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Victor R. Squires

University of Adelaide

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This paper examines China's overseas land-based investments in agriculture and has a threefold contribution to existing literature. First, it takes stock of what we know so far about the determinants of 'land grab'. Second, it presents a picture of sustainable and equitable development of Foreign Land Acquisitions (FLAs) and Foreign Direct Investment (FDI). Third, policy syndromes are examined and policy implications discussed. China's overseas land-based investments are part of what have been termed developmental outsourcing. Different from a conventional interpretation of outsourcing, this concept of developmental outsourcing refers to off-shoring in which the state plays a key role in planning, intervention and regulation. This paper does not aim to provide definitive answers, yet intends to scrutinize the data and re-examine the 'land grabbing' discourse, with special reference to Central Asia. This will be done by reviewing the literature on land-based investments in terms of incidence, size and geographical dispersion over the period 1949-2011.

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Land Grab in Central Asia, With Special Reference to China's Foreign Land Acquisitions and Foreign Direct Investment

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I. ABSTRACT

This paper examines China's overseas land-based investments in agriculture and has a threefold contribution to existing literature. First, it takes stock of what we know so far about the determinants of 'land grab'. Second, it presents a picture of sustainable and equitable development of Foreign Land Acquisitions (FLAs) and Foreign Direct Investment (FDI). Third, policy syndromes are examined and policy implications discussed. China's overseas land-based investments are part of what have been termed developmental outsourcing. Different from a conventional interpretation of outsourcing, this concept of developmental outsourcing refers to off-shoring in which the state plays a key role in planning, intervention and regulation. This paper does not aim to provide definitive answers, yet intends to scrutinize the data and re-examine the 'land grabbing' discourse, with special reference to Central Asia. This will be done by reviewing the literature on land-based investments in terms of incidence, size and geographical dispersion over the period 1949-2011.

I review the relevant literature on the determinants of FLA essential for a good understanding of FLAs and FDIs. I discuss equity and sustainability in land grab, with particular emphasis on food security and sovereignty; water and energy security; environmental protection; socio-economic protection and unbalanced geopolitical power. Policy syndromes and implications are related to peasant rights, water and energy issues, food security, environmental and labour laws,

transparency and development, and employment opportunities. There is an attempt to reach a conclusion about recent developments.

Author: Formerly, University of Adelaide, Australia.

II. INTRODUCTION

Interest in farmland is rising. And, given commodity price volatility, growing human and environmental pressures, and worries about food security, this interest will increase, especially in the Central Asia (CA) region. Many CA countries have suitable land available that is either not cultivated or produces well below its potential. This is a development challenge in CA. Seventy-five percent of the CA's poor are rural, and most are engaged in farming (Squires, Shang and Ariapour, 2017, Squires and Lu, 2018). The need for more and better investment in agriculture to reduce poverty, increase economic growth, and promote environmental sustainability is clear. One of the highest development priorities in CA must be to improve smallholder¹ agricultural productivity (Sedick 2012, Lerman, 2012, Strong and Squires, 2012, Hua and Squires, 2015). The prospect of rising prices for food and other agricultural commodities has had the effect of galvanising interest of international finance capital in agricultural production, prompting acquisition of large areas of agricultural land in Central Asia (and elsewhere) by a variety of means

¹ The term "smallholders" is widely understood to include small farmers who do not own or control the land they farm. In some cases they may have a formal use right. See FAO for a discourse on smallholders and their characteristics. <http://www.fao.org/docrep/to211e/To211E03.htm>

including FDI, OOF and IFI institutions (Ghosh, 2010). Narula (2013) refers to these land acquisitions as 'land transfers' and uses the term specifically to describe the acquisition or lease by state or private investors, both domestic and foreign, of legal interests in the agricultural land of a developing country. These land transfers typically are negotiated by the developing country's government, or sometimes, additionally, in consultation with proximal communities or individuals. These land acquisitions have led to accusations by some commentators, reviewed by Hoffman and Ho, 2012; Spielfoch and Murphy (2009) of 'land grab'.

Global land grabbing can be defined as a growing demand for land characterized by the purchase or long-term lease of vast tracts of land from mostly poor, developing countries by wealthier, food-insecure nations and private investors. Land with crop-producing potential is currently a valuable investment opportunity. Land grabbing occurs especially in weak states (Lee, 2016). Much of it is a result of regulatory failures and corruption at the national level and basic governance problems (Squires, 2012; Squires and Lu, 2018). Land tenure (including use rights) seems to be the biggest single problem (Robinson et al., 2012, Halimova, 2012). In many countries only 1% of agricultural land is registered with titles for individual landowners and ancestral communities. Land and ownership mapping prior to registration of land titles acquires a new sense of urgency in the face of land grabbing. Communal land tenure is especially vulnerable, even where it is 'in principle' recognised in national constitutions. Agricultural land in all countries is never ownerless, it seems clear that much is underutilised, and even China has fallow land. Violations of non-registered or communal land rights, the legal protection of women farmers, or "water grabbing", are clearly issues which must be solved at the national level. Alden Wily (2011) has highlighted the legal basis through which much existing customary land tenure remains vulnerable to expropriation by government on behalf of national and foreign

investors, with consequent displacement of existing land users. It has been argued (Borras and Franco, 2010a, 2012b) that existing analysis of land deals too often is conceptually simplistic and lacking sufficient empirical detail to illuminate processes of local or national enclosure of land resources, and their social and economic consequences

A recurrent emphasis in reports of 'land grab' land deals is that these constitute a major change in international relationships, with international capital investment being deployed in Central Asian (CA) contexts in which regulatory and legal frameworks are ill-equipped to defend the interests of existing land users or the wider public interest of the country concerned. One such report by the World Bank (Deininger et al. 2011) states that some foreign investment has in fact targeted countries with weak regulations (Mann and Smaller, 2010). There seems little doubt that land deals in CA have involved new types of foreign investors, including Chinese enterprises that are State-owned as well as range of commercial entities (see below).

It is also important to recognise that, if the current land deals involve a new wave of foreign investors, for many governments they are only the latest initiative in a long-running search for capital investment to raise agricultural productivity. For the most part, this search has been guided by ideas of 'modernisation', either through mechanisation and creation of large-scale production units, or through transformation of small-scale 'subsistence' producers into small-scale commercial farmers, following an 'Asian' or 'green revolution' model based on increased input use. In each case, the goal has been to raise the amount of marketed agricultural output either for export or for local food markets. Land acquired may not be for food production at all. About 22% of this newly acquired land, is used for mining, tourism, industry and forestry, 58% for biofuels production, and only 20% for food production (Anseeuw et al., 2012). A key question is to what extent different types of existing land and water users within 'rural communities' stand

to gain or lose from such developments (Borras and Franco, 2010b; IFPRI, 2009).

Smallholder productivity is essential for reducing poverty and hunger, and more and better investment in agricultural technology, infrastructure, and market access for poor farmers is urgently needed. When done right, larger-scale farming systems can also have a place as one of many tools to promote sustainable agricultural and rural development, and can directly support smallholder productivity, for example, through ‘out-sourcing’ programmes (see below). However, press and other reports (UNOHCR, 2010, Deininger, 2011, Pannier, 2011) about actual or proposed large farmland acquisition by big investors (as part of FDI) have raised serious concerns about the danger of neglecting local rights and other problems (De Schutter, 2009, Shepherd, 2011). They have also raised questions about the extent to which such transactions can provide long-term benefits to local populations and contribute to poverty reduction and sustainable development (Alden Wily, 2011, Borras and Franco 2010a). Institutional gaps at the country level can be immense. Too often, they have included a lack of documented rights claimed by local people and weak consultation processes that have led to uncompensated loss of land rights, especially by vulnerable groups (Halimova, 2012); a limited capacity to assess a proposed project’s technical and economic viability; and a limited capacity to assess or enforce environmental and social safeguards.

