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Summary of activities in 2016

In 2016 the staff associated with Centre for Land Tenure Studies (CLTS) engaged in activities related to fieldwork in various countries, participation and presentation in conferences, publication of CLTS working papers and publication of papers in international journals.

With respect to its own publications series, eight new working papers were written in 2016. CLTS associates have also published eleven journal papers in such journals as *Journal of Development Studies*, *Ecological Economics*, *European Review of Agricultural Economics*, *European Journal of Development Research*, *Land Use Policy*, etc. In addition, CLTS issued two reports in 2016.

Stein Holden held an invited plenary presentation with the title "A Land Tenure Module for LSMS" at 17th Annual World Bank Conference on Land and Poverty in Washington DC, USA. This is work aiming to help standardize the collection of land tenure data across countries based on this generic module that has been developed. As a follow-up to this work in standardizing how land tenure data should be collected, Stein Holden has contributed to a new initiative by the World Bank to promote better land governance in Malawi, which was the first country also to implement the Land Tenure Module in 2016. Another part of this collaboration has been to organize data from a large survey (NACAL) on land tenure issues in Malawi in 2007 that was funded by Norway and to help the preparation of a follow-up survey of estates in Malawi. This work also includes Malawian PhD-students at NMBU (Samson Katengeza and Sarah Tione) who are part of the Capacity Building for Climate Smart Natural Resource Management and Policy (CLISNARP) NORHED program. One of the outcomes of this work was a World Bank Policy Research Paper with the title "Gender-differentiated impacts of tenure insecurity on agricultural performance in Malawi's customary tenure systems" written together Klaus W. Deininger, Fang Xia and Stein Holden.

Stein Holden had another project in Malawi, funded by the Consortium of International Agricultural Research Centers under CGIAR. The project "Adoption of Conservation Technologies in Malawi" was implemented in collaboration with CLISNARP PhD-students (Samson Katengeza and Sarah Tione) and an American researcher, Monica Fisher, at Univ. of Idaho. The project used tablets and the World Bank software Survey Solutions which allows uploading data directly from the tablets and to a "sky" server. The survey included collection of detailed farm plot level data where the tablets' GPS function was used to measure plot sizes and identify their locations. This new technology has great potential in facilitating more easy data collection with fewer errors.

In 2016 Mesfin Tilahun Gelaye, post doc student at the School of Economics and Business (NMBU) and coordinator of CLISNARP NORHED program at Mekelle University, has been promoted to Associate Professor at Mekelle University.

Stein Holden and Mesfin Tilahun started new research on youth issues in Ethiopia in 2016. Since 2011 the Ethiopian government has started to allocate rehabilitated communal lands to youth

groups. The purpose is to provide new livelihood opportunities to landless youth in a country where landlessness and youth unemployment and desperate migration are growing concerns. By pooling own research funds and funds from CLISNARP, a baseline census of 740 youth groups in five districts was implemented in the spring 2016 and followed up with a survey of youth group members with some experiments during the summer 2016 for a sample of the groups.

Paper "Does minimum tillage improve livelihood outcomes of smallholder farmers? A micro-econometric analysis from Zambia" written by Hambulo Ngoma, PhD student at the School of Economics and Business, came out as a top paper and won the Graduate Students and Young Scholars' Case Study Competition. In addition, Hambulo Ngoma defended his PhD thesis in December of 2016.

The "Tverrforsk" project "Land Renting and Agricultural Transformation in Norway" project, funded by NMBU, was finalized in 2016. Two CLTS working papers and one CLTS report were produced under the project in 2016.

In 2016 CLTS created lists of Master of Science theses written at NMBU on related topics and made this list accessible through the CLTS webpage with links to soft copies of these theses. This includes theses written in Norwegian and English.

Centre for Land Tenure Studies

The Centre for Land Tenure Studies was opened at NMBU (earlier UMB) on the 27th of June 2011 resulting from a joint initiative by researchers at the Department of International Environment and Development (Noragric), the School of Economics and Business, and the Department of Landscape Architecture and Spatial Planning. In 2012 CLTS was joined by the Department of Ecology and Natural Resource Management.

