Land Grabbing and Food Security of Host Countries in Sub-Saharan African Case

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Submitted to Central European University Department of Public Policy

In partial fulfillment of the requirements for the degree of Master of Arts in Public Policy

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Budapest, Hungary 2010

Abstract

"Land grabbing" or cross-border long-term land leasing or purchasing for agricultural investment has become a new phenomenon in many countries, especially in Sub-Saharan Africa. The phenomenon is prospected to bring both developmental opportunities and threats to the host counties. One of the issues with which host countries should be concern is food security. This research paper studies the potential effects of land grabbing on food security of host countries in Sub-Saharan Africa. The paper uses food security conceptual framework, which is drawn on different concepts of food security, as analytical framework. It finds out that land grabbing has both potential to enhance and undermine domestic food security of host countries. However, the actual effects are depending on how conditions under land grabbing negotiation are made. The potential effects that are discussed in this paper should be taken as a guideline to encompass food security issue in land grabbing negotiation and also in policy agenda setting to ensure host countries' domestic food security as regards to land grabbing phenomenon.

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List of Abbreviations

FAO	Food and Agricultural Organization of the United Nations
FDI	Foreign Direct Investment
IFAD	International Fund for Agricultural Development
IIED	International Institute for Environment and Development
NGO	Non-Governmental Organization
SWFs	Sovereign Wealth Funds
The U.S	The United State of America

Chapter 1: Introduction and Research Methodology

Recently, "land grabbing", or international agricultural investment in the form of long-term land leasing or purchasing, has become a new phenomenon in a number of developing countries, especially in Sub-Saharan Africa (Cotula et al. 2009). This phenomenon has attracted lot media attentions since it has rapidly increased in the last few years and involves significant scale of land in developing countries. Land grabbing phenomenon is mainly driven by food security concern that stimulated by skyrocket food prices in 2008, energy security concern that boosts demand for biofuel, and current financial crisis that force investors to seek for alternative investment. Regarding the three drives, particularly the concern over food security, governments and private investors of rich countries such as the Gulf States are interested in purchasing or leasing large-scale of land in developing countries, where land are perceived as abundant and cheap, to invest in agricultural production.

Most of the massages from the media and NGOs have highlighted the potential negative effects that the host countries may have to face, for example a displacement of people in rural area, environmental damage, and domestic political unrest. One of the major concerns is domestic "food security", since many of them, especially in Sub-Saharan Africa are facing food insecurity problem. Land grabbing is criticized as a tool of richer countries to transfer food insecurity problem to the poor countries. However, it can also bring both developmental opportunities for food security improvement to the host countries through expected economic and agricultural development. Whether it would actually enhance or worsen food security in host countries is still debatable. In academic area the study on this issue has not yet been concretely formulated, neither theoretically nor empirically. Regarding this knowledge gap and the important of food security on people's welfare, this research

paper would like to study the relation between land grabbing and food security from theoretical perspective based on the conceptualization of food security per se. The research paper is paying particular attention to the potential effects of land grabbing on food security in Sub-Saharan African countries since they are the main destination for land grabbing and having food insecurity problem.

The study of this research paper shows that land grabbing has potential to both enhance and undermine food security of the host country in Sub-Saharan Africa. It gives a picture of how land grabbing would affect domestic food security of host countries regarding different food security concepts. It argues that it is crucial for host countries to identify what position they would take to ensure food security of their citizen, since the actual positive or negative effects of land grabbing depend on how the contract is drawn, and how the governments will address policy to react with the potential effects.

1.1. Background and Indication of Problem Area

Land grabbing is perceived as a new phenomenon, which catches a lot of attention from the media and developmental agencies. Solely in the year 2008, GRAIN– an international non-profit organization who works mainly on supporting small farmers and social movement for community-controlled and biodiversity-based food system¹ - has reported roughly 180 cases of such international land transaction as national attempt to enhance control over food-producing lands (Daniel and Mittel 2009). The total number of land grabbing cases is definitely far beyond GRAIN's reported number, since the main actors are not only national government but also private investors (2009b).

Land grabbing is driven by different purposes, such as food security, energy security,

¹ http://www.grain.org/about/?org

and as alternative investment strategy. Most national land grabbings are forced by the food security purpose. Countries that have limitation on domestic food production due to resource constraints– for example scarcity of water and cultivatable farms, and highly depend on food import–are viewing land grabbing as new policy strategy to cope with food insecurity problem, especially when food price is very fluctuating and prospected to rise in long term. Regarding information from GRAIN, these countries are the Gulf States, China, Saudi Arabia, Japan, Malaysia, India, South Korea, Libya, and Egypt Food security problem (GRAIN 2008).

Sub-Saharan Africa is reported by the media as "a hotspot" for land grabbing, especially in Sudan, Ethiopia, Madagascar, Mozambique and Tanzania (Cotula et al. 2009, 17). According to Cotula et al. (2009, 99), about 2,492,684 hectares of large-scale land in these countries have been allocated for foreign agricultural investment since 2004. Number of project and allocated land area are on an upward trend and are expected to increase in the future (Cotula et al. 2009). Land grabbing or large-scale land acquisition is a very sensitive issue of the region since much of rural population of the region depend their livelihood and food security on land (Cotula et al. 2009).

Food security is one of the urgent problems of Sub-Saharan Africa. The region is the most vulnerable region to food security in 2008-2009, in which about half of its population in food insecurity (Shapouri et al. 2009, 20). The region is highly dependent on food import and food assistant. Governments in the region perceive land grabbing for agricultural investment as an opportunity to fulfill investment gap in agricultural sector to improve food security problem. However, the concern that land grabbing may worsen the region's food insecurity situation rather than improving it is raised from international developmental organizations such as FAO, media and NGOs. Now, it is far from possible to conclude an impact of land

grabbing on food security in the region since land grabbing phenomenon is quite recent and there is not enough empirical evidence available to confirm any claim. The relationship between the two is arguable.

Regarding food security, this research paper realizes that food security is not a unified concept that has an absolute definition. It has been developed overtime. The different food security concept shows different dimensions of food security, for example availability, accessibility, or vulnerability, in which each of the dimensions requires a specific analytical perspective to look into. Therefore, any analysis regarding food security, including its relationship with land grabbing phenomenon, should carefully regard the difference of food security concept per se.

This research paper would like to call for attention to the necessity of an analytical framework for analyzing the land grabbing-food security relationship which grounds on the diversity of food security concept. Even though most of the literatures regarding land grabbing and food security have noticed the diversity of food security concept, their analysis does not show an explicit linkage between different food security concepts with the prospect effect from land grabbing. Hence, it is difficult to show a clear picture of relationship between the two. An unclear picture of food security and land grabbing relationship will result in a difficulty in land deal negotiation and policy design of host countries. A clearer framework of food security concept to analysis land grabbing phenomenon would help host countries to identify their problem and take an appropriate policy implication or status quo in the negotiation to ensure food security for their people.

1.2. Research Objective

To study the potential effects of land grabbing and food security of the host countries

in Sub-Saharan Africa, regarding different food security concepts.

1.3. Research Question

How would land grabbing affect food security of the hosting countries in Sub-Saharan Africa, regarding different food security concepts?

1.3.1. Sub-questions:

- What is food security? And how it can be explained from different dimensions.
- What is land grabbing? What are the main characteristics of current land grabbing phenomenon?
- What are the potential effects of land grabbing to the host country in Sub-Saharan Africa in general?

