0	360.0	284.0	317.0	321.0	330.0	347.0	386.2	383.8	203.3	429.1	367.5	328.7
Senegal	11.8	16.6	17.0	24.0	25.9	16.2	21.6	22.9	25.6	37.8	38.2	29.9	36.0	33.8	68.1	64.9
Sierra Leone	1.3	0.6	1.4	3.0	3.0	3.0	3.0	3.0	0.3	0.1	0.2	0.3	..	..	..	..
Somalia	2.7	..	..	..	..	..	0.5	0.5	0.5	0.5	0.5	0.5	..	..	..	..
Sudan	81.9	55.7	59.5	52.9	58.4	51.7	95.4	77.4	37.7	38.8	40.7	84.2	57.4	63.1	83.0	50.2
Suriname	1.0	1.0	2.9	3.3	4.3	4.3	7.3	7.1	7.6	5.3	5.8	5.6	4.4	6.3	6.9	3.0
Syrian Arab Republic	304.2	287.6	306.5	338.1	351.3	341.8	357.2	368.4	330.8	370.8	365.5	299.3	313.9	342.0	402.7	480.0
Tajikistan	128.0	128.0	128.0	76.0	70.0	70.0	62.1	51.1	36.9	10.6	8.9	12.1	..	..	..	..
Togo	11.5	11.7	12.2	9.9	11.2	16.4	17.6	16.8	17.2	16.9	19.8	19.2	12.3	17.6	7.9	20.4
Tunisia	83.9	98.9	105.0	95.4	89.0	77.0	97.0	96.5	113.9	112.2	111.3	100.0	69.9	101.4	104.7	175.8
Turkey	1,887.5	1,770.9	1,927.6	2,207.0	1,507.3	1,700.4	1,799.3	1,825.7	2,180.7	2,193.4	2,088.8	1,670.6	1,691.4	2,015.2	1,893.6	2,031.2
Turkmenistan	175.0	175.0	175.0	160.0	125.0	131.0	142.0	178.0	76.0	91.2	105.6	98.0	..	..	..	..
Uganda	0.2	1.2	0.8	2.2	1.9	1.3	0.6	0.6	3.5	4.5	6.6	5.8	7.5	9.3	8.8	5.8
United Arab Emirates	12.5	17.5	22.3	27.7	29.4	32.0	32.2	32.3	35.4	36.2	35.1	35.0	50.4	60.1	31.2	14.9
Uzbekistan	730.0	730.0	730.0	636.0	473.0	474.0	445.0	875.1	824.4	774.8	731.2	720.3	..	..	..	..
Yemen, Rep.	22.5	19.6	14.6	11.0	11.7	13.1	8.1	19.3	17.6	15.1	15.2	16.3	11.6	5.7	3.1	2.8
OIC-57	14,384.2	14,063.4	14,963.6	14,517.5	13,454.8	14,109.8	14,566.9	14,940.7	15,890.3	16,236.5	16,103.0	16,163.7	15,557.0	16,017.6	14,109.7	18,934.3

Source: Data Resource Centre, EPSD, staff computation using UNCTAD online database accessed in April 2009

Proposed Modality for Identifying and Exploiting Investment Opportunities

The methodology depicted below describes a potential programme of activities, inputs, outputs, outcomes and impacts by potential recipient governments (with the assistance of Development Partners), aimed at unlocking inherent and under-utilized economic development potential of certain specific spatial locations in their countries.

Figure A1: Proposed Plan of Action to Identify and Exploit Investment Opportunities



Assuming the recipient government’s willingness to entertain FDI / JVs in agriculture, the first step would be to determine areas with inherent potential that is currently under-utilized.

Potential areas could be identified and selected on the following basis:

- Availability of arable land and suitable water resources;
- Availability of labour;
- Areas with under utilized economic potential;
- Areas of historic under-investment; and
- Political risk.

Once areas have been identified, potential projects will need to be determined with a view to undertaking a preliminary scoping of the prospective projects. It is proposed that such an exercise be undertaken by credible experts within the recipient country (perhaps with assistance from the IDB). At the least, the exercise should determine the following for each potential project:

- Products to be produced;
- Project rationale;
- Key market factors;
- Source and quantities of raw material required;
- Capital requirements;
- Number of employees;
- Competitive advantages and disadvantages;
- Means of overcoming the disadvantages;
- Potential investor profile; and
- Indicative internal rate of return.

The above could be consolidated into a short report and would be sufficient for presenting to potential investors wishing to pursue investments in the recipient countries.

An important element as part of this analysis would be to identify the key issues, development imperatives and constraints for realizing the project/s. In this regard, key de-bottlenecking projects (infrastructural or otherwise) will need to be identified, and go into the recipient's governments budgetary process. Alternatively, if it requires a public-private partnership, it will have to be further developed to the stage where it can go for request for proposals and/or into Investor Conferences.

Thus, the culmination of the above-mentioned activities would be an "investor conference" wherein the potential agriculture and infrastructural projects could be marketed to potential investors. Once projects have been "taken up", monitoring and review of implementation and outcomes would be important to ensure that the project delivers the required jobs and extension services agreed to up-front.

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ABBREVIATIONS	
AfDB	African Development Bank
AsDB	Asian Development Bank
CIT	Countries in Transition
CPA	Comprehensive Peace Agreement
CV	Coefficient of Variation
DDR	Doha Development Round
DRC	IDB Data Resource Centre
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
GCC	Gulf Cooperation Council
ICBA	International Centre for Biosaline Agriculture
ICC	International Criminal Court
IDB	Islamic Development Bank
IFAD	International Fund for Agriculture Development
KAI	King Abdullah Initiative for Saudi Investment in Agriculture
LDCs	Least Developed Countries
LDMCs	Least Developed Member Countries
LIFDC	Low-Income Food-Deficit Countries
MCs	Member Countries
MDB	Multilateral Development Banks
MENA	Middle East and North Africa
MENASA	MENA and South Asian
MIWR	Ministry of Irrigation and Water Resources
OFAC	Office of Foreign Asset Control
OIC	Organization of Islamic Conference
SSA	Sub-Saharan Africa
TA	Technical Assistance
UN COMTRADE	United Nations Commodity Trade Statistics Database