Board of the Centre for Land Tenure Studies

Poul Wisborg (Chair), Department of International Environment and Development,
Inger-Lise Saglie, Department of Landscape Architecture and Spatial Planning,
Ragnar Øygaard, School of Economics and Business,
Sjur Baardsen, Department of Ecology and Natural Resource Management,
Eva Falleth, Dean, Faculty of Social Science.

People at CLTS

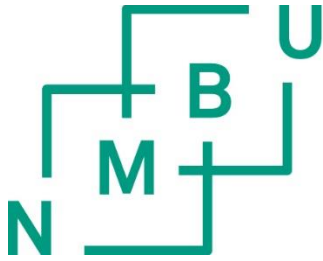
Core team: Ole Hofstad, Stein Holden, Berit Irene Nordahl and Espen Sjaastad.

Associates: Bernt Aarset, Arild Angelsen, Tor Arve Benjaminsen, Erling Berge, Einar Bergsholm, Per Kåre Sky, Sølve Bærug, Einar A. Hegstad, Darley Jose Kjosavik, Eirik Romstad, Dag Einar Sommervoll, Håvard Steinsholt, Steinar Taubøll, Arild Vatn, Pål Vedeld, Nikolai K. Winge.

Post doc researcher: Mesfin Tilahun

PhD students: Hadsh Tesfa Gebreab, Samson Katengeza, Desta Brhanu, Sarah Tione, Salem Afework. Øyvind N. Handberg, Menasbo Gebru Tesfay.

Administrative support: Kateryna Krutskykh.



Norwegian University of Life Sciences Centre for Land Tenure Studies

Mission

The Centre for Land Tenure Studies (CLTS) at NMBU is established to further the study of land tenure. Land tenure studies define a broad and complex field of study cutting across many disciplines. For CLTS this entails, but is not limited to, the following activities:

- Provide a common arena for discussing land tenure issues, including a series of seminars directed to present new research or important theoretical perspectives. This may be designed as part of an educational program.
- Promulgate a joint series of working papers.
- Support international publication of articles and books.
- Develop and conduct joint courses at both Master and PhD level.
- Initiate and support exchange of researchers.
- Participate in research networks related to land tenure.
- Maintain a public list of collaborating institutions and researchers.
- Initiate and develop applications for research funds to support basic research on land tenure both by our own efforts and in collaboration with other research groups working on land tenure questions.

In its activities the centre will use English as its working language as far as practically possible.

In short we may say that the mission of the Centre for Land Tenure studies is to enhance collaboration across departments at NMBU; to strengthen the visibility of NMBU activities within the field of land tenure; to strengthen NMBU's international collaboration and networks within the field; to contribute to research and knowledge generation on land tenure issues; to help build capacity in the South and in Norway within the field; to disseminate policy lessons, and to contribute to policy debates.

CLTS Internal Seminar Series

In 2016 CLTS continued organizing Internal Seminar Series that was launched in 2013. The seminars are aimed to lead to more interaction on land tenure related issues. Both the NMBU staff and PhD-students can propose themes for such internal seminars.

The seminars are announced through our website: <http://www.nmbu.no/clts>. The presenters are encouraged to make papers/power-point presentations available on the website.

In 2016 CLTS held 1 internal seminar:



Bruk av bildet skal merkes med: Foto: Studio Vest AS

November 2nd: CLTS organized seminar hosted by Dag Einar Sommervoll, professor at the institute of Landscape Architecture and Spatial Planning at Norwegian University of Life Sciences, who held presentation with the title "Getting more by asking for less: The efficacy of a strategically low ask in the real estate market". Tower building, Norwegian University of Life Sciences, Aas.

CLTS Working Papers

1. Stein T. Holden, Daniel Ali, Klaus Deininger and Thea Hilhorst (2016). [A Land Tenure Module for LSMS. CLTS Working Paper No. 1/2016](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

This paper proposes to fill the important gap in reliable and nationally representative land tenure data by including a Land Tenure Module (LTM) to be linked to multi-purpose household surveys such as the Living Standard Measurement Surveys (LSMS).

