

i2live



Dr. Claire Schaffnit-Chatterjee, Senior analyst Deutsche Bank Research



Michael Schneider, Director, Head of Environmental & Social Capital Deutsche Bank AG, Deutsche Asset & Wealth Management

Foreign investment in African farmland: Opportunities and risks

With growing global population & rise of the middle class, food security is an existential challenge for mankind. The growing needs for arable land worldwide is tremendous. Governments, agricultural companies & financial investors are interested in securing access to food and other agricultural products through an alternative asset class. According to Land Matrix, over 80 countries are currently targeted by foreign investors. Two-thirds of the targeted farmland is located in Africa, especially in sub-Saharan Africa.

Dr. Claire Schaffnit-Chatterjee will address the following topics in this exclusive i2live webinar:

- Identification of economic players in agricultural land acquisition
- Investment role played by countries and group of countries
- Risks and opportunities related to land acquisitions in Africa
- Setting "win-win win" strategy to guarantee success of land investment



Ola Jane: Hello everyone. Welcome to Industry Intelligence and our i2Live webinar series. Today we're pleased to welcome Claire Schaffnit-Chatterjee, Senior Analyst at Deutsche Bank Research. She will speak to us about opportunities and risks with investing in African farmland.

> I'm Ola Jane Gow of Industry Intelligence, and with me is my colleague, Jeremie Bohbot. If you are watching this presentation on the internet, you should see the title slide on your screen now.

This webinar is one of the many ways that Industry Intelligence delivers market information to our client companies. Our services bring together breaking news, Wall Street analysis, economic data, trending topics such as today's presentation on investing in African farmland. We connect the dots, you get the big picture. The slide on your screen gives you a snapshot of a few of the companies in the timberland sector that rely on our services.

Before we get started, I want to tell you a little bit about the Industry Intelligence suite of solutions. We designed these services to meet the information needs of everyone in your company. We developed our suite of solutions to make your job easier.

Industry Intelligence is a great resource to prepare for a meeting, to write reports, and most importantly, to stay abreast of your competition. Discover just how easy it is to join the smart companies that rely on our services. Visit us at industryintel.com or call us today.

Today's presentation is brought to you through the cooperation of GreenWorld. GreenWorld is a boutique real assets alternative investment firm focused on forestry and farmland. They offer two options for direct investment into farmland, including one for African farmland. You'll find them on the web at GreenworldBVI.com.

If you think of questions, please send them using the Q&A tab. You'll see a sample of this function on your screen now.

Today we welcome Claire Schaffnit-Chatterjee, Senior Analyst at Deutsche Bank. Claire researches trends in the areas of food agriculture, covering such dynamics as supply/demand, prices, sustainability, climate change and risk management, particularly of sub-Saharan Africa. Claire



has been with Deutsche Bank Research since 2006. Welcome to our program, and at this time, I'm delighted to turn the presentation over to Claire.

Claire: [Slide 11] Thank you Ola Jane, and good evening everybody, or good morning, for those who are overseas. It is my pleasure to share with you today a few things about foreign investment in farmland. I'd like to go through the following points.

[Slide 12] First, the global rush on farmland, how much is happening, where, by whom. Then, discuss some of the drivers, what are the interests of investors in acquiring land abroad, then go through some risks and opportunities, and finally start discussing which strategies are most beneficial to all parties involved. And as well, what is the extent of the role of investors entering into investment in land so that it is not only financially rewarding, but also sustainable, environmentally and socially.

[Slide 13] So there is a global rush for land. It is very difficult to get accurate data on global investments in land. Although the picture is imperfect, all evidence suggests that land acquisitions are happening quickly and on a large scale. Several institutions have been reporting data, including the World Bank, the International Land Coalition, and Land Matrix, which the International Land Coalition facilitates with other institutions including the German Society for International Cooperation.

So again, all these data should be taken with a grain of salt, but they do give an idea of what is happening. So over 1000 agricultural deals have been recorded since 2000, according to the Land Matrix data. This amounts to around 83 million hectares.

So now this refers to agriculture oriented projects, so no mining or tourism, acquired by foreign investors, so this excludes domestic transactions, targeting low and middle income countries of the Global South and Eastern European countries, and affecting an area of at least 200 hectares, which is 2 square kilometers. So these are just deals which are reported, what's probably more interesting and relevant is to look at the reliable deals.

These are the deals for which some kind of transaction or transfer of land rights has happened. So these reliable deals, according to these data, cover



an area of around 33 million hectares. So that's roughly the area of Germany, Belgium and the Netherlands put together, which amounts to around 0.7 percent of the world's agricultural land.

The World Bank, another source of information, reports for the period between October 2008 and August 2009, around 46 million hectares. So these are for the reliable deals. Still fewer deals are reported as being signed, and 330, covering 21 million hectares, are reported to have started production.

So these are a lot of figures, but this is just to show that it's not straightforward to get accurate data in this area. A large number of signed contracts, about 80 percent, have been followed through by the implementation, and start of operation of projects, according to this data.

Now, there are several reasons why a deal may not lead to a production start. For one thing, the investment may be a pure speculative positioning based on the expectation that land prices will increase, there's no specific investment plan in the short term for that land acquired.

Another reason may be the underestimation of the managerial and technical difficulties involved in the implementation. This is especially likely for operators who may not have an established track record in agriculture. There are indeed various challenges to be encountered at various levels, ecological, political, bureaucratic, socioeconomic, and the context also, once people have started taking possession on the ground, the context may not prove to be as conducive as they expected.

Some conditions which the investors expected may not have materialized, for instance in terms of transport and infrastructure support, so they pull out. There are some examples in the past where this has happened.

In terms of the timeline, what has happened in the past two years, the Land Matrix data suggests that the rate of land acquisitions spiked in 2009, probably as a result of the 2007-2008 food crisis. The slowdown in 2010, which you can see in the chart on the right may be a consequence of the easing of commodity prices, of the financial crisis, as well as possibly a result of investors being increasingly aware of the risks involved, especially in the context of increased critical press coverage. But overall, a



long term trend of growing commercial interest in land is expected, as we discuss later.

So there are a large number of target countries, with a strong interest in Africa. Over 80 countries are targeted by foreign investors, and around 11 of them constitute 70 percent of the target surface.

[Slide 14] Two-thirds of the farmland that is of interest to foreign investors is located in Africa, especially in eastern Africa, as you see in the chart on the right; also in southeastern Asia. The countries in eastern Africa where the most interest has been shown, for instance, Sudan, south Sudan, Mozambique, Tanzania, Ethiopia, Madagascar, DRC, Zambia, and also Liberia in another part of Africa.

In other regions I can also cite a few countries which have been heavy targets, Argentina, Brazil, Indonesia and Laos. We have to keep in mind that other countries, particularly in Latin America, have been of interest in terms of land to investors, but for some other reasons than agriculture, for instance mining and conservation, so they wouldn't be part of this data, and it is often actually by domestic investors, so they wouldn't be part of this data either, which focuses on foreign investors.

In Africa, reported large scale acquisitions of farmland amount to approximately 4 percent of the total agricultural area. In Latin American and Asia, they account for a much lower share of the agricultural land, maybe around 1 percent, but of course they still represent a considerable area. These countries of interest to investors for farmland are mostly countries, as expected, with significant amounts of uncultivated cropland with potential for high yield gains and good accessibility. Now it also turns out that they tend to be poor countries with weak governments, especially land governance.

[Slide 15] If we look at a spatial analysis of the land deals, investors tend to target forestland, grassland and cropland to similar degrees. They also tend to target, again as expected, cropland where the yield gap is relatively large and where additional inputs may create greater yields, be it fertilizers, seeds, water, infrastructure or even know-how.

[Slide 16] This land targeted is often covered by mosaics of cropland, with vegetation and forest that are likely related to smallholder agriculture, as



confirmed by some scarce data we have from a fairly small database of 80 to 90 observations. So the formal legal land owner is often a smallholder, the community or the state.

[Slide 17] Another criteria of importance to investors, if we look at the accessibility, the median accessibility of the targeted areas is about three hours away from the nearest city, so this means relatively easy access to markets and agricultural inputs. But we can see, according to this data, there is also a significant share of areas located over nine hours from the next city, and this may actually have a positive side effect if it drives investment in infrastructure in the host country.

[Slide 18] So who are these actors? We have categorized three broad groups of economic players in agricultural land, they are governments seeking to acquire agricultural land in other countries in order to secure food and energy supplies in their own country, agricultural companies may look at expanding or integrating the supply chain, and of course there are financial investors.

