# **II. TRENDS AND DRIVERS**



### 2.1. THE BACKDROP: GOVERNMENT SUPPORT AND FDI IN AFRICA

#### A fast-evolving context: Increasing FDI flows to Africa

Trends in large-scale land acquisitions for agricultural investments must be placed within the broader context of expanding economic relations between Africa and the rest of the world. Over the past decade, economic liberalisation, the globalisation of transport and communications, and global demand for food, energy and commodities have fostered foreign investment in many parts of Africa – particularly in extractive industries and in agriculture for food and fuel.

In 2007, FDI to sub-Saharan Africa amounted to over US\$ 30 billion, a new record level – up from the records of about US\$ 22 billion in 2006 and US\$ 17 billion in 2005 (UNCTAD, 2008a; see Figure 2.1). The distribution of FDI flows and stocks is highly uneven, shaped by cross-country differences in resource endowments. Big shares of investment are concentrated in countries with important petroleum and mineral resources, such as Nigeria. But while investment flows to some countries have stagnated (e.g. Cameroon), countries like Ethiopia, Ghana, Mozambique, Sudan, Tanzania and Zambia, that received little foreign investment until the early 1990s, now host sizeable stocks of foreign investment (UNCTAD, 2008a; see Figure 2.2).



Data source: UNCTAD (2008a)



Data source: UNCTAD (2008a)

It is quite possible that these trends may be reversed by the ongoing slowdown in the global economy. The current financial crisis and economic downturn may affect capital availability, attitude to risk and world commodity demand. But, in the longer term, the structural factors underpinning increased investment (some of which are discussed in the next section) are likely to stay.

Given Africa's resource endowments, natural resources are at the heart of FDI flows to the continent. Increases in investment flows are directly linked to global demand for energy and commodities such as oil, gold, copper, aluminium and nickel (UNCTAD, 2008b). Growing interest in Africa's petroleum and minerals, exemplified by recent large-scale projects like the Chad-Cameroon oil development and pipeline project, is linked to fluctuations in global commodity prices and Western efforts to diversify supplies. The perceived availability of land in Africa has attracted the attention of governments eager to ensure security of food and fuel supplies, and of investors eager to tap into global demand for food and fuel – as discussed later in this report.

#### The range of government-backed FDI

Governments play a range of roles in promoting investment overseas – including with regard to land acquisitions. Much reporting of international land deals is vague on the institutional and financial details of deals. Arrangements are complex, and need to be analysed in detail to develop an

informed understanding of the role of home governments. While an accurate typology is not possible, the forms of government involvement in land deals includes the following types:

- 1. **Direct land acquisition by central government agencies:** Although this model appears rare, there are documented cases of the central government, represented for instance by the Minister of Agriculture, acquiring land in a foreign country through a high-level deal with the relevant host country minister.
- 2. SWF investments: Many SWFs have shifted in the past couple of years away from purely portfolio investments towards direct investments in foreign assets. Most commonly, this involves acquisitions of minority shares in foreign public-listed companies. Direct investments in foreign land assets are less common, although some cases are discussed below. SWFs may operate though a subsidiary operational company, or through entering into shared-governance joint ventures with private sector companies or with other governments' state-owned enterprises (SOEs) or investment funds.
- 3. **State-owned enterprises and other non-SWF equity shares:** Many states own or partner in enterprises through investment sources other than SWFs. Broadly speaking, a majority stake or whole ownership by the state classifies a business as an SOE. But the definition of an SOE is complicated by differing policy circumstances among countries and discontinuities between business ownership and business governance, and will be further discussed below.
- 4. Support to private sector in investor and host countries: Governments have a number of vehicles beyond equity stakes for providing financial and non-financial assistance to private sector and state-owned companies in their countries. Some governments have established development funds that provide financial services such as subsidies, soft loans, guarantees and insurance to both SOEs and other companies (e.g. the Abu Dhabi Fund for Development). Government agencies also provide a range of informational, technical and bureaucratic support to the private sector in investor and host countries. Examples of these agencies include export credit agencies in investor countries and investment promotion agencies in host countries.

FIGURE 2.3. TYPOLOGY OF RELATIONSHIPS AMONG INVESTMENT VEHICLES, ENTERPRISE MODELS AND LAND HOLDERS IN LAND INVESTMENTS IN AFRICA



boxes show the wide variety of government and private sector mpression (not quantitatively mportant role of government nvestment vehicles and land VB: The size of the boxes for quantitatively accurate). The non-equity financial support practice. The weighted lines government land deals. The indicate the more prevalent arrangements is shown as a variation from government dashed lines represent the oles in these investments. gradation, to illustrate the nvestments in Africa. The many connections among providing loans and other accurate) of their relative arrangements (again, not possible and are seen in considerable overlap in arrangements that are development funds in nolders gives a visual mportance in land to both private and through to private

5. Framework agreements and national policy: Even in purely private investment projects, governments play a role through establishing the regulatory framework that governs the investment – including through national legislation in home and host states and through framework government-to-government agreements such as bilateral investment treaties (BITs) and cooperation agreements in agriculture. These intergovernmental agreements may be part of broader bundles of development aid, non-financial assistance and business involvement.

The categories above are not distinct but rather overlap and reinforce each other. A typical process of government-backed FDI may begin with government-to-government dialogue and fact-finding missions, leading to a broad, non-binding statement of partnership intent. This may pave the way to individual investment projects led by SOEs, joint ventures and other companies, each based on more specific legal agreements. All of these will have access to various forms of financial and non-financial support in the investor and host countries. SWFs may have equity shares in the SOEs or joint ventures. The implementation of deals signed between governments may be driven by private operators, either from inception or as part of subsequent efforts to regain momentum. The upshot is a very wide range of combinations of public and private finance and governance. Figure 2.3 opposite provides a simplified summary to show the diversity of arrangements.

The next few sections provide additional clarification on three of the forms of government involvement discussed above: SWFs, SOEs and framework agreements.

#### Sovereign wealth funds and FDI

SWFs are unusual as a government institution, in that their management is largely market-oriented, but also unusual in the financial sector because of their government ownership. The International Working Group on Sovereign Wealth Funds (IWG) of the IMF defines SWFs as follows:

"[S]pecial purpose investment funds or arrangements, owned by the general government. Created by the general government for macroeconomic purposes, SWFs hold, manage, or administer assets to achieve financial objectives, and employ a set of investment strategies that include investing in foreign financial assets. The SWFs are commonly established out of balance of payments

surpluses, official foreign currency operations, the proceeds of privatisations, fiscal surpluses, and/or receipts resulting from commodity exports".<sup>8</sup>

The key features of SWFs are government ownership, financial objectives (rather than e.g. traditional balance of payments purposes), and separate management from other government funds.

Estimates of the aggregate value of SWFs range from US\$ 1.9 trillion to US\$ 3.5 trillion. UNCTAD's World Investment Report (2008a) estimated that, in 2007, SWFs' foreign direct investment was only US\$ 10 billion, which approximately accounts for 0.2% of their aggregate assets and 0.6% of total FDI flows in that year. In contrast, private equity funds' FDI was US\$ 460 billion in that year. However, of the US\$ 39 billion investments abroad by SWFs over the past two decades, as much as US\$ 31 billion was committed in the past three years (UNCTAD, 2008a).