III. THE LAND GRABBING DEBATE

Global land grabs are complex and multifaceted [IFPRI, 2009, Hofman and Ho, 2012]. But how they are understood, analysed, and interpreted varies tremendously. The two major orthodox reports that dominate the discussion, at least in terms of agricultural land, come from IFPRI [2009] and FAO [Deininger et al. 2011]. These reports share a rhetorical presentation of land ‘acquisition’ as having both pros and cons. They argue that the principal problems of dispossession are primarily related to poorly

functioning markets. Problematized as such, the answer is readily available through technocratic means to overcome distortions and unleash market rationality. If land acquisition (both as FLA and through FDI) is “done right,” they assert, there is immense potential to achieve maximum production and efficiency in line with well-functioning factor markets to properly allocate goods. The other major problem they identify points to corruption and poorly functioning states that cannot create the proper conditions for transparent market transactions. Thus they argue for “good governance” to ensure private property rights and thus well-functioning property markets with fair returns to those whose land is sold or leased, whether by the state or by other actors. If these two conditions are met—properly functioning markets and an end to corrupt practices— they claim that negative outcomes associated with dispossession can be avoided and/or properly compensated, whether land is simply taken over by the state, or obtained through market transactions (Cotula et al., 2011, Deininger et al., 2012; De Schutter, 2009, Cotula, 2011, 2012; Cotula et al., 2009).

IV. THREATS AND OPPORTUNITIES FROM LARGE-SCALE LAND ACQUISITIONS

In Deininger et al. (2011) the following summary is offered: “Given the changing global economic context, the agricultural sector clearly requires more investment. Because of the urgent need for greater development in rural areas and the fiscal inability of the developing-country governments to provide the necessary infusion of capital, large-scale land acquisitions can be seen as an opportunity for increased investment in agriculture. Proponents of such investments list possible benefits for the rural poor, including the creation of a potentially significant number of farm and off-farm jobs, development of rural infrastructure, and poverty-reducing improvements. Other possible positive spillovers include resources for new agricultural technologies and practices as well as future global price stability and increased production of food crops that could

supply local and national consumers in addition to overseas consumers. Others see threats that the land acquisitions present to people's livelihoods and ecological sustainability. In some cases, the land leases are justified on the basis that the land being acquired by the foreign investor is "unproductive" or "underutilized." In most instances, however, there is some form of land use, often by the poor for purposes such as grazing animals and gathering fuelwood or medicinal plants. These uses tend to be undervalued in official assessments because they are not marketed, but they can provide valuable livelihood sources to the poor. Large-scale land acquisitions may further jeopardize the welfare of the poor by depriving them of the safety-net function that this type of land and water use fulfils."

Smallholders who are being displaced from their land cannot effectively negotiate terms favourable to them when dealing with such powerful national and international actors, nor can they enforce

agreements if the foreign investor fails to provide promised jobs or local facilities. Thus, unequal power relations in the land acquisition deals can put the livelihoods of the poor at risk. This inequality in bargaining power is exacerbated when the smallholders whose land is being acquired for foreign investment projects have no formal title to the land, but have been using it under customary tenure arrangements. Since the state often formally owns the land, the poor run the risk of being pushed off the plot in favour of the investor, without consultation or compensation. Land is an inherently political issue across the globe, with land reform and land rights issues often leading to violent conflict. The addition of another actor competing for this scarce and contested resource can add to socio-political instability in developing countries.

Under the 'right' conditions the transfer of land based resources is a "win-win" for all involved (Box 1).

Box 1: IFPRI's Toward Win-Win Policies (After Von Braun and Meinzen-Dick, 2009)

A dual approach can help address the threats and tap the opportunities related to foreign direct investment in agricultural land. First, the threats need to be controlled through a code of conduct for host governments and foreign investors. Second, the opportunities need to be facilitated by appropriate policies in the countries that are the target of these foreign direct investments. Key elements of a code of conduct for foreign land acquisition include the following:

- *Transparency in negotiations.* Existing local landholders must be informed and involved in negotiations over land deals. Free, prior, and informed consent is the standard to be upheld. Particular efforts are required to protect the rights of indigenous and other marginalized ethnic groups. The media and civil society can play a key role in making information available to the public.
- *Respect for existing land rights, including customary and common property rights.* Those who lose land should be compensated and rehabilitated to an equivalent livelihood. The standards of the World Commission on Dams provide an example of such policies.
- *Sharing of benefits.* The local community should benefit, not lose, from foreign investments in agriculture. Leases are preferable to lump-sum compensation because they provide an ongoing revenue stream when land is taken away for other uses. Contract farming or out-grower schemes are even better because they leave smallholders in control of their land but still deliver output to the outside investor. Explicit measures are needed for enforcement if agreed-upon investment or compensation is not forthcoming.
- *Environmental sustainability.* Careful environmental impact assessment and monitoring are required to ensure sound and sustainable agricultural production practices that guard against depletion of soils, loss of critical biodiversity, increased greenhouse gas emissions, or significant diversion of water from other human or environmental uses.
- *Adherence to national trade policies.* When national food security is at risk (for instance, in case of an acute drought), domestic supplies should have priority. Foreign investors should not have a right to export during an acute national food crisis.

In contrast to these rosier positions, current critiques of land grabbing highlight wealthy nations' roles in dispossession processes through aid regimes, other official flows (OOF²), foreign direct investment (FDI), hedge funds, and sovereign wealth funds (Mann and Smaller, 2010; Borras et al., 2011; Margulis, McKean and Borras 2013.). In these analyses each of these intervention pathways plays a crucial role in the rapid expansion in scope and scale of global land and resource transfers. The numbers themselves are a point of contention for very good reasons. The most recent assessments indicate approximately 20 million hectares have been transferred annually in the first decade of this century. This represents an area comparable to the entire UK (24 million hectares), with land transfers dramatically outpacing historical averages according to many analysts (see Anseeuw et al., 2012). The combined scale, scope, and pace of these dispossession processes are what raise alarm bells amongst critical analysts such as GRAIN³.

In the critical literature, land grabs represent disarticulation and dispossession in the collision and integration of diverse property regimes via colonial, imperial, mercantile, neo-colonial interventions, capitalist penetration and commodification, and military campaigns (Lee, 2016). Many of these analysts also emphasize how land grabs are achieved through national policies, direct state purchase and eminent domain, as well as so-called 'land reform' (McMichael 2012, 2013; Borras and Franco, 2012a; 2012b; Haberli, 2014; De Schutter, 2011; von Braun and Spoor, 2011). Financialization by hedge funds and banks is another focus, driven by food security and commodity price rises in 2008 (McMichael, 2012; 2013; Muldavin, 2012; Cotula, 2012, Kappel, Pavletic and Schupbach, 2012). The creation of financial instruments associated with large tracts

of acquired land allows for speculative investment, trading, and profits prior even to land clearance or the beginning of production schemes (De Schutter, 2009:253). In simplest terms the debate is between those promoting land acquisition for increasing efficiency of production and development modernization, and those critical of all forms of land grabs and dispossession. In between, a broad range of positions exist as the competing narratives reveal. For a careful review of the debate see (DeSchutter, 2009; Shepherd, 2011; Cotula, 2012, Cotula and Blackmore, 2014), as well as the introductions to the special issues on global land grabs in *The Journal of Peasant Studies* and in Zoomers, 2010, Visser and Spoor, 2011, Woodhouse, 2012, Zimmerle, 2012).