1.4. Research Methodology

1.4.1. Analytical Framework

This paper research uses different food security concepts as an analytical framework to answers the research question of how land grabbing would affect food security of the host countries in case of Sub-Saharan Africa. As many literatures point out, food security concept is not static but rather dynamic. The concept has been changed over past three decades since it was introduced in 1970s. Each concept that has been developed reflects different dimension of food security. To have a clear picture land grabbing effects on food security, each of the major concepts should be taken into account in the analysis.

Conceptualizing different food security concepts into an analytical framework is,

therefore, the most important part of this research paper. Food security conceptual framework used in this paper is drawn from three main types of food security concept: food security on availability basis; food security on accessibility basis; and food security concept that tackles with other issues such as livelihood and human rights.

The research paper also conceptualizes and characterizes current land grabbing phenomenon, so that its potential effects on food security can be discussed. The definition and characteristics of land grabbing are drawn from literatures of international developmental organizations such as World Bank, FAO and IFAD, and data from media and NGOs who works on this issue. The definition and characteristics of land grabbing together are used as basic information to analyze the potential impacts of land grabbing on host countries in general. Then potential effects of land grabbing are analyzed through the food security conceptual framework.

1.4.2. Research Method and Data

This research paper is based on literature review. It conceptualizes food security concept and land grabbing characteristic through literatures, secondary data from NGOs, news, and policy recommendation and research paper of international developmental organizations. Its analysis is not formulated by empirical data but rather on theoretical and conceptual perspective. However, it also uses available empirical data to make its argument more convincing.

To analyze the Sub-Saharan Africa case, this research paper mainly uses an information from the recent study of FAO, IFAD, IIED's cooperative report written by Cotula et al.(2009) - "Land Grab or Development Opportunity?: Agricultural Investment and International Land Deal in Africa", which can be considered as the most informative and

insight empirical study available.

Limitation of Research

The major limitation of this research paper is a restraint of empirical data of actual effects of land grabbing phenomenon on host countries. Most of the useful data on this issue are provided by media reports, some researches of NGOs, particularly GRAIN group, and some reports and policy recommendations by international developmental organization such as World Bank, FAO, and IFAD. However, since this paper does not aim at evaluating the actual effect of land grabbing phenomenon but rather build its analysis on theoretical and empirical perspective, the limitation of availed empirical data does not significantly have an affect on the paper's analysis.

Another limitation is time constraint. Since time is very limited in doing this research, the research paper cannot cover all of the available literatures. The analysis of this paper is based on as much information and data as possible given the time limit, which may not cover all the aspect related to the area issue.

1.5. Chapter Guideline

The research paper starts the second chapter with the conceptualization of food security concepts. In this chapter, three main types of food security concepts are discussed. Accordingly, the paper draw a framework based on main focus and characteristic of food security that each concept highlights. The third chapter explores the land grabbing phenomenon. In this chapter land grabbing rationale and main characteristics are explored and discussed. In the forth chapter, potential effects of land grabbing in hosting countries are elaborated given the case of Sub-Saharan African countries. The fifth chapter uses food security conceptual framework from the second chapter to analyze potential effects of land grabbing in hosting countries discussed in the forth chapter. In this chapter the main research

question is answered and discussed. Lastly, the sixed chapter concludes its argument and gives some remark regarding policy implication for the host countries.

Chapter 2: Conceptualizing Food Security Concept

2.1. The Development of Food Security Concept

"Food Security is a dynamic idea that has undergone significant transformations in its conceptual life time" Edward R. Carr (2006, 15). Most of the review articles show a transformation of the concept over decades. There are at least about two hundred different definitions of food security (Smith et al, 1992). Given the multifold of the concept, it is difficult to unify food security. An understanding of different concepts is needed to give a complete picture of food security.

Regarding Maxwell reviews, food security concept has shifted three times since it was first addressed in the World Food Conference in 1974. From his analysis there are three stages of food security concept development: first, "a shift from global and nation to household and individual level of focus, second "from a food first to livelihood perspective", and third "from objective indicators thinking to other spheres" (Mexwell 1996, 155). Based on Maxwell's analysis and other review literatures on food security concept such as FAO (2006), Tweeten (1999); and Maxwell et al. 1992, this research paper groups food security concepts into three different types, which has been chronically developed: food security on availability basis; food security on accessibility basis; and food security that tackles with other issues such as rural livelihood or human rights. Each types of the concept are not conflicting with each other but they rather explain the concept from different dimensions. In section 2.1, the paper discusses main focuses of each food security concept and also its policy implication. In addition, cross-dimensional issue, sustainably of food security, is also discussed. Then in section 2.2., all the concepts discussed in section 2.1 is summarized together in to a framework which is used in further analysis in chapter 5.

2.1.1. Availability Based Food Security Concept

Most of review literatures on food security indicate that the concept was first conceptualized in 1970s (Grain 2008a; Carr 2006; FAO 2006; Maxwell 1996; Maxwell et al. 1992). During that period food security was conceptualized as "a secured food supply" at national and global level (Carr 2006; FAO 2006; Maxwell et al 1992). The concern over food supply was rooted back from the world food crisis in 1972 to 1974 (Maxwell et al 1992). The food crisis was a consequence of a bad weather that took place all over the world in 1972 (Time 1947). According to Time Magazine special report on world food crisis (1974), in 1972 the world's food output dramatically dropped for the first time in 20 years for about 33 million tons in total. In the following year, poor weather was continuing in some countries and most of developing countries could not boost up output due to limitation of capacity and shortage of inputs. Therefore, food price was greatly increased and left billion of people in hunger (Time 1974).

Food supplies shortage problem in 1972-1947 called a great attention from the United Nations. In 1947, the first World Food Conference was held by the FAO in Rome. Food security was defined in the conference as:

"Availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices" (World Food Conference cited in FAO 2006, 1).

"Availability" of food is a core dimension of this food security definition. Availability of food supply is a determining variable of food (in)security (Carr 2006, 16). Availability based concept refers to food security at the national and global level. The world or any given country can achieve food security if it can supply sufficient level of food products by any means. Luther Tweeten (1999) explains that availability of food can be achieved not only by food production, but also by food import and the accumulation of food stock. FAO (2006) expands the means to food availability to food aid as it defines availability as "the sufficient quantities of food of appropriate quality, supplied through domestic production and imports – including food aid" (FAO 2006,1). The availability dimension of food security implies the needs for world food stock promotion, improvement of new technology and agricultural restructuring, food import stabilization schemes, enhancement of food trade, food aid to famine area, developmental aid for agriculture, and food aid (Carr 2006; Maxwell 1996). Example of practical food availability promotion at international level was the enlargement of IMF Compensatory Financing Facility to cereals in 1981, which helps poor countries to meet their need for food import (Maxwell 1996).

Food availability is directly related to efficiency and cost-effectiveness of food production, which is discussed in the following section.

a. Food Availability Dimension and Efficiency and Cost-effectiveness

Availability dimension of food security is closely connected to "efficiency and costeffectiveness" issue. Sufficient food supply available should be provided with efficiency and cost-effectiveness, which Maxwell et al. (1992) perceives as a legitimate objective. Not only provide enough food for its population, each country should do it in the most efficient way regarding expected cost and benefit (Maxwell et al. 1992). On the one hand, sufficient food supply can be effectively provided by improving productivity of domestic food production. This implies a necessity for agricultural development policy such as agricultural reform or agricultural technologies research and development. Another way to ensure efficiency is through the national economic growth. Since higher national income level means higher resources to use in food supply enhancement purpose (Maxwell et al. 1992), each country can enhance food security through general economic development. In sum, food security in availability dimension depends not only on agricultural development policy, but also on overall economic development policy (Tweeten 1999).

