

Hunger issues: natural resources

Land: an unequally distributed, threatened but essential resource

Most of the hungry in the world can be found among small farmers cultivating tiny plots of land and landless agricultural labourers. Some rural communities who until recently could use their traditional rights to cultivate land have been excluded as their land was grabbed by local elites, civil servants or foreign investors. This trend has accelerated as the price of agricultural commodities has increased and agriculture has become an increasingly attractive sector.



Inequitable agrarian structures and unequal land distribution

Land, together with labour, is an essential factor of production for agriculture. But it is very unequally distributed.

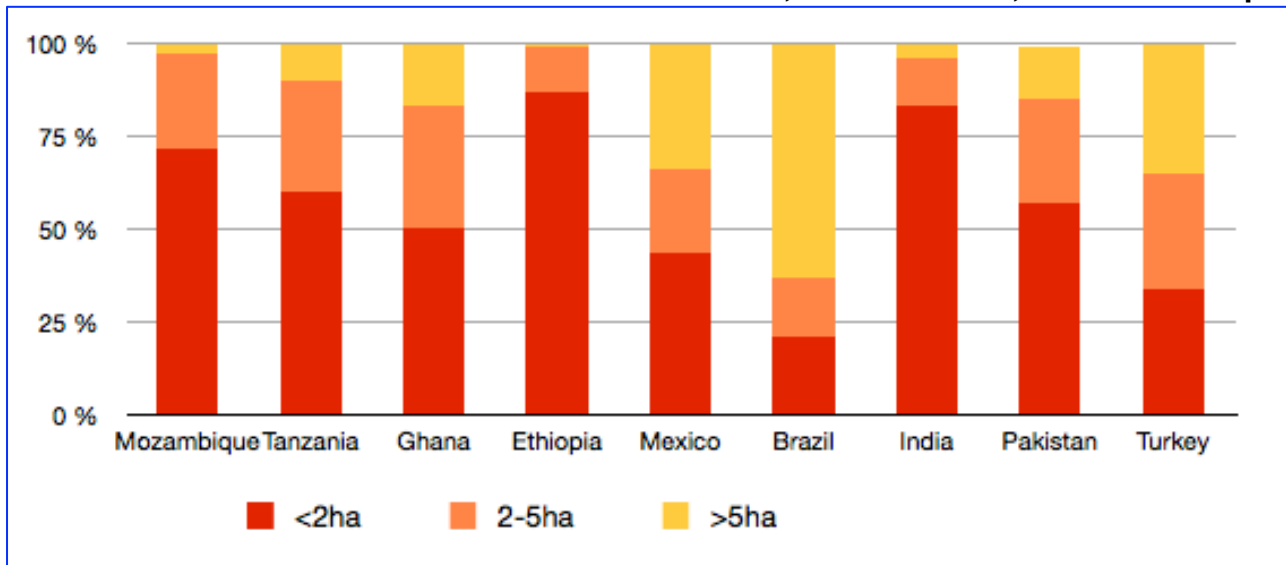
In rural societies, access to land is generally the most important factor impacting on socioeconomic differentiation, poverty and hunger¹. In non-industrial countries, the unequal distribution of land is one of the main obstacles to an economic development that benefits the majority of the population. In most of these countries, rural elites own or control land. Despite decades of struggle in favour of agrarian reform, ownership of land

¹ The importance of access to land as factor determining the incidence of poverty and food insecurity is considerably lessened in the case of societies where there are non-agricultural employment opportunities, as demonstrated by some countries in Latin America and Southern Africa.

has tended to become increasingly concentrated and the most recent period has been one where this negative evolution has even accelerated².

The following diagram illustrate this unequal distribution in nine countries of Africa, Latin America, Asia and Europe: Mozambique, Tanzania, Ghana, Ethiopia, Mexico, Brazil, India, Pakistan and Turkey.