I think it's important to keep in mind that these groups actually do not work in isolation. The interest of one set of actors likely drives the interests of other groups higher by putting pressure on the land, and some of them may actually also partner. The Land Matrix data identifies four types of investors, as you can see in the pie chart. Most of the investors are private companies, followed by state owned or public companies, and investment firms.

[Slide 19] So now if we stop for one slide on the financial investors, the principal for agricultural land historically has been wealthy individuals, family offices and endowments. These endowments could have been from institutions in the academic or religious sectors, so pretty much all kinds. Recently there has been a noticeable shift in that pension funds and hedge funds have been entering this asset class.

The distribution of investor types also varies according to the regions of origin, investors from North and South America and Europe are almost exclusively private companies according to available data. In the Gulf States, public or state owned companies tend to be the main actors, although this does not apply to Saudi Arabia, it's more the case for the



United Arab Emirates, and it's also the case to a lesser degree in China and South Korea.

As I was hinting at earlier, foreign investors have sometimes built a partnership with either domestic companies, for instance investors from China, the UK or the US, there are several examples, when they invest in Ethiopia, the Philippines and Tanzania, where they enter into partnership with a domestic company. In some cases, actually, this partnership may be required by legislation.

Foreign investors also often act in partnership with each other, particularly in the case for investors from the US, the UK and South Africa who have formed partnerships with each other in about one third of the deals in which they are involved.

[Slide 20] Now, if we look at where the investments come from, investment in farmland originates from three groups of countries: emerging countries - such as China, India, Malaysia, Brazil, South Africa, Korea-, the Gulf States, and countries from what is sometimes called the Global North, so basically the US and European countries.

The chart that you can see on the screen right now displays the top 20 investing countries in terms of total area covered by land deals. Both reported and reliable, and again you can see that there's a wide discrepancy, particularly in some countries.

The recent wave of large scale land deals has involved investors from Brazil, South Africa, as well as China, India, and most emerging Asian countries. This is actually symptomatic of a new trend towards southsouth relationships. It is likely driven by cultural affinity and reduced transport and transaction costs.

Here there are regional differences as well, for investment in Asia, apparently over 50 percent of the deals involve investments of Asian origin. Agribusiness companies from Brazil and Argentina invest preferably in their regional neighborhood as well, and South African investors target Africa at large, especially eastern, central and southern Africa. In Africa, however, European, North American and Gulf States investors are more active than African ones, when we look at Africa as a whole.



[Slide 21] So today our topic is farmland, but just to put it in a bigger context of investment in land at large, agriculture is by far the main objective of investment in land, accounting for around 75 percent of the whole area targeted by foreign investors.

[Slide 22] So this takes us to the second part of this presentation, looking at the drivers. So food and energy security are key drivers for governments who are, of course, eager to avoid high dependence on imports and fear political instability in case of a tight situation.

The financial sector involvement is many driven by expectations of attractive returns, and these expectedly attractive returns are due to strong fundamentals. These are the macro trends driving the tight supply and demand balance for agricultural products, which I would like to review briefly with you right now.

[Slide 23] There are three, I'm going to look at briefly, because probably you have heard these before, but there are three major factors pushing demand as well. Growing world population, 7 to 9 billion by 2050, it is expected to happen predominantly in developing countries and almost exclusively in urban areas.

The urban population is expected to swell by about 3 billion people as the rural population contracts. By 2030, 60 percent of the world's population is expected to live in urban areas, and in Africa and Asia, the urban population will actually have doubled.

Another driver of increased demand is of course the rising income in developing countries, which drives increased consumption of resource intensive food like meat. Urbanization is also a driver here since it leads to changing preferences towards high value products, with food consumption shifting from grains and other staple crops to meat, dairy, fish, eggs, fruits and vegetables. This is especially the case with the nutrition transition taking place in India and China.

Number three, of course, is the increasing use of crops for biofuels. This is for the demand side. At the same time, supply is constrained by limited availability of water and energy, and this is exacerbated by climate



change. There are also bottlenecks in storage and distribution which also limits supply in some regions.

It's important to stop for a second, maybe, on the water factor, which may be a driver of investment in farmland in some cases, on top of securing food and other agricultural products, or maybe as part of securing these. For some countries, outsourcing agricultural production also contributes to reducing pressure on water resources at home.

Some countries in this situation are the Gulf States, China, Saudi Arabia. So in fact these countries import what is called "virtual water", the water embedded in the land, and this is an additional driver for these countries.

[Slide 24] Competition for land is fierce due to land degradation, urbanization, further use of agricultural products for biofuel, and potential carbon sequestration. As you can see from this chart, increasing the amount of land under cultivation is the way agriculture has grown throughout most of history, but if we look at cultivated areas per capita, so these are the yellow, orange yellow triangles on this chart, the cultivated areas per capita have shrunk as rural populations have grown, it has decreased by half, from around 0.45 hectares per person in the early '60s, and at the end of the last decade, it was just above 0.20 hectares per capita.

[Slide 25] There is still land potentially available and convertible to agricultural use, especially in sub-Saharan Africa and Latin America. Of course, the cost of bringing new land into production can be high, either from a financial or from an environmental point of view. It typically requires large investments in infrastructure in sub-Saharan Africa, and in some regions like Latin America, it involves cutting down sub-tropical and tropical forests. Yields have stagnated in their increases in most regions, most of Africa, also Asia, have huge opportunities for productivity gains and yield improvements.

So given these strong fundamentals, investments in land are particularly attractive, with good prospects for income generation from the agricultural productivity on acquired land, both currently and in the long term, because all of these drivers we have just reviewed are structural factors that are here to stay. And this long-term aspect is particularly appealing to pension funds, who are desperate to generate returns for an aging population with a long-term horizon.



Rising prices of agricultural land is another attractive feature. The value of agricultural land may rise as a result of its scarcity as well as increasing demands for agricultural commodities, and also some other uses, for instance carbon sequestration or other environmental services such as biodiversity, water availability and equality, these could increase the value of agricultural land.

[Slide 26] A key factor also for investors interested in farmland is the diversification aspect of the investment portfolio, given the local relations with returns from traditional asset classes like equities and bond markets, this is a key attractive feature of investing in real assets in general, particularly agricultural land, and we have seen particularly during the financial crisis that investors were eager to move away from riskier assets to real assets.

[Slide 27] The last argument I will mention here is the hedge against inflation, the literature is actually divided on this issue, but the returns from agricultural land are mostly uncorrelated with and higher than the inflation rates in developing economies.

[Slide 28] In terms of what is produced, four types of production can be found on acquired land. Food crops, non-food crops, multiple use, which means that a plot of land may be used to produce crops for more than one purpose, and flex crops. These are crops such as soybeans, sugar cane and oil palm which can be used for either food or biofuel production, with the possibility to switch depending on demand prices, market opportunities.

The shares seem to be fairly even, but of course, again, these results have to be interpreted with caution, because it's particularly difficult to gather such data. There are some regional differences which I don't want to get into in great detail here, but large scale land acquisitions for food crop production are located mostly in East Africa, West Africa and Southeast Asia.

Rubber production projects often take place in Southeast Asia, mostly managed by Chinese and Vietnamese actors. Flex crops such as soybeans, sugar cane and oil palm have played a central role in the recent wave of large scale land acquisitions.



[Slide 29] So now, the third part about risks and opportunities. Of course investments in farmland are associated with a number of risks and opportunities for the various shareholders. I like, actually, in a broad way to consider four groups of stakeholders, typically the investors themselves, the host countries, but there are also local populations, and I like also to include, potentially, mankind, if we manage to improve food security with these investments.

[Slide 30] The risks to investors or operators, some of them are directly associated with agricultural production, for instance in terms of agronomy or bad weather. Other risks are associated with the volatility of commodity prices, of course the level of political stability in the host country is a factor, but there is also a key risk related to the challenge of respecting the economic and social rights of the local population, especially in countries with weak governance and inadequate or nonexistent land tenure systems.

So precisely, if we look more closely at this last group of risks, in terms of food security, over 60 percent of the land area acquired in reported deals is located in countries with above average prevalence of hunger, and above average shares of GDP coming from agriculture, mostly in sub-Saharan Africa.

Since a significant proportion of the land is likely to be used for food export or non-food production, there is always the possibility that local food availability may be negatively impacted, of course, with potential consequences on hunger and malnutrition.