The size, institutional mandate, governance structure and investment policies of SWFs (from the Gulf to East Asia through to Norway) are extremely diverse, which requires caution in generalising. Various stakeholders, from central banks through to non-governmental organisations (NGOs), have recently voiced concerns about the governance of SWFs and their roles in international investment (e.g. Gieve, 2008; Truman, 2007; Singh, 2008). With regards to FDI, concerns include use of investment as vehicle for foreign policy, unacceptable influence over host country economies, particularly in strategic industries, and lack of transparency, with the perception that SWFs have access to routes of influence and other advantages not open to the private sector.

On the other hand, there are also reasons why SWF investment may be especially attractive to host countries. Compared to private equity, SWFs invest with longer time horizons, higher risk tolerance, more stability (fewer calls on capital) and greater readiness to make counter-cyclical investments. For example, SWFs had an important role in purchasing and stabilising shares in financial institutions in 2008. During recent months, however, SWFs have themselves become more risk-averse in response to the trenchant downturn in capital markets.

Both the Organisation for Economic Co-operation and Development (OECD) and the IMF have stepped in to provide guidance on SWFs. The main outcome

<sup>8.</sup> See www.iwg-swf.org

of the OECD's Freedom of Investment project in 2008 was four principles to guide host countries in regulating SWF investments so that they address national security concerns without removing opportunities for investment by SWFs. In October 2008, the IWG of the IMF presented 24 voluntary principles for SWFs, dubbed the "Santiago Principles", covering various aspects of SWF governance (see www.iwg-swf.org). The next step of the IWG will be to convene a Standing Group of Sovereign Wealth Funds.

#### State-owned enterprises and FDI

The exact definition of an SOE varies from country to country, but in broad terms SOEs are profit-making entities registered under company law that are majority or wholly owned by the state. Their profit motive differentiates them from other semi-autonomous parastatal bodies such as energy supply boards or universities, but the profit motive often sits alongside other roles in the national economy such as price stabilisation or provision of employment.

The world's largest SOEs are predominantly oil and gas companies such as Saudi Aramco (Saudi Arabia), Petroleas Mexicanos (Mexico) and the Kuwait Petroleum Corporation. A number of these, such as Petronas (Malaysia), are important outward investors. SOEs are also significant beyond the lucrative oil and gas sector. EDF (France), Deutsche Post (Germany) and Volkswagen (Germany) are examples of major foreign direct investor SOEs. Virtually all of the top 30 Chinese multi-national enterprises are state-owned. Between 2003 and 2005, 80-85% of Chinese international FDI flows and stock were accounted for by SOEs (Cheng and Ma, 2007).

The boundaries between "state" and "non-state" enterprises may be fuzzy, as illustrated by the Chinese case. There are two aspects to this discussion: state ownership and state influence. In China, corporations emerging from the centrally planned economy such as COFCO (China National Cereals, Oils and Foodstuffs Import and Export Company) are clear SOEs: senior staff are appointed by the state, and chief executive officers have ministerial level rank. In other cases, however, it is less easy to distinguish whether a Chinese firm is "public" or "private". Many companies do not disclose clear information on equity structure, which makes it difficult for outsiders to be precise about ownership. An apparently private company may by controlled by a state-owned, unlisted parent company.

In addition, there is likely to be significant state influence over strategic private firms, or put another way strategic companies flourish because of their formal and informal links to key state agencies. Such companies benefit from access to special credit lines, tax breaks, and possibly favourable interpretation of regulations and priority in allocation of key contracts. Key private companies in China will also have internal Communist Party committees, which are likely to encourage close accountability to the state. While such firms are operationally independent, on red flag issues they are likely to adhere closely to government policy, or informally specified objectives.

#### Framework agreements and FDI

Land deals may be facilitated by the enabling environment provided by BITs, framework cooperation agreements for agriculture, and other government-to-government deals.

Though the content of BITs varies, they usually provide legal protection to investment by nationals of one state party in the other state. They typically define investment very broadly, which would cover investment in agriculture including land acquisitions. Their provisions usually include safeguards against discrimination, expropriation and arbitrary treatment, provisions on profit repatriation and currency convertibility, and access to international arbitration as the mechanism to settle investment disputes. Recent years have witnessed a boom in BITs in Africa. By December 2006, African countries had signed 687 BITs, up from 193 in 1995.<sup>9</sup> The seven countries covered in this study signed a total of 71 treaties since the year 2000, compared to 5 in the 1960s and 42 in the 1990s (see Figure 2.4).

Agricultural cooperation agreements tend to encourage technical cooperation, joint research and exchange of information and experience. They may also be specifically worded to encourage private sector investment in agriculture. Examples are article 5 of the Memorandum of Understanding for the Cooperation in Agriculture between Lebanon and Sudan;<sup>10</sup> and article 4 of the Framework Cooperation Agreement between Mali and Portugal.<sup>11</sup>

<sup>9.</sup> UNCTAD (2008b: 24 and 26). These data include North Africa.

<sup>10.</sup> Signed on 29 November 2003, on file with the authors.

<sup>11.</sup> Signed on 14 September 1999, on file with the authors.



Data source: UNCTAD World Investment Report online database

Beyond legal instruments, the role of government-to-government diplomacy in promoting economic relations is also exemplified by the recent "Africa summits" hosted by China (November 2006), the EU (December 2007), India (April 2008), Japan (May 2008) and South Korea (October 2008). Significant government involvement in recent or planned international events also reflects growing interest from Gulf countries – such as the Gulf-Africa Strategy Forum, convened by the private independent think tank Gulf Research Centre and held in Cape Town in February 2009, and the forthcoming Joint Afro-Arab Ministerial Meeting on Agricultural Development and Food Security, which will be hosted by the African Union and the Arab League in October 2009.

Inter-governmental arrangements may evolve into committed partnerships underpinned by mutual financial stakes. For instance, under the 2002 Special Agricultural Investment Agreement between Syria and Sudan (see Table 1.1), the government of Sudan grants to the government of Syria a 50-year lease over a land area of 30,000 faddan (about 12,600 ha) in Al-Gezeera state (articles 2 and 3); the preamble of this deal explicitly refers to its being a "practical step" to execute the Agreement for Cooperation in Agriculture, signed between the two governments in 2000, while article 1 refers to the investment treaty between the two states. In these cases, international treaties complement project-specific contractual arrangements, so that the content of the latter can only be properly understood in light of the former – as will be discussed below.

### 2.2. TRENDS IN LARGE-SCALE LAND DEALS IN AFRICA: THE MEDIA VIEW

The past 12 months have witnessed a major increase in *reported* international land deals, particularly in domestic and international media. In late 2008, the NGO GRAIN compiled a valuable forerunner research report, collating materials from the media and other third-party sources (GRAIN, 2008). GRAIN is continuing this process with a web-based depository of emerging stories on land acquisitions (http://farmlandgrab.blogspot.com/). The International Land Coalition maintains a similar web-based resource, "Commercial Pressures on Land", for its members.

Media reports are of varying quality and reliability. A careful analysis of the more credible reports provides some insights on trends and players. Certain East Asian (China, South Korea) and Gulf (Saudi Arabia, Qatar, United Arab Emirates) states emerge as key sources of investment. Dependence on food imports and availability of major official reserves (SWFs from oil revenues or trade surpluses) are common characteristics – with the exception of some East Asian countries where import dependency does not seem to be a main driver (see Box 2.1). Private investors from the European Union (EU) and the United States (US) are also active in land investment, though have featured in fewer headlines in the international press.