Distribution of farm size in nine countries of Africa, Latin America, Asia and Europe



Source: Agricultural census conducted during the first decade of the XXIst century

Some more examples illustrate this situation:

- In Africa:
 - In Mali, 14% of the farmers are landless, 56% of farms have less than 5 ha and 4% have more than 20 ha³
 - In Ghana, 7% of farms have more than 10 ha and control 48% of the land⁴
 - In Malawi, 3/4 of the farms have less than 1 ha⁵, and the farms headed by women have less land than the average size; almost half of the villages face land conflicts
- In Latin America:
 - In Mexico, 0,1% of the farms have more than 2500 ha and control 29% of the land, while 44% of the farms have less than 2 ha and have only 2.2% of the land⁶
 - In Brazil, 15.6% of farms are not family farms and they control 76% of the land. They have an average size of 491ha⁷

² Global Policy Forum <http://www.globalpolicy.org/social-and-economic-policy/world-hunger/land-ownership-and-hunger.html>

³ Centre d'Expertises Politiques et Institutionnelles en Afrique (CEPIA), **Ruralstruc**, juillet 2007

⁴ Xinshen Diao, **Importance of Agriculture for Sustainable Development and Poverty Reduction: Findings from a Case Study of Ghana**, IFPRI, 2010

⁵ Agricultural Census of Malawi, 2007

⁶ Agricultural Census of Mexico, 2007

⁷ Agricultural Census of Brazil, 2006

- In Ecuador, 63% of the farms have less than 1 ha and represent 6.3% of the total land, while 0.79% of the farms have more than 100 ha and represent 29% of the total land
- In Asia:
 - In Bangladesh in 2008, 13% of rural households were landless and this proportion is constantly on the increase (it was only 9% in 1983/84)⁸
 - In Vietnam, 4% of rural households are landless and 78% cultivate less than 1 ha⁹
 - In India, 1% of farms that have more than 10 ha have 15% of the land
 - In Pakistan, 1.6% of farms have more than 20 ha and control 21% of the land
- In the Middle East and Europe:
 - In Egypt 90% of the farms have less than 2.1 ha
 - In Turkey, 36% of farms have less than 2 ha and cover 5.6% of the area while the 0.9% who have more than 50 ha cover 17% of the surface.

Inequality of land distribution is not only a matter of quantity (area) but also one of quality, the better land being usually accumulated by the richer part of the population. In India, for example, the 1% of the farms who have more than 10 ha also have 11% of the total irrigated land. In the North-West of Tunisia, in the Medjerdah valley, large farms who used to be owned by colonial settlers have the better land that is often irrigated, while smaller farms cultivate land that is less fertile and prone to erosion on the slopes of the valley.

Besides privately appropriated land, common land constitutes an important resource that gives access to land resources (mostly pastures and forests) that have often a critical role in the survival of the poorest families. The area covered by this type of land is estimated to be somewhere between one and 1.5 billion ha, to be compared with the total area covered by agricultural land which is around 5 billion ha. But this common land is increasingly threatened by private appropriation, a process that is well under way.

The lack of tenure security

In industrialised countries, land rights are generally well recognised and respected. This is not the case in non-industrial countries, particularly in Africa, where very little land, limited mostly to urban or peri-urban areas, is registered and titled. This makes it difficult for individuals or communities who exploit agricultural land in rural areas to protect their traditional user rights when land is being increasingly sought after.

Land remains the main source of conflict in rural areas. These conflicts can have destabilising effects on governments and be a source of extreme violations of human rights (the media often mention the assassination or disappearance of land activists¹⁰). The absence of land title also is an obstacle to access to credit for farmers.

