

FOOD SECURITY AND LAND GOVERNANCE FACTSHEET

Ghana



Contents

Land governance3Food security5Resources and other information7References8

ABSTRACT

Land governance directly influences food security in Ghana. The main issues relate to access to and control over land in more densely populated areas. It affects secured tenure particularly for women and smallholder farmers and users in areas where Paramount chiefs are powerful and engage in land transactions directly. Several large scale land transactions have occurred in the last few years, mostly for agricultural investment purposes. Conflicts over access also occur between different land owning groups with young people, the youth not having secured access to land. Or between smallholder farmers, women and cattle herdsmen searching for new land.

A complex mix of constitutional, legislative and customary procedures and frameworks is the basis for land governance and administration in Ghana. So, the current land administration system suffers from legal pluralism resulting in overlapping claims which can render investment risky and creates insecurity of tenure for the poor. The Government of Ghana is undertaking long-term reforms through the Land Administration Project (LAP) since 2003 up to date to implement the National Land Policy and undertake institutional reforms. The reform aims at mainstreaming efficiency in the Ghana Land Administration systems to ensure land tenure security for all. The land reform process requires a considerable period of time as a result of implementation capacity gaps and limited impacts. Ghana's land policies do not focus directly on the issue of food security and programmes directed at food security such as FASDEP II (which includes some land issues), GCAP, MOFA (Block farm programme and the Youth in agriculture programme), METASIP and other Donor supported programmes focus on land administration and ownership and their effects and implications for food security.

This country factsheet was prepared under auspices of LANDac – The Netherlands Academy on Land Governance. The initial version (2012) was compiled by the Royal Tropical Institute (Thea Hilhorst and Nicolas Porchet, KIT) at the request of the Ministry of Foreign Affairs – The Netherlands.

In 2016, the factsheet was updated by Mr. Richmond Antwi-Bediako of PhD Candidate at Utrecht University and director of the Rural Environmental Care Association, and Dr. John Tia Bugri of Kwame Nkrumah University of Science and Technology (KNUST) in collaboration with LANDac (Gerard Baltissen, KIT, and Gemma Betsema, UU) with support from the Food and Business Knowledge Platform (F&BKP) as part of the LANDac/F&BKP knowledge agenda on land governance and food security.

About LANDac

LANDac, the Netherlands Academy on Land Governance for Equitable and Sustainable Development, is a partnership between Dutch organizations working on land governance. The partners are the International Development Studies (IDS) group at Utrecht University (leading partner), African Studies Centre, Agriterra, the Sociology of Development and Change (SDC) group at Wageningen University, HIVOS, the Royal Tropical Institute (KIT), and the Netherlands Ministry of Foreign Affairs. The LANDac network conducts research, disseminates information, and organizes courses and training, focusing on new pressures and competing claims on land and natural resources. Guiding question is how to optimize the link between land governance, sustainable development and poverty alleviation.

www.landgovernance.org

About F&BKP

The Food and Business Knowledge Platform (F&BKP) is one of the five Knowledge Platforms initiated by the Dutch Ministry of Foreign Affairs. It is an open and independent initiative where representatives from international networks and organizations of business, science, civil society and policy come together. The Platform shares, critically reflects on, generates, deepens and improves (interdisciplinary) knowledge and feeds practices and policies on food and nutrition security. Land governance is one of the prioritized themes in its mission to develop a more focused knowledge agenda. www.knowledge4food.net

LAND GOVERNANCE

Regulatory land governance framework

A complex mix of constitutional and legislative sources is the basis for land governance in Ghana, which is mostly the result of the co-existence of different tenure systems: customary law, statutory law, constitutional provisions, judicial decisions and religious law. Managing these systems to ensure security of tenure for all sections of the society is a challenge to the legal system in Ghana (Agbosu et al., 2007; Sarpong, 2006; Runger, 2008).

Ghana has both a title and a deed registration system. Land titling was introduced and even made compulsory in 1986, but implementation has been sporadic only in Greater Accra and some parts of the Ashanti Regions. The Ghana National Land Policy was adopted in 1999 to address a series of issues such as weak land administration; conflicts in the land market (boundaries, ownership); and expropriation of large tracts of land by the state, coupled with a lack of consultation with landowners and non-payment of compensation.