There are conflicting land claims possible, especially in the context of weak land governance. As we discussed earlier, a significant share of the land acquired appears to have been formerly used by smallholders, and the formal legal landowner is often a smallholder, the community or the state, so these suggests that in some ways investors may compete for land with local communities. But of course there are ways to compensate these local populations so that they actually end up being better off.

There are some tricky issues when some part of the local population has been using the land without having official land rights to it, for instance, herders, fishers and forest dwellers depend on communal land for their livelihoods, and land ownership can be very complex. Some of these countries, or rather most countries, particularly in sub-Saharan Africa,



have land tenure systems based on the dual system, where customary land rights coexist with formal property rights, so it makes it tricky not to overlook the rights of some of the population.

[Slide 31] Compensation and evictions, we've all heard this has happened in some cases. It does seem, according to the data available displayed on the charts on the left, that for some projects, the investment comes as a surprise to local community members. This is actually probably not too difficult to change. And information on the number of people displaced is scarce, but there seems to be evidence that there have been a number of cases where smallholders have been evicted from their land.

[Slide 32] In terms of environmental sustainability, the risks associated with agriculture, particularly large scale agriculture are well known. Just the fact of using land for agriculture as opposed to leaving it wild often implies loss of biodiversity, but of course these risks have to be balanced with the need to increase food production to feed a growing population, it is a trade-off. Of course, it is important to try and minimize these risks, for instance by not over-exploiting the land, by preserving soils through efficient use of fertilisers and pesticides and judicious irrigation.

Land degradation, particularly soil erosion, is one of the main concerns. In acute cases, it can even lead to desertification. Land degradation is particularly severe in eastern Africa, where it currently affects 14 percent of the area.

Overexploitation of land is another risk. A small share of the land acquired is initially covered by forests, which are known for providing key environmental services, as well as to contribute to the living of some of the populations.

There is also potentially a risk of one-sided agricultural development, if small-scale farming disappears in a large scale due to investment in large plots of land, small farms do have a reason to be, and they can be very efficient in some cases if you look at the total factor productivity.

Of course, scale economies may be achieved by mechanization for some crops, such as sugar cane, palm oils and soybeans. Some other crops such as rubber, fruits and vegetables, tend to do also very well under intensive



production with a significant proportion of manual input, which can also happen on a small farm.

[Slide 33] So this was a review of the risks. So of course there are huge opportunities of investment in farmland. The return to investors can be quite attractive, as we discussed earlier. The investments in farmland potential also offer significant opportunities associated with the fact that land is in use, whereas before it was uncultivated, now producing crops with high and increasing global demands, or with improving yields, which are often quite low.

Local economic benefits are there, potentially; they include the improvement of infrastructure such as roads, irrigation infrastructure, storage facilities, access to markets. There is also the creation of on-farm and off-farm employment, which would be for processing, packaging and transportation of the crops and of course also very significant is the transfer of technology and know-how.

The third chart displays the benefits reported for over 100 projects for which information is available. Again, it's a small database, but it gives some insight. For he majority of these projects, well over 70 percent, actually, around three quarters, improvements in infrastructure are reported, including health and education facilities, better access to markets and project infrastructure, which is of course usable by the local population. And around a quarter of these projects are reportedly associated with financial support for the local population, 20 percent with capacity building.

The second chart illustrates the evidence of job creation, based on information available for 89 cases. Around a quarter of these projects are reported to have created over 5,000 jobs, and half of these projects are reported to have created over 1,000 jobs. Of course it's difficult to figure out what kind of jobs these are, whether it's really additional, or job replacement, but still there is strong evidence of job creation in these projects. There is also some additional information on job creation for foreign workers which is available, and it apparently takes place in only 12 percent of the projects in the sample, so there is actually, contrary to what has been said, there is no evidence according to this data which is supporting the theory of a massive influx of workers from the investor countries.



At the country level, of course, there is also a whole range of benefits for the host countries, they include economic growth, particularly through employment creation or improved infrastructure, income generation of course, foreign exchange proceeds, increase in export revenues, both from the agricultural produce itself and possibly processed food, and this would in turn lead to higher levels of skills and income of the local population. And food security is a potential benefit for the host country.

In Africa, the benefits are mostly seen in terms of employment creation and infrastructure development. The land is not usually often leased for a very high price, because opportunity cost is typically seen as very low, and also because markets tend to be absent, there is a lack of well-established formal land markets. And of course food security is another big upside.

[Slide 34] This is just a general chart to show the viability of the yield for some of the major crops among the 12 top producers. This is just to give evidence that there are huge gaps to potentially be bridged.

[Slide 35-36] So this takes us to the last part, win-win strategies. As I said, I like to actually include the stakeholders broadly, so there would actually probably even be one more win for the world. In order to protect local farmers from eviction and to encourage investments related to land, security of tenure is key. It is estimated that globally, actually 60-70 percent of the farms are being run by people who do not have contractual use, and many tenure problems actually arise because of weak governance. So there's a lot of room for improvement of governance.

[Slide 37] There are some guidelines available for responsible governance of land tenure. In 2010, the Principles for Responsible Agro-Investments were released by the FAO, World Bank, UNCTAD and so on. And they cover those seven which you can see on the left. It is actually very useful that these principles have been put together, but there is no effective mechanism to enforce the guidelines, and many developing country governments actually lack both or either the capacity or the political will to do so.

And there is also currently no international organization with the authority to do so. So in fact, that's where the investors come into play, because they have a big role, actually, in this aspect.



So now if we go back to the aspect of strategies with many wins, key to the success is long-term engagement with local interests, not just the elites but also the locals, to have them participate in the economic activity. There are actually a full range of business models which support the smallholder farmers, and link them to buyers and consumers, the so-called collaborative, inclusive business models.

So it is clear that the world needs to increase investment in agriculture for the sake of both food security and poverty reduction, and entering an efficient and sustainable production is needed. There's a lot of opportunity here.

[Slide 38] And finally, I wanted to conclude with the fact that there is definitely a strong case to be made to use land which is currently uncultivated but suitable for cultivation of crops, which are in high and increasing demand. Large numbers of smallholders are confined to subsistence farming with low yields by lack of access to technology, infrastructure and capital, and providing them with these assets can have far reaching developmental impacts in rural areas, and bring many wins.

[Slide 39-42] So now I just wanted to let you know that what I've talked about tonight is based on the publication, Foreign Investment in Farmland. There is also a recent publication which is not specific on agricultural farmland but on sub-Saharan Africa.

[Slide 43] And now I will be very happy to pass the floor, so to speak, to my colleague Michael Schneider, who is the manager of the Environmental and Social Funds at Deutsche Bank. I'm really grateful that he could join us today, because he has experience on the ground and he can share with you his views on the topic.

Michael: Hello Claire, it's Michael speaking, hello everyone. So we thought it would be of additional value to walk you through a bit of what Claire has summarized in, I think it's page 19 and 20 of the initial publication, not the slides tonight.

And I wanted to give you a bit of a public/private view on food security, household income improvements and ultimately also employment, because if you look at the investment needs, it's not necessarily... of course



on either one of the areas, smallholder farming or commercial farming, it needs to come together both.

If you want to reach \$83 billion of annual investment, this will not be done by either of the two players, large scale or small scale farming. It will also not be done by either of the two players, public or private investment.

So one of the very interesting vehicles is the one my team runs, and I'm actually a fund manager myself. The project was initiated by the German government in a quest for more food security projects and actually initiated by the private sector. So instead of using the rather large development assistance budget the German government has, they put out risk capital to be used by the winning bidder in a public tender. The tender had about a dozen applicants, and we ended up winning by trying to combine rather unlikely actors in the field, following the public-private idea of saying, well, the mission comes from a government, the German government in this case.

The expertise on the ground comes from KFW, which is the acting entity, the development finance institution that is owned by the German government. They know what has gone well and what has probably failed in the past. And then we as a private sector bank, we can hopefully add a lot of value by bringing in anybody from people buying cassava starch in Tanzania to people buying cocoa in West Africa to people buying fresh vegetables for supermarkets in South Africa, to people providing inputs, to people providing weather risk insurance. All of these are our clients. So if we select a few of these appropriate partners and bring them into play, we can help reduce risks and make a seemingly un-investable field investable.

And for us, we would be the appropriate partner to select a few of those, bring them into play, and help reduce what is otherwise seen by many of you. We've seen lots of investors on this call as well, on an un-investable field.