In Peru, estimates are that only 10% of the land was registered in 1990. This proportion grew to more than 50% in 2005 due to the implementation of the “Programa Especial de Titulación de Tierras” (PETT). This percentage was less than 50% in Ecuador around

⁸ Agricultural Census of Bangladesh, 2008

⁹ Agricultural Census of Vietnam, 2006

¹⁰ See for example the recent [assassination of Cicero Guedes](#) in Brazil

1990. Brazil lacks a centralised land register and it is estimated that in 2008 only 4% of the private land was titled in the Amazonian zone. In Cambodia, a country where land grabbing is particularly important (see below), a big land demarcation programme aiming to give land titles to 470,000 families for 1.8 million ha was launched by the Prime Minister in 2012¹¹. This programme, which is implemented by mobilising students, should be implemented in a few months, according to the Cambodian government, but many observers are sceptical about the real capacity of untrained students to implement such an ambitious programme and they suspect this to be just a political operation. India launched an eight-year programme in 2008 with the objective to move from “presumptive” property titles to clear and verified land titles. In Africa, international organisations such as FAO, IDLO ([International Development Law Organisation](#)) and NGOs work towards the registration and the emission of titles for the land of rural communities.

Agrarian reforms

There are very divergent views on the best way to approach land reform¹²:

- Advocates of a market-based agrarian reform argue that this approach will limit the bureaucratic nature of reform, reduce risks of corruption and reduce the risk of political tension, as owners who sell their land choose to do so on a voluntary basis
- Opponents of this type of agrarian reform argue that owners are not really ready to sell their land, or, if they sell, they will only sell land of a lesser quality and at a price far above its real value, given that the state provides subsidies to purchasers. Moreover, they believe that these reforms only create very limited land transactions and therefore do not really contribute substantially to modify unequal land distribution
- Advocates of compulsory agrarian reform stress that expropriation is justified in cases land is not exploited by their owner. The allocation of land to small and poor producers will then contribute to economic growth and poverty reduction, provided these producers are trained and have access to the resources required to cultivate the land distributed. It can also help to reduce political tension in the countries where the population is strongly mobilised on land issues.

Whichever approach adopted, results of agrarian reform have, until now, been rather disappointing in most cases, mostly because they were not really fully implemented because of lack of political will. In fact, it is even possible to expect a degradation of the situation regarding land distribution, as there are increasing threats on land.

Threats on land

Because of its central role in rural societies, land has always been a major issue. It has been the object of greed by members of these rural societies and by outsiders.

¹¹ Total agricultural area of Cambodia is estimated to be approximately 5.5 million ha.

¹² Bandeira et Sumpsi, **Access to Land, Rural Development and Public Action: The When and the How** Development Policy Review, 2009, 27 (1): 33-49

The colonial period

From a historical point of view, the establishment of settlements owned by “outsiders” and the development of plantations owned by multinationals have been the main means by which local people have been deprived of land access.

As early as in Roman times, the best land in North Africa was distributed to former Roman legionaries as it became the breadbasket of ancient Rome.

In the XIXth century, with the development of colonialism, there was a large scale movement of land appropriation in conquered countries of the South. For example, 130,000 settlers were established on the best land in Algeria between 1871 and 1881, and they owned 2.7 million ha by 1963. In Kenya, white settlers grabbed close to 3 million ha of the best land.



In Guatemala, United Fruit (now Chiquita) was called by the local government in 1901 to manage the local postal service and was soon to be granted by the authorities a contract to build the main railroad. By 1940, United Fruit had taken over, with the complicity of the corrupt local government, 42% of agricultural land to cultivate bananas. Similar events took place in other parts of the world: rubber plantations by Michelin in Vietnam (since 1925), by Firestone in Liberia (since 1926), by Unilever in Nigeria (since 1925). These takeovers were the result of a deliberate policy of the colonial powers and their local allies to expand the production of tropical products for supplying colonial “mother countries”. This led to the establishment of a bimodal system where huge export-oriented *latifundia*-like plantations coexist with micro-farms, as can be observed in large parts of Latin America, the South of the USA and some countries in Africa (particularly in Southern Africa) and Asia (e.g. The Philippines)¹³.