The Land Administration Project (LAP) was set up to implement the National Land Policy, undertake institutional reforms and to improve efficiency in service delivery. The objective of the first phase (2003 – 2011) was the development of land administration pilots to lay the foundation for a fair, efficient, cost effective and sustainable decentralized land administration system. The four components of the first phase of LAP were: (1) Harmonizing the land policy and regulatory framework; (2) Institutional reform and development; (3) Improving land titling, registration, valuation, land use planning and land information systems and (4) Project management, human resource development and monitoring and evaluation. The second phase of LAP started in 2012 and is expected to end in March 2016. Main project components include: (1) Strengthening the policy, legal and regulatory framework for land administration; (2) Decentralizing and improving business and service delivery processes; (3) improved maps and spatial data for land administration; and (4) human resource development.

Legal Provisions	Statement
1992 Ghana Constitution	Vested all public lands in the President in trust for the people of Ghana (Article 257)
	Freed all pre-existing public lands in the three northern regions from state control.
	Recognizes that the managers of public, stool, skin and family lands are fiduciaries charged with the obligation to discharge their functions for the benefit of, respectively, the people of Ghana and the stool, skin or family concerned and are accountable as fiduciaries in this regard.
	Prohibits the creation of freehold interest out of stool land in favour of a grantee (Article 267-5)
National Land Policy (NLP)	Articulates Government's strategy on land management and administration and sets out direction: • for facilitating equitable access to land and land tenure security based on registered titles; • promote sustainable land management;
First phase 2003-2011	• payment of fair compensation for land acquired by the state;
Second phase 2012- 2016	divesting of vested lands to their allodial owners and;promoting research on land governance

Land tenure forms

Two broad tenure arrangements exist: customary tenure and public land tenure. It is estimated that 80 percent of Ghana's lands is held under customary land tenure systems (Sarpong, 2006). The Ghanaian Government guarantees customary tenure arrangements. Customary land secretariats have been established to administer land rights but only few are operational. These customary land secretariats created by the LAP can have a great impact in local land administration through their basic records keeping, awareness creation, recording of customary land rights, land use plans and their protection and dispute resolutions. Land disputes are increasingly settled through Alternative Dispute Resolution (ADR) mechanisms (Larbi, 2011).

Tenure Arrangement	Description
Allodial title	Highest interest in customary law; held or vested in stools or skins. This right is acquired either by being the first to cultivate the land or by succession from the first owning group. Stool/skin ownership means corporate ownership and not ownership under the personal fiat of an individual ruler. Allodial owners hold their interest under customary law and are not subject to any restrictions on their user rights or any obligations, except for those imposed by the laws of Ghana (Ollennu, 1962; Asante, 1975).

Tenure Arrangement	Description
Freehold	Customary law freehold, or "usufructuary title", is an interest held by subgroups and individuals in land acknowledged to be owned allodially by a larger community. Customary law freehold may be held on a corporate status by the sub- stool, lineage, and family or by individuals. It is perpetual and continues as long as the superior title of the stool is acknowledged (da Rocha and Lodoh, 1999).
	Common law freehold is an interest in land acquired through a freehold grant made by the allodial owner, either by sale or gift to another person out of his interest. This grant requires the parties to agree that their obligations and rights will be regulated by common law (da Rocha and Lodoh, 1999).
Sharecropping	Abunu (a half share) and abusa (a third share), are sharecropping arrangements by which the tenant tills the land and, at harvest, gives a specified portion of the produce to the landlord. The recipient is obliged also to recognize the superior authority of the stool and to perform customary services due from the subject grantor to the stool/skin. Holders of the usufruct have also the right to relinquish their interest by sale, lease, mortgage or pledge, or to grant agricultural tenancies or shareholder agreements (Sarpong, 2006).
Leaseholds	Rights granted to a person to occupy specified land for a specified term, that are derived from the common law, not customary law. A lease may be granted either by the holder of the allodial title or a customary freeholder. The lessee may create a sublease or assign the unexpired term of the lease, subject to the consent of the lessor (da Rocha and Lodoh, 1999).