Developing survey standards to generate globally comparable land data is important for generating data to be used in global and regional land governance monitoring initiatives (SDGs; LPI – UNECA; GLTN/ GLII; VGGT). The LTM can be a cost-effective way to provide data for evidence-based analyses that will help identify the areas where policy action can have the most significant and/or immediate impact, and help in sequencing and prioritizing policy interventions.

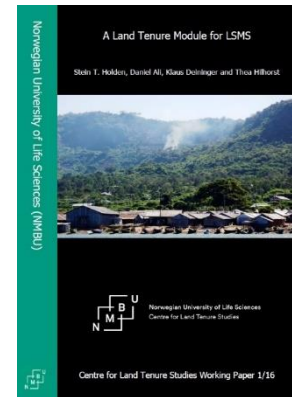
The paper illustrates important issues that may be analyzed based on such a module in order to motivate its implementation and where the current state of knowledge is constrained by limited data access. To facilitate this integration, a generic LTM is proposed based on an assessment of existing tenure modules and lessons learned from surveys on land tenure.

It introduces a basic structure including: (i) ownership and use of agricultural and non-agricultural land and immobile assets on the land, (ii) sources of land acquisition including inheritance, (iii) land transactions, (iv) formal and informal property rights, (v) investments on the land, (vi) land conflicts, (vii) legal knowledge, (viii) gender and property rights, (ix) perceptions of tenure security and (x) trust in land-related institutions.

2. Malgorzata Barbara Havel (2016). [Unlock the lock-in! Balance of rights in relation to betterment and compensation in Poland. CLTS Working Paper No. 2/2016](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

Many Polish cities are faced with a dilemma: to enact their local land-use plans and be exposed to the immediate financial consequences of their adoption, or to protect their budgets against these costs and give up control of the development of the cities.

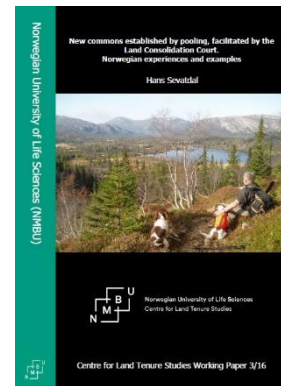
There are very broad compensation rights for value decline due to planning regulations and for areas designated in plans for public roads. At the same time, current planning system policies and instruments in Poland largely neglect how the costs of providing urban infrastructure and services are socialized and how the benefits of development processes are privatized. The use of value capture instruments is very limited.



This paper discusses the distribution of rights and liabilities in relation to the two main sides of the property-values effect caused by land-use planning regulations and public works in Poland, in the background of the new planning system and property-rights approach adopted in the country. The article presents the current situation, initially explores a possible ways forward based on varied international experiences, discusses the institutional design of land markets, and indicates the need for planning by law and property rights.

3. Hans Sevattal (2016). [New commons established by pooling, facilitated by the Land Consolidation Court. Norwegian experiences and examples. CLTS Working Paper No. 3/2016.](#) Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

New commons might come into being by pooling of resources. Such pooling often needs some sort of professional external assistance, as well as appropriate institutional framework. In Norway the Land Consolidation Courts - originally established for reallocation and individualization of land and rights - have developed into a multipurpose instrument, also for facilitating common use of formerly individualized resources. Examples are extraction of certain mineral deposits, development of small-scale hydroelectric power, recreational fishing and hunting, land development etc. The issue is discussed in a context of legal framework - both in public and private law - negotiation, decision-making and enforcement.



4. Erling Berge (2016). [Of urban commons. CLTS Working Paper No. 4/2016.](#) Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

Last summer visitors to the Oslo opera house were met with the following announcement: "Here comes the "Opera Commons" explaining: "Operaallmenningen", the Opera Commons, "will be a multi-functional meeting place for cultural events, recreational activities and people passing through." The choice of "allmenning" (commons) to designate a place that is available to citizens of Oslo and their visitors as a "meeting place for cultural events" and "recreational activities" may be part of an international trend idolizing "the commons". This trend one may observe both in academia and in some political circles. The trend deserves some reflection in its own right. Why is there currently a need for this term?