According to media reports, Sudan, Ethiopia, Madagascar and Mozambique are among the key recipients of FDI in land in Africa. Outside Africa, Pakistan, Kazakhstan, Southeast Asia (Cambodia, Laos, Philippines, Indonesia) and parts of Eastern Europe (e.g. Ukraine) appear to be significant recipient countries. Relative geographical and cultural proximity to some of the key investor countries appears to play a role, notably with regard to a band of countries around the Gulf (Sudan, Pakistan, Central Asia).

These recipient countries vary greatly in GDP, relative importance of agriculture in the national economy, legal frameworks regulating land and investment, and government capacity to negotiate deals with incoming investors. Some key recipient countries are food importers themselves (e.g. Sudan). As a result of these differences, the characteristics and reverberations of international land deals are likely to diverge.

Media reports highlight the spectrum of government backing behind land transactions: SWFs and other direct investments, support through loans and guarantees, and overarching support through policy and bilateral agreements. There is no single dominant model for financial and ownership arrangements, but rather a wide variety of locally specific arrangements among government and the private sector as illustrated in Figure 2.3. Examples of the many reported cases are given below to illustrate the breadth of arrangements.

#### SWFs and government-to-government deals

Sovereign funds, despite some international concerns about their increasing role in asset acquisition, do not emerge as the main mechanism through which governments promote land acquisitions abroad. Examples of direct investment in foreign land by SWFs seem isolated, and usually far from the top end in terms of land area size – though indirect SWF involvement in land deals through equity participation in more directly engaged companies is difficult to measure.

An example of significant SWF involvement in the sector is provided by the Qatar Investment Authority (QIA), which pursues joint ventures with foreign host governments using an interesting co-ownership, risk-sharing model not yet seen in other SWFs and government investment vehicles. Outside the African context, the QIA has reportedly established one-billion dollar joint venture funds with the governments of Indonesia and Vietnam (contributing 85 and 90% of the finance, respectively), in order to support investment in a range of sectors including agriculture (National Portal Republic of Indonesia, 2008; and Reuters, 2008c). Similar deals are reported to be under discussion between the QIA and the governments of Malaysia (The Star, 2009) and of the Philippines (Pañares, 2008). QIA is also reported to have been involved in the negotiation of land deals in Sudan (GRAIN, 2008). Other direct land investments by SWFs are noted in Table 2.1 (see page 36).

In some cases, land deals have been signed directly between two governments, rather than through subsidiary bodies like SWFs. One verifiable example is the 2002 Special Agricultural Investment Agreement between Syria and Sudan, mentioned above – which involves a 50-year lease by the government of Sudan to the government of Syria.

# TABLE 2.1. EXAMPLES OF AGRICULTURE-RELATED DEALS BY SWFs REPORTED IN THE MEDIA

SWF	Key project information	Status	Source
Qatar Investment Authority (QIA), Qatar	Joint venture fund, Indonesia	Established	National Portal Republic of Indonesia (2008)
Qatar Investment Authority (QIA), Qatar	Joint venture fund, Vietnam	Established	Reuters (2008c)
Qatar Investment Authority (QIA), Qatar	Joint venture fund, Malaysia	Negotiation	The Star (2009)
Qatar Investment Authority (QIA), Qatar	Joint venture fund, Philippines	Negotiation	Pañares (2008)
Kuwait Investment Authority, Kuwait	Approached several countries in South East Asia to discuss potential for long-term investment in agriculture and other sectors	Negotiation	Reuters (2008d)
Libya Africa Investment Portfolio (LAP), Libya	Partnership with a local organisation Foundation for Africa Development Aid, Liberia for the production of rice in Liberia	Concession agreement signed, subject to revision and ratification by parliament	http://adalap.co m/ and The Analyst (2007)
Libya Africa Investment Portfolio (LAP), Libya	Through a subsidiary, to develop 100,000 ha in the Office du Niger, the land area with highest agricultural potential in Mali	Deal signed	Clavreul (2009)

#### State-owned enterprises

State-controlled entities other than sovereign funds may be more significant players than SWFs in international land deals. SOEs with sectoral expertise in agribusiness are in some cases investing in primary agricultural production in foreign countries. For example, the Zad Holding Company, a state-owned firm from Qatar, is reported to be involved in the formation of a joint holding company to produce food in Sudan for export to Arab markets (Sudan Tribune, 2008b). In September 2008, Dubai World, a government-controlled conglomerate, created a new subsidiary targeting global investments in natural resources ("Dubai Natural Resources World"); this has in turn set up subsidiaries to handle investments in three sectors, including a company to handle "agrarian investments" (Dubai World Media Centre, 2008). Chinese SOEs have been involved in discussions about land acquisition in Africa. Wuhan Kaidi, a power company, is currently involved in negotiations over a land concession in Zambia for jatropha cultivation.<sup>12</sup> COFCO, the state-owned grain and oilseed trading company, was involved in discussions for a major land concession to grow rice and soybeans in Mozambique, though at present this deal has not progressed.<sup>13</sup>

However, as yet there are no known examples of Chinese land acquisitions in Africa in excess of 50,000 hectares where deals have been concluded and project implemented. China's "Friendship Farms" in various African countries are formally owned by a Chinese parastatal organisation, but are mostly medium scale, usually below 1000 hectares.

Beyond Africa, Chinese SOEs have been involved in acquisition of land for key agricultural commodities. Examples include Yunnan Rubber, a former state farm, which has reportedly acquired 160,000 hectares in Laos for rubber cultivation (Weiyi Shi, 2008). Sinopec, one of China's nationally owned oil companies, is reported to be discussing with an Indonesian enterprise setting up biofuel plants and growing energy crops in Indonesia, with an investment of US\$ 5 billion (Biopact, 2008).

#### Private sector and government-private joint ventures

While acknowledging the variety of government-to-government deals above, most reported international land deals involve the private sector. There has been extensive media coverage, for example, of a 1.3 million ha deal between the South Korean company Daewoo Logistics and the government of Madagascar. The deal was reported to involve the acquisition of land in the west and east of the country to grow maize and oil palm mainly for export to South Korea, though the deal subsequently ran into trouble and was then officially cancelled by the new government of Madagascar (e.g. Africa-Asia Confidential, 2008; Blas, 2008; Jung-a *et al.*, 2008; Olivier, 2008; Reuters, 2008a; BBC, 2009).

<sup>12.</sup> Interview with Biofuels Association of Zambia, 14 April 2009; Lusaka Times (2009).

<sup>13.</sup> Interview with a technical consultant for COFCO, 25 March 2009.

Major private land deals that have actually reached conclusion have involved both agrifood companies and biofuels developers. Examples of the former include:

- A consortium of Saudi agricultural firms called Jenat recently announced plans to invest US\$ 400 million into food production in Sudan and Ethiopia, following investments in 10,000 ha of barley, wheat and livestock in Egypt according to company sources (Reuters, 2008f and 2009c);
- Another private Saudi consortium recently announced a lease of unspecified size in Ethiopia (Reuters, 2009d);
- The pan-African conglomerate Lonrho acquired 25,000 ha of land in Angola, and is negotiating major land deals in Mali and Malawi (Burgis, 2009).