Institutional framework

Institutions involved in land governance include: National Development Planning Commission (NDPC); Ministry of Lands and Natural Resources (MLNR); Forestry Commission; Lands Commission (which comprises: Survey and Mapping, Land Title Registration, Land Valuation and Public and Vested Lands Management divisions); Office of the Administrator of Stool Lands (OASL); Department of Game and Wildlife (DGW); the Environmental Protection Agency (EPA); Town and Country Planning Department (TCPD), Metropolitan/Municipal and District Assemblies (MMDAs) and various Customary Institutions.

The Lands Commission Act of 2008 merged several major land sector agencies, namely the Survey and Mapping Division; the Land Valuation Division; the Land Registration Division and the Public and Vested Land Division, into one umbrella body known as the Lands Commission. It is important to note that the OASL, which is primarily responsible for most customary land administration, is not part of the Lands Commission. Two institutions, the Lands Commission and the Office of the Administrator of Stool Lands (OASL), are mandated to administer public and stool lands respectively (Sarpong, 2006). All ten regions of the country have Regional Offices of the Lands Commission undertaking land administration responsibilities. The LAP is also supporting the creation of Customary Land Secretariats, a total of 57 (37 under LAP-1 and 20 under LAP-2) have now newly been established.

Gender

The principal ways in which women acquire land is through their lineage, inheritance, marriage or by contractual arrangements. However, women have more limited rights to land and other natural resources than their male counterparts. Among the multiple causes are Ghana's inheritance systems, tenure arrangements and land-use patterns, all unfavourable to women (Sarpong, 2006).

Women's land rights under customary law in some of the rural areas, tend to be secondary rights, derived through their membership in households and lineages and secured primarily through marriage or as gifts. These rights are not clearly defined or documented, tend to be subject to change, are of uncertain duration and are often subject to the maintenance of good relations between the parties involved (Runger, 2008). Access to land by women, especially for agricultural use, is generally possible, (Bugri, 2008) but highly insecure with agreements that can be revoked at any point in time.

The National Land Policy (1999) has identified a number of difficulties relating to land tenure and administration, e.g. insecurity of tenure of certain groups. But, the interests and the impact of land administration and land tenure on women have not been mentioned. However, the LAP activities have been more gender-conscious and attempt at correcting the policy document through the implementation documents and studies (Runger, 2008).

The constitutional removal of all pre-existing public lands in the three northern regions from state control and their transfer to customary law (as in the south) has had broadly negative consequences for women's control of land.

Foreign direct investment

The 1992 Ghana constitution bans the creation of freehold interests in favour of foreigners and states that a non-citizen cannot be granted leasehold for a term exceeding 50 years (Sarpong, 2006). Ghana is keen to attract foreign direct investment into the economy and has adopted liberal regulatory regimes, especially in sectors like agriculture and mining. This has led to a proliferation of mining projects initiated mostly by foreign multinational corporations or their subsidiaries, but mineral rights belong to the state and as such mines can proliferate on non- state land (Sarpong, 2006). Mining activities can intervene with agricultural activities.

Large scale acquisitions of land for agriculture and biofuel are taking place. In 2010, a total of 17 commercial biofuel developments were identified. Fifteen of these companies are foreign-owned and/or financed by the Ghanaian diaspora, with all but one adopting business models that require large-scale plantations of more than 1,000 hectares. However, only anecdotal and inaccurate information is available on the nature and scale of large-scale foreign land acquisitions in the agricultural sector, as corporate data is often unreliable and government statistics incomplete (Schoneveld, 2010). Government is also mindful of the implications of large scale land acquisitions and in February 2012, the Lands Commission developed guidelines for large scale land acquisitions for agriculture and other purposes with the view to operationalising the principles of responsible agricultural investments developed by the FAO, World Bank, IFAD and UNCTAD (Lands Commission, 2012).

The Land Matrix reported a total of 41 deals (concluded), of which 36 are transnational deals (the others are domestic investors). Most investments are done in agriculture (both biofuels and food); the 41 deals together enclose 932,634 ha (contract size).

FOOD SECURITY

Although Ghana attained middle income status in 2010 following the discovery of oil, it ranks 138 out of 187 countries in the 2014 Human Development Report and is classified as a low-income, food-deficit country. Its northern regions display many of the same agro-ecological characteristics as Sahelian countries, including poor soil quality, a single and increasingly erratic rainy season, and recurrent floods and drought (WFP, 1016).