So this fund, instead of discussing the exact details, gives you a little bit of a flavor of what can be done to reduce risks. Basically we engaged the United Nations Labor Organization as a fund to help evaluate risks around the social criteria of health and safety at work, child labor, indigenous people's protection, cultural heritage, and in turn, the United Nations ILO



has reached out to the UNEP environmental program to look at things like land pollution, biodiversity and land acquisition practices.

So all these are otherwise known as the headlines of the IFC performance standards, and what I think is key to mention is, if you follow those in farmland activities, you probably don't need any of the other standards, industry standards, these are the IFC performance standards and they are covering most of the concerns, many of them based on internationally recognized conventions from the ILO themselves.

So it's very unique for a fund, actually I'm not aware of any other funds having a partnership with ILO, and we would like to mention that as an example where investment decisions are taken by KFW and other delegates that are purely independent of ourselves. This is a true privatepublic partnership where the private sector brings investments that are in line with the mission of the fund, I mentioned those mission statements earlier, also with income improvements, food security and employment.

We feel comfortable, there's a separate report from the ILO in Geneva on each single investment. Uniquely, we travel together on each due diligence trip, , and we propose together improvements to health and safety, for example, we have stipulated malaria protection for areas in Zambia where the workforce is out 20 percent of the time with malaria. This becomes an economic issue as much as a social issue that employment shouldn't come with malaria.

So this is a bit of a specialty, it's a very unique fund, we're not aware of any other similar ventures where we've encouraged everybody to think about these types of structures, to get things right, to reduce risks, to be able to invest in seemingly un-investable areas, and to get the mission right as well, instead of losing track of it and potentially investing in a smallholder area, or forgetting to ask the chief, when you invest in Ghana. This is a huge mistake, it ignores the rights of the local population, and we believe this fund is a pretty good example of getting your arms around risks and also opportunities, and making the best of it for the benefit of populations as well.

I'll close it down, we need some time for the Q&A, and thanks for your attention.



Ola Jane:	Okay, thank you Michael and thank you Claire, I appreciate your webinar today and the insights, and you raised a lot of questions, I think, that our audience will have many. Let's move on to the Q&A, and please, if you're in the audience, submit your questions through our Q&A panel.
	We have a few questions that were submitted earlier, so I'm going to start with those while the audience has a chance to pull its thoughts together.
	"What African countries are you seeing investors most active in, and is there anything about those countries, let's say, is it political stability, legal, regulatory structure, soil, what is it that'd driving the investment?"
Claire:	From the information available, it's especially in eastern Africa that there's been interest. Sudan and South Sudan, Mozambique, Tanzania, Ethiopia, DRC, Zambia, Madagascar. And apparently the features looked at are the amount of uncultivated available land, the accessibility of the land, whether it's available not too far away from the cities, or whether infrastructure is in place, or is likely to be in place to facilitate transportation. Of course, the quality of the soil is a factor as well, but I'd like to pass it on to Michael, who may have some more specifics to say on this issue.
Michael:	I can confirm, just keep in mind additionally, there's a lot of macroeconomic things happening as well. I just came back from Namibia and before that Maputo and Zimbabwe. The overriding idea of central banks in the region, of course, is also a problem in terms of currency management, if you look at Namibia. Namibia is historically highly dependent. They importe.g. about 83 percent of its fruit and vegetable needs from South Africa as well about three quarters of their energy needs. So it becomes a currency issue as a lot of money is flowing out of the country. This has implications as well for domestic stability. So we see those flows as well, and we should all keep them in mind when we do our risk assessment.
Claire:	I just wanted to add, some people may be wondering what the effect of the current selloffs in the EMs may be on investors' interest in farmland, it's a bit tricky to say, but first of all, the most fragile countries are not the ones that are heavy targets in terms of farmland. Of course, some of the

targeted countries may have some currency issues. But I think it's very



	important to keep in mind that these investments are long term, so the structural trends will matter more than what's happening in the short term.
Ola Jane:	So here's a question, "What type of foreign investors are you seeing moving into this asset class, are they mostly hedge funds, pension funds, endowments, and from what countries and regions are many of these investors from?"
Claire:	I think I probably partly answered this question during my presentation, I think it's really a mix of investors, there's hedge funds, equity funds, and they tend to come from various parts of the world as well, so
Ola Jane:	There's not one prime concentration that you see.
Claire:	No, there's more and more emerging countries, there's the US and Europe, and there's the Gulf States as well, so it's really a mix. And I tried to see if there was some kind of pattern in terms of the structure of the vehicles as well, but it does seem to be a mix.
Michael:	There's also domestic pension funds that have quotas, they have to invest locally, and they have a lack of projects, so that's another player. Keep in mind the most important lack, in terms of availability, is not necessarily good soil. It's usually management quality on the project level. So many of the private equity funds have come and gone, many have failed because they couldn't find a good operations team on the ground, that we also see regularly.
Ola Jane:	Okay. You talked about the various ethical issues around foreigners buying African farmland, but how is this really being handled, who bears the responsibility, is it the investor, is it the fund itself? Can you talk a little bit about the details of managing, let's say, rights of local people to their land and stuff like that?
Michael:	Of course it's very much an ethical and moral obligation of any investor to do that. Our funders are more stringent, probably the most stringent that I've seen, because we follow specifically the guidelines of IFC, all the seven guidelines I mentioned earlier, we will be accountable against those. And of course you see local populations being supported by local governments in this.



If you look at places like Ghana, it's very different than places like Zambia. Commercial farm blocks in Zambia, when they're passed on to the next person by way of land leases need the sign-off by the president. In places like Ghana, it's usually with the chief, the chief takes the place of ultimate power of passing on land.

You have to have both, you have to look at local customs and accept those, and like I said earlier, if you follow the IFC performance standards, you will see that land acquisition come with exactly those obligations, and as a fund, we, for example, exclude any involvement in resettlements. Involuntary resettlements are unacceptable to us; we're not going to invest in anything like that. And also keep in mind we don't invest in land at all, we will never, as a fund, buy a piece of land and then operate it.

We will always look for a local operator who runs the field and the farm, and is in the local value chain. We will not, as a German government, Deutsche Bank, KFW, fund and joint venture, invest straight in land and then potentially sit on it or even speculate, that is 100 percent outside of scope. We will not touch that.

- Ola Jane: Okay. Could you talk a little bit about the role of the German government in the structure of your fund? Could you talk a little bit about that and how it works?
- Michael: The Africa Agriculture and Trade Investment Fund is a closed-ended investment company organized under Luxembourg law in the form of a public limited liability company and was initiated by KfW on behalf of the German Federal Ministry for Economic Corporation and Development (BMZ). Well, the German government has provided risk capital. You could call that anything like junior or first-loss capital. The Fund's Shareholders are represented by the Board of Directors, which has the exclusive power to administer and manage the Fund. The Board of Directors appoints the Investment Committee which approves investments proposed by the Investment Manager and supervises the activities of the Investment Manager. The Investment of the Fund on behalf of the Board of Directors. More please find at our website http://www.aatif.lu/organizational-setup.html



So you have to look at the typical DFI like KFW following through in a contractual relationship with the German government, setting this up, putting out the public tender, being the day to day provider of the board members, most of the board members are KFW employees, or are third parties nominated by KFW. In general, the governance follows a delegation by the German government to its own development finance institution, KFW. And they set up the entity together with us in a partnership, and they initially had to do the tender, public tender in Europe to find out who's the best manager.

Ola Jane: [Slide 44] Okay. Thank you to you both, I noticed our clock time went by so fast, we've already been on our call for an hour, so I'm going to wrap it up here. I'd like to thank you, Claire and Michael and Deutsche Bank for your participation in today's webinar, and a special thank you to GreenWorld for its support in helping us promote it.

[Slide 45] When you exit this webinar, you will be presented with a survey, please take a few minutes to answer the few short questions, and we appreciate your feedback. If you're not yet a member of our LinkedIn group, please join us. Jeremie will send you an invitation at the close of today's call. Through it, you can stay connected with the speakers and sponsors who are part of our webinar series.

[Slide 46] There will be a transcript with slides available next week, we'll email when it's ready, and Jeremie will post an announcement to those of you in the LinkedIn group.

[Slide 47] Coming up in early September, Richard Hall, chairman of Zenith International, will speak about the competitive and complex beverage market, and at the end of September, we'll have Linda Eatherton from Ketchum speak on emerging food trends.