On the other hand, each country does not necessarily have to produce its own food but can import food supply from aboard if it is more efficient and cost-effective. The country can ensure sufficiency of food supply regardless its natural resources endowment. Limitation of natural resources for food production can be offset by international trade and food transfer (Tweeten 1999). Efficiency and cost-effectiveness are criteria to indicate whether the country is better to produce, to import food from abroad, or to transfer food through food aid channel, in order to achieve a sufficient level of food availability. Each country has to compare expected cost with expected benefit of each policy options (Maxwell et al. 1992, 43).

It is important to note that "food security-efficiency dilemma", which was introduced by Balaam, can be expected regarding food import option (1986) (FAO 2006). The dilemma reflects a debate on national food self-sufficiency and food dependency from import domain (FAO 2006). Davies and Witter (1986) note that food security suggests an efficiency distribution system to balance food import and domestic production (Maxwell et al 1992, 42). This dilemma is link to another important issue of "sustainability", which is explored in the following section.

2.1.2. Accessibility Based Food Security Concept

In 1980s the main focused dimension of food security changed from availability to "accessibility" (FAO 2006; Carr 2005; Maxwell 1996;Maxwell et al. 1992). This food security concept dimension bases its analysis on household and individual level rather than national and global level as of availability based concept (Maxwell 1996; Maxwell et al. 1992). It is a shift from macro to micro level of analysis (Maxwell 1996). Accessibility dimension focuses on both supply and demand side of food security, in which it try to find a

balance between the two (FAO 2006). Accessibility dimension came on attention when availability dimension failed to explain food insecurity where there was no food shortage (Carr 2005). Rather than merely concentrates on sufficiency of food supply, accessibility dimension questions whether household and individual are able to obtain the available food (Maxwell et al. 1992). In 1996, World Food Summit had encompassed accessibility dimension into its food security definition:

Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (World Food Summit 1996 cite in FAO 2006,1)

From the definition, not only physical but also economic access to food is highlighted. According to FAO (1996), access to food refers to access to sufficient resources for obtaining adequate food for active and healthy life. The sufficient resources are conceptualized by Amartya Sen (1981) as "entitlements", which are a set of commodity bundles over which individual has control in order to have physical access to food, given legal, economic, political, and social arrangements of the society that they live in (FAO 2006a, 1). In the following section, 2.1.2.1, the paper gives more explanation on "entitlement approach", and in section 2.1.2.2, it pays attention to food accessibility and economic entitlement (poverty issue), which are often highlighted in food security policy implication.

a. Food Accessibility and Food Entitlement Approach

Maxwell (1996) credited Amartya Sen (1981) for a paradigm shift in food security concept from availability to accessibility dimension (Maxwell 1996, 157). Sen points out that accessibility dimension was obviously seen in nutrition planning and has been demonstrated in a number of field studies since 1970s. However, he was the one who theorized the concept and moved it to centre-stage (Maxwell 1996, 157). Sen explains the relationship between food accessibility and food security through his original approach, "food entitlement" (Maxwell 1996). The approach focuses on "the ability of people to command food through the legal means available in that society – including the use of production possibilities, trade opportunities, entitlement vis-à-vis the state, etc." (Sen 1981, 433). From his view, ownership to food is a property right that constructed but rules in the society. Each person in the society has "entitlement to a commodity bundles" – including food (Sen 1981, 434). Sen explains that personal entitlement depends on two variables: endowment factor; and exchange entitlement mapping, (Sen 1981, 435). Endowment factor is the initial resource bundle that individual own or inherit, which can be transformed through production and trade, for example land asset (Maxwell et al. 1992). Exchange entitlement mapping is entitlement that individual can have through exchange (trade and production). It is socially constructed, which depends on legal, economic, political, and social feature of the society and individual's position in it (Sen 1981, 435). For example, opportunities to produce, trade possibility, legal rights to distribute the produce, and social security provisions – e.g. unemployment benefits.

He explains that food insecurity or famine at household and individual level does not result from insufficient of food supply, but from a failure to entitled with sufficient food bundle. This failure is result from, for example, 1) deficit of buying power, 2) price was immoderate, 3) obstacle to have access to transfer (Tweeten 1999, 474). Food security can be ensured by enhancement of household and individual entitlement such as ensuring rights to land and production, or direct improvement of food access, for example access to government or NGOs food transfer.

b. Food Accessibility and Poverty

Regarding food security definition of 1996 World Food Summit, which has been undertaken by many international developmental agencies such as FAO, IFAD and World Bank, economic access to food is highlighted to be as important as physical access to food. As other entitlements, economic entitlement is significant as a mean to acquire sufficient food. However, it is more emphasized than the others in policy implication. Many literatures pay attention to the effect of poverty on food insecurity of household and individual (Timmer 2005; Tweeten 1999; Braun 1995; Braun et al. 1992; Simon et al. 1992). Poverty is a main determinant of food insecurity (Braun et al. 1992, 9). People who have relative low economic entitlement such as the poor, elderly, landless peasants, small-scale farmers, and workers are usually identified as having food access problems (Tweeten 1999, 474).

Low economic entitlement or poverty is perceived to be a root of food insecurity because it limits the possibility of household and individual to get access to food. Therefore, poverty alleviation means food security enhancement (Timmer 2005; Tweeten 1999). Higher household and individual income can improve food accessibility, and therefore enhance food security (Tweeten 1999; Braun et al. 1992). This implies a specific policy to increase income of the poor such as asset based expansion, land reform, job creation, or financial aid etc., and also general economic growth promotion policy that contributes to overall higher capita income of the population.

2.1.3. Food Security Concept that Tackle with Other Issues

In recent literatures food security is linked with other issues beyond the boundaries of availability and accessibility dimension, for example livelihood, human rights, ecological sustainability, nutrition, etc (FAO 2006). In this paper two of the issues will be discussed; livelihood, and human rights since they are mentioned in the literatures regarded food security in relation to land grabbing (Cotula et al. 2009; Daniel and Mittle 2009), which is the main focus of the paper. Food Security and Livelihood Approach

Livelihood approach recognizes food security as one dimension, among others, of

livelihood security (Mexwell and Smith 1992, Chambers 1988, Frankenberger and Coyle 1993 cited in Maxwell and Wiebe 1998). In this approach food is not primary human need as in conventional food security view - Maslow's hierarchy of need approach (Maxwell 1996). The approach was based on an observation of famine in Africa in 1985 that shows that people were willing to stay hungry to save their asset and future livelihood (Maxwell 1996; de Waal 1989). It suggests, "Food security of people have to be interpreted in the context of their complex and dynamic livelihood strategies" (Mexwell and Smith 1992, 28). Chambers (1988) defines livelihood security as;

Livelihood is defined as adequate stocks and flows of food and cash to meet basic needs. Security refers to secure ownership of, or access to, resources and income-earning activities, including reserves and assets to offset risk, ease shocks and meet contingencies. (Chambers 1988, 1 cited in Maxwell and Smith 1992, 28)

This approach explains that food is only one among a wide range of factors that determine individual decision to balance their interest regarding other factors such as risk or economic stats. It views food security in rather dynamic way and interested in individual's coping strategy to sustain livelihood security, which encompasses food security. Livelihood approach is overlapped with entitlement approach in a sense that both pay attention to individual endowment as a factor that affects food security. For livelihood approach, endowment such as real income, asset or livelihood itself, affects individual perspective to food security and their strategy to cope with the problem. As Mexwell (1990) argues citing de Waal (1988), "the poor people will modify their attitudes to food in order to, for example, to preserve their asset base or other ways protect their livelihoods" (Maxwell 1990, 4 cited in Maxwell and Smith 1992, 31).