As for biofuels, GEM Biofuels plc gained exclusive rights for 50 years over 452,500 ha in Southern Madagascar to plant jatropha for biodiesel production (Reuters, 2008a). In addition, UK energy company CAMS Group announced in September 2008 that they had acquired a lease over 45,000 hectares of land in Tanzania for investments in sweet sorghum production for biofuels, through equity financing and lending from a commercial bank in London (Reuters, 2008e).

Interestingly, private operators include not only agribusiness firms, but also investment funds, for example in a reported land acquisition in Southern Sudan by US-based Jarch Capital (Blas and Wallis, 2009). Recent announcements of new specialised investment vehicles suggest that the number of investment fund land deals may increase in future, including both Western funds (e.g. BlackRock and Emergent Asset Management Ltd; Henriques, 2008) and Gulf funds (e.g. Abu Dhabi-based Al-Qudra Holding; Blas, 2008).

Media reports also provide examples of government backing for privately led deals. Saudi Arabia's "King Abdullah Initiative for Saudi Agricultural Investment Abroad" supports agricultural investments by Saudi companies in countries with high agricultural potential, with a view to promoting national and international food security. Strategic crops include rice, wheat, barley, corn, sugar and green fodders, in addition to animal and fish resources.<sup>14</sup>

<sup>14.</sup> http://www.mofa.gov.sa/Detail.asp?InSectionID=3981&InNewsItemID=88796.

The Saudi Arabian company Hadco reportedly acquired 25,000 ha of cropland in Sudan (Blas and Wallis, 2009), with 60% of the project's cost coming from the governmental Saudi Industrial Development Fund (Reuters, 2009a). Similarly, the Abu Dhabi Fund for Development is financing the development of 28,000 ha of farmland in Sudan to grow alfalfa for use as animal feed, and probably maize, beans and potatoes for export to the United Arab Emirates (Rice, 2008).

#### Is there a scramble for land in Africa?

While media reports provide numerous examples of a wide range of international land deals, they in themselves say little about scale and trends. Without a large-enough pool of systematic and reliable data, it is hard to quantify the scale of recent land acquisitions, and assess the extent to which these are on the rise. Whether information about international land deals filters through the media seems largely due to contingent circumstances. The Daewoo deal in Madagascar received wide media coverage due to the investor's decision to go public at a press conference. But other major land acquisitions in Madagascar, such as the GEM acquisition of almost half a million hectares, received surprisingly little attention among international media in spite of press releases (e.g. Reuters, 2007; Reuters, 2008f; Biopact, 2007) and public sharing of information on the part of the investor.<sup>15</sup>

In addition, there is a big difference between announcing plans and actually acquiring land – let alone starting to cultivate it. In the short term, high-level negotiations and announcements do not necessarily translate into sizeable changes in land access and use on the ground. The reasons for this are varied: first and foremost, the time lag separating the negotiation of a framework deal, the transfer of land rights, and agricultural production (which is often phased, so that even a very large project may initially involve cultivation of a relatively small land area); but also possible changes of plans linked to political risk (as in the Daewoo deal) or to evolving contexts.

Finally, although some recently reported deals are of unprecedented scale, it must be borne in mind that large-scale land acquisitions are not a new phenomenon. In the past, land was commonly acquired by foreign investors, for instance to produce rice (Lonrho) and rubber (Firestone). At a

<sup>15.</sup> Such as a presentation at the Biofuels Markets East Africa Conference in Dar es Salaam, 17-18 September 2008 (Benetti, 2008).

smaller scale, South African farmers have been acquiring land in Zambia, Mozambique and Tanzania for decades. Large domestic players have also acquired land in the past, for example to produce pulp (e.g. Mondi in South Africa). This makes it even more difficult to establish whether the past few years have witnessed an acceleration in land acquisitions (by project numbers or overall land area) based on media reports alone. Quantitative research on the scale of the phenomenon is therefore particularly useful.

### 2.3. EVIDENCE FROM QUANTITATIVE STUDIES IN FIVE AFRICAN COUNTRIES

The national inventories undertaken for this study shed some light on the scale of land acquisitions. Before analysing these, however, it is important to re-emphasise the limitations of this research. Government agencies were the primary source of information. The extent to which this information could be cross-checked with qualitative interviews varies across countries. It may very well be that a share of international land deals are not reflected in government statistics. In Ethiopia, for example, enquiries at the state-level Oromia investment promotion agency found evidence of some 22 proposed or actual land deals, of which 9 were over 1,000 ha, *in addition* to the 148 recorded at the national investment promotion agency. It is possible to speculate that state-level agencies in other Ethiopian states may also have records of additional projects,<sup>16</sup> and that some land acquisitions may not have been recorded at all.

Also, while the Ethiopian investment promotion agency has developed a relatively effective system to record and store data about land deals, its counterparts in Madagascar, Mali and Ghana seem to have far less complete and reliable systems. As a result, country teams had to rely to a greater extent on other sources of information, which tend to be less systematic and complete. In Madagascar, constraints in access to data on domestic investment, mainly due to political reasons, are likely to have skewed the dataset towards FDI. In Ghana, research relied heavily on data from the Free Zones Board, which may not capture all land acquisitions – and indeed a

<sup>16.</sup> Though Oromia is seen as the hotspot for agricultural investment and land acquisition.

recently reported acquisition was not registered with the Board.<sup>17</sup> It is therefore possible that cross-country variation in numbers of deals reflects differences in availability of data, in government determination to collect and store it (possibly linked to the extent of the government involvement in economic relations), in government capacity to do so effectively, and in its willingness to share data with researchers – as well as differences in real-world land deals.

Finally, datasets tend to be incomplete, which translates into gaps in the analysis. For example, in Ethiopia information about the land size of many deals proposed or concluded in 2008 was missing. In Sudan, where the study relied on information posted online by the investment agency, the dataset is even more incomplete than in the other countries.

More generally, official government statistics are likely to lag behind realworld negotiations for proposed deals – and even more so with regard to the recent announcements of new funds for *future* land acquisitions, discussed above. Much of the ferment highlighted by the above press review is likely not to be fully captured in publicly available government data. This may explain some of the discrepancies we found between media reports and official government data. For example, an investment by German company Flora EcoPower in Ethiopa was reported to involve 13,000 ha (Reuters, 2009e), while it is recorded at the Ethiopian investment promotion agency for 3,800 ha only. A recent 400,000 ha deal in Sudan, reported in the media (Blas and Wallis, 2009), is absent from Sudan's public available government statistics.

#### Size and trends in land investments

All these caveats notwithstanding, data from the national inventories suggest that total *approved* land allocations for investment in agriculture (whether FDI or domestic investment, privately or state-led) over the period 2004-2009 are significant. The national inventories have documented an overall total of 2,492,684 ha of allocated land in the five quantitative study countries, excluding allocations below 1000 ha and pending land applications. Country-specific figures reach a total of over 803,414 ha in Madagascar, with Ethiopia and Sudan following suit (see Figure 2.5 and Table 2.2). Given the incompleteness of the study's datasets and the likelihood that many deals may

<sup>17.</sup> Namely, 100,000 acres acquired by Sequoia Energy for a biofuel project (Barlow, 2008).