Visit us at i2live.net and sign up for these and other webinars. Remember there's no charge for registration, but spots are limited, so please register early. Thank you to everyone for your participation, and this ends our event.



i2live webinar

Foreign investment in African Farmland: Opportunities and Risks



We'll be starting shortly. Thank you for your patience.

The audio of this web conference is automatically broadcast to your computer speakers or headset. Please make sure your speakers or headset are switched on.

If you want to listen to the web conference via phone, please dial **1-650-479-3208** Access code: **662 831 756**



i2live webinar

Foreign investment in African Farmland: Opportunities and Risks

Presenter:

Dr. Claire Schaffnit-Chatterjee Senior Analyst, Deutsche Bank Research

Hosted by Industry Intelligence



Industry Intelligence solves information challenges and provides market intelligence solutions for companies across manufacturing sectors.

Trusted by:



"Industry Intelligence has been extremely helpful in allowing me to stay informed with respect to developments in the paper and forest products industry. It's very easy to keep in touch on a daily basis, but also a wealth of information is available on almost any relevant topic if needed.." — Jeff Hearn, Board of Directors, Resolute Forest Products



Everyone's a decision-maker

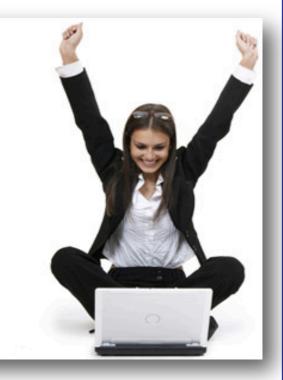
Every day employees at every level make decisions that affect the bottom line. We have an intelligence solution for everyone.





Your job better and easier

Stay informed, keep ahead of your competition, prepare for meetings, create presentations and generate reports using our market intelligence.





Smart Companies

Leverage external and internal market information as a strategic competitive advantage. Be a smart company too.





Visit us: www.industryintel.com

Call us: +1-310-553-0008

Why Industry Intelligence

B2B subscription service, business data provider, financial data aggregator, news aggregator, information supply-chain—we offer the best of all these.







This i2live webinar is sponsored and supported by:



Q&A

	TYPE IN YO QUESTION	UR
Q&A All(4)		
Ask:	All Panelists	*
	articipant in the ask menu first and type yo acter limit.	ur question here. There is



Dr. Claire Schaffnit-Chatterjee Senior Analyst at Deutsche Bank Research

i2live Presenter

industry 🛄

Dr. Claire Schaffnit-Chatterjee is Senior Analyst at Deutsche Bank Research, investigating trends in the areas of food/ agriculture (supply/demand, food prices, sustainability, climate change, risk management) and responsible for sovereign ratings in Sub-Saharan Africa.

intelligence inc.®

www.industrvintel.com

Prior to joining Deutsche Bank Research in 2006, Claire worked for consulting companies (latest as a manager at Accenture, Strategy-Financial Services) and in academic research. Deutsche Bank



Foreign investments in farmland Risks, opportunities, "win-win-win" strategies

Passion to Perform

Webinar i2live webinars August 28, 2013



Agenda



The global rush for land



3

4

1

Drivers of investment in farmland

Risks and opportunities

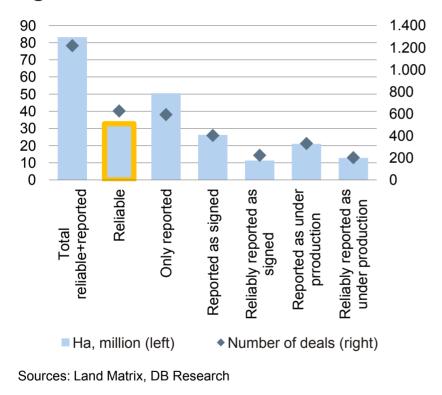
Win-win-win strategies

Deutsche Bank DB Research

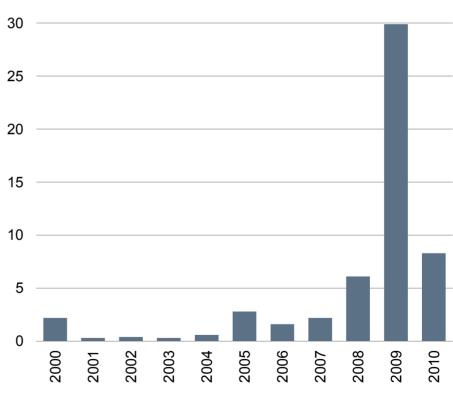
There is a global rush for land



Large-scale land acquisitions for agriculture



Pace of global land acquisitions



Million hectares reported

Source: Land Matrix

High concentration with strong interest in Africa



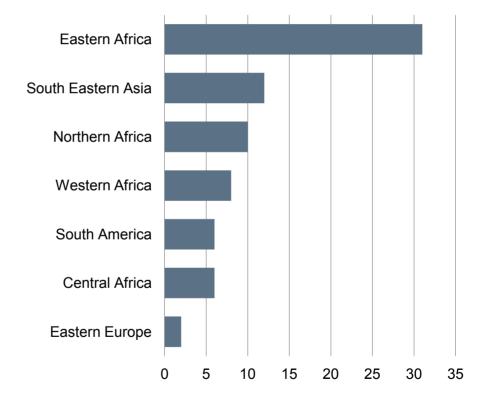
Land acquisitions by regions

Cumulative size of deals, million hectares

Africa Asia Americas Europe/Oceania 0 10 20 30 40 50 60 Source: Land Mtrix, Asmussen et al..

Land acquisitions by sub-regions

Cumulative size of deals, million hectares



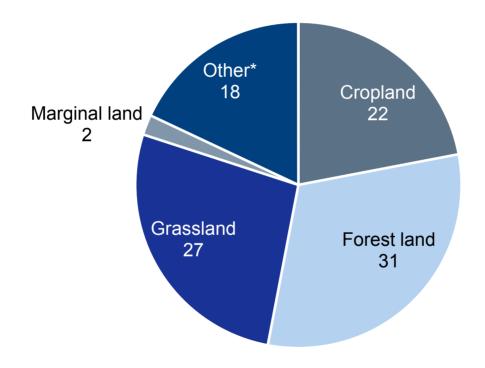
Source: Land Matrix, Anseeuw et all.

DB Research

Forests, grassland and cropland



Share of area acquired by land cover class, %



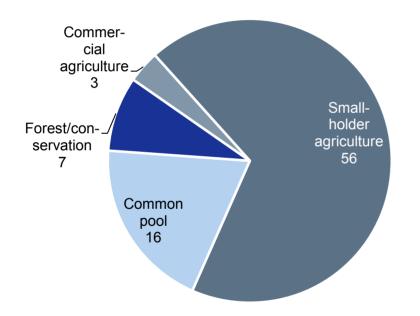
* Other refers mostly to bare land

Source: Land Matrix, Globcover, ESA

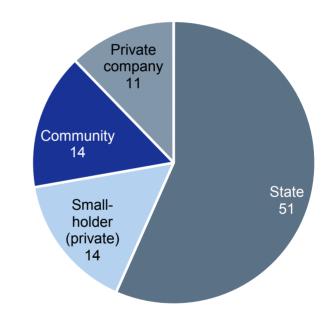
Former use



Former land use of acquired land



Former legal land owner



Note: Based on 82 observations

Source: Land Matrix, Anseeuw et al.

Note: Based on 90 observations

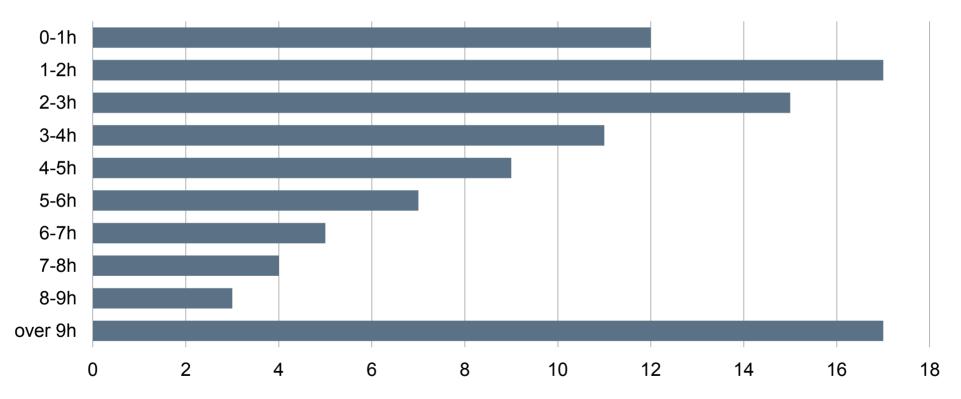
Source: Land Matrix, Anseeuw etal.