According to Shepherd [32,40].

“The land grab movement demonstrates that there are several factors dividing the debate surrounding agricultural investment which have important implications for global food security. First, there exists a key divide about the roles to be played by the state and the market. The role of the international financial institutions (IFIs) within the land grab trend and in response to the global food crisis represents an approach to development characterized by private sector control and lower government regulation. A second divide is over the role of science and technology in agriculture. The IFIs' appeal for increased investments in agribusiness and high-input, capital-intensive agriculture will undoubtedly have adverse effects on rural livelihoods. The assumption that capital-intensive technologies through agribusiness will trickledown to the poor is misleading, as rural communities will be displaced and food sovereignty undermined. A third key divide in this debate is over the role of international trade in agriculture (Narula, 2013, Zoomers, 2010). Food-insecure countries are responding to food shortages by looking to distant lands in order to develop crops for export back home. The land grab trend is putting private interests in direct competition with land for local food production, a

² Other official flows (OOF) are defined as official sector transactions that do not meet official development assistance criteria. OOF include: grants to developing countries for representational or essentially commercial purposes.

³ A Spanish based NGO

situation which cannot be tolerated in the face of food insecurity”

4.1 What are the economic, gender, and environmental impacts of large scale land investments?

Many rural households depend on combining shifting cultivation, livestock, and forest resources to survive in their variable environments. Many recent land acquisitions by large scale investors have displaced them, damaging local livelihoods, food security and access to key resources.

As the HPLE (2015) report highlights:

“Much land in middle and low-income countries such as the post-Soviet republics in Central Asia is productively occupied and used, but does not have formal paper title, rendering such customary rights vulnerable to dispossession. Rights of women, social groups relying on the commons (grazing, woodland, wetlands), ethnic minorities and indigenous peoples are particularly insecure”.

The legal status of land proposed for transfer or actually allocated to investors varies across countries and regions. State ownership is common, though government can also invoke eminent domain, on the grounds that it is acting in the public good, and reclassify private or village land to public land. The terms of acquisition also vary greatly, from short to long term leases, and freeholds. In case of leases, annual rental payments are frequently very low, though investors may be expected to commit capital to investment in infrastructure. Many contracts refer to employment provision, but are often imprecise about the detail or consequences of non-compliance. Equally, there is frequently little in the way of binding agreements on local procurement, processing of produce, and payment of taxes. Given that these contracts are usually kept confidential, it is very difficult for performance to be scrutinised or investors held to account by government agencies, parliament, local people, CSOs, or media. Community consultation is usually required of the investor, but is frequently carried out at speed and without

proper information, with benefits oversold and adverse impacts downplayed. The different actors – investor, government, local people – enter the negotiations with highly asymmetric information and power. Consequently, local people usually lose out, and governments lose both revenue and opportunities to achieve long term benefits for their populations.

Farmland acquisitions also have significant gender implications. In many farming regions, most agricultural workers are women. Yet farming contracts are often with male household heads, with payments made to men even where it is women who do most of the work (Daley, Dore-Weeks and Umuhoza, 2010) and cash crops controlled by men may encroach upon lands previously used by women for food crops. Women are vulnerable to exploitation through land investments in four ways. First, women face systemic discrimination when it comes to their access, ownership and control of land as well as protection of their land rights. Second, women face discrimination in socio-cultural and political relations, especially when it comes to influencing and making decisions. Third, they are particularly vulnerable to change that reduces their incomes, because these are generally already lower than men's. Fourth, they are physically vulnerable to male force (Daley, Dore-Weeks and Umuhoza, 2010).

4.2 Foreign Land Acquisitions in Planned Foreign Direct Investment (FDI)

An improving FDI climate and increasing risk-taking by investors (including those from China) has occurred and investors are scouring the world (including Central Asia) for farmland. This makes it even more difficult to find answers on how to save local farmers without at the same time guaranteeing the returns from FDI. This is especially so when put in a dynamic perspective of rapid demographic changes and growing urbanisation, not to speak of climate change (FAO et al., 2010); Spieldoch and Murphy, 2009, Lambin and Meyfroidt, 2011).

4.3 Rationale for investing in foreign land deals

Land with crop-producing potential is currently a valuable investment opportunity. Naturally, private operators look first at the economic and technical feasibility of investing in a land deal project. To varying degrees they also take other factors into account, such as national legislation, governance, fiscal incentives, and reputation of the deal brokers and other stakeholders. But other factors are also at play - such as business opportunities linked to expectations of rising food prices, agricultural commodity demand from industry, and policy reforms in recipient countries.

The rationale for such investment, especially in farmland, has typically centred around three motivations:

1. *Farmland as an inflation hedge.* As a real asset that is linked to food and energy production, farmland is expected to be a hedge against inflation. Its supply is largely inelastic (in contrast with fiat currency, securities, etc.), and increasing valuations will lead to relatively marginal increases in supply, further reinforcing its value as an inflation hedge.
2. *Farmland as asset positioning for a food and energy scarcity theme.* Economic and demographic growth is likely to create demand for agricultural products that outstrips current productive capacity, leading to the development of new farmland at a time of rising prices.
3. *Farmland as a diversifying source of return.* Being a private market investment subject to its own physical and economic dynamics and an asset that is, for the most part, privately held and often indirectly stabilized by government subsidy, farmland's returns are not, in the short run, directly linked to financial markets. Furthermore, farmland is generally a relatively unlevered asset, further disassociating its returns from financial markets.

Exports that arise from FDI and other FLA projects may increase economic growth, GDP and government revenues. FDI may also create new jobs, including for the former landowners, bring new technologies for production and processing, and increase yields and productivity in the whole sector. Because they mostly produce for exports their investment may be positive for global food security, but small or nil for host country food security except where they provide the foreign exchange necessary to buy cheaper food abroad (Kappel, Pavletic and Schupach, 2012). On the negative side, there are cases of hit-and-run operations with short-term land leases and which are likely to cease after the expiry of fiscal incentives. Degraded soils, erosion, deforestation, and depletion of surface and groundwater are more likely to result from such investments than jobs and government revenues. In fact, only investors intending to stay may want to ensure that their investment responds to sustainable land use principles. Under these circumstances, land sales and long leases with sustainability provisions lead to more national food security than tax holidays and short-term operations with little if any vertical integration. The question then would seem to be whether *national* food security in its multifaceted context would be better or worse off without FDI.

4.4 Agricultural Foreign Direct Investment (FDI) and food security

Agricultural FDI does relate to food security as defined in the FAO State of Food report (2009) and land grab is a concern. It is important to point out that food security has totally different connotations at the household, national and global levels. Agricultural FDI can increase global food security according to IFPRI (2011) and World Bank, (2014).

Governments at all times have sought to attract FDI (Foreign Direct Investment) as such. Many consider agricultural FDI as a component of their food security equation. Traditional investment issues such as protection, promotion, expropriation and compensation may look

different in this perspective. What matters here is which regulatory framework relating to FDI will best support national food security defined in a large sense. Agricultural investment projects can (but will not automatically) contribute to national food security even if they are export-oriented or if they produce biofuels, feed crops, or cotton that can generate revenue and allow imports of food staples.

Some governments have started to realise the impediment which traditional and communal structures represent for innovation and modernisation. They seek better means to overcome the organisational handicaps of remote areas and small producers and FDI and land grabs may help them achieve this. To be able to lease or sell land owned by poor and subsistence farmers, unable even to feed themselves, became even more attractive for governments who can ‘unload’ to land grabbers endowed with capital, technologies, and access to new markets.