Food security in relation to livelihood approach, therefore, is linked to concepts such as "vulnerability" or "risk management" (Chambers and Conway 1992 cited in FAO 2006). The approach pays particularly attention to the poor and vulnerable people such women, since they have high risk to be deprived from livelihood and food security. In order to enhance food security, security of livelihood is needed (Maxwell 1994 cited in Maxwell and Wiebe 1998). In policy perspective, broad livelihood enhancement policy – such as household risk reduction or rural growth improvement – is a policy implication to ensure food security in relation to livelihood approach.

a. Food Security and Rights to Food

Food security is also defined as "rights". Over the past two decades, there are attempts to promote "right to food" as one of the basic human rights accepted in international arena. It has been mentioned in many international conferences, declarations, and conventions in different notions. It is referred to "…inalienable right to be free from hunger and malnutrition …" in the Universal Declaration on the Eradication of Hunger and Malnutrition of 1974 World Food Conference (United Nations 1974 cited in Maxwell et al. 1992, 45). While it is regarded as "the right to an adequate standard of living" in 1984, Article 25 of the Universal Declaration of Human Rights mentioned (Maxwell et al 1992,44). And it was referred as "right to adequate food", which is based on availability dimension of food security concept, in 1996 World Food Summit (FAO 2006,1).

Rights to food implies to responsibilities of the state to its citizens. Van Hoof (1984), Alston and Eide (1989), and Eide et al. (1991) show that the state has threefold of responsibilities: to respect; to fulfill; and to protect the basic rights – including right to food of its population (Maxwell et al 1992, 46). Firstly, the sate has to respect rights to food and not do any action that weaken an ability of its people to pursue their needs according to the rights (ibid.). Secondly, the state has to support its population to meet their need to food (ibid.). And lastly, the state has an obligation to protect its population from being departed

from pursuing their need of food (ibid.). Protection obligation implies that the state has to ensure its population means of livelihood such as rights to resources – for example, land and natural resources.

Recently, right to food does not only imply for states responsibility but also for private sectors (Cotula et al. 2009, 105). This approach has been accepted internationally by the UN Special Representative of the Secretary General on Human Rights, Transnational Corporations and Other Business Enterprise (Cotula et al 2009, 105). They emphasize that it is a direct responsibility of private sector to respects human rights, which includes the right to food.

b. Cross-Dimensional Food Security Issue - Sustainability

Another issue that is needed to be considered parallel to the three main types of food security concept mentioned above is "sustainability". It has been emphasized in the 1974 World Food Conference's food security definition – "Availability at all times..." (World Food Conference 1974 cited in FAO 2006, 1) Sustainability shows time dimension of food security at all level of analysis – national, household, and individual. It is about how to "maintain", "enhancement", and "endure" food security in all dimensions on a long-term basis, regarding shock or fluctuation that can create a pitfall. Regarding the World Bank Report on Poverty and Hunger (1986), there are two types of food insecurity considering time dimension (FAO 2006, 1). Firstly, "dynamic of food insecurity" or the continuation of food security that caused by due structural problem. Secondly, "transitory food insecurity" or the temporary food insecurity that caused by temporary tension or pressure such as natural disaster, economic crisis, or political conflicts (FAO 2006). To tackle food security problem both time dimensions of food security should be considered.

On availability dimension, sufficient food should be provided at all time (Wiebe 1994

cited in Maxwell and Wiebe 1998). On accessibility, sustainability dimension refers to an ability to "generate access to sufficient food while maintaining their endowments of resources over an extend period of time" (Wiebe 1994,p.56 cited in Maxwell and Wiebe,8). On livelihood dimension, according to Maxwell (1988) "sustainable livelihood is a necessary condition of food security". People should be able to maintain livelihood security overtime to be able to maintain food security. And on right to food, state should always have responsibility to its citizen's right to food.

2.2. Food Security Conceptual Framework

Most of the review literatures on food security concept have recognized the development of the concept in their work. They have conceptualized the concepts into different dimensions which are related to the development of the concept, for example; FAO (2006) addresses three dimension of food security: availability, accessibility, stability, and utilization. Tweeten (1999) gives three dimensions: availability, accessibility, and utilization. And Maxwell and Weibe (1998) describe the concept through three dimensions: sufficiency, sustainability, and vulnerability. In this research paper, food security conceptual framework is drawn directly from food safety concept development that is previously discussed in this chapter.

In summary, in this paper food security concept is framed into three dimensions: availability, accessibility, and dimension that related to other issues such as livelihood and human rights. In addition, it also regards cross-dimensional of food security issue, which is sustainability concept. The conceptual framework of food security of this paper is demonstrated in the following table 2.1.

	Availability Based Food Security Concept	Accessibility Based Food Security concept	Food Security Concept that Tackle with Other Issues		Cross- dimensional issue:
			Livelihood Approach	Rights to Food	Sustainability
Level of Analysis	National and Global	Household and Individual	Household and Individual	Individual	All levels
Main Focus	Sufficiency of Food Supply	Entitlements	Livelihoods	Basic Human Rights	Time dimension
Concerning issue	Efficiency and Cost Effectiveness Available of food though: food production, food trade, and food transfer	•Endowments factors •Exchange Entitlement Mapping • Economic endowment – Poverty and income	 Livelihood security Risk management Vulnerability 	Responsibilities of the state 1. To respect 2. To fulfill 3. To protect	•Dynamic food insecurity •Transitory food insecurity

Chapter 3: Chapter 3: Land Grabbing

International land grabbing has become an emerging global phenomenon, which catches a lot of media's and international developmental agencies' attention recently (Cotula et al. 2009). Before finding the answer of how land grabbing would impact food security in host countries, we need to understand what exactly land grabbing is. In this chapter, the features of recent land grabbing phenomenon are explored. The chapter starts with a discussion about land grabbing definition to scope down the term for later analysis in section 3.1. Then it discusses about main forces of that the phenomenon in section 3.2. In section 3.3 and 3.4, destination of land grabbing and the main investors are discussed, respectively.

3.1. What is Land Grabbing?

3.1.1. Land Grabbing Definition

Land grabbing is not a theoretical concept but a term to describe an international investment event that takes place in many areas around the world in recent years. Land grabbing cannot be defined as an absolute concept. Its definition has been given by the media, international development agencies and NGOs on the basis of common features that derived from available empirical evidences. Definitions of land grabbing that are shown in literatures can be grouped in to two general versions: broad definition and narrow definition.

Regarding the broad definition, the most recent report that was written on corporation between FAO, IFAD, and IIED, "Land grab or development opportunity? Agricultural investment and international land deal in Africa" (2009), defines land grabbing as "*land acquisition* that is not include only purchase of ownership but also the acquisition of use rights – leases or concession – whether short or long-term" (Cotula et al. 2009, 17). Regarding this definition land grabbing refers to any international investment activity that involves land transaction, regardless any detail such as the size of land acquired, underlying purpose, investors or time length. However in its study, the report has narrow down its focus to large-scale FDI land acquisitions for agricultural purpose only.