Northern Ghana lags behind the rest of the country in almost all development indicators. Six out of ten people are poor, compared to just two out of ten in the southern section. The high rate of poverty is linked to a number of factors, including occupation and income generating activities. Nine out of ten households farm on mostly small plots of land (five acres or less), limiting their production capacity to a little more than subsistence levels. A 2012 Comprehensive Food Security and Vulnerability Analysis identified poverty as the leading cause of food insecurity in Northern Ghana.

The Northern, Upper East and Upper West Regions also have some of the highest rates of malnutrition in the country; four out of ten children under the age of five are stunted or chronically malnourished, meaning they will not be able to meet their full growth potential. Nearly thirty percent of people in the Upper East Region do not have adequate access to food, compared to a national average of five percent (WFP, 2016).

About 1.2 million people, representing 5 percent of Ghana's population, are food insecure. Throughout the country, about 2 million people are vulnerable to become food insecure. Key causes of food insecurity in Ghana are generally linked to post-harvest losses: an estimated 30% of its food crops produced annually is lost due to poor post-harvest management, poor farm to market roads, insufficient and inappropriate storage facilities, and lack of processing facilities to convert the perishable produce to longer shelf-life, etc. As such, most of the food security policies and initiatives in the country are more geared towards solving the above challenges rather than focusing on land related issues, some of these include:

- MOFA (Block Farm Programme) this programme is geared towards supplying improved seeds, fertilizers, weedicides and tractor services to farmers who are encouraged to farm together on common areas of land.
- Donor Support USAID, WFP, ADRA Ghana These donor agencies intervene with direct food aid in times of poor harvests and other natural or man -made disasters that affect the nation's food supply
- The revised Food and Agriculture Sector Development Policy (FASDEP II) programme emphasizes the sustainable utilization of all resources and commercialization of activities in the agriculture sector with market-driven growth as the main focus. It encourages greater engagement of the private sector and collaboration with other partners to facilitate implementation of policies. FASDEP II has nine strategic objectives, the strategic objective No. 3 is to enhance access to and control over land, information on land rights and tenure security

- The Ghana Shared Growth Development Agenda (GSGDA II 2014-2017) expects agriculture to lead growth and structurally transform the economy by providing optimal support to smallholder
- The Medium Term Agricultural Sector Investment Plan (METASIP) was prepared by the Ministry of Food and Agriculture and the National Development Planning Commission. The METASIP is the investment plan to implement the medium term (2011-2015) programmes of the policy. It has been developed to achieve a target agricultural GDP growth of at least 6% annually, halving poverty by 2015 in consonance with MDG 1 and based on government expenditure allocation in the national budget of at least 10% within the Plan's period (2011-2015). The METASIP, a result of a consultative, technical and budgetary process, identifies results and resource requirements and roles that the stakeholders in the sector will play in its implementation. It takes into account ongoing projects and will adopt the Sector-Wide Approach (SWAp) in its implementation bringing on board sector stakeholders in effective coordination and participation.
- The Ghana Commercial Agriculture Project (GCAP) GCAP is a US\$ 145m Government of Ghana project, funded jointly by the World Bank and the USAID with the view to developing the commercial agriculture sector in Ghana. GCAP seeks to increase access to land, private sector finance, and input-output markets by smallholder farms, through private-public partnerships in the Accra Plains and Savannah Accelerated Development (SADA) zones in Ghana.
- The AU's New Partnership for Africa's development (NEPAD)- Comprehensive Africa Agricultural Development Programme (CAADP); ECOWAS Agricultural Policy (ECOWAP) to address food insecurity in the sub-region;
- The Gender Agricultural Development Strategy (GADS I & II) since 2004 addressed Gender Inequalities in the Agricultural sector, adopting gender mainstreaming approach to gender equality (GADS I) and (GADS II) for value chain and private sector development since 2014. The purpose of the gender strategy is to provide guidance to the Ministry of Food and Agriculture, its agencies, decentralized departments, civil society organizations, private sector and development partners to be more gender responsive in their programming and interventions (GAASG, 2014).