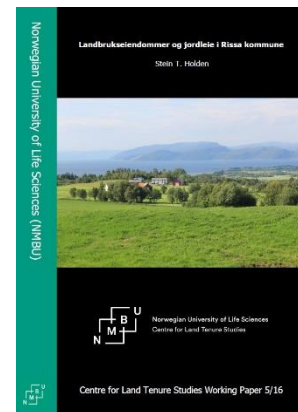


The established theory of the commons does not have much to say about urban reality in its own right. However, the theory is well developed to understand some problems of collective action as these appear in urban development. The link between land tenure and structure of land use decisions is well known. We shall use the theory of the commons to comment on the link between tenure and form of commons that may appear and the problems of governing urban commons in various forms.

5. Stein T. Holden (2016). [Landbrukseiendommer og jordleie i Rissa kommune. CLTS Working Paper No. 5/2016](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

Denne artikkelen beskriver eiendomsstrukturen og bruksstrukturen for landbrukseiendommer i Rissa kommune og hvordan disse har endret seg de siste tiår fram til 2013. Den bruker data fra Statens Kartverk og Statens Landbruksforvaltning til dette. Nøkkelinformeranter i kommunen er benyttet til å karakterisere endringer i landbruket i kommunen og å forklare noen av disse endringene. Jeg drøfter også en del mulige virkninger av endringer i landbrukspolitikken og hvordan disse har påvirket bruksstrukturen og insentivene til å holde jorda i god hevd.

Det har foregått er rask omstilling i jordbruket i kommunen fra mange små melkeproduksjonsbruk til konsentrasjon av det meste av denne produksjonen på noen større bruk med melke-roboter.

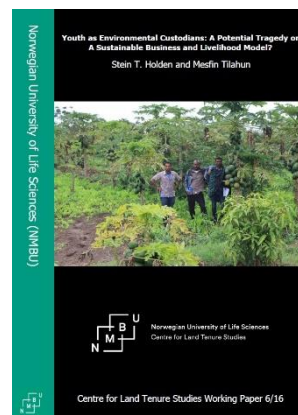


Denne prosessen har gått raskere gjennom etablering av mange samdrifter, omsettbare melkekvoter og økende omfang av jordleie. Det er ting som tyder på at en del leiejord forfaller på grunn av manglende insitamentter til å drenere jorda mens store maskiner og tidspress kombinert med dårlig vær kan gi kjøreskader og synkende avlinger. En del informanter mener at overgangen fra vekstskifte til mer ensidig korn og grasproduksjon også kan ha bidratt til synkende avlinger, men det mangler gode data til å fastslå dette. Høye arealtilskudd og mindre vektlegging på avling kan også ha bidratt til at noen spekulerer i å leie inn mer jord enn de klarer å forvalte på en god måte da arealtilskuddet er høyere enn leia de må betale.

6. Stein T. Holden and Mesfin Tilahun (2016). [Youth as Environmental Custodians: A Potential Tragedy or A Sustainable Business and Livelihood Model? CLTS Working Paper No. 6/2016](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

Youth unemployment and migration is a growing challenge that needs more political attention in many countries in the world, particularly countries with rapid population growth and economic transformation.

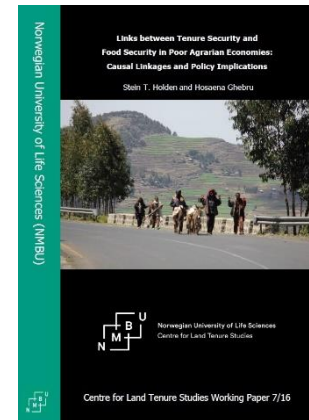
Proactively mobilizing the youth as a resource in the creation of sustainable livelihoods can potentially be a win-win-win solution that Ethiopia is currently attempting with its new youth employment strategy and high ambitions to transform the country's economy into a Green Economy. If it succeeds, it can set an example for other countries in the world to follow. This paper gives an overview of the youth program and the basic ideas and challenges.