Data source: country studies

# TABLE 2.2. LAND UNDER INVESTOR CLAIM 2004-EARLY 2009(APPROVED PROJECTS ONLY)

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	Ethiopia	Ghana	Madagascar	Mali	Sudan	Total
Total land area allocated (ha)	602,760*	452,000*	803,414*	162,850*	471,660*	2,492,684*
No. of projects approved (over 1000 ha)	157	3*	6*	7*	11*	184*
Largest land allocation (ha)	150,000	400,000	452,500	100,000	109,200	
Total investment commitments (US\$)	78,563,023*	30,000,000*	79,829,524*	291,988,688*	439,600,000*	919,981,235*

Data source: country studies; \* denotes incomplete data

not be reflected in them, these data should be seen as conservative figures. Levels of activity appear significantly higher once pending land applications are included. Approved land allocations constitute varying shares of each country's total suitable land – which is a country's total land area suitable for rain-fed agriculture (Bot *et al.*, 2000; FAO, 2003; FAO, 2009 – see Figure 2.5).<sup>18</sup>

Significant levels of investment have been committed in all study countries (Table 2.2). Overall investment commitments documented in the five quantitative study countries amount to US\$ 919,981,235. This amount is likely to underestimate investment levels for projects included in the national inventories, as data on investment commitments presented significant gaps. Data access constraints also prevented an analysis of actual investment flows for documented projects so far. Cross-country mis-matches between aggregate figures on investment commitments and on allocated land (for example, with Mali receiving higher levels of investment for lesser land than the other countries) must be read with great caution: for each project, investment levels depend on project-specific variables linked for instance to the crop system, the business model, and existing ecological and infrastructural conditions.

The significance of this level of land allocations can only be properly understood once investor claims are placed in their broader context. Land availability varies across the study countries (as will be discussed in section 2.5 below), and land allocations that look small in relation to the overall national territory can still be very significant where they concentrate on the possibly much more limited areas of higher-value land (more fertile land, land with greater irrigation potential or easier access to markets). In addition to outside investment, pressure on the land may also be growing as a result of other forces, including population growth (see section 2.5) and demand for land from smallholders increasingly engaged in commercial agriculture. Equal land areas allocated to outside investment are likely to have different implications in local contexts with varying levels of land competition. Water scarcity may be a constraint even where land is available, and priority in water use may prove a source of conflict.

Obtaining geo-referencing for approved and proposed land deals proved difficult in most country studies, though in Ethiopia data obtained by the country team enables plotting investment amounts and land area sizes by region against FAO data on land suitability (see Map 2.1). The map suggests

<sup>18.</sup> Irrigated agriculture may be found – and often is – in land which is unsuitable under rain-fed conditions.







Data source: country studies. Approved projects only. NB: Sudan projects are not represented as data is not disaggregated by year of approval.



Data source: country studies. Approved projects only. NB: Sudan projects are not represented as data is not disaggregated by year of approval.

that documented land deals tend to concentrate in regions with more fertile lands and/or closer links to markets. This mapping exercise only gives a broadbrush picture of the spatial distribution of land deals, however. Far more detailed, project-specific geo-referencing would be needed in order to accurately plot land deals against data on land suitability.

Data from the national inventories suggest an upward trend for project numbers and allocated land, for instance in Ethiopia, Madagascar and Mali. But while cumulative figures display such upward trend, some annual data show a less clear-cut picture involving year-to-year fluctuations (in Ethiopia and Madagascar). Increases in land deals feature over the entire duration of the study period (2004-2009), though Ghana and Mali seem to have experienced an acceleration over the past couple of years (see Figures 2.6 and 2.7).

Lack of data disaggregated by year prevents a trends analysis for Sudan. But large-scale land acquisitions in this country are not new, particularly with regard to investment from Gulf countries. The Arab Organisation for Agricultural Development (AOAD), based in Khartoum, was created in 1970 for the purpose of identifying and developing links among Arab countries, and coordinating agriculture-related activities among members. Its Director-General recently said he believed that Arab nations had the potential to feed themselves through international land acquisitions, saying "I am convinced that if there is a real interest and seriousness by investors in the farming sector, then the whole Arab World needs of cereal, sugar, fodder and other essential foodstuffs could be met by Sudan alone" (Kawach, 2009).

#### **Ownership of investments**

The national inventories gathered data about equity ownership for documented investment projects. Data access constraints made it difficult to establish what percentage of private sector-led deals involves government backing through mechanisms other than equity participation, such as soft loans or insurance schemes. Even with regard to ownership, it is possible that indirect government participation, for instance through equity in the chain of parent and subsidiary companies, may not have been detected.

Results from Ethiopia, Ghana, Mali and Madagascar indicate that, in terms of allocated land area, the major share of approved investments are made by private companies rather than state-owned entities, though state agencies do account for a sizeable proportion of total allocated land (see Figure 2.8).



Data source: country studies; absolute figures reflect known cases. NB: Data does not include Sudan due to lack of information relating to investor profile.



Data source: country studies; absolute figures reflect known cases. NB: Data does not include Sudan due to lack of information relating to investor profile.

The extent of this varies across countries. While in Ethiopia and Madagascar all documented investments are privately owned, Mali hosts major governmentbacked investments, including a 100,000 ha land allocation to a subsidiary of an SWF based in Libya, and an 11,000 ha allocation to a regional organisation of which Mali is a member (UEMOA).

Figure 2.8 suggests that the share of government-owned investment is higher for investment commitments than for allocated land. This raises the interesting question of whether investments involving government participation in equity might tend to be associated with higher levels of investment per hectare. This question is complicated by two factors. First, as with cross-country variation in investment/land area ratios (see above), caution and more research are needed, as land area sizes and investment commitments crucially depend on the economics specific to each individual project, and the pattern suggested by Figure 2.8 may not be statistically significant. Second, projects involving government or inter-governmental agencies might be more frequently tied to development aid goals, blurring the border line between pure investments and aid interventions. In Figure 2.8, the public-private split in investment commitments is affected by some large, capital-intensive projects in Mali that are mainly driven by local development or food security considerations (such as the UEMOA deal and a project funded by a US donor). The same issues would apply to Gulf-based government development funds that provide loans or insurance to private investments, or to the tying of investment and aid-funded infrastructure undertaken by some Middle Eastern or East Asian operators.

A comparison between the shares of FDI and domestic investment in Ethiopia, Ghana, Madagascar and Mali suggests that the majority of the investment involves FDI (see Figure 2.9). In Madagascar, all documented projects involve foreign ownership of domestic subsidiaries – although as discussed this may be partly caused by the lack of publicly available information on the significant agribusiness projects owned by domestic investors with political prominence.

But a less expected finding is the extent to which national individuals and companies are also acquiring land in certain countries – an aspect virtually absent in much media reporting. In Ethiopia, domestic investors account for the large majority of agricultural projects, adding up to 362,000 ha and US\$ 54 million compared with 240,000 ha and US\$ 24 million for FDI.

The picture does not change much if only land deals over 5,000 ha are considered: Ethiopian projects still cover 286,000 ha and US\$ 12.6 million, compared with FDI of US\$ 10.8 million and 210,000 ha.