¹³ Barraclough, S. Land Reform in Developing Countries : The role of the state and other actors. Discussion Paper No. 101, June 1999 [www.unrisd.org/80256B3C005BCCF9/\(httpAuxPages\)/9B503BAF4856E96980256B66003E0622/\\$file/dp101.pdf](http://www.unrisd.org/80256B3C005BCCF9/(httpAuxPages)/9B503BAF4856E96980256B66003E0622/$file/dp101.pdf)

Since the middle of the XXth century

At the time of independence, most of the land that had been grabbed during colonial times was not restituted to the local producers from whom it had originally been taken. Much remained in the hands of those who had taken it; some became large properties belonging to local elites; and parts became large state-owned properties which in recent years have been again privatised for the benefit of local elites. In some countries, the movement for depriving communities of their traditional land was continued after independence, supported by violence: in former Zaire during the 80s, for example, villages were burned down by Mobutu's army in North Kivu to establish ranches for the local political bosses on the fertile volcanic land. In Cameroon, Del Monte and Dole started their banana production (see the [Video on the impact of Dole on a region of Cameroon](#)). There are unfortunately many examples of this type.



All these land take-overs which were covered in the media during the 70s, progressively disappeared from the news only to again hit the headlines following the 2007-2008 food price crisis.

However, in the meantime people continued to lose their access to land on a large scale under different modalities:

- Millions of peasant farmers, as in India, lost their land because they became indebted with usurers who accumulated land over the years as they recovered loans given. In many countries, this indebtedness was due to the difficulties faced by small farmers in competing with large “modern” capitalist farms located in the same country or abroad and which benefit from various advantages and/or subsidies
- In Africa, land was sometimes taken over by local civil servants or urban traders who, aware of the development of local demand, could “convince” local authorities (local administrators and chiefs) using their power or through corruption to give them the best land, sometimes irrigated, located in peri-urban areas or near the main roads

- All over the world, farmers were expropriated and sometimes even deported to allow for the establishment of dams, mines or tourist resorts
- In Brazil, tribes saw the forest from which they draw their living destroyed and replaced by ranches or soybean fields.

It is very difficult to estimate the importance of this movement that occurred progressively and quietly, but its consequences can be seen when observing the inequality of land distribution today.

The recent period and the land grabbing movement

Despite all the noise made around land grabbing in the media and which is largely due to the development of the international civil society, it is difficult to put precise figures on this phenomenon. The best source of data is most probably the [Land Matrix](#) that is accessible on line from the Internet. The [excellent analysis](#) of these data made by Ward Anseeuw and his colleagues of the [International Land Coalition](#)¹⁴ give however a fairly good idea of this movement. Nevertheless, the figures presented in the Land Matrix themselves have an element of uncertainty for several reasons:

- A good share of the land acquisitions recorded rely on unverified declarations
- A considerable share of the acquisition agreements mentioned have not translated into fact¹⁵ (as was the case for the agreement between Madagascar and Daewoo which involved more than one million ha and was widely covered in the press)
- Just about 25% of acquisitions lead to actual cultivation. Other acquisitions do not lead to production either because access infrastructure to the land is insufficient, or because of technical, political or social constraints. Moreover, some of the contractors do not have a real intention to produce and only sign agreements in order to have the land available for future speculation, all the more as the price of land is likely to climb further if agricultural prices remain, as forecasted, at a high level.

The size of the phenomenon

Acquisitions recorded in the Land Matrix in 2012 have to be of a size superior to 200 ha¹⁶ and involve agricultural land. Altogether the data base records 1200 agreements since 2000, of which half involved the transfer of land rights. They cover a total area of 83.2 million ha in non-industrial countries, equivalent to 1.7% of the world's agricultural area (almost three times the agricultural area of France). Out of this total, confirmed data amount to 43.7 million ha (1.5 times the agricultural area of France) and the area actually cultivated is 21 million ha. The number of acquisitions started to grow after 2005. This date corresponds to the time when there was some awareness that the historic decreasing trend of agricultural prices was being reversed and prices had started to rise.

¹⁴ Anseeuw, W.; Boche, M.; Breu, T. ; Giger, M.; Lay, J.; Messerli, P. and K. Nolte. 2012. "[Transnational Land Deals for Agriculture in the Global South. Analytical Report based on the Land Matrix Database](#)". CDE/CIRAD/GIGA, Bern/Montpellier/Hamburg.