With reference to current land grabbing phenomenon, other reports and literatures take a narrower version of land grabbing definition. In Oakland institution' report "the Great Land Grab" by Shepard Daniel with Anuradha Mittal (2009), land grabbing is specifically defined as "purchase or lease of vast tracts of land by wealthier food-insecure nation and private investor from mostly poor, developing countries in order to produce crops for export" (Daniel and Mittal 2009, 1). The other narrow definition is given in an article of Annelies Zoomers (2010). Zoomers defines land grabbing as "a large-scale, cross-border deals or transaction that are carried out by transnational corporation or initiated by foreign governments" (Zoomers 2010, 429). The two definitions show two common features of current land grabbing. First, the definitions of land grabbing is limited to only an international event, and not include the investment from domestic investors. Second, they show that the investor of land grabbing can be government body not only private sector.

This paper takes a broad version of land grabbing defined in FAO, IFAD, and IIED's report as a base line. However, regarding the research question and constraint of time and available information, the paper scopes its focus to only land grabbing that is a large-scale international land acquisition for agricultural investment, regardless whether it is governments' or private investors' afford.

3.1.2. Land Grabbing as a New Phenomenon? – Characteristics of Current Land Grabbing Phenomenon

As mentioned before, land grabbing has been amplified by the media and international developmental agencies as a "new" phenomenon to which the world should pay attention. However, international land grabbing itself, as large-scale land acquisition for agriculture, is not new. Zoomers (2010), Hallam (2009), and Smaller and Mann (2009) argue that land grabbing, which most of the cases reminder of colonial period, exist in Asia, Latin America, and Africa. Zoomer(2010) and Hallam(2009) called it as traditional land grabbing or traditional FDI in agriculture. Most of them related to traditional agricultural practice or were mainly for agribusiness exporting, for example land purchases for cattle farming (Zoomer 2010) and rubber by Firestone (Cotula et al. 2009). However, since 1980, land grabbing remarkably declined and was replaced by other type of investments such as contract farming or investment in other agricultural related product, for example fertilizer, machine, or seed (Smaller and Mann 2009, 1).

By reviewing literatures on current land grabbing phenomenon, the paper concludes that there are three main characteristics that differentiate current phenomenon from traditional land acquisition. First of all, governments increasingly play roles as land grabbing investors along with private sector (Zoomers 2010). Secondly, a scale of land acquisition is gigantic as never happened before as one consultant of international land development firm said, "We're used to seeing 100,000-hectare sales. This is more than 10 times as much." (The Guardian 2008). Thirdly, new land grabbing phenomenon is mainly for basic food production, which is different from before that focused on non-food products as well (Hallam 2009).

3.2. What Drives Current Land Grabbing Phenomenon?

Current land grabbing phenomenon is caused by complex mixture of factors (Daniel and Mittal 2009). Literatures and reports indicate that the phenomenon is driven and stimulated by three recent crises – food crisis, energy crisis, and financial crisis (Zoomer 2010, Cotula et al. 2009; Daniel and Mitlle 2009; Smaller and Mann 2009; the Guardian 2008).

3.2.1. Food Crisis

In 2008, world food prices skyrocketed as never before due to shortage of agricultural output, high speculative activities, export restriction by leading food-exporting countries (Daniel and Mitlle 2009;Smaller and Mann 2009). At least 25 food-exporting leaders, including Vietnam, India, Russia, and Argentina, decided to restrict their key food export (Smaller and Mann 2009, 4). Higher food price raises food import bills (Daniel and Mittal 2009). This volatility of global food price and supply soars a concern over food security and fear of food shortage in many food-imported dependent countries, especially countries in the Middle East. For food-importing and relatively rich countries whose arable land and water are scarce, land grabbing then has become their new strategy to secure their food supply to feed their increasing population (Daneil and Mittal 2009). However, land grabbing attempt for food investment was not just started after food crisis in 2008 but the crisis stimulated the investment to become a phenomenon.

3.2.2. Energy Crisis

Due to the current energy crisis, petro-energy price has dramatically risen. Increasing petro-energy price has created more demand for alternative energy, especially biofuel. Biofuel was boom in 2003 (Smaller and Mann 2009). Demand for biofuel has increased over years. For example, the European Union increases the target of biofuel use for transportation to 10 percent by 2010, whereas the U.S. aims to raise ethanol use to 3.5 billion gallon by 2010 (Daniel and Mittal 2009, 4). Nowadays, biofuel is accounted for about 30% of total global wheat and grain growth use (Daniel and Mittal 2009,4). Increasing demand for biofuel has, therefore, brought back land grabbing (Zoomer 2010; Daniel and Mittal 2009; Smaller and Mann 2009).

3.2.3. Economic Crisis

Financial crisis in 2009 made private investor and national funds rethink about their investment strategy. They have to diversify portfolio for higher and more secured return (Hallam 2009). An increasing agricultural product price and high demand for biofuel make land grabbing for agricultural investment becomes highly attractive (Cotula et al. 2009; GRAIN 2009b). As George Soros said in June 2009 that "farmland is going to be one of the best investment of our time", high-power industry who shares the same belief has become active players in land acquisition and international agricultural investment (GRAIN 2009b, 1-2). The investors choose to acquire land rather than other type of investment to reduce investment risk and ensure investment security in long-run (Hallam 2009).

3.3. Where is Land Grabbing Destination?

The physical criteria that land grabbing investors are likely to consider when choosing land grabbing destination are available land size, land fertility, and water resources (Smaller and Mann 2009). Large-scale land is desirable since the investors can enjoy economies of scale in agricultural production (Hallam 2009). Therefore, Africa with its perceived abundance of available land is the main destination of land grabbing (Cotula et al 2009; Hallam 2009). The quality of land is also important. Plots of land that are highly fertile and have sufficient water resource² for cultivation are desirable such as those in South East Asia and South America. However, the investors also consider other social, economic, politics, and institutional conditions - for example land ownership laws, political stability, a support of host country's government, or existing basic infrastructures - in the host country when making investment decision.

According to available data, countries that are land grabbing destination are mostly in developing world, for example Sudan, Pakistan, Philippines, Cambodia, Mexico, Laos, Russia, Kazakhstan, Mozambique, Brazil, Uganda, Madagascar, Ukraine, Turkey, Georgia, etc (GRAIN 2008b). However, there are also developed countries that have abundant of available farmland being land grabbing target such as Australia and the U.S. (GRAIN 2008b).

3.4. Who are Land Grabbing Investors?

Current land grabbing phenomenon has been driven by both public and private sector. From the public sector side, land grabbing is mainly for food security purpose, while some are for energy security and investment opportunity (Cotula et al. 2009; The Guardian 2008). There are two broad groups of courtiers that actively involve in land grabbing (Cotula et al. 2009). Firstly, East Asian countries, namely China and South Korea. Secondly, Gulf State, which are Saudi Arabia, Qatar, and United Arab Emirate. These countries are highly dependent on food import but have surplus of other resources such as oil or investment capital (Cotula et al. 2009).

Based on a study of land grabbing situation in Sub-Saharan countries, Cotula et al. (2009) reveal that there are five types of action that governments get involved in land grabbing: 1) direct land acquisition by central government agencies; 2) investment through

² An important of available water resource in land grabbing decision is descriptively explained in Smaller and Mann (2009).

sovereign wealth funds³ (SWFs); 3) investment through state-owned enterprises⁴ and other non-SWF; 4) investment supported by private sector; and 5) creating a framework agreement and national policy such as government-to-government diplomacy (Cotula et al. 2009, 32-38). In precise categories of government actions are overlap with and reinforcing each other (Cotula et al 2009).