But as outside interest increases and as governments or markets make land available to prospective investors, land acquisitions may result in local people losing access to the resources on which they depend – land, but also water, wood and grazing. National laws may not have sufficient mechanisms to protect local rights and take account of local interests, livelihoods and welfare. Insecure resource rights, inaccessible registration procedures, compensation limited to loss of ‘improvements’ like crops and trees. Legislative gaps often undermine the position of local people. Cotula and Blackmore (2014) say “Ultimately, the extent to which international land deals seize opportunities and mitigate risks depends on each project’s terms and conditions: how risks are assessed and mitigated (for instance, with regard to project location), what business models are used (from plantations to contract farming through to various forms of equity participation by local people), how costs and benefits are shared (including the distribution of food produced between home and host countries), and who decides on these issues and how?”.

If the search for investors in agriculture has been a long-standing concern of governments of post-Soviet republics in CA, the interest of international investors is relatively recent. It has arisen from an international context characterised by perceptions of rising insecurity of energy and food supply and concomitant volatility in energy and food commodity prices. While these perceptions are linked to narratives of climate change, it is important to recognise that it is the policy responses to climate change concerns, not the biophysical effects of climate change, that have had the most immediate impact. Predicted climate change impacts are often characterised in terms of changing rainfall patterns, typically in terms of increasing frequency of extreme events (greater concentrations of rainfall in fewer and more intense storms), leading to higher run-off and greater risks of both floods and soil-moisture deficits (Cotula, 2009). Yet the focus on land and the physical displacement of people from it, risks obscuring impacts with far wider reach: the impacts of new large-scale agricultural projects on the consumption, diversion and storage of water resources and ramifications for hydrological processes far beyond the land they occupy (see below).

V. CHINA'S ROLE IN LAND GRABS

A more complete understanding of China’s central role in global land grabs and land dispossession is a key window through which to understand the world today (Muldavin, 2012). China’s importance cannot be underestimated in terms of scale, scope, and the speed of transformations. This is not to overemphasize China relative to other actors, but to bring focus to the specific ways in which the Chinese state and other China-related actors participate in these global processes. The Chinese state’s land appropriations are complex, outside most conceptualizations and not fully integrated into many analyses. This land grabbing is both domestic (Siciliano, 2014) and international, state run and in partnership with domestic and international capital, official development assistance (ODA), OOF, and

International Financial Institutions (Nitula, 2013, Zimmerle, 2012; Chaudhuri and Bannerjee, 2010, Haberli, 2014). It may involve direct investment in infrastructure, real estate, and farmland) or indirect but often leads to increased landlessness via implementation of environmental policy⁴. This is often enabled through loss of control rather than complete dispossession (state-imposed cash cropping schemes for agribusiness companies), and built upon assumptions drawn from and reinforcing discourses. The existing literature on China's complex and multifaceted role in land grabs is wide-ranging. The debate has focused on the nature and extent of China's international involvement. In terms of the former, land deals are either seen as desirable (Deininger et al., 2011), inevitable yet manageable (Von Braun and Meinzen-Dick, 2009) or be seen as something uncompromisingly pernicious (the main contention). In a context lacking transparency and therefore reliable sources of information, the question is whether China's overall role is significant (Ping, 2008; Hofman and Ho, 2012; Scissors, 2010), or greatly exaggerated (Hofman and Ho, 2011, Freeman, Holslag and Weil, 2008). Probably the most robust area of debate surrounding China's role in land grabs focuses on food and agriculture as the driving force behind this global phenomenon (Muldavin, 2012; De Schutter, 2011; McMichael, 2012; Scissors, 2010). Currently, the argument that China's future food security/self-sufficiency requires international resource acquisitions/grabs is widespread (Muldavin, 2012). Yet others challenge this argument asserting that Chinese overseas engagement is driven more by general investment opportunities (whether infrastructure projects, industry, mining, resource extraction, etc.) than food security concerns (Freeman, Holslag and Weil 2008:55,100]). The Chinese state has three distinct interconnected roles in large-scale land acquisitions: enabler, host, and investor. Each

role encompasses a variety of actors, institutions, policies, and practices.

One must also distinguish between agricultural production geared at feeding humans, and agricultural production geared at feeding animals and/or providing raw materials for industrial production. China has adopted separate strategies in each of these respects. China essentially meets its demand for food grains, including animal feed and other agricultural resources e.g. cooking oils on the global market, especially since it joined the World Trade Organization (WTO) in 2001. Agricultural commodities imported by China mainly come from Asia, Australia and USA. As for agricultural production geared at feeding the Chinese population, China's agronomic potential is largely underestimated by western observers. Up until now, China has been virtually self-sufficient in supplying most of its own food (fruit, legumes, maize, cereal, rice, etc.). Although imports have increased for certain types of products, there is no sign that China is dependent for its food supply (although it a major importer of rice and soybeans and is increasingly dependent on imports of wheat and red sorghum). Foreign land acquisition does not appear to be part of China's strategy for food security. The FLA's in recent years in Central Asia (and even in parts of Africa) are not specifically about growing food grains or biofuels (Adem, 2010). There are benefits that flow from FLA that are not driven by a need for agricultural commodities.

5.1 China's overseas land-based investments in agriculture

According to Hofman and Ho, (2012) the pace of Chinese investments in the decade ending 2010 followed the state's 'going global' strategy. The first formal policy to enhance the global expansion of different sectors of the Chinese economy was launched in December 2000 in the tenth Five Year Plan: '...encourage outward investments that can bring into play China's comparative advantage, widen the areas...' (cited in Adem, 2010). In a broad sense, the government initiated the strategy to enhance global expansion

⁴ The Grain for Green program that provides cash subsidies and grain to farmers who retire cropland and plant trees, shrubs or grasses to protect the soil from further erosion., [43]

of Chinese companies. For agricultural production this particularly pertained to natural rubber, oil-bearing crops, cotton, vegetables and timber. In 2008 the Ministry of Agriculture further spurred the global expansion of Chinese agribusinesses (Cheung and Sun, 2009). Its new policies identified investment potential for state-owned enterprises, with a special focus on edible oil-bearing crops, in Central Asia, Russia, Africa, Southeast Asia and South America. Moreover, the Ministry also issued principles on which foreign farm investments should be based: farming locations should be situated in countries on *good terms* with China, which are rich in *resources* and *human capital*, while being *politically stable* (Hofman and Ho, 2012).

Earlier attempts to expand global activities by Chinese companies failed due to absence of state support. Chinese agricultural experts, entrepreneurs and officials therefore urged the government to keep oversight in overseas land investments to manage risks involved in investments, related to trade, diplomacy, security and manufacturing. The Ministry of Agriculture recommended its companies to establish cooperative agreements in order to avoid criticism of a 'neo-colonialist' approach (Hofman and Ho, 2012). In the debates on China's overseas land-based investments, there is a tendency to simplify matters. For one, 'China' is seen as a monolithic agency – a single actor on a worldwide quest of natural and mineral resources. However, the term 'China' in fact denotes a wide variety of state, semi-state and private actors.