¹⁵ Only 30% of the acquisitions recorded in the database have really been signed.

¹⁶ By recording agreements of more than 200 ha, the Land Matrix most probably gives a good idea of the land grabbing movement. For example, in the case of Laos, concessions of less than 200 ha constitute around 2/3 of the agreements but cover only 10% of the total area involved.

The maximum number of acquisitions was achieved in 2009, the year following the one in which agricultural prices had hit a first peak. FAO estimates that direct foreign agricultural investments increased from USD 1 billion in 2000 to USD 7 billion in 2007¹⁷. The fall in the number of signed agreements that followed can be explained by the occurrence of the financial crisis and the negative visibility that was given to the land grabbing movement in the press and in international fora.

Land acquisition may also happen with objectives other than agricultural. This type of operation may also involve very large areas. In Latin America, it is estimated that mining concessions cover around 70 million ha. Part of these concessions may however still be available to local communities for their agricultural activities, particularly when they are not used for open-cast mining. In Laos (see box below), it is estimated that mining concessions constitute about half of the land allotted under concessions.



Where is the land acquired?

Africa is by far the region where land grabbing is the most important. Up to 62% of the acquisitions recorded in the Land Matrix are located in the continent and they cover 56 million ha, an area equivalent to the total agricultural area of Angola¹⁸. The main countries concerned are Sudan, Mozambique, Tanzania, Ethiopia, Madagascar and Zambia. Asia comes second, with almost 18 million ha (twice the agricultural area of Bangladesh or Malaysia). The main countries involved are the Philippines, Pakistan, Indonesia, Cambodia and Laos. Finally, in Latin America 7 million ha (close to half of the agricultural area of Chile) have been acquired, mostly in Brazil and Argentina,

Countries where these acquisitions take place are characterised by a large difference between observed productivity and potential productivity. These countries are also mostly poor countries when compared to the countries from which investors originate, and they have a higher prevalence of hunger.

¹⁷ FAO, **Foreign direct investment - win-win or land grab?** World Food Summit on food security 2009

¹⁸ It may be the case that the importance of Africa in these figures is due in part to the attention given to this continent by the media and international civil society organisations.

Finally, it seems that in most countries, concessions are generally located on good and accessible land located in relatively densely populated areas (this is however not the case for Laos, see box below). They are set mostly on arable agricultural land (around 40% of the total) and on forest land (25% of the total).

Acquisitions for what?

According to the Land Matrix data, when land is put under cultivation, around 25% of it is for producing food, 17% for producing non food-products (mostly jatropa for agrofuels in Africa and rubber in Asia), 25% for producing mixed products that can be used either for food or for producing agrofuels, depending on market conditions (e.g. oil palm)¹⁹. The rest of the land (1/3) is put under other uses.

Most of the production is for export. This confirms the assumption that these land acquisitions are a way for some countries to secure their supply for agricultural commodities without having to resort to the world market²⁰. As already mentioned earlier, part of the acquired land is not put under cultivation but is simply kept for speculation. The value of land has recently risen and is likely to continue to increase in the future, thus making it a good investment. This is due to a greater profitability of agriculture that is the consequence of the increasing trend in agricultural prices, a movement that most experts believe will continue in the future. The fact that some of the investors are financial institutions (see below) underlines the speculative aspects of this movement.

Who are the investors?

The main investors are, by order of importance, private companies, public companies, investment funds and public-private partnerships.

Private investors are often investment funds or holdings rather than companies specialised in agriculture or agroindustrial activities, and they often have neither the will nor the specialised competencies required to manage large and complex agricultural investments. For example, one of the funds controlled by G. Soros has taken a 23.4% participation in Adecoagro, one of the main food and agrofuel producing companies in South America that is active in Argentina, Brazil and Uruguay. The financier Jim Rogers has also admitted investing in land.