7. Stein T. Holden and Hosaena Ghebru (2016). [Links between Tenure Security and Food Security in Poor Agrarian Economies: Causal Linkages and Policy Implications. CLTS Working Paper No. 7/2016](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

Population growth leads to growing land scarcity and landlessness in poor agrarian economies. Many of these also face severe climate risks that may increase in the future. Tenure security is important for food security in such countries and at the same time threatened by social instability that further accelerate rural-urban and international migration.

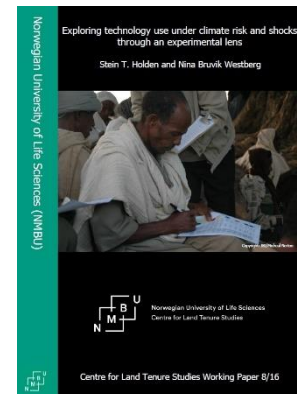
Provision of secure property rights with low-cost methods that create investment incentives can lead to land use intensification and improved food security. Pro-active policies that engage youth in establishment of sustainable livelihoods hold promise. Social and political stability are essential for tenure security and food security.



8. Stein T. Holden, Erling Berge, Espen O. Sjaastad, Geir H. Strand og Håvard Steinsholt (2016). [Jordleie og bruksstruktur i tre norske kommuner. CLTS Working Paper No. 8/2016](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

Omfanget av jordleie og bruksstruktur for tre norske kommuner (Norrdal, Rissa og Ås) fra tre ulike landsdeler sammenlignes for årene 2004 og 2013 basert på data fra Statens Landbruksforvaltning (produksjonstilskudd) og Statens Kartverk (eid areal).

Ås antas å være typisk for kornproduksjon på Østlandet, Rissa er typisk for Midt-Norge hvor melkeproduksjon dominerer, og Norrdal er en typisk Vestlandskommune med topografiske utfordringer. Vi finner at omfanget av jordleie har økt særlig i Norrdal og Rissa i denne perioden. Jordleie, omsettbare melkekvoter, ny teknologi og organisasjonsformer (samdrifter) har bidratt til å skape større og mer rasjonelle driftsenheter mer uavhengig fra eierstrukturen enn tidligere.

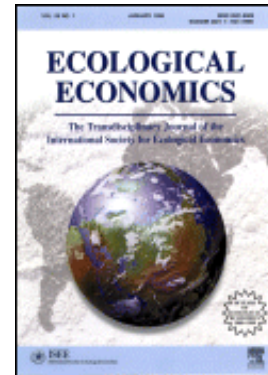


Journal papers

1. Handberg, Ø. N. and Angelsen, A. (2016). [Pay little, get little; pay more, get a little more: A framed forest experiment in Tanzania](#). *Ecological Economics*, doi: 10.1016/j.ecolecon.2016.09.025

How do different levels of individual payments for environmental services (PES) affect intrinsic and social motivations for forest conservation? Does introducing small PES crowd out these motivations?

This paper presents findings from framed field experiments (FFE) conducted with local forest users in Tanzania. The payoff structure represents a common-pool resource situation; participants' payoffs depend on the number of trees harvested, and aggregate over-harvesting can harm future harvest.



Four levels of individual PES are tested in a between-group design: no (0%), low (20%), medium (60%) and full (100%) PES, where the level is relative to the harvest value. We observe lower than theoretically predicted harvest rates at no, low and medium PES, while the opposite is true at full PES. The results suggest that low PES has little impact on local forest use in Tanzania and has on aggregate no significant effect on intrinsic and social motivations. Increasing payments has a negative, but diminishing effect on harvest rates.

2. Holden, S. T. and Quiggin, J. (2016). [Climate risk and state-contingent technology adoption: shocks, drought tolerance and preferences](#). *European Review of Agricultural Economics*, doi: 10.1093/erae/jbw016.