5.2 China's land acquisitions in CA

According to Hofman and Ho(2012)

“when scrutinising China’s ‘land grabs’ one encounters two interrelated debates. The first debate revolves around concerns about feeding the increasing world population and the future outlook of agriculture. The second debate relates to discussions on globalization and corporate social responsibility. In the first debate, the alleged merits or threats of ‘land grabs’ have

resulted in various studies over the past years (see for example (Deininger et al, 2011; DeSchutter, 2009). In short, it boils down to the question of whether land acquisitions are entirely negative for poor and socially vulnerable groups, or whether they might also entail positive effects – or might even be a sheer necessity to feed the world. China’s role in the global ‘land grab’ is part and parcel of this debate”

An alarmist report by (GRAIN, 2008) identified China as a major ‘land grabber’⁵. Is China a ‘neocolonial power in the making’ (Visser and Spoor, 2011) or does China also aim to espouse economic prosperity in recipient countries? The ‘China expansion’ discourse features parallels with the second discourse on globalization and corporate social responsibility which, too, is split between arguments of ‘zero-sum’ and ‘win-win’ opportunities (Narula, 2013). In recent years, China’s rapid economic growth has been coupled with a rising demand for natural resources. Great international concern has arisen over China’s land acquisitions for agricultural and biofuel production, pejoratively called “land grabbing”. The significant rise in China’s global activities in agriculture with particular reference to its alleged “land grabbing” should not be seen as separate from the country’s global expansion in other sectors. For example, the “Belt and Road’ initiative (https://en.wikipedia.org/wiki/One_Belt_One_Road_Ini).

China has enhanced its cooperation with Central Asia both bilaterally and multilaterally (Squires, 2018; Squires and Lu, 2018a, Squires, Shang and Ariapour, 2017). Domestic security concerns have been the most important motivator behind China’s strategy towards CA, due to, in large part, the continued insecurity along the Chinese borders, namely with Tajikistan, Kyrgyzstan and Pakistan. One of the Central Asian countries

⁵As Grain (2008, 3) stated, ‘From Kazakhstan to Queensland, and from Mozambique to the Philippines, a steady and familiar process is under way, with Chinese companies leasing or buying up land, setting up large farms, flying in farmers, scientists and extension workers, and getting down to the work of crop production’.

targeted by Chinese investors is Tajikistan (Pannier, 2011). The country is currently a typical economy-in-transition caught in the flux from a centrally planned to a market economy. In this sense, it is in certain ways similar to, yet, still lagging far behind the People's Republic of China. In the Tajik context, two important land deals have caught the international media's attention. Within the past decade, the authorities of Xinjiang (China's western frontier) have acquired a land concession of 20 thousand hectares, while not long before that, the Chinese government concluded a deal with the Tajik government for the acquisition of 110 thousand hectares, which subsumes around 1.0% of Tajikistan's total land area. According to the Tajik government, the Chinese investments' accompanying advanced agricultural technology and know-how is crucial for the country's development. However, controversy has arisen over both concessions (Lohmar et al., 2009)]⁶.

The diversity of Chinese investments involves multiple Chinese actors which may have distinct interests to operate overseas and expand their endeavours. Land is now acquired for industrial farming (in order to produce biofuels), timber extraction/logging, tourism, aquaculture, establishment of special economic zones (SEZs) and industrial centres. Over the past decades China's sustained economic growth has put a rising pressure on the country's domestic natural resources. The oft cited numbers portraying the country's dire situation are that China boasts 21% of the world's population, while the country possesses only 8.5% of the world's available arable land, and 6.5% of the world's water reserves. To complicate matters, China lost 8.2 million hectares of arable land between 1997 and 2010, due to urbanization and environmental degradation (UNOHCR, 2010; Freeman, Holslag and Weil, 2008)⁷.

⁶ Pannier, B. 2011. 'Tajikistan agrees to allow Chinese farmers to till land', Radio Free Europe, January 27th 2011, available at http://origin.rferl.org/content/tajikistan_china/2289623.html

⁷ Beijing: United Nations Office of the High Commissioner for Human Rights.

The pressure on China's land and water resources is unquestionable. It is manifested in the different strategies that the authorities undertake to increase domestic food production. For the government, affordable food prices are perceived as being crucial to maintain social stability and guaranteed supplies are of utmost importance. To fuel its economic development, China increasingly projects its domestic shortages to other countries and regions abroad. The stimulus for this development has become even more pressing since the country's growing middle class pursues more luxurious life styles and consumption patterns (Wang, Hua and Squires, 2017). An increase in a range of particular food products, such as wheat, soybeans, rice, but also animal feed, are more efficiently produced overseas, and thus imply new grounds for Chinese investments. In the five years ending 2015, the country has become a major player in the global land market. New unexpected agreements have emerged under which the Chinese government seeks to acquire large tracts of land and to access overseas resources.

5.3 Going global: Food as driver for outsourcing?

There are different drivers of Chinese companies to invest abroad: a) resource security, b) new markets and investment opportunities; c) symbolic diplomacy; and d) forging strategic partnerships. Chinese companies' quest for natural resources abroad results from the perception of resource insecurity. China's development abroad seems to follow the same pathway of its domestic development (Lohmar et al, 2009). Over the last three decades China's sustained economic growth has put a rising pressure on the country's domestic natural resources. The country became a net food importer by 2004. The status of 'net importer' does not imply that export of food commodities does not take place. The policy changes initiated since 2000 have encouraged Chinese farmers to change their cropping patterns to more profit-making produce (Humphrey and Schmitz, 2007). Both imports and exports have risen sharply since that time, further enforced by

China's WTO accession in 2001. China is now a major exporter of cash crops such as fruits and vegetables (FAOSTAT 2015). Of all food commodities, soybean tops the list of agricultural produce imported to China in 2015 (Squires, Hua and Wang, 2015) and is also one of the major crops steering foreign land investments (see also Adem, 2010).

The significant rise in China's global activities in agriculture with particular reference to its land acquisitions cannot be seen as separate from the country's global expansion in other sectors. For example, Chinese companies are also involved in infrastructure projects, mining and oil extraction around the world, while smaller scale private Chinese enterprises engage more in overseas investment and production activities nowadays.

These investment activities may intertwine and coalesce in terms of interests, timing and government objectives. China invested a total of 215.9 billion USD abroad from 2006-2010. The pace and extent of foreign investments has surged since then. This includes Chinese non-bond investments and investments over 100 million USD. These figures are close to the official figures of the Chinese Ministry of Foreign Trade and Commerce (MoFCom), i.e. 218 billion USD. The bulk of these investments went into energy and power (47.3% or 102.2 billion USD), metals and mining (28.2% or 60.8 billion USD), and finance and real estate (18.2% or 39.2 billion USD). *Agriculture only accounted for a small proportion of total investments, i.e. 4.2% (or nine billion USD)*. This figure also includes 0.2 billion USD or 2.2% of total investments for agricultural construction contracts (Hofman and Ho, 2012). Moreover, of this figure, 60% (5.4 billion) were in fact unknown or 'troubled' investments: cancelled, or announced by the media but never or only partially implemented. The issue of unknown or troubled investments is a problem that I have also encountered in my data analysis. As will be demonstrated below, a substantive part of Chinese investments that are agreed upon or announced in the media never materializes (Hofman and Ho, 2011).

Global land acquisitions are high on the socio-political agenda today. The recent developments have resulted in numerous research initiatives and reports in the last five years, with fierce debates about the impacts of the investments on local livelihoods and the environment. A frequently mentioned issue by critics is that the socio-political processes through which the land use changes are implemented are undemocratic and a testimony of "bad land governance" (Mann and Smaller, 2010, Margulis et al, 2013). The recent land acquisitions regularly contain formally arranged lease or concessionary rights, ranging from 30 to 99 years. Due to shortages in food and fuel, rapidly emerging economies have begun to outsource agricultural production by leasing or buying rural land in developing countries including some in CA. China's huge population that represents a third of the world and its unprecedented economic growth have resulted in the country's supplies of food, energy and metals and minerals falling far short of demand. This has prompted China to step up efforts to acquire farmlands, oil fields and mining assets abroad. China has been highly successful in expanding its influence in Central Asia in recent years, largely at the expense of Europe, Russia and the United States (Swanström, 2011). This will give rise to new patterns of engagement, new coalitions and economic interactions that will shape the future of the Eurasian region. CA is important for China. China emerged early on as one of the most important players in the region and is the largest investor in many of the CA countries. Its sphere of influence is expanding. China's prominence in the region will undoubtedly grow and have a significance that extends beyond the region, not least for the US, Russia, and India and the EU (Squires, 2018, Swanström, 2018).