Linking land governance and food security

Ghana's land governance initiatives involve procedures, policies, processes and institutions which seeks to manage land, property, natural resources and ensure food security. Ghana has dual land legislation (statutory and customary) with different land tenure and management systems endorsed by the 1992 constitution and influencing land governance and food security in Ghana. For effective harmonization of customary and statutory legislation which ensure good land governance and secured food, three main arrangements are currently on going in the LAPII:

- Enactment of a Land Bill to ensure property rights from customary to statutory arrangement. Currently, there is a Land Bill Working Group completing the Bill for its passage before dissolution of Parliament
- Enactment of Land Use and Spatial Planning Bill. This bill was informed by the Ghana National Spatial Development Framework 2015 to 2035 (Government of Ghana, 2015). There are provisions in both the framework and bill to increase food production by
 - a. Increasing agriculture cultivation area permanently cropped beyond the current 16% cropped land area.
 - b. Increasing agricultural yield above the world standards
 - c. Increasing irrigation scheme from the current 8 regions to all the 10 regions.
 - d. Increase storage facilities from the current 5 regions to all the 10 regions
 - e. Increase number of markets

The bill aimed is harmonizing Act 462, 480 and Cap 84 of the colonial ordinance, and placed it under a common law. The bill is now being considered in parliament for consideration.

- Customary Land Secretariat (CLS). The main objective of the CLS is to promote good land governance, secure the security of tenure of farmers and ensure food security. The CLS is duly recognized by the Regional Lands Commission as a key stakeholder in customary land administration in the area. Its functions are designed to assist the Public and Vested Lands Management Division (PVLMD) of the Lands Commission in land administration and management in the area. The PVLMD is currently responsible for recording, documentation and registration of public and vested lands as well as customary lands. The CLS indicated to the PVLMD that, in order to assist in the effective administration and management of land rights, the PVLMD should support them such that the PVLMD makes a condition that all prospective land purchasers must have allocation notes from the CLS before their land documents can be processed by the division.
- As part of the urgency for land reforms to ensure tenure security at the local level, the government of Ghana through
 the Land Administration Project is undertaking long-term (25 years) rural parcel right demarcation and documentation
 for selected food basket areas in Customary Land Secretariats areas in the Brong Ahafo, Western and Ashanti regions
 of Ghana. The demarcation and survey of individual parcels aims at increasing tenure security to boost agricultural

investment, obtain a critical land database on actual farm sizes and location, types of crops grown, farm rents to be paid etc. At the pilot stage, about 5000 farms are expected to be demarcated. It is hoped that the initiative will streamline land acquisition processes in the areas, bridge the rural and urban economic transformation gap, increase food production for food security and improve revenue generation.

RESOURCES AND OTHER INFORMATION

Related country profiles

- USAID: http://www.usaidlandtenure.net/ghana
- FAO: http://www.fao.org/countryprofiles/index.asp?lang=en&ISO3=GHA
- FAO/Gender: http://www.fao.org/gender-landrights-database/country-profiles/countries-list/general-introduction/en/?country_iso3=GHA
- IMF: http://www.imf.org/external/country/GHA/index.htm
- World Bank: http://www.worldbank.org/en/country/ghana
- Land Portal: http://landportal.info/book/countries/GHA?indicator=INDFAOFSEC1&comparing-country=DZA

Laws, policy and regulations search engines

- FAO Lex (Land & NR search engine): http://faolex.fao.org/faolex/index.htm
- Water Lex (Water laws search engine): http://faolex.fao.org/faolex/waterlex.htm

Maps and databases

- · Land and soils databases/information systems: http://www.fao.org/nr/land/databasesinformation-systems/en/
- Water database/information systems: http://www.fao.org/nr/water/infores_databases.html
- · Land and water maps and graphs: http://www.fao.org/nr/solaw/maps-and-graphs/en/

Portals and other resources

- http://landportal.info/library
- http://www.landesa.org/search/?q=ghana
- http://www.ghanalap.gov.gh/index.php
- · http://www.landcoalition.org/en/countries/ghana

Ongoing donor support programs

The Global Donor Working Group on Land (GDWGL) quotes 18 donor programmes and projects in Ethiopia (finalized and active ones): https://landgov.donorplatform.org.

Civil society organizations working on land governance

The Civil Society Coalition on Land (CICOL), is a member of International Land Coalition (ILC) from Ghana, Global Land Tool Network (GLTN) and the Global Land Indicators Initiative (GLII). CICOL is the umbrella organization, a research and advocacy platform for all relevant NGOs, CSOs and individuals working on land issues in Ghana. Their aim is to influence processes of land reforms and land administration. CICOL engages in research, provides information and organizes campaigns to raise awareness on how NREG affects land rights and livelihoods of the rural poor. CICOL, since 2008, has been working on land governance through awareness creation and capacity enhancement programmes for traditional authorities, women's groups, land users, media organizations etc., through its 70 member organizations (www.cicol.org).