Climate risk represents an increasing threat to poor and vulnerable farmers in drought-prone areas of Africa. This study assesses the maize adoption responses of food insecure farmers in Malawi, where drought-tolerant (DT) maize was recently introduced.

A field experiment, eliciting relative risk aversion, loss aversion and subjective probability weighting parameters of farmers, is combined with a detailed farm household survey. A state-contingent production model with cumulative prospect theory preferences is estimated.



More risk-averse households were more likely to have adopted DT maize, less likely to have adopted other improved maize varieties and less likely to have dis-adopted traditional local maize (LM). Exposure to past drought shocks stimulated adoption of DT maize and dis-adoption of LM.

3. Tilahun, M., Damnyag, L. and Anglaaere, L. C. N. (2016). [The Ankasa Forest Conservation Area of Ghana: Ecosystem service values and on-site REDD + opportunity cost](#). *Forest Policy and Economics*, 73: 168–176.

The Ankasa Forest Conservation Area is one of the most important protected areas (PA) in West Africa.

This study aimed at estimating the economic values of selected ecosystem services of the PA and the direct on-site REDD + opportunity costs to communities. We found that the PA stocks 32.8 million m³ (627 m³/ha) of standing trees with a stumpage value of about \$ 19.1 million (364 \$/ha), 64.3 million tCO₂e (1230 tCO₂e/ha) of carbon worth of \$379.5 million (\$7257/ha), and 6380 tons of nutrients worth of 0.64 million USD. The direct on-site REDD + opportunity cost for conserving the PA until 2042 was about 6.7–24.1 \$/tCO₂e (0.22–0.80 \$/tCO₂e per year) in net present value.



From our field observation of the PA, we did not see a buffer zone that separates the PA from the surrounding land uses. Establishing a buffer zone is very important for the sustainability of the PA. Such an effort, however, should take in to account the opportunity costs to the rural communities associated with possible displacement. Thus, the results of the study could be used as important input for designing policies that will reinforce the sustainability of the Ankasa PA and other conservation sites in Ghana.

4. Holden, S. T. and Ghebru, H. (2016). [Land tenure reforms, tenure security and food security in poor agrarian economies: Causal linkages and research gaps](#). *Global Food Security*, 10: 21-28.

This paper reviews the literature to identify the relationship between tenure security and food security. The literatures on tenure issues and food security issues are not well connected and the scientific evidence on the causal links between tenure security and food security is very limited.

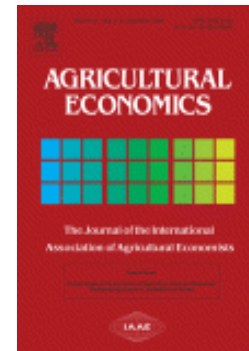
The paper explores the conceptual linkages between land tenure reforms, tenure security and food security and illustrates how these vary across diverse contexts. The paper then reviews the limited number of high quality studies that contribute to a causal chain analysis between tenure security and food security and identifies important research gaps.



5. Tadesse, M. A., Holden, S. T., Øygard, R. A. and McPeak, J. (2016). [Cattle sharing and rental contracts in an Agrarian economy: evidence from Ethiopia](#). *Agricultural Economics*, 47 (5): 479–492.

Empirical evidence on the role of cattle sharing and rental contracts in agrarian economies is limited. This article is an investigation of different types of cattle sharing and rental contracts producers in rural Ethiopia adopt.

It also investigates why households in rural Ethiopia rely on these contracts that are vulnerable and therefore subject to potential moral hazard problems described in earlier literature. We apply random effect probit and control function econometric methods to household panel data collected in 2005 and 2007 from two agro-ecological zones in Ethiopia.



Controlling for the endogeneity of access to livestock credit, we find that contracts are spatially fragmented and better developed where population density is high and credit and insurance markets are poorly developed. We also find that contracts help cash poor and credit constrained households to improve their herd dynamics, to get access to nonlivestock resources (land, labor and cash) and share risks that could have been difficult without the contract. We show that contracts are rational responses of residents in rural communities characterized by imperfect credit and insurance services, since households with better access to credit are less likely to rely on contracts.