The great majority of land acquisition agreements are negotiated between investors and governments²¹ as in a large number of concerned countries, land is not formally registered or titled and is considered to be government property.

The investors come, by order of importance, from China, Saudi Arabia, Brazil (particularly in Angola and Mozambique), United Arab Emirates, South Korea, India, the USA, the UK, Malaysia and Sweden. All these countries are richer than those countries where investments take place. They also have better developed institutions and greater political

¹⁹ Switching from food production to agrofuel production can be a source of volatility for food commodity prices.

²⁰ Demeke, Pangrazio and Maetz, **Country responses to the food security crisis**. FAO, 2009 http://www.fao.org/fileadmin/user_upload/ISFP/pdf_for_site/Country_Response_to_the_Food_Security.pdf

²¹ FAO, Ibid, 2009

stability. Their legal system is stronger and the anti-corruption fight more effective... Several of them are looking for areas where it is possible to do agriculture because they face constraints on water availability.

The example of Laos

The demand created by rapidly growing neighbouring countries like China, Thailand and Vietnam has multiplied by 50 the number of requests for land concessions between 2000 and 2009 in Laos. There have been 2642 land agreements covering 1.1 million ha or 5% of the area of the country - an area that excludes deforestation concessions, contract farming and irrigation project agreements excluded.

The areas involved are mainly located in accessible forests. More than 60% of projects have less than 5 ha. The 5% largest projects cover 89% of the total concession area and relate to primary activities (agricultural production, forest plantations and mining).



Regarding land utilisation, more than 90% of the concession area is destined to primary production:

- Mines 50% (zinc, copper, iron and gold)
- Forests 28% (rubber and eucalyptus)
- Agriculture 22% (sugarcane, jatropha and livestock)

The remaining part is divided equally between the secondary (mainly processing industries and manufactures) and tertiary sectors (mostly tourism).

Most of the land is acquired by foreign investors (72%). Joint ventures account for 12% of the projects with the remaining 16% being for nationals.

According to the report analysing the inventory of agreements, primary investments are made in areas that are poorer than the rest of the country, while secondary and tertiary investments are made in more favoured regions.

(Source: Schönweger et al., 2012: [Concessions and Leases in the Lao PDR: Taking Stock of Land Investments](#). CDE, University of Bern, Bern and Vientiane: Geographica Berneris)

The dangers

The main negative consequences of land acquisitions include:

- Forced expropriation without compensation of community land, with economic and social consequences that can be dramatic (poverty, hunger)
- In some cases, entire groups of population have been displaced and have lost their economic capital and cultural heritage
- The deprivation of communities of their land may accelerate rural-urban migration
- Evicted independent agricultural producers are likely to become exploited agricultural labourers
- The increased pressure on land and the increase of its price may induce the poorest producers to sell their land and migrate to the cities
- Increased pressure on natural resources, especially on water - particularly through the uncontrolled establishment of irrigation - forests and grazing lands
- Environmental degradation through chemical contamination (fertiliser, pesticide, etc.), land degradation and depletion of water resources²²
- A reduction of the volume of food products available on local markets as a large part of production on acquired land is used for export and production of agofuels, and some land is left unused. This may contribute to an increase in the local price of food with possibly dramatic negative consequences on the food security of local people.

The advantages

Possible advantages from land acquisition and agricultural investment by foreigners may include:

- An increase of the volume of investment in agriculture (the absence of investment in agriculture is often given as one of the causes of the diminishing rate of growth in world agricultural production over the last two decades and of the 2007-2008 food crisis)
- An improvement in agricultural technologies and the “modernisation” of the management of agriculture through the establishment of more efficient marketing systems and the improvement of sanitary, phytosanitary and food quality standards. These changes can lead to an increased productivity, production and value added
- The development of land that otherwise would not have been utilised because of lack of means of production
- The improvement of transport and communication infrastructure
- The creation of local jobs and value added in agriculture and agroindustries
- Production contracts for local producers that secure stable markets for their production.