These findings match evidence about widespread land acquisitions by national elites and urban middle classes in several African countries. It would be interesting to document the extent to which acquisitions by nationals are driven by the hope to subsequently partner up with a foreign investor, using the land as a negotiating chip. The Jarch Capital deal in South Sudan seems interesting in this respect: the US investment company is reported to have acquired, through its related company Jarch Management, a lease over 400,000 ha of land by taking a 70% stake in the South Sudanese company LEAC for Agriculture and Investment Co Ltd. The Sudanese company is controlled by the son of a high official in the Sudan People's Liberation Army, and had in turn obtained most (though not all) the land area from the government (Blas and Wallis, 2009; Reuters, 2009b).

#### **Crops and markets**

The national inventories suggest that food projects in the quantitative study countries account for the majority of allocated land areas and, even more so, investment commitments, but that biofuels also constitute a significant share of both (see Figure 2.10). Attractiveness of biofuels as an investment option varies widely among African countries. In Ethiopia, 98% of the projects recorded at the investment promotion agency involve food production, compared to only 2% for biofuels (though in terms of land area the split is slightly different: 94% versus 6%). On the other hand, the qualitative case studies undertaken for this research suggest that countries like Mozambique and Tanzania have more enthusiastically embraced the biofuels boom.

A final point worth mentioning is market outlets. Country study findings in this regard are mixed – most allocated land is for export-oriented cultivation in Madagascar and for domestic consumption (and regional export) in Mali, while Ethiopia displays a combination of these. Incomplete data sets prevent us from getting a full picture for Sudan, though the limited data available does suggest that export-driven agriculture plays a key role (Figure 2.11). In aggregate terms, exports dominate biofuel production, while for agri-food the picture is more nuanced (Table 2.3).



Data source: country studies. NB: Biofuels here means feedstocks for bioethanol and biodiesel. The borderline between food and fuel is blurred, as the same crop may be used for both or the same land cultivated with multiple crops, and as investment plans may evolve over project duration to respond to changing international prices and other incentives.



Data source: country studies

TABLE 2.3. FOOD AND FUEL, EXPORT AND DOMESTIC MARKET						
	Investment commitments (US\$)		Land area (ha)			
	Food	Fuel	Food	Fuel		
Domestic market	249,212,800	0	229,162	0		
Export >25%	44,043,257	117,430,824	517,126	1,106,300		

Data source: country studies. NB: Sudan data not included. Data for mixed output and unspecified market mix projects not included.

## **2.4. DRIVERS BEHIND THE LAND DEALS**

Several factors underpin the land acquisitions discussed in the previous section. Some countries that are highly dependent on food imports see land acquisitions overseas as part of their national food security strategy. Agricultural investment has also been associated with rising land values and increasing prices for agricultural commodities. Both of these dynamics are important, but they do not explain all cases. Precisely what combination of factors is at work in a particular land deal varies from case to case. And while the role of investors is critical, it is important not to neglect the agency of host states in attracting and encouraging investment. Some of the key drivers of the recent wave of large-scale land acquisitions are discussed below.

#### **Food security**

Over the past century or so, food prices have been in long-term decline, reflecting the expansion of agricultural frontiers and agricultural trade, increasing concentration in the retail sector, as well as innovations in production. The food price hikes of 2007 and 2008 shook the assumption that the world will continue to experience low food prices. Maize and wheat prices doubled between 2003 and 2008 (von Braun, 2008; see Figure 2.12 below). Grain and other food prices have dropped from the highs seen in the summer of 2008; but prices are still 30 to 50% above their averages over the past decade (The Economist, 2009b).<sup>19</sup> Price decreases could be a temporary



Data source: von Braun (2008)

19. The new FAO database confirms that 2009 prices are still high compared to the period since 2000, see http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/

correction, and falls in international prices have not always translated into equivalent falls in in-country prices. It is still unclear whether the world is now entering a new period of food price inflation. Some ongoing processes are fostering expectations that in the longer term food prices will continue to rise and create new incentives for investment in agriculture.

These processes relate to both global food supply and demand (Selby, 2009). On the one hand, constraints and uncertainties in food supply may be due to the diminishing agricultural production in some areas, linked to negative environmental externalities affecting soil quality and water supply. Water-intensive agriculture has (with industrial and domestic use) lowered water tables in many production systems, thereby reducing the productivity of agriculture. For example, while until recently extensive subsidies and water-intensive production made Saudia Arabia self-sufficient in wheat, imports resumed in 2007, and wheat production will be phased out completely by 2016. Progressive depletion of non-renewable fossil water in the country was a key factor in this shift (Woertz *et al.*, 2008; Woertz, 2009).

Bottlenecks in storage and distribution infrastructure may also constrain supply in the near future (Selby, 2009). Climate change is expected to exacerbate land degradation and water scarcity in many places, and to increase the frequency of extreme weather events affecting harvests. Changes in oil prices may also affect supply: oil is central to modern agriculture for its role in transport costs and in the production of nitrogen fertilisers. The oil question also links to biofuel production, an important competing land use. Production of some bioethanol or biodiesel feedstocks diverts staples into non-food use thereby affecting food supply, and results in important land use change. According to the International Food Policy Research Institute (IFPRI), "increased biofuel demand in 2000-7 is estimated to have contributed to 30 percent of weighted average increase of cereal prices" (von Braun *et al.*, 2008).

On the demand side, population growth, increasing urbanisation rates (which expand the share of the world's population that depends on food purchases) and changing diets (particularly growth in meat consumption by middle classes in large industrialising countries) appear among the factors pushing up global food demand. For example, while cereal agriculture in the Gulf countries is in irreversible decline, the population of the region will double from 30 million in 2000 to nearly 60 million by 2030. Dependence on food imports, now at 60% of

total demand, will grow as a result (Woertz, 2009). Food inflation has been a serious issue in several Gulf countries, with higher food prices driving inflation in the wider economy. Price rises are particularly problematic in relation to the large migrant blue-collar workforce in smaller Gulf states, and there are concerns about social unrest. Social unrest associated with food has affected at least 33 countries around the world during the recent food price spikes (World Bank, 2008b).

For some of the countries involved in international land deals, these food security concerns (whether shorter or longer term) are extremely significant. The acquisition of land internationally is one possible strategic choice to address the challenge. Africa is seen as a major production base, along with parts of South America and Asia. However, food security is not the only driver of land deals, and care must be taken in interpreting the motives of governments in promoting agricultural FDI. China provides an interesting case study in this respect (Box 2.1).

#### **Biofuels**

Production of liquid biofuels is a key driver of much recent land acquisition. Internationally, government consumption targets have been the key driver of the biofuels boom, as they create guaranteed markets for decades to come. Government policies have also provided financial incentives to the private sector (for example, subsidies and tax breaks). While climate change mitigation is often presented as a key policy goal, in practice more compelling reasons for governments to pursue a switch from oil to biofuels include (Dufey *et al.*, 2007):

- Energy security: with fluctuating global oil prices, countries are seeking alternative energy sources to increase long-term energy security and reduce energy import bills.
- Rural development: a new and profitable land use will provide better opportunities and long-term security for farmers and employees, as well as if processing facilities are near to farms for value-addition to profit rural areas.
- Export development: for countries with favourable endowments of land, labour and trade conditions, biofuels are an opportunity to develop new export markets and improve the trade balance.