Other CSOs working on land in Ghana include:

- Community Land Development Foundation (COLANDEF) http://colandefgh.com/
- Rural Environmental Care Association (RECA) www.recaafrica.com
- Land For Life
- Development Institute (DI) http://www.thedevin.org/
- Land Resource Management Centre
- Centre for Sustainable Development
- NETRIGHT Ghana
- WILDAF Ghana

REFERENCES

Agbosu, L., Awumbila, M., Dowuona-Hammond, C. and Tsikata, D. (2007). Customary and Statutory Land Tenure and Land Policy in Ghana, technical publication No. 70, Institute of Statistical Social and Economic Research (ISSER), University of Ghana, Accra.

Asante, S. K. B. (1975) Property Law and Social Goals in Ghana 1884-1966, Ghana Universities Press, Accra.

Bird, Neil, Timothée Fometé and Gene Birikorang. 2006, Ghana's experience in timber verification system design. Verifor Country Case Study 1, May 2006. http://www.verifor.org/resources/case-studies/ghana.pdf

Bugri, J. T. (2008) The Dynamics of Tenure Security, Agricultural Production and Environmental Degradation in Africa: Evidence from Stakeholders in North-East Ghana.

Da Rocha, B. J. and Lodoh, C. H. K. (1999) Land Law and Conveyancing in Ghana, Accra, Ghana.

Ghana Land Policy, 1999, Accra, Ministry of Lands and Forestry.

Ghana land administration project: http://www.ghanalap.gov.gh/

Government of Ghana. (2015). Ghana National Spatial Development Framework (2015-2035). Land Administration Project II, Final report. Town and Country Planning Department. Funded by the International Development Association (IDA) International Land Coalition. 2012. Land Matrix. http://landportal.info/landmatrix

Larbi, Odame. N.D. Land Administration Reform in Ghana. Ghana Land Administration Project. http://www.fig.net/commission7/verona_am_2008/ppt/13_sept/10_1_larbi.pdf

Larbi, Odame W. 2011. Ghana's Land Administration Project: Accomplishment, Impacts and the way ahead. World Bank Conference on Land and Poverty Reduction. The World Bank 18-20 April 2011. Washington D.C. http://siteresources.worldbank.org/INTIE/Resources/475495- 1302790806106/GOV5Paper2Larbi.pdf

Ollennu, N. A. (1962) Principles of Customary Land Law in Ghana, Sweet and Maxwell, London.

Rünger, M. 2008. Governance, Land Rights and Access to Land in Ghana. A Development Perspective on Gender Equity. GTZ, Ghana. http://www.fig.net/pub/accra/papers/ts01/ts01_02_ruenger.pdf

Schoneveld, G. German, L. Nutakor, E. 2010. Towards Sustainable Biofuel Development: Assessing the Local Impacts of Large-Scale Foreign Land Acquisitions in Ghana. Paper presented at the World Bank conference April 2010. http://siteresources.worldbank.org/EXTARD/Resources/336681-1236436879081/5893311-1271205116054/schoneveld.pdf

Sarpong, George A. 2006. Improving Tenure Security for the Rural Poor- Ghana Country Case Study-Towards the Improvement of Tenure Security for the Poor in Ghana: Some Thoughts and Observations. FAO, Rome.

WFP, 2016. https://www.wfp.org/node/3467/3707/644350

World Bank.2009. Ghana: Natural Resources and Environmental Governance (NREG) Program. http://web.worldbank.org/ WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/0,,contentMDK:22701705~pagePK:146736~piPK:226340~theSitePK: 258644,00.html?cid=3001 2





LANDac

More information about LANDac and our activities is available on our website: www.landgovernance.org.

Contact

LANDac is based at International Development Studies, Utrecht University

Address

LANDac, attn. Gemma Betsema
Utrecht University / Faculty of Geosciences
Human Geography & Planning (SGPL) /
International Development Studies
PO Box 80 115
NL-3508 TC UTRECHT
The Netherlands

landac.geo@uu.nl www.landgovernance.org