Close to cities or far away



Accessibility of land deal locations

% area in target countries, by travel time to next city



Source: Land Matrix, Anseeuw et all.

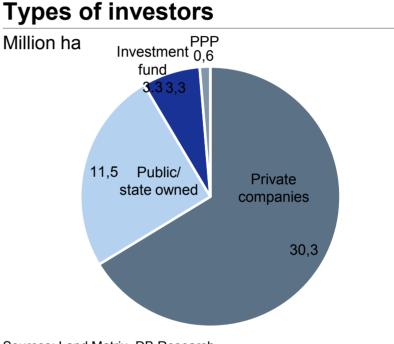
Both private and public actors



Three broad groups of economic players in agricultural land:

- Governments eager to secure food and energy supplies

- Agricultural companies
- Financial investors



Sources: Land Matrix, DB Research

Financial investors



- In the past mostly: wealthy individuals
 - family offices
 - endowments
- Have entered: pension funds and hedge funds
 Long-term returns for a growing number of retired people
- Regional distribution of investor types
 Mostly private from America and Europe, mostly public in the Gulf States

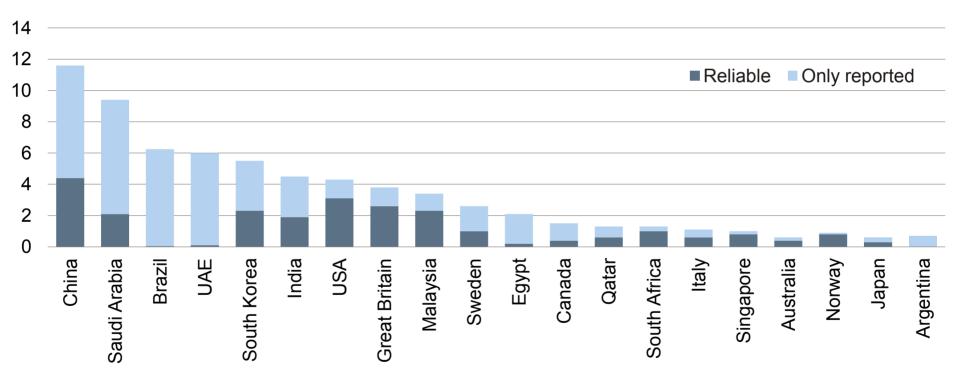
Partnerships

Origin of investment: Emerging countries (increasingly), Gulf states and the North



The origin of investment - top 20 countries

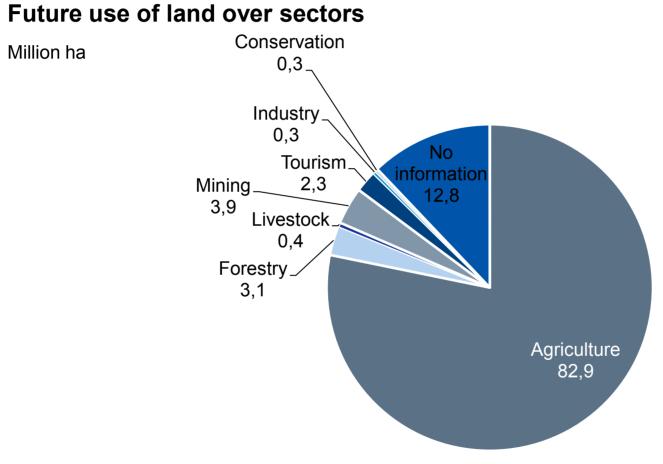
Million ha



Source: Land Matrix, Anseeuw et al.

Agriculture is the main objective





Source: Land Matrix



Agenda



The global rush for land

2

3

4

1

Drivers of investment in farmland

Risks and opportunities

Win-win-win strategies

Strong fundamentals: a tight supply/demand balance

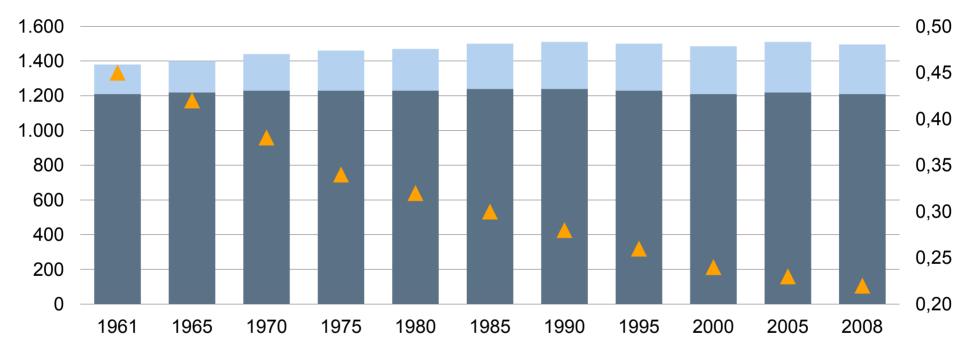


1. Increasing demand

- Growing world population (7 bn now, 9 bn in 2050 developing countries, urban areas)
- Rising incomes in developing countries
 - \rightarrow Increased consumption of resource-intensive foods like meat
- Increasing use of biofuels
- 2. Constrained supply
 - Water
 - Energy
 - Climate change
 - \rightarrow Securing food and agricultural products
 - → Interest in water

Increasing cultivated land to grow production





Evolution of land under irrigated and rainfed cropping

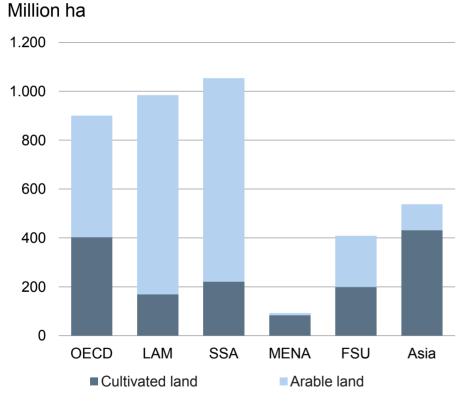
■ Rainfed, m hectares (left) ■ Irrigated, m hectares (left) ▲ Cropland per person, hectares per person (right)

Sources: FAO, DB Research

Potential supply of farmland

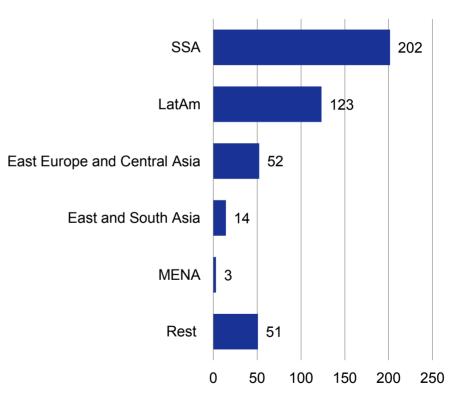


Arable and cultivated land across regions



Potential supply of land available

Million ha



Sources: B. Dorin, FAO, DB Research

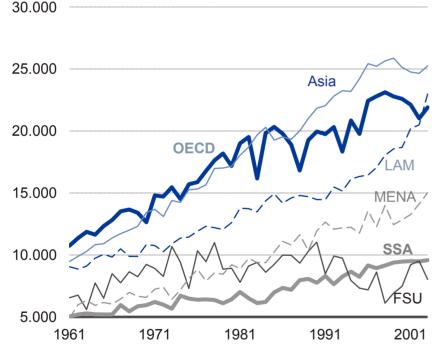
Sources: World Bank, DB Research

Output growth – Limited yield increases



Uneven yield increases across regions

Plant food production per ha of cultivated land, kcal/ha/day



Source: FAO, B. Dorin (Inra-Cirad)

Decades of **underinvestment** in ag. R&D and rural infrastructure

Limited access to inputs and credit

Some regions were bypassed by the Green Revolution

→Small farms in most parts of Africa, also in Asia offer huge opportunities for productivity gains and yield improvements