The demise of the Soviet Union was the trigger for increased Chinese influence in CA. The historical fear of China still lingers on in the region and is reinforced by its increased influence and economic clout. Resolving the outstanding border issues and increasing military and security

cooperation with the bordering states has become foremost concerns for China, whose focus is on its economic and energy interests in the region. China has enhanced its cooperation with Central Asia both bilaterally and multilaterally. Domestic security concerns have been the most important motivator behind China's strategy towards CA, due to, in large part, the continued insecurity along the Chinese borders, namely with Tajikistan, Kyrgyzstan and Pakistan.

The contexts in which Chinese (and other)⁸ actors acquire land, differ widely in socio-economic, political, cultural and environmental conditions, as do the particular resources that Chinese companies aim at and the approach they pursue. This influences the way Chinese companies approach the host society. Several studies have been conducted on China's expansion in resource extractive industries and other sectors. Yet, China's global expansion in general is still poorly understood (Hofman and Ho, 2011). First, when it comes to foreign land acquisitions, Chinese investors are one type of actor among a wide range of foreign private and public investors, including those from Russia, the Gulf States, South Korea and India (Lohmar et al., 2009 Von Braun and Meinzen Dick, 2009) Visser and Spoor (2011) discuss the factors that make the post-Soviet republics such an attractive region for international investment, arguably encompassing much greater agricultural land reserves than most regions of sub-Saharan Africa (Cotula, 2009) or Asia. The focus is on the vast agricultural land areas in Ukraine, Russia, and Kazakhstan, which are politically and geographically almost literally located in between the global economic powers of the West (with the EU bordering Ukraine), China (south-east of Kazakhstan), Russia (bordering Kazakhstan and the Ukraine). Land is increasingly becoming a major asset and political priority in this region. Interestingly, domestic oil and gas companies were the first investors from outside

agribusiness to invest in land (starting in 1999/2000 onwards). These acquisitions were very often driven by the need to diversify risk and were not without speculative motives, being quite different from the land investments undertaken for the purpose of food, feedstuff, and biofuel production. Although some of these investors have shown signs of backtracking from agriculture, on the whole they still have a great impact on the sector.

Equally important in the recent wave of land acquisitions are domestic elites and intraregional corporations. For instance, while being the recipient of foreign investments, a number of Latin American countries also invest in agricultural land themselves (Cotula et al., 2009) Thus, with regard to what is coined a worldwide 'land grab', one therefore should also examine the distinctiveness of Chinese investors vis-a-vis the others. However, what is clear from the discourse is that a 'global magnifying glass' is put on China's every move in the world, which – regardless of the specific effects of these moves – will be influenced by the perceptions and associated fears – 'the yellow peril' – or expectations of China as an emerging global power or as the 'booming billion consumers' market. Yet, in fact we know very little about the range of Chinese investors involved, the motives behind their investments, and importantly the actual impact of Chinese land acquisitions at the grassroots. In particular, China's upcoming presence in Africa in the last decade has received considerable attention (Cheung and Suny, 2009, Adem, 2010). But is China a neo-colonial power in the making? Chinese companies and their activities are most often portrayed in a rampant sense as an aggressive resource extractor. The focus should be on the following questions: How do Chinese land acquisitions impact local (ethnic) communities? What stakeholders are involved, and how do their vested interests determine their actions? What are the regulatory, legal and informal institutions that govern the land acquisitions on the ground? And how are customary rights systems affected by the Chinese land acquisitions?

⁸ Arab states too. Arab states 'must invest in Central Asian farmland' - See more at: <http://www.farmlandgrab.org/post/view/20465-arab-states-must-invest-in-central-asian-farmland#sthash.Hx9MJVcV.dpuf>

One difficulty in analysing land grab and for carrying out independent impact assessments is the fact that most investment contracts are not in the public domain. The available information on land deals in CA is incomplete and the discussion in this paper makes no claim to comprehensive coverage. Available data may not be accurate, retrieved as they often are from press sources⁹. The fuzzy borders of the land grab phenomenon and the uncertainties and imprecision regarding its extent are but one difficulty for a scientific analysis of its medium to long term implications. The extent of forced displacements of local farmers and expropriation compensation offered (or refused) remains totally unclear, and the same is true for the social and environmental damage which may have been caused by large agricultural projects. Hence an exact measurement of the actual extent of land grab – whatever its definition – is simply not possible.

Central Asia is a strategically important region with vital geo-political implications because of its natural resources, and its geographical location hemmed in between Asia and Europe (Squires, 2018, Swanström, 2018). One of the CA countries targeted by Chinese investors is Tajikistan (see above). Importantly Tajikistan is not outstanding in its potential for productive agriculture. The current limited food security is a case in point. Agriculture in Tajikistan relies heavily on irrigation and the mountainous landscape is not well suited for large-scale highly productive agricultural production (Bekchanov et al., 2018; Scissors, 2010; Woodhouse 2012). One could speculate that the Chinese investment is triggered by the crucial natural resources that Tajikistan has to offer, as the Chinese government is increasingly motivated to foster trade and bilateral relationships with the 5 ‘stans’. This is also to the importance of developing the bordering Xinjiang Uygur Autonomous Region in western China. Xinjiang is an important bridge between Tajikistan and China, and social stability in the region is of utmost importance for the

Chinese government (Swanström, 2018). From this description alone, one may understand that there are potentially various motives that underlie Chinese land-based investments.

5.4 Factors conducive to FLA in the post-Soviet Central Asian states

An examination of the trajectories of the post-Soviet states (5 “stans”) since independence in 1990 helps to provide a background to reasons why FLA (not only by China) became possible. The states in CA, especially the 5 'stans' are "fragile" but the region is important as a crossroads for great powers (Swanström, 2018). There are key challenges that must be addressed by the governments in the region. As one examines the post-Soviet economies of the ‘stans’ most exhibit the following characteristics:

- Ossification of the ruling regimes¹⁰.
- "Primitivisation" of the economy.
- Overreliance upon natural resources as the main source of economic growth.
- A lack of rational improvements in the industrial structure.
- The incapacity of domestic investments in the industrial structure.
- The increasing limitations on the ability to attract foreign investment.
- The worsening of the balance of payments.
- The growth of foreign indebtedness.
- Incompleteness of reform in the agrarian sector.
- The use of agriculture as a "donor" to support other sectors of the economy.
- An excessive reliance upon import-substitution-- which is by no means always justified.

All these negative dynamics threaten to doom the economies of post-Soviet Central Asia to protracted stagnation, at least in the foreseeable future. The region suffers from the horrific environmental legacy of the Soviet Union. Land degradation, deforestation, pollution of land and water, loss of biodiversity are major problems

⁹ Financial Times, Guardian, Far East Review, Radio Free Europe, BBC and the China Daily

¹⁰ Except perhaps Kyrgyzstan

(Orlovsky and Orlovsky, 2018). Water-related problems in the region are a major problem (Bekchanov et al., 2018; Krutov, Rahimov and Kamolidomov, 2014). Water, not energy, probably will be the cause of a conflict in the region in the near future (De Fraiture, Giordano and Liao, 2008).