From the private sector side, they are driven by profit making purpose (GRAIN 2009b). They are driven by high food price and energy price as an alternative investment opportunity. GRAIN (2009 b) reveals that the role of "financial capital" (investment funds and companies – domestic and transnational) is remarkably significant in current land grabbing phenomenon. In 2009, GRAIN has observed 120 land grabbing investment structures by financial capital. The most significant examples is land deal purpose of Deawoo, a major Korean private company, with Malagasy government in 2008 to lease out 1.3 million hectares of farmland or about half of Madagascar's arable land (Spieldoch 2009; GRAIN 2008 a). Big international investors from financial sector, and investment banks from developed world like Morgan Stanley, BlackRock (U.S.), Deutsche Bank (Germany), Glodman Sachs (U.S.), and Knight Frank (U.K.) have changed their investment strategies from banking and property sector to agricultural investment (Daniel and Mittal 2009; Smaller and Mann 2009).

GRAIN (2009b); Hallam (2009); Daniel and Mittal (2009); GRAIN (2008b) claim that private sector plays a leading role in the current land grabbing phenomenon. However, evidences show that, in most of the case, private sector are highly supported and backed up

³ SFWs is "government institution, in that their management is largely market-oriented, but also usual in the financial sector because of their government ownership" (Cotula et al. 2009, 29).

⁴ State-own enterprise are "profit-making entities registered under company law that are majority or wholly owned by the state" (Cotula et al. 2009, 31).

by their government (Cotula et al. 2009). For example, in August 2009 Mauritian government made a long-term lease contract on farmland in Mozambique and then subleases it to two private corporations (GRAIN 2009), or in the case of Saudi Arabia and China which the government gives support for private company to invest in agriculture abroad to promote the nation's food security (Cotula et al. 2009, 28).

Chapter 4: Potential Effects of Land Grabbing on Host Country: Sub-Saharan Africa case

This chapter discusses potential effects which land grabbing would make on the host country- in the case of Sub-Saharan African countries. Most of the information about land grabbing in the Sub-Saharan region is based on FAO, IFAD, and IIED corporative report (Cotula et al. 2009), since it is the most complete and reliable source of information available. The chapter begins by giving a picture of land grabbing in the region. Then, potential land grabbing effects on the region are discussed. The effects that are discussed in this section are specific effects that are relevant to food security, which is the main focus of this research paper.

4.1. Basic Information of Land and Land Grabbing in Sub-Saharan Africa

4.1.1. Land Availability in Sub-Saharan Africa

In the eyes of investors, Sub-Sahara Africa has abundance of unutilized land (Cotula et al. 2009). This claim is true according to Global-Agro-ecological Assessment, which explores global agricultural land based on satellite imagery (Fisher et al. 2002 cited in Cotula et al. 2009), and net land balance statistic (the different between total land area and a sum of utilized land for cultivation, settlement, forest, and protected land) (Cotula et al. 2009). Therefore, the region has become the main destination of land grabbing.

However, Cotula et al. (2009) argue that even though lands in the region seem abundant, they are not actually available for land acquisition. They point out that "availability" concept of land is questionable and need critical analysis. The concept often refers to an evaluation of land "productivity" rather than "existence" of land users (Cotula et al. 2009). "Available", "idle" or "waste" lands are land that the government considers as unproductive, which can be occupied or used by local people. For example, in Ethiopia, lands in Benishangul Gumuz and Afar region distributed to investor were previously used for shifting cultivation by the locals, which perceived by the government as unproductive users (Cotula et al. 2009). Land that the investors are looking for are likely to be higher in value, fertile, and with access to water resource, which often be claimed or used by the locals (Cotula et al 2009). However, there is a problem to formally identify land availability on basis of existence occupancy and usage since most countries in the region have underdeveloped formal property rights regime (Hallam 2009). Land property rights regime is on transition period shifting from traditional and historical-based to market-based (Hallam 2009, 5).

4.1.2. Land Holding in Sub-Saharan Africa

"Land is nationalized or mainly controlled by state" in several countries in the region, for example Ethiopia, Mozambique, and Tanzania (Cotula et al. 2009,74). Whereas other countries such as Kenya, Madagascar, and Mali have private ownership scheme on land holding, and some country, e.g. Ghana, some of lands are held by state but most of them are held by private entitles (Cotula et al. 2009). In general, formal land markets in the region are still underdeveloped, where only 2-10% of lands are under formal tenure and lands are limited distributed to private holders (Cotula et al. 2009). Local people are satisfied with customary tenure system. Even in the countries where private ownership is ensured, most of land is under state control (Cotula et al. 2009).

4.2. Land Grabbing in Sub-Saharan Africa

4.2.1. Sub-Saharan African Government's Incentive

Most of the governments in the region are interested in developing their agricultural and rural sector (Daniel and Mittal 2009). Agricultural development has recently become strategic policy of countries in the region to generate growth, create employment, and ensure food security (Cotula et al. 2009). Therefore, land acquisitions with promised agricultural investment are very attractive for the governments. In order to attract foreign investment, many national policy reforms to facilitate such investment are made, for example removal of restriction on foreign ownership on land, or taxation and custom regime reform (Cotula et al. 2009)

4.2.2. Land Grabbing in Sub-Saharan Africa

According to Cotula et al (2009) land grabbing in the region has key features as follows;

- Since most of lands in the region are under state-control, land acquisition always involve with state decision.
- Land grabbing is dominated by foreign private sector with strong government back up.
- Most of land investment are long term leasing rather land purchasing.
- Land fees are set at a very low rate.

4.3. Potential Effects of Land Grabbing on Sub-Sahara Africa Countries

The potential effects of land grabbing in Sub-Sahara Africa discussed in this section are grouped into potential benefits and potential treats as follows.

4.3.1. Potential Benefits from Land Grabbing

a. Economic Benefits

International developmental agencies such as FAO, IFAD, or World Bank stress in their report that land grabbing or international land acquisition for agricultural can be beneficial for poor countries' economic development (GRAIN 2010; Daniel and Mittal 2009). The potential economic benefits from land grabbing include the following types:

1) Direct Financial Benefit - Land Fees

Finding from Cotula et al. (2009) indicated that mostly economic benefit from direct financial transfers such as land fee in the region are relatively low significance comparing with other prospect benefits such as job creation or infrastructure development (which are discussed in the next section). Normally, official land fees that the investors have to pay are often very low at merely the nominal rates, or not being charged at all. For example, in Sudan land rents are remarkably low at about US\$ 2-3 or 0.42 hectare per year in the Northern part of the country and the rents government charges from foreign investors are not much different (Cotula et al. 2009, 79). Low rent is resulted from underdeveloped formal land market in the region. The report shows that governments in the region are more interested in rural developmental benefit such as local employment or infrastructure building then direct financial benefit from land fees. Therefore, land fees have become an unimportant part in their negotiations.

Taxation, which is another direct financial benefit, is also likely to be insignificant because most of the host governments have lowered tax rate or have tax exemption as an incentive to attract foreign investment in agricultural sector, which is strategic sector for many countries. For example, in Sudan the government gives exemption on custom duties and tax on all capital for agricultural concession (Cotula et al. 2009, 80).

2) Macroeconomic Benefits - on Investment, Employment, and Infrastructure

Macroeconomic benefits such as investment, employment creation, and infrastructure building from land investment are considered as a key area of benefit for host countries (Cotula et al. 2009). Regarding benefits from investments that the investors promised to bring in, capital transfer from such investment is prospected to stimulate host countries' economy, especially in rural area. Focusing on sectoral development, foreign capital inflow is very important for agricultural development in host countries. It will fill up the investment gap in the sector, which cannot be fulfilled by the government (Hallam 2009). Foreign investment is productivity and improving quality of agricultural product (Hallam 2009). Moreover, domestic agricultural market can also be improved, since the more foreign investment could mean the more competition in the market. There is not yet sufficient evidence on capital and technology transfer from land grabbing. However, taking a lesson from general FDI, in long-run host countries are really benefit from enhanced technology, product quality, and sanitary standard (Hallam 2009).