A profitable investment

/

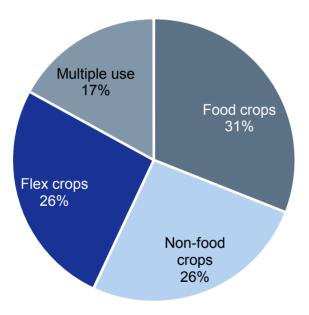
- 1. Good prospects of achieving income through rising agricultural productivity
- 2. Rising prices of agricultural land
- 3. Portfolio diversification
- 4. Hedge against inflation

Food, non-food and flex crops

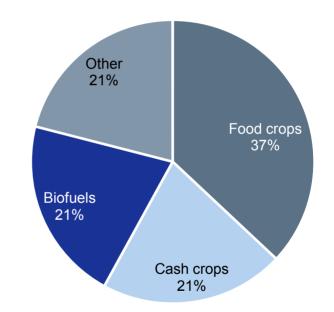
/

Future use of land acquired

Share of total area



Significant driver: Energy crops



Other: forest, livestocvk area or hunting ground

Sources: Land Matrix, DB Research

Sources: World Bank, DB Research



Agenda



The global rush for land



3

4

Drivers of investment in farmland

Risks and opportunities

Win-win-win strategies

Deutsche Bank DB Research

Risks associated with large-scale land acquisitions

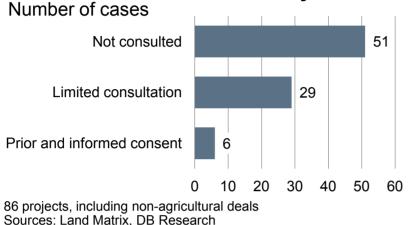


- Agricultural production (agronomy, bad weather)
- Volatile commodity prices
- Political risk
- Economic and social rights of local populations
- Environmental sustainability
- One-sided agricultural development

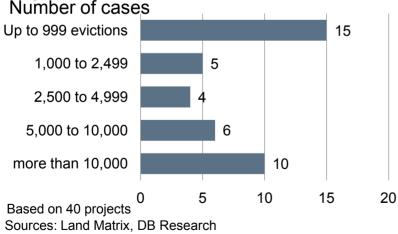
Economic and social rights of local populations



Involvement of the community



Reported evictions Number of cases



- Food security

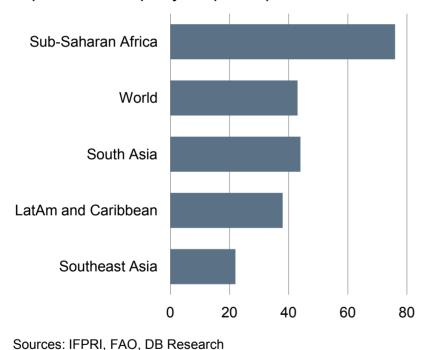
A concern in case of food export or nonfood production in food-insecure countries

- Conflicting land claims in a context of weak land governance

- Compensation and evictions

Environmental sustainability Agricultural development

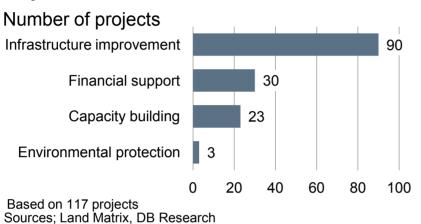
Annual loss of arable land, 1961-2009



Square meters per year per capita

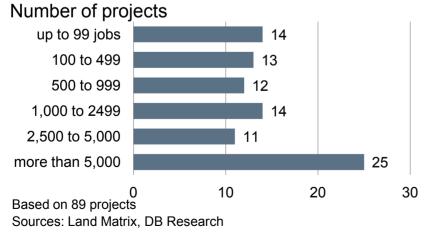
- Land degradation
- Overexploitation of land
- Loss of "virtual water"
- Forests destruction
- Small-scale vs large-scale farming
- Loss of biodiversity

Opportunities from investing in farmland



Reported benefits of investments

Projects with domestic job creation



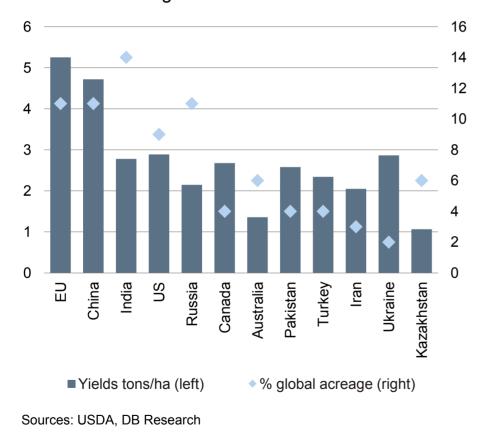
- Returns to the investor

- Local economic benefits See charts
- Country-level benefits
 - Economic growth
 - Export revenues
 - Workers' skills and income
 - Food security
- Global food security

Opportunities for yield improvements

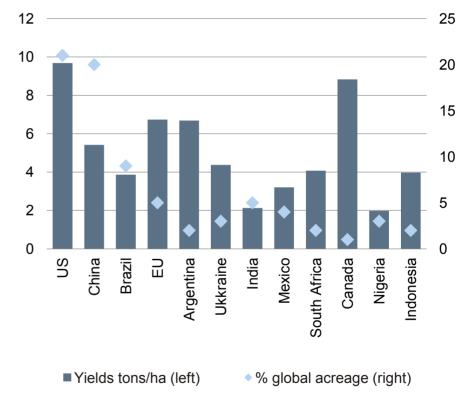


Wheat yields- Top 12 producers



2005-2010 average

Corn yields - Top 12 producers



2005-2010 average

Sources: USDA, DB Research



Agenda



The global rush for land

2



4

Drivers of investment in farmland

Risks and opportunities

Win-win-win strategies

Minimizing risks, maximizing local benefits Key role of investors



- Improved governance
- Security of land tenure
- Involve local farmers (and businesses): informing initially project transparency
- Collaborative business models between small farmers and investors: contract farming, joint ventures
 - \rightarrow boost agricultural productivity while reducing poverty and hunger

Principles for responsible investment



Principles for responsible agro-investment (RAI)

Land and resource rights

Food security

Transparency, good governance and enabling environment

Consultation and participation

Economic viability and responsible agroenterprise investing

Social sustainability

Environmental sustainability

Source: RAI, Knowledge exchange platform developed with The World Bank, FAO, UNCTAD, IFAD

Principles for responsible investment in farmland (PRI)

Promoting environmental sustainability

Respecting labour and human rights

Respecting existing land and resource rights

Upholding high business and ethical standards

Reporting on activities and progress towards implementing and promoting the principles

Source : UNPRI (2011)

Positive private investment in agriculture



- A strong case for private investment in agriculture
 USD 83 bn needed per year to feed the world in 2050
- Enormous potential yield gains
 - None of the countries of interest to large investors in Africa reaches 25% of its potential yield
- Role for both smallholder and large scale agriculture

Publications





Current Issues Emerging markets

Deutsche Bank

DB Research

July 15, 2013

+49 69 910-31821

Maria Laura Lanzeni

Deutsche Bank AG

Fax: +40.60.010_3187

www.dbresearch.com

DB Research Management

Frankfurt am Mair

DB Research

Germany

Claire Schaffnit-Chatterjee

claire.schaffnit-chatteriee@db.com

E-mail: marketing.dbr@db.com

Ralf Hoffmann | Bernhard Speyer

Page

Author

Edito



Sub-Saharan Africa

A bright spot in spite of key challenges

Sub-Saharan Africa (SSA) is growing fast with annual real GDP growth of over 5% in the last decade, second only to developing Asia. Medium-term growth will remain robust, on the back of a recovering global economy, still high commodity prices and investment in productive capacity. Annual growth projections until 2015 are close to 6%, higher if one excludes South Africa.

Robust growth is increasingly spread over countries. Not confined to commodity exporters, it also applies to countries not categorised as rich in raw materials. such as Ethiopia and Rwanda. East and West Africa are the fastest-growing subregions

Improved macroeconomic management and increased political stability have underpinned strong public spending, especially on infrastructure and services. Investment has been an important driver of growth in much of SSA, although it remains low in a developing world context. FDI to SSA is strongly increasing.

A large consumer market is emerging. Consumer demand has grown rapidly in recent years, on the back of solid real income growth. Many SSA countries are expected to reach middle-income status in coming years.

Social development is improving but remains low and uneven. In spite of clear progress in health and education, the poverty rate is still close to 50% and around 30% of the population is undernourished. Inequalities remain striking.