# **BOX 2.1. COMPLEX DRIVERS FOR INTERNATIONAL AGRICULTURAL INVESTMENTS: THE CASE OF CHINA**

A common external perception is that China is supporting Chinese enterprises to acquire land abroad as part of a national food security strategy. Yet the evidence for this is highly questionable.

In 2008, in the context of the global food price crisis and serious food price inflation in China, a confidential document was drawn up by China's Ministry of Agriculture. The document argued that the country would in the future no longer be able to maintain its own food security, and that active efforts should be made to secure land concessions overseas (Anderlini, 2008). This proposal was intensely debated in China, with many analysts arguing that land acquisitions overseas was not a feasible food security strategy due to logistics and political risk.

In December 2008, the National Development and Reform Commission, China's planning agency responsible for five-year plans and long-term national strategy, announced a new 20-year food security strategy. It also explicitly stated that land acquisitions abroad would not be part of the strategy (Xinhua News Agency, 2008). The only exception to this is possibly land for soyabean cultivation in Brazil.

However, some argue that even if China is not currently acquiring land to feed itself, it is still engaging in an unofficial long-term hedging strategy, and that this has driven reported negotiations for land deals in Mozambique and Sudan (see for example, Horta, 2008). The accuracy of these reports is hard to verify, however.

In addition, China has had an explicit "Going Out" policy since 2004 – as part of a business development (rather than food security) strategy. The Chinese government has encouraged Chinese firms to invest abroad, partly to secure access to resources where Chinese demand outstrips domestic supply, and also to build robust international companies capable of competing in key sectors with leading established multinationals. This policy has been supported by a range of incentives such as tax breaks, credit, low-interest loans and customs preferences, allied to high level diplomatic support. The focus of this activity has been strategic SOEs that Chinese policy-makers see as capable of rivalling established multinationals. However, in theory smaller companies investing in land may also be able to access government support. The China Africa Development Fund set up by China Development Bank to finance China's development programme in Africa is actively looking for opportunities to support Chinese agribusiness development on the continent. It is possible that the recent decline in the oil price from the highs of 2008 may dampen enthusiasm for biofuels investments in the short-term. But given the projections of diminishing supplies of non-renewables, biofuels are likely to remain and increase as an option in the longer-term, unless policies move against encouraging further biofuel investment in response to concerns about its impact on food security.

#### Non-food agricultural commodities

Some countries depend on imports of agricultural commodities as part of their industrialisation model and their role in global production and consumption systems. Global economic growth would require secure access to these commodities where they cannot be replaced by alternatives – though the ongoing economic downturn may slow these processes. When production systems meet natural limits, new sources of supply become necessary. Commodities that are subject to this kind of pressure include rubber, cotton, sugar, coffee, cocoa, tea, soybeans and many others.

To take one example, Chinese rubber imports shot up to consume 23% of world supply in 2003 (Weiyi Shi, 2008), overtaking the US as the biggest consumer of natural rubber in the world. This has resulted in acquisition of land for rubber production in countries neighbouring China, for example Laos and Myanmar (Weiyi Shi, 2008; Gray, 2009). Not all agricultural commodities necessarily require direct investment in land, however. For example, China's cotton imports have mostly expanded through purchase on the world market, or through the involvement of Chinese companies in local markets as buyers or under contract farming arrangements – as in Zambia, where Chinese buyers have expanded operations rapidly in recent years. Cotton is however also farmed through investment in large-scale plantations in some areas (for example, Xinjiang, in Northwest China and parts of Central Asia).

#### Expectations of returns: The role of the private sector

While food and energy security emerge as key drivers of government-backed agricultural investment, private sector involvement seems mainly driven by expectations of competitive returns from agriculture or land. With agricultural commodity prices rising, the acquisition of land for agricultural production (whether biofuels, agrifood or other agricultural commodities) looks like an increasingly attractive option. In some parts of the world, FDI into agriculture has been growing for some time, particularly in Russia, Ukraine, Central and Eastern

Europe, Latin America and parts of sub-Saharan Africa. These investments are driven not by short-term considerations linked to the food price hikes of 2008, but to the expectation of returns in agriculture over the longer term.<sup>20</sup>

Traditionally agricultural value chains have tended to concentrate returns in processing and distribution, while the risks fall mainly on primary production, acting as a disincentive for investment in agriculture. Now the upward trend in commodity prices is tipping the balance by increasing the downstream risks to processors and distributors, concerned about sourcing raw materials, and boosting returns from production (Selby, 2009). This increases the attractiveness of agricultural production as an investment option, including the acquisition of land as such, but also of shares in companies holding land, producing fertilisers or otherwise involved in upstream agricultural activities (The Economist, 2009b).

Some agribusiness players traditionally involved in processing and distribution are therefore pursuing vertical integration strategies to move upstream and enter direct production – a rationale explicitly mentioned by Lonrho as justifying its recent land acquisitions in Angola, Mali and Malawi (Lonrho Plc, 2009). Entering direct production enables agribusiness firms to avoid needing to buy from the market (where market prices include a share for traders), and to secure their supply (when market price rises and export restrictions reduce supply to world markets). This may offset the high risks typically involved in holding large areas of land in foreign (and often politically unstable) countries.

Finally, in many parts of Africa land is still very cheap. As will be discussed in chapter 3, most of the land deals documented by this study involved no or minimal land fees. Yet, with productive land increasingly being perceived as scarce in many contexts (see section 2.5 below), the relative value of land is likely to increase. This may create expectations of returns not only from the profitability of agriculture, but also from increases in land values per se, for both domestic and foreign investors. This circumstance is particularly significant given that the global financial crisis has resulted in a collapse in equity and bond markets, thereby reducing the appeal of these investment options.

As for government-backed investment, there is no evidence to suggest that either China or Gulf states are primarily engaged in land investments with a view to profiting from rising land values per se. China's interest is more to do

20. Interview with an international agribusiness consultant, 23 January 2009.

with securing supplies of agricultural commodities, or with opportunities for Chinese companies to profit in regional markets (Box 2.1). In the case of the Gulf states, as we have seen, the interest is more in securing food supplies.

#### **Emerging carbon markets**

Some argue that emerging carbon markets may be fostering land acquisitions in the expectation of long-term increases in land values. Carbon markets may be relevant for afforestation projects, possibly including biofuels, and longer-term for the nascent Reduced Emissions from Deforestation and Forest Degradation (REDD) scheme that is being negotiated as part of the post-Kyoto climate change regime. Indeed, potential returns from carbon markets may increase land values. Evidence on the extent to which this is currently happening is mixed, however. REDD is still at a very early stage. This is likely to limit its potential impact on land values in the short term – though it may not deter those investors that look at longer-term returns, such as investment funds and SWFs.

Generally speaking, afforestation projects have had limited success under the Clean Development Mechanism – the arrangement under the Kyoto Protocol for developed countries to offset their excess emissions through projects in developing countries. This is due to high transaction costs and other restrictions (for example, all forestry is excluded from the EU Emissions Trading Scheme). On the other hand, a substantial proportion of the voluntary market has supported tree planting and management (Cotula and Mayers, 2009).

The quantitative country inventories have not revealed much evidence of land acquisitions *declaredly* motivated by carbon market considerations. But evidence does suggest that these concerns can play a role as complementary sources of project revenues, for example in the Mali Biocarburant biodiesel project in the *cercle* of Koulikoro, Mali (GERES, 2009).