Unfortunately, these advantages often do not materialise as the land acquired was already used previously by local farmers and the increase of production is much less than first expected. The newly established companies generally adopt mechanised production methods, hire only few local labourers and are reluctant to make contractual arrangements with a large number of small farmers. In many cases, companies even hire foreign staff²³, qualified and even some non qualified.

²² FAO, *Ibid*, 2009

²³ FAO, *Ibid*, 2009

The example of the region of Makeni in Sierra Leone

The Swiss company [Addax Bioénergie](#) has taken over 50,000 ha in the Makeni region in Sierra Leone, with the aim of producing sugar cane for ethanol.

[SiLNoRF](#), (the Sierra Leone Network on the Right to Food), a coalition of civil society organisations created to promote the right to food and to fight against land grabbing has criticised the fact that the agreement between the government of Sierra Leone and Addax Bioénergie was made without prior information and free consent of the concerned communities and that it did not have any provisions for compensating them for the loss of their land.

Altogether, Sierra Leone is expected to make agreements with foreign investors for around 500,000 ha.

What needs to be done

To avoid the dangers and yield the advantages that could be drawn from land acquisitions by investors, a number of precautions need to be taken. [The Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security](#) developed by FAO since 2009 and approved by the Committee on World Food Security (CFS) in May 2012 spell out the principles and good practices that should serve as a point of reference for governments. They include in particular:

- The recognition and respect of legitimate tenure rights even in the case of informal systems
- The adoption of good practices for recording and transferring tenure rights
- Ensuring that administrative systems for land tenure are accessible and affordable for the people
- The restitution of land to evicted communities
- The recognition of the rights of indigenous communities
- The accountability and transparency of investments on agricultural land
- Establishing proper resolution mechanisms for conflicts on land rights
- The proper management of urban encroachment on rural zones

These directives are a starting point but they still have considerable weaknesses that have been stressed by civil society organisations:

- They do not formally recognise the obligation by states to ensure the access by people to land and other means of production in conformity with the [International Covenant on Economic, Social and Cultural Rights](#) and the [Voluntary Guidelines on the Human Right to Food](#)
- Human rights cannot be limited to principles that are based on the existing situation. These rights must be respected and adequate planning for the future is needed
- The call for transparency in the processes mentioned in the Guidelines is insufficient. The issue is not one of access to information but concerns the accountability of states towards their population
- The Guidelines do not explicitly recognise the right of the population to reject certain investments

- The concept of economic viability should not correspond to the profitability for the investor but to the interest of the concerned population and communities, in particular the reduction of their vulnerability and the respect of their future development opportunities as well as the protection of the environment.



Some researchers²⁴ identify some naivety in the Guidelines regarding the good will of the states and of investors, and the skewed balance of power in relations among the state, investors and the population. They also adopt a simplistic view of customary laws on land and other natural resources that can sometimes be very complex in reality, and they do not take into account local level power structures. These researchers propose a moratorium on the acquisition of land so as to have the time to design and implement a strategy to effectively protect customary rights.

One possibility that could protect the interests of local communities and associate them fully with the investment and its possible benefits, could also be to oblige investors to work with communities through joint venture agreements that would be based on the provision of capital and technologies by the investors, on the one hand, and the provision of land and labour by the communities (without any transfer of the land rights or even leasing of the land to the investors). Standard agreements that would protect the interests of all partners should be developed in each country so that they fit with local conditions. But in this case, too, there is a need for time to develop satisfactory models and for lengthy negotiations entailing all required precautions to ensure that the point of view of the communities is fully taken into account. In the meantime, all new acquisition agreements should be suspended.

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(February 2013)

²⁴ Locher, Martina; Steimann, Bernd; Upreti, Bishnu Raj (2012). Land grabbing, investment principles and plural legal orders of land use. Journal of Legal Pluralism and Unofficial Law, 65:31-63.http://www.zora.uzh.ch/66490/1/Locher%2DSteimann%2DUpreti_2012_manuscript_submitted_to_JLP.pdf