On employment benefit, land acquisition for agricultural investment is prospected to create more domestic employment (Zoomers 2010; Cotula et al. 2009; Hallam 2009). An empirical study of Cotula et al. (2009) on quantitative level of employment confirms that the investment has significantly created jobs as forecasted. However, there is no available data

about qualitative of job created.

Lastly, for infrastructure building benefit, many of host countries in the region seem to emphasize on commitment to invest on infrastructure of foreign investors, for example on irrigation system (Cotula et al. 2009). However, in some case infrastructure commitment does not relate to agricultural sector. For example, Qatar government promises to offer loan to build deep-sea port in Kenya in return for land leasing (Cotula et al. 2009, 82).

4.3.2. Potential Threats from Land Grabbing

a. Displacement of Local People

Lands allocated to foreign investors are often claimed to be "available" or "waste" land on productivity basis not actual usage and occupancy of the locals (Cutola et al. 2009). However, most of higher value lands, which are fertile and irrigated, are already in used by the local. Hence, land grabbing that often seeks for higher value land will result in displacement of those people (Cutola et al. 2009). The size of displacement can be different in each country, in which further study is needed. Large-scale land acquisition could increase a big number of rural-landless since most of people in the region live in rural area, for example about 70% of Malagasy are in rural area (Daniel and Mittal 2009). The concern has been specifically highlighted on indigenous people. There is an estimation in the United Nations Permanent Forum on Indigenous Issues that large-scale land acquisition for biofuel production will make approximately 60 million land rights of the indigenous people around the would under risk (Daniel and Mittal 2009, 12).

Even though land grabbing may create employment opportunities for displaced people, but their livelihood would be changed (Daniel and Mittal 2009). They may have to shift from being a farm-holder to become a worker. In addition, displacement of people would result in a change of rural community, devastation of social capital, and reduction of accessibility to local resources. Compensation of the displaced are highly recommended by World Bank and FAO as a code of conduct that should be take into account in land deal (GRAIN 2010; Cutola et a; 2009).

b. Obstacle to Land Reform

Daniel and Mittal (2009) make a point that land reform effort in many developing countries has been threaten by land grabbing deal. Formal land tenure scheme in most of the host countries is not well developed yet (Hallam 2009). There is a need of land reform in those countries to ensure and secure access rights of local people to land. Taking Philippines experience, the effort to push land reform bill for land redistribution, the Genuine Agrarian Reform Bill (GARB), in 2009 was stalled by Saudi investors who were planning to lease thousand hector of land in Philippine for livestock and poultry investment (Daniel and Mittal 2009, 14). According to Daniel and Mittal's (2009) report, in Kenya, Tanzania, and Zimbabwe land reform is needed and may also be threaten by land grabbing movement as in Philippines.

Chapter 5: Land Grabbing and Hosting Countries' Food Security

In this Chapter, the research question of how land grabbing would affect host countries' food security in the case of Sub-Saharan Africa is discussed and answered. There is a concern raised by the head of FAO, Jaques Diouf, that land grabbing phenomenon "could create a form of neo-colonialism, in which "poor states producing food for the rich at the expense of their own hungry people (The Guardian 2008). Sub-Saharan Africa, which is the main destination of land grabbing, is one of the regions that faces serious food security problem. Therefore, it is important for countries in the region to think through on Diouf's concern regarding potential effects of land deal that they have already made or is on

negotiation. An analysis in this chapter provides a broad picture of how land grabbing could potentially affect food security of host countries in Sub-Sahara Africa through different dimension of food security concept. The analysis is based on food security conceptual framework that is illustrated in chapter 2 - table 2.1 combines with the potential effects of land grabbing discussed in chapter 3.

5.1. Land Grabbing Effects on Food Security in Availability Dimension

Availability dimension of food security focuses on the food supply at national level. It concerns about how food supply can be secured and provided through food production, trade, or transfer, and how efficient or cost-effective those options are.

Land grabbing is likely to increase food supply of host countries by two means. Firstly, food supply from domestic production will increase due to advancement of productivity and efficiency by foreign investment. Lack of investment capacity is indicated as a fundamental cause of low food productivity and, therefore, food supply, in the region (Hallam 2009). Most of the countries have limited public and private investment resources for agricultural development (Hallam 2009). Hence, land grabbing that bringing capital inflow is a great opportunity for those countries to fill up an investment gap, bring land use to the full potential, and thus increase food supply. Moreover, productivity and efficiency will also be promoted by new technology transferred, and the new infrastructure building that support agricultural production such as irrigation system. Apart from that, since investments are in large-scale of farmland, economies of scale that reflects cost-effectiveness can be expected. Secondly, host country will have more resource to import food from abroad, since land grabbing is prospected to boost host country economy in general. Many countries in the region, such as Sudan, are currently net food importer (Cotula et al. 2009, 34). Accordingly, land grabbing will enhance their ability to supply food to ensure domestic food security. However, foreign investment in agriculture by land grabbing in general does not always increase domestic food supply since not all investment are on food production. Even though food security is a key driver behind land grabbing, many are rather driven by increase global demand on biofuel (Cotula et al. 2009; Üllenberg 2009a). Moreover, though food investment projects are dominant, but they are usually aiming to export back to investors' country. As a result, the investment will not have any significant effect on host country's food balance (Üllenberg 2009b). For example, in Madagascar, all food production of Deawoo investment was sent back to Korea and there is no evidence that the investment increases food supply for the local (Üllenberg 2009b, 26). In addition, potential food surplus enhancement benefit from technology transfers will be limited if the technologies are not flowed to local producers (Hallam 2009).

5.2. Land Grabbing Effects on Food Security in Accessibility Dimension

Accessibility dimension of food security focuses on ability of household and individual to get access to food. The attention is given to entitlement that makes a particular household or individual be able to get access to food.

Regarding entitlement issue, land grabbing would create opportunities and threats for food accessibility and food security in the host country. On the plus side, land grabbing would enhance entitlement from two ways. First of all, it would improve economic entitlement of household and individual by directly and indirectly enhancing their income that allows them to afford more food (Smaller and Mann 2009). Directly, land grabbing would generate employment for the local, and indirectly it would boost national and local economy, which will affect the local standard of living. Secondly, foreign investment in agriculture would improve exchange entitlement mapping, which will help household and individual enhance opportunity to exchange (through trade and production) for better food access, through domestic food market improvement, and better infrastructure building. Foreign investors would increase competition in domestic food market, which would stabilized market price and enhance market exchange. Better domestic market condition will, therefore, benefit domestic consumer in accessing to food. While infrastructure building, such as irrigation system, will help improving food production of the locals (Hallam 2009). Moreover, other infrastructure building such as road or port will lead to better market access and also better market information.

On the negative side, land grabbing is likely to undermine household and individual entitlement and entitlement exchange mapping. First of all, it would weaken ability of people to produce their own food. As discussed in chapter 3 land grabbing will drive out local people from their land, since most of arable lands are in used, therefore. People will not be access to fertile and arable land, which is the most important production means of local household and individual to their own food production (Cotula et al. 2009). Nevertheless it would also reduce accessibility to other natural resources that are attached to land such water source (Cotula et al. 2009; Üllenberg 2009a). Cotula et al. (2009) have further point out that displacement of people from important production means would result in poverty which, as consequence undermines their food accessibility.