5.5 The critical role of water resources in land grabs

Mann and Smaller (2010) are among the few who identify water scarcity as one of the long-term drivers of land acquisitions for agriculture. A critical motivation in the current trend towards large-scale land acquisitions is the water factor. Agriculture trade specialists have long recognised the notion of trade in virtual water to account for the water needed to grow different crops (Squires, Hua and Wang, 2015). Today we see investment in water rights in foreign states, through the purchase or lease of land with associated water rights and access, as a critical part of the new process of securing long-term farming investments. The many headlines focusing on 'land grabbing' have distracted attention from the role that access to water plays in underpinning the projected productivity of FDI in acquisition of agricultural land in developing countries. In current debates on the impact of foreign investment in agricultural land, the consideration of water has been peripheral. Yet it is clear that water scarcity is a major driver of international flows of investment in agricultural land. This is not because there is any 'global' scarcity of water, but local scarcity of water for agricultural use is emerging in economies that are expanding particularly quickly, such as in India and China and where renewable water resources are particularly limited (HPLC, 2015, Haberli, 2014). Water is a key resource in many of the areas targeted for investment (Woodhouse, 2012; IFPRI, 2009; HPLC, 2015). Irrigable land has often been assigned to investors. Yet there are serious concerns over dam and canal infrastructure's ability to cope with this enormous increase in irrigated area that follows FLA. Greater use of irrigation water close to the river could have

damaging consequences further downstream, especially for dry season harvests. In addition, the high value floodplain below dams, which produce rice, fish and facilitate grazing to support millions of people, as well as habitat for a large number of birds and other species, may suffer (Arnell, 2004).

Even where land acquisition deals do not specify irrigation, choice of location and/or crop type indicates this is invariably an implicit requirement of projects. The choice of crops proposed for projects financed by FDI suggests a high likelihood of production that demands irrigation, not just dependence on rainfall. It seems clear that FDI is set to increase water demand by agricultural projects. It may be argued that this is indeed necessary to increase agricultural output, as many CA governments hope. It needs to be asked to what extent these projects will provide production that is additional to that which is already taking place, and possibly providing infrastructure (dams, canals, drains) which will enhance water management possibilities for existing producers. Conversely, to what extent will water demand by FDI projects simply displace existing water use, resulting in increased agricultural risk and impoverishment? As with other aspects of FDI land deals, press reports provide a source for concern.

It is arguable that private investment in water infrastructure (e.g. for water storage) could provide wider benefits to neighbouring small-scale producers, thus reducing the risk inherent in much of agriculture in sub-humid and semi-arid Central Asia. It is also possible that foreign investment may compete with existing water use, and some land deals have included provisions for priority access to water in cases of scarcity. Empirical studies are used to identify the mechanisms through which large-scale land investments influence water availability for smaller-scale land users. Although effects on water resources may constitute one of the main impacts of land deals, this is likely to be obscured by the lack of transparency over water requirements of agricultural projects and the invisibility of much existing local agricultural

water management to government planning agencies.

Land deals tend to overstate the potential of 'rain-fed' farming and understate (or obscure?) the need for agricultural projects to include investment in water management. At the same time, this process also has the effect of rendering invisible the water management strategies of existing small-scale agricultural producers. Thus, the current discussion of land deals risks obscuring, not only the water management needs of the agricultural projects but also their impacts upon existing local water resource users. For both large- and small-scale models of modernisation, water management has played a role.

A final, and perhaps most important, aspect of the water dimension of large-scale land acquisitions is that impacts are likely to be far more extensive than might be anticipated from the area of land occupied. Unlike land which has a distinct spatial boundary, water use depends on flows through the landscape. Thus the main impacts of land deals may be felt via their effects on water resources. Consequently, restriction or interruption of flows of water in a 'land grab area' in one part of the landscape will have potentially widespread downstream impacts. In assessing the current state of affairs in these countries, it is essential to acknowledge the paucity and unreliability of much of the statistical information emanating from the region. Particularly important is the lack of accurate data about the scale of the shadow economy, which some experts estimate to be as high as 40 percent of the GDP. During the 1990s, the countries of post-Soviet Central Asia have had to traverse a tortuous, twisted path that has led them from a euphoria of unbounded hopes to a mood of profound despair and disenchantment. The exhilaration that accompanied the sudden (and unexpected) realization of independence at the start of the first decade since Independence has given way to intense public frustration and a pervasive economic crisis (Pomfret, 2010). This economic crisis has been unfolding against a background of continuous demographic growth. The

impoverishment of the broader population in the region has reached truly menacing proportions; the gulf between the fragile stratum of super-rich ruling elite and the majority living below the poverty line has reached dangerous levels (Lerman, 2012, Sedik, 2012).

The main factors contributing to economic growth in the post-Soviet Central Asian countries have been foreign trade, foreign investment, and foreign loans and credits. The economies of the countries of the region are critically dependent on foreign trade. The foreign trade turnover in these countries represents 60 to 70 percent of the GDP. In all countries, imports exceed exports (oil, metals, and cotton). It became increasingly apparent that the development model chosen by governments of the 5 'stans' is in need of serious correction. Macro-economic stabilization, together with political stability, make it possible to begin large-scale structural changes and to give greater attention to the domestic market.

The agrarian sector should become the main priority of development in CA, at least in Uzbekistan and Kyrgyzstan. In both countries, agriculture provides employment for about 45 percent of the total labour force, produces between one-third and one-half of the GDP, and accounts for a significant part of exports that earn hard currency. In both countries, economic policy actually discriminates against the agrarian sector, which has been transformed into a source of reserves for import-substitution in industry (Uzbekistan), or which is used in the interest of commercial intermediaries (Kyrgyzstan). The proportion of budgetary, credit, and investment resources for the agrarian sector does not correspond to its role and significance in the economies of the 5 'stans'. By functioning as a "donor" for the other sectors of the economy, the potential is rapidly increasing for a crisis to beset the agriculture sector itself. To a significant degree, this discrimination against the agrarian sector explains the depressing social and economic situation in these countries. The eradication of poverty and indigence is not possible without a change in economic policy

addressing the needs of the agrarian sector (as suggested by the World Bank, ADB and other donors). Top priority in the policy of development must also be given to the expansion of light industry and the processing of agricultural commodities. It is precisely these branches of industry that have been subjected to the greatest destruction during the process of transformation and that are now situated on the periphery of attention in official economic policy. Without a reorientation of investment resources to these branches, the 5 'stans' are doomed to remain exporters of agricultural commodities and products with a low level of processing--as is to be seen at the current time.

The post-Soviet era has allowed differences in the economic potential of individual 'stans' to become clearly apparent. They follow economic strategies, which are to a large degree, incompatible. In early 1999, the 5 'stans' began to impose severe restrictions and customs duties on imports inside the region. Kazakhstan, Uzbekistan, and Kyrgyzstan established trade barriers against each other. Whereas Kazakhstan and Kyrgyzstan carried out a policy of reducing the state's regulatory role in the economy, Uzbekistan and Turkmenistan pursued a contrary course. It should be painfully evident that this institutional discordance can hardly contribute to the process of drawing these five states closer together in the economic sphere. Investors from abroad (Russia, Arab States, Turkey and China) see opportunity here and this has led, in part, to greater foreign direct investment (FDI) and FLA (Swanström, 2018).

VI. DISCUSSION AND CONCLUSIONS

The emergence of "land grabbing" (the purchase or long term lease of vast tracts of land from mostly poor, developing countries by wealthier, food-insecure nations as well as private entities to produce food for export) has raised deep concern over food security and rural agricultural development. The finance sector is a relative newcomer to farmland acquisition. Its interest has

been generated by rising prices for food and other agricultural commodities, the perception that the value of land and water is increasing, and the emergence of farmland as a global asset in a portfolio of other investments, offering a return less affected by the latest international financial crisis. While many argue that the establishment of a conducive investment environment is necessary to stimulate agricultural production, there is a pressing need to study the implications of increased foreign private control over crucial food-producing lands.