SSA's population is growing fast, becoming more urban and experiencing a youth surge. On the positive side, this means lower dependency ratios, a major rise in demand and urban centres becoming potential hubs of innovation and employment. However, job creation is a particular challenge, in a context of skill deficits. Structural transformation has started, more through services than manufacturing

Managing resource wealth is key to sustainable growth in SSA. Despite recent headwinds in commodities markets, new discoveries and further exploration promise strong revenue flows. They provide SSA with an opportunity to create employment and inclusive growth through value addition in all sectors.

The business environment remains challenging in SSA but the region is 10 increasingly attractive for investors. Surveyed companies with an established High population growth: A mixed blessing 14 business presence in SSA are happy with their situation. Investments in infrastructure/logistics and education, economic diversification, market reforms 18 and improved governance are critical for SSA's long-term success. 21

* The author would like to thank Kolia Johannsen for research assistance

November 13, 2012

Author Claire Schaffnit-Chatterjee +49 69 910-31821 claire.schaffnit-chatteriee@db.com

Editor Maria Laura Lanzeni Deutsche Bank AG DB Research Frankfurt am Main Germany E-mail: marketing.dbr@db.com

Fax: +49 69 910-31877 www.dbresearch.com

DB Research Management Raif Hoffmann I Bernhard Spever

Foreign investment in farmland No low-hanging fruit

There is a global rush for land. Since 2000, recorded agricultural transactions involving foreign investors amount to 83 million hectares of land in developing countries - 1.7% of the world's agricultural area - although only half of these data are considered reliable. Most of the targeted countries are poor with weak land governance, have high yield gaps and good accessibility. Two-thirds of the targeted farmland is located in Africa, especially in Sub-Saharan Africa.

Investors originate increasingly from emerging countries, especially China, India, Brazil and Malaysia. Globally, the investors are both private actors especially from America and Europe - and public or state-owned companies especially from the Gulf States.

Investment in farmland is driven by long-term trends such as growing consumption of food and biofuels in a context of limited availability of arable land, water and energy; investors are interested in securing access to food or other agricultural products, access to water and financial returns in an alternative asset class. Both food and non-food crops (e.g. biofuel crops, rubber) are of interest. The agricultural production on acquired land is largely for export.

Significant risks are associated with investing in farmland. The main challenges are to respect the economic and social rights of local populations, to preserve environmental sustainability and to avoid one-sided agricultural development. Investors often compete for land with local farming communities.

Investments in farmland can also be a "win-win" strategy if the risks are mitigated, particularly through project transparency and long-term engagement with the local population. Besides the gains for investors and home countries, investments in farmland can yield benefits for local communities, the host country at large and lead to increased global agricultural production. Financial investors have an important role to play in maximizing these benefits.

The way forward includes improved governance, especially security of land tenure. Guidelines ensuring responsible investments in land conducive to broadbased development have been produced but an effective mechanism to enforce them is still missing. Documenting foreign investment is also key, both for transparency and better understanding of the phenomenon.

There is a strong case for private investment in agriculture. Investments required in developing countries to support the agricultural output needed in 2050 amount to an average of USD 83 billion per year, which represents an increase of about 50% over current levels. There is increasing evidence that collaborative business models between small farmers and investors (for instance contract farming) can be mutually beneficial, boosting agricultural productivity while reducing poverty and hunger, without necessitating transfer of land

Deutsche Bank **DB Research**

Contents

but remains low.

Conclusion.

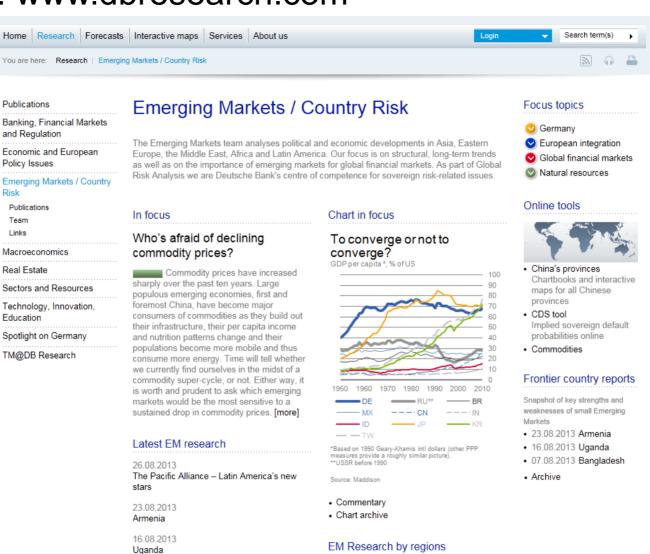
sustainable growth ...

Impressive economic growth Social development improves

Managing resource wealth for

Governance and investment climate

Visit us at: www.dbresearch.com





Publications

Banking, Financial Markets and Regulation

Policy Issues

Risk

Publications Team

Links

Macroeconomics

Real Estate

Sectors and Resources

Education

Spotlight on Germany

TM@DB Research

- EM general
- BRIC
- Africa
- Asia
- Latin America
- Middle East & North Africa
- · Central & Eastern Europe

Deutsche Bank **DB** Research

09.08.2013

07.08.2013

Bangladesh

Archive

Who's afraid of declining commodity prices?

Thank you for your attention!

Dr. Claire Schaffnit-Chatterjee claire.schaffnit-chatterjee@db.com 069 910 31821 www.dbresearch.de

Disclaimer

© Copyright 2013. Deutsche Bank AG, DB Research, 60262 Frankfurt am Main, Germany. All rights reserved. When quoting please cite "Deutsche Bank Research".

The above information does not constitute the provision of investment, legal or tax advice. Any views expressed reflect the current views of the author, which do not necessarily correspond to the opinions of Deutsche Bank AG or its affiliates. Opinions expressed may change without notice. Opinions expressed may differ from views set out in other documents, including research, published by Deutsche Bank. The above information is provided for informational purposes only and without any obligation, whether contractual or otherwise. No warranty or representation is made as to the correctness, completeness and accuracy of the information given or the assessments made.

In Germany this information is approved and/or communicated by Deutsche Bank AG Frankfurt, authorised by Bundesanstalt für Finanzdienstleistungsaufsicht. In the United Kingdom this information is approved and/or communicated by Deutsche Bank AG London, a member of the London Stock Exchange regulated by the Financial Services Authority for the conduct of investment business in the UK. This information is distributed in Hong Kong by Deutsche Bank AG, Hong Kong Branch, in Korea by Deutsche Securities Korea Co. and in Singapore by Deutsche Bank AG, Singapore Branch. In Japan this information is approved and/or distributed by Deutsche Securities Limited, Tokyo Branch. In Australia, retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product.

Q&A

Speaker:



Dr. Claire Schaffnit-Chatterjee

Senior Analyst at Deutsche Bank Research

Speaker:



Michael Schneider



TYPE IN YOUR
QUESTION

▼ 🕄 Q&A	
All(4)	
Ask: All Panelists +	
Select a participant in the ask menu first and type your question here. There is a	
256 character limit.	



This i2live webinar was sponsored and supported by:



i2live



i2live LinkedIn Group Stay connected with your community



i2live



i2live transcript in a week



industry intelligence inc.®

Upcoming i2live Webinars



Wednesday, September 11, 2013 Market themes for the future of beverages Richard Hall Zenith International Ltd.

Register at www.i2live.net



Wednesday, September 25, 2013 The emerging food e-vangelist Linda Eatherton Ketchum industry intelligence inc.®

Upcoming i2live Webinars

Register at www.i2live.net



Wednesday, October 9, 2013 A commonsense solution to the postal service's budget crisis Rafe Morrissey Greeting Card Association



Wednesday, December 4, 2013 Marketing to Millennials Brad Hanna Barkley

industry intelligence inc.®



Industry Intelligence Inc. provides market intelligence and information management solutions for companies, associations and academic institutions focused on the forest products, packaging and food and beverage industries. Learn how your business or organization can become more efficient and productive with our services. Visit www.industryintel.com or call (310) 553-0008.

Find out more about upcoming i2live webinars at www.i2live.net

Ola Jane Gow

VP Market Development 11845 Olympic Blvd Suite 500W Los Angeles, CA 90064 www.industryintel.com

Jeremie Bohbot

Marketing Coordinator 11845 Olympic Blvd Suite 500W Los Angeles, CA 90064 www.industryintel.com For any inquiries contact i2live@industryintel.com