#### **Host country incentives**

Among many African countries there is a renewed interest in agriculture as a source of employment, growth and revenue as well as more long-standing concerns about food security.<sup>21</sup> In this context, foreign investment is seen as capable of bringing new technologies, developing productive potential, facilitating infrastructure development, and creating employment and supply

<sup>21.</sup> In the donor community this interest is best illustrated by the publication of the World Development Report 2008 on agriculture (World Bank, 2008a), and a renewed interest by donors such as DFID in the agricultural sector.

of food to local markets. In some countries there is an explicit strategy of diversification from dependence on single commodities, for example oil in Sudan or copper in Zambia. Agriculture is seen as an obvious alternative.<sup>22</sup>

Beyond the growing number of investment treaties, discussed in section 2.1, the more favourable attitude to FDI is reflected in national-level policy reforms to improve conditions for foreign investors. Examples include the adoption of investment codes (e.g. Mali in 1991 and 2005, Mozambique in 1993, and Tanzania in 1997) and reform of sectoral legislation on land, banking, taxation, customs regimes or other aspects. Although political risk remains high in many African countries, and although recent hikes in commodity prices have prompted some adverse tax or regulatory interventions by governments seeking to capture a share of the greater profits, the predominant trend is towards policy reforms to improve the attractiveness of the investment climate (UNCTAD, 2008b). One of the main discernible policy trends is towards the easing or removal of restrictions on foreigners' acquisition of "strategic" assets, including land, for example easing of restrictions on foreign ownership and simplifications to the administrative processes involved, discussed further in section 3.2.

### 2.5. AVAILABILITY OF UNDER-UTILISED SUITABLE LAND IN AFRICA

One of the key reasons for Africa's attractiveness to outside investors is the perceived abundance of land. In explaining their interest in Africa, the manager of a major private investment fund involved with land acquisitions was quoted as saying that "Africa has most of the underutilised fertile land in the world" (Jung-a *et al.*, 2008); the chief executive of another fund emphasised that "land values are very, very inexpensive" (Henriques, 2008). Yet systematic empirical data on land availability in Africa remains limited.

The Global Agro-ecological Assessment (Fischer *et al.*, 2002), based on satellite imagery, provides the most comprehensive survey of global agricultural potential. It suggests that 80% of the world's reserve agricultural land is in Africa and South America. Estimates based on satellite imagery from 1995-1996 give a total cultivable land in Africa of 807 million ha, of which 197 million ha are under cultivation. The underestimation of the actual use,

<sup>22.</sup> Interview with a Sudanese government official, 22 February 2009; and with a private sector official, 20 February 2009.

according to the authors, ranges from 10 to 20%, which would increase the cultivated land up to about 227 million ha. However, it is not clear how land under shifting cultivation and fallow systems is included in these measurements. In Africa, a ratio of five plots under fallow to every plot under cultivation would give a range of the total "cultivated" land from a minimum of 227 million ha up to a maximum of 1182 million ha<sup>23</sup> – well above the available reserves. In addition, since 1996, there is likely to have been an increase in land under agriculture in Africa, plus a decline in available agricultural land due to competing land uses.

Worldwide, about half of the cultivable land reserves are in just seven countries: Angola, Democratic Republic of Congo, Sudan, Argentina, Bolivia and Colombia (Fischer *et al.*, 2002). "Marginal" and "abandoned" lands may be more widespread, but there are likely to be major obstacles to commercial agricultural production on these lands: most importantly lack of adequate water for viable harvests, but also fragmented rather than continuous land holdings and inaccessibility from markets.

Population data may also provide insights on the extent of land availability. Over the past few decades, many parts of Africa have experienced strong demographic growth. Average population growth rates for sub-Saharan Africa were 2.14% in the period 1950-55 and 2.49% in 2000-05, although average data mask important cross-country differences and projections suggest that this rate is to decrease over the next decades (down to 1.68% in 2030-35; United Nations, 2008). It is important to note, however, that population changes may not be concentrated in rural areas.

As a result of demographic growth, population density has increased substantially (see Table 2.4). In Ethiopia, Mali and Sudan, population density

TABLE 2.4. POPULATION DENSITY OVER TIME (POPULATION/SQ. KM)							
	Ethiopia	Ghana	Madagascar	Mali	Mozambique	Sudan	Tanzania
1950	17	21	7	3	8	4	8
2000	59	82	26	8	23	14	36
2050	157	190	73	23	55	30	116

Source: United Nations (2008), actual data and projections

23. I.e. 197 million times 6.

figures increase significantly if related (not to the entire land area of a country but) to land suitable for cultivation. This effect is due to the fact that a substantial part of the country may be occupied by desert or barren lands. It is also reflected in the major differences between total land area and "net land balance", which excludes land already used for cultivation, settlement, forests and protected areas (see Figure 2.13).



Key concepts and sources: "Suitable land": land suitable for rain-fed agriculture; irrigated agriculture may be found – and often is – in land which is unsuitable under rain-fed conditions. "Gross land balance": the extent of suitable land remaining after making deductions for areas of actual cropland, without considering current land uses other than cropland. "Net land balance": suitable land minus the sum of cultivated land, forestland, protected areas and settlements. "Net population density": population per suitable land. Based on Bot *et al.* (2000); Fisher *et al.* (2002); and FAO (2009).

In other words, although all seven countries display positive net land balances, particularly Sudan, the availability of land should not be taken for granted, even in Africa. Even where land is currently underused and seems abundant, it is still likely to be claimed by somebody. In addition, aggregate figures about land availability tell only part of the story. Investors are likely to seek higher-value lands for their agricultural investment. From an economic point of view, compensating local people for loss of land may still be more convenient to the investor than cultivating unoccupied but less fertile land. This may explain why even in seemingly land abundant countries like Sudan large-scale land allocations have been reported to entail takings of local land rights.

Concepts such as "available", "idle" or "waste" land, used to justify land allocations to investors, therefore need critical analysis. These concepts feature quite prominently in some of the country reports. In Ethiopia, for example, all land allocations recorded at the national investment promotion agency are classified as involving "wastelands" with no pre-existing users. But this formal classification is open to question, in a country with a population of about 75 million, the vast majority of whom live in rural areas. Evidence collected by in-country research suggests that at least some of the lands allocated to investors in the Benishangul Gumuz and Afar regions were previously being used for shifting cultivation and dry-season grazing, respectively. Evidence of pre-existing land use and claims in areas allocated to investors was also provided by the qualitative studies in Tanzania and Mozambique (Sulle, 2009; and Nhantumbo and Salomao, 2009).

In other words, concepts such as "idle" land often reflect an assessment of the *productivity* rather than *existence* of resource uses: these terms are often applied not to unoccupied lands, but to lands used in ways that are not perceived as "productive" by government. Perceptions about productivity may not necessarily be backed up by economic evidence (for instance, on pastoralism, see Hesse and Thébaud, 2006). Low-productivity uses may still play a crucial role in local livelihood and food security strategies.

Even the systematic national assessments of available land for allocation to investors, recently undertaken in some African countries, may be subject to challenges about what land was considered as "available" and hence included in the inventory, how thorough the assessment was, and who was involved in it and how.