When analysing China's developing "going global" strategy Hofman and Ho (2012 https://en.wikipedia.org/wiki/One_Belt_One_Road_Initiative).

"found a significant rise of land acquisitions over the last decade. At the same time, however, the lacuna in precise data and information about Chinese companies' structure, size and governmental backing constrains a better and detailed overview of the actors involved in Chinese foreign land investments. The diversity of Chinese investments involves multiple Chinese actors which may have distinct interests to operate overseas and expand their endeavours. . The contexts in which Chinese actors acquire land, differ widely in socio-economic, political, cultural and environmental conditions, as do the particular resources that Chinese companies aim at and the approach they pursue. The lack of data and information about the engagement of Chinese private company overseas limits exact quantification, and a reliable qualification of the Chinese projects."

Box 2: When Development Cooperation becomes Land Grabbing: The Role of Development Finance Institutions. Some unresolved questions about FLA and land grabs

- **Agrarian Change:** What changes in broad agrarian structures are emerging? Are land deals motivated by new forms of agrarian capitalism or repeats of the past? What is the nature and extent of rural social differentiation – in terms of class, gender, generation and ethnicity – following changes in land use and land property relations as well as organizations of production and exchange? What are the emerging trends around dynamics of power, elites and corruption; land as a source of patronage? How can we make sense of the politics of land deals in different contexts? What are the dynamics of international politics of land grabs in the broader context of energy, mining, forestry and conservation; and the role of big capital and powerful interests?
- **Finance:** How are land deal contracts developed between foreign and local companies and national states and financiers? Who finances these deals? What is the role of sovereign funds, hedge funds, pension funds and other financial instrument? Who is involved? How does the money flow? How and to what extent has (trans) national finance speculation played a role in land deals in the context of the convergence of food, fuels, climate and finance crises?
- **Resistance and Alternatives:** What is the range of reactions from local communities to these investments? To what extent have agrarian political struggles been provoked by the new land investment dynamics? What are the issues that unite or divide the rural poor, organized movements, and rural communities around the issue of land deals? What are some of the relevant emerging alternatives from key actors? Are some of the traditional policies such as land reform, and some of the more recent alternative visions such as ‘food sovereignty’ relevant and useful in protecting and promoting the interest of the rural poor in the midst of these (trans) national commercial land deals?
- **International Policy Actors:** Have global land policies of different overseas development agencies (eg World Bank, ADB, FAO, EU) contributed to facilitating/encouraging or blocking/discouraging land deals? What are the limitations of ‘code of conduct’, certification, regulation, FAO’s Tenure Guidelines, information -dissemination, and capacity-building strategies?

My argument makes four key points. First, there is as of yet no evidence of a coordinated Chinese government effort to obtain land in post-Soviet Central Asia or in other neighbouring countries, for food security or for other agricultural investment. However, and second, a small number of Chinese agribusiness companies did pursue land acquisitions as part of China’s general ‘going global’ surge of trade and outward foreign investment. In most cases the amounts of land at stake in these negotiations were far smaller than reported, and the projects themselves were either commercial, import-substitution production (mainly rice, cotton sugar), Third, for a combination of political and economic reasons, this interest has not, so far, translated into significant land acquisitions in CA countries. This is not too surprising because China’s global expansion in general is still poorly understood (Hofman and Ho, 2012; Haberli, 2014). China’s rise as a global investor country coincided with the global price increases of food, oil and many other commodities in 2007 and 2008. An intense media interest in China’s role as an emerging investor, in the context of concern over global food security, led first to a spate of

newspaper articles, blog postings and media reports. Many of these reports contained significant errors but were nonetheless circulated uncritically and became the foundation for databases and, later, scholarly analyses. Therefore, by 2012, a misleading image of Chinese agricultural engagement in LFA appeared to have solidified in the public mind. The narrative ran “the Chinese were very actively acquiring large amounts of farmland in the 5 ‘stans’, especially Kazakhstan and Tajikistan and the Chinese government was leading the effort, using its state owned enterprises (SOEs) and sovereign wealth funds. The purpose was to secure food for China’s own food security”. In 2009 the Food and Agriculture Organization (FAO) sponsored a study on ‘land grabs’ by the London-based International Institute for Environment and Development (IIED). The IIED authors (IFPRI, 2009) cautioned that, although there was clearly Chinese interest in agricultural investment, the conventional wisdom appeared to be incorrect. Although there is a common external perception that China is supporting Chinese enterprises to acquire land abroad as part of a national food security strategy the evidence for

this is highly questionable. The Chinese have a strategy to foster overseas investment, including in agriculture. Chinese food consumption will increasingly require imports, particularly as scarce land is lost to development, and as more Chinese move into the middle class, consuming more meat (Wang, Hua and Squires, 2015). These realities underpin the readiness with which NGOs and others believed the ‘hyperbolic’ media stories on Chinese ‘land grabbing’ in LFAs, and filled their databases with cases that were often more chimera than real. Yet the details of these stories suggest that the way they have been interpreted needs to be revised. In particular, these investments do not appear to be part of a coordinated Chinese strategy to secure land in the 5 ‘stans’ to grow food for China. Rather, they reflect the uncoordinated strategies of a number of different firms to explore commercial investment opportunities across multiple sectors.

In this paper I have argued that the water dimension of agricultural land acquisition in CA has yet to be widely acknowledged. It seems a discussion of land deals in such terms has barely begun. The empirical evidence of actual impacts of recently agreed FLA and FDI projects is inevitably sketchy, and this paper makes no claims to have undertaken a comprehensive review. Rather, it has attempted to identify the types of questions that need to be asked. Notwithstanding that, a set of minimum principles and measures to address the human rights challenge associated with large-scale land acquisitions and leases has been proposed by De Schutter (2009) and economists grapple with other assessments (Chaudhuri and Bannerjee, 2010 and Cotula and Blackmore, 2014). There is a risk that large-scale commercial agriculture will cause unforeseen but disproportionate damage to existing small-scale production systems. This is likely even where existing small-scale land use has legal protection, because it may lack visibility, in part due to its small physical extent. This raises questions about the most useful indicators to assess both existing use and the impact of new investments.

Trends in foreign direct investment in land for agriculture may bring about substantially lower food prices when expanding agricultural land area, and thus increase national food security in host countries (Haberli, 2014, Ghosh, 2010]. At the same time agricultural FDI can also impair food availability at the local level (McMichael, 2012; Cheung and Suny, 2009). Similarly, protection of small farmers may improve their own food security but also mean higher food prices for poor urban households. FDI patterns of the recent decade reflect deep global economic and social transformations, with potentially profound implications for the future of world agriculture. The role of food in human consumption makes it fundamentally different from other commodities. In many parts of the world, land is central to identity, livelihoods and food security, and decisions taken today will have major repercussions for many, for decades to come. As China (and India) become richer and start to eat meat regularly – a particularly dramatic development for global food security – these new consumer habits require a 5 to 9-fold increase of cereals and oilseed production, not to mention the also increasing water requirements and greenhouse gas production.

Detailed analysis of FLA and in particular the role of FDI should become a priority as data becomes available. In a context lacking transparency and therefore reliable sources of information, the question is whether China’s overall role is significant (Muldavin, 2012; Cheung and Suny, 2009, Ping, 2008) or greatly exaggerated.

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