Secondly, as also pointed out in chapter 3, land grabbing investors have possibility to obstruct domestic land reform, which is important step to improve domestic food security. At household and individual level, land tenure security is an exchange entitlement that supports food production (Mexwell and Weibe 1998). Moreover, at national level, many literatures indicate that land reform, which secures land tenure of local users, will increase agricultural productivity and food supply that implies for food security improvement (Sen 1981 and 1985; Rahmato 1991 and 1993; Shipton 1990 and 1994; Carter et al, 1994; Bruce and Migot-

Adholla 1994 cited in Maxwell and Weibe 1998, 2) because security in land ownership will enhance credit accessibility that, therefore, improves agricultural production (Maxwell and Weibe 1998). Therefore, an obstacle to food land reform in host countries will also be an obstacle to food security.

5.3. Land Grabbing Effects on Food Security in Dimension that Related to Other Issues – Livelihood Approach and Right to Food

5.3.1. Land Grabbing and Food Security in Livelihood Approach

To begin with food security in relation to livelihood approach, food security is perceived as only a part of livelihood security. Therefore, the effects of land grabbing on food security can be understood through the effects on livelihood such as a change in individual income, or assets in dynamic way.

Land grabbing would be both opportunity and threat for food security in relation to livelihood approach. On the one hand, since land grabbing has potential to enhance individual income and standard of living through investment, capital transfer, and employment creation, it would change livelihood strategy of individual in host country. Higher income will reduce risk and uncertainty that individual, especially the poor, have to faces. Hence livelihood and food security has a possibility to be improved. On the other hand, land grabbing would result in displacement of people and drive them out from initial asset. The displacement will directly change people's livelihood since they are taken away from their asset and resources. Individual and household, especially vulnerable groups such as the poor and women, may have to change their livelihood strategy, which thus affects their food security. Regarding empirical findings food security of vulnerable groups will be deprived during difficult time such as in crisis or drought (Maxwell and Smith 1992). Therefore, food insecurity, especially of vulnerable groups, can be expected as a result of land grabbing. In addition, displacement would change other aspect of people livelihood, such as social capital and rural community, which may indirectly affect livelihood strategy and food security.

5.3.2. Land Grabbing and Right to Food

Rights to foods focuses on state responsibility (and recently also include private sector responsibility) to respect, fulfill, and protect people's basic rights on food.

Whether land grabbing would promote or violate rights to foods depends on how it would affect food security at individual level. There are possibilities for both outcomes as previously discussed. However, there is possibility that local rights such as land right, which is related to right to foods since land is an important of food production, would be violated by land grabbing. This is because of a lack in legal or mechanism to guarantee and protect local rights in most countries in the region (Contula et al. 2009; Daniel and Mittal 2009). Even though legal instrument exists in some countries but it cannot ensure local rights in practice (Contula et al. 2009).

5.4. Land Grabbing Effects in Cross Dimensional Food Security – Sustainability of Food Security

Sustainability of food security is interested in how food security can be maintained, enhance and endure over a period of time. On the plus side, land grabbing may increase food production productivity and food supply in long run as a result of technology transfer and agricultural development from foreign investment. Therefore, food availability could be sustained by land grabbing and its investment. In addition long-term investment may ensure long-term employment for the local, if so accessibility and livelihood dimension of food security could be sustained. However, on the negative side, long-term land leasing, which is mostly about 40-50 years, may lead to change in environment that affects long-run production and food availability if the investment relates to cultivation which require high water an nutrient or base on monoculture production (Cotula et al. 2009). More than that, long-term leasing would undermine accessibility and livelihood sustainability, since local people will be displaced from arable land for long-period of time. The change from food producer to food buyer will make displaced people become more dependent on food market.

5.5. Land Grabbing Effects on Food Security in Host Country in Summary

In this chapter, potential effects of land grabbing to food security in host countries, particularly in Sub-Saharan Africa, have been illustrated based on different dimensions of food security. The analysis in this chapter does not intend to finalize whether land grabbing would enhance or undermine host countries' food security, but it wants to show all the potential effects that could happen to food security that host countries should consider regarding their land deal. Food insecurity is an important problem in Sub-Saharan Africa region. Food security should be put as one of policy agenda in land acquisition negotiation. The government should maximize the potential benefit, and minimized potential threat of land grabbing on food security by creating conditions to investors in land deal. Even though the deal has already been made, an analysis in this chapter is useful as a guideline for policy intervention to ensure food security. Brief list of recommendations for host countries' governments are the followings;

- Governments should ensure that promised investment, employment creation, infrastructure building, agricultural development and technology transfer will actually take place for the benefit of their people, especially for the locals in rural area who will be directly impacted by land grabbing.

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- Governments should set land-leasing fees at reasonable rate regarding lands value to minimize an opportunity cost, and maximize financial benefit, which can be used in other development projects to offset the potential negative effects of land grabbing.
- Foreign investment projects should be assessed on the basis of capacity, efficiency and sustainable development before making the deal.
- To ensure domestic food availability, governments should make a condition with foreign investors who invest in food production to supply some part of food products to domestic market.
- Land deal and negotiation should be transparent and involve local stakeholders participation.
- Social and environmental impact should be assessed before making the deal.
- There should be specific developmental policies for displaced people, and vulnerable groups to ensure their livelihoods and food security, especially during the transition period. For example, reasonable compensation program, or food aid program.
- Specific policy to assist small-scale farm should be made, for example production development and technology transfer policy.
- Local rights such as right to food, right to resource access, and right to land should be respected, fulfilled, and protected by formal institution setting such as laws.
- Land tenure security should be legally ensured for individual and collective use, regarding custom land use in each country.

Chapter 6: Conclusion

The main objective of this research paper is to study the potential effects of land grabbing phenomenon on food security in host countries through different concepts of food security. The paper grounds its analysis on Sub-Saharan African countries, since it is the land grabbing "hotspot" and is one of the vulnerable regions to food security. In order to understand the relationship between land grabbing and food security in host countries, the paper argues that food security conceptual framework, which encompasses different concepts of food security, is needed. Therefore, regarding the development of food security concept in the past three decades, the paper has drawn a framework that shows three dimensions of food security: availability; accessibility; and food security that related to other issues such as livelihoods, and human rights. In addition, the framework also includes cross-dimensional issue, which is sustainability in to its analysis.

Based on the food security conceptual framework, land grabbing in Sub-Saharan Africa has potential to both enhance and undermine food security of the host counties, given all dimensions of food security. The actual effects that would occur are highly depended on how the conditions of land deal are made. Therefore, the government of each country, who has high control over domestic land and is a key player in land grabbing negotiation, should regards the potential effects of land grabbing on food security in their decision making on land grabbing negotiation. The finding of this paper can be use as a broad guideline for those governments to encompass food security issue into negotiation on land grabbing. The paper would like to argue that Sub-Saharan African countries should give priority to food security problem as main policy agenda, since food insecurity situation in the region is very poor. The government should make a negotiation in the way that potential benefits to food security are maximized, while potential threats are limited. And in the situation that land grabbing has already took place, the paper's finding can be use as a guideline for the governments to set policy agenda to compensate the potential negatives effect of land grabbing on domestic food security.

However, the finding of this paper is based on limited empirical information that is available at the moment. The potential effects of land grabbing on food security of host countries discussed cannot give an accurate prediction on what would actually happen. It is rather give a general guideline of the issues that should be concerned by the host countries' government. The government should consider its specific context as well in making the decision. Therefore, further study that provides empirical evidence and specific case study are needed in the future.

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