6. Tilahun, M., Birner, R. and Ilukor, J. (2016). [Household-level preferences for mitigation of *Prosopis juliflora* invasion in the Afar region of Ethiopia: a contingent valuation](#). *Journal of Environmental Planning and Management*, 60 (2): 282-308.

Prosopis juliflora, which is an alien tree species in Ethiopia, has invaded over 360,500 ha of land in the Afar region of the country and is threatening pastoral livelihoods.

We conducted a contingent valuation study to assess rural households' willingness to contribute in cash and labor to mitigate *P. juliflora* invasion in three districts of Afar. Results show that about 84% of the respondents prefer an intervention involving complete eradication of *P. juliflora*.



The lower and upper bound median willingness to contribute to this intervention were 9.97 and 13.42 USD/household/year in cash and 30 and 43 days/household/year in labor. Off-farm income and *P. juliflora* invasion levels on pasturelands are among the factors affecting willingness to contribute to the mitigation of *P. juliflora* invasion. Incentives to local people and having a proper institutional setup that involves local culture and institutions are important for mobilizing people on a voluntary basis for mitigation of *P. juliflora* invasion.

7. Debelo, B. L. (2016). [Factors Affecting Differences in Livestock Asset Ownership Between Male- and Female-Headed Households in Northern Ethiopia](#). *European Journal of Development Research*, doi: 10.1057/ejdr.2016.9.

Empirical studies that analyze the gender gap in livestock ownership are scarce. This article investigates gender differences in livestock holding using five waves of survey data (1998–2010) from Northern Ethiopia.

By employing decomposition analysis, we find that female-headed households (FHHs) own significantly fewer livestock compared with male-headed households.

Differences in observed characteristics and returns to characteristics account for 29 and 51 per cent of the gender difference, respectively.

Lower endowment of land area, male labor and children (aged 6–14) in FHHs are the observed factors causing the disparity. Gender difference is more pronounced in the ownership of large animals than in the ownership of small animals. Findings are relevant for gender-sensitive public interventions that aim to promote livestock accumulation.



8. Holden, S. T. and Ghebru, H. (2016). [Land rental market legal restrictions in Northern Ethiopia](#). *Land Use Policy*, 55: 212-221.

This study assesses the de jure and de facto land market legal restrictions in the Tigray region in Ethiopia and the extent of implementation of the new land rental restrictions that were introduced in 2006 that state that not more than 50% of a farm can be rented out.

The knowledge, perceptions and attitudes regarding the law among local Land Administration Committee (LAC) members, local conflict mediators and a sample of rural households are investigated. We find that the rented area restriction is commonly violated and not enforced.

The law is circumvented by framing sharecropping as something other than land rental, although sharecropping is the dominant land rental contract in the region. When it is made clear that the law may hurt weak and vulnerable (often female-headed) households that are unable to farm their land themselves and therefore rent it out, the large majority of LAC members, conflict mediators and rural households are against the law.



9. Holden, S. T. and Westberg, N. B. (2016). [Exploring technology use under climate risk and shocks through an experimental lens](#). *African Journal of Agricultural and Resource Economics*, 11 (1): 47-62.

Increasing agricultural productivity among smallholders in developing countries remains essential to improving food security, and one potential avenue for this increase is through stimulating technology adoption.

In this paper we combine rainfall data with household survey and field experimental data to assess households' use and potential demand for a risky agricultural input in Tigray, Ethiopia. More specifically, we explore how average rainfall, rainfall variability, lagged rainfall shocks and risk aversion relate to inorganic fertilizer use at the farm plot level.



Further, we analyse how these variables and exogenous price variation affect the demand for inorganic fertilizer at the household level. The findings are potentially important for the design of policies to promote agricultural production in semi-arid rain-fed agricultural areas with vulnerable populations facing rainfall risk and shocks.

10. Holden, S. T. and Bezu, S. (2016). [Preferences for land sales legalization and land values in Ethiopia](#). *Land Use Policy*, 52: 410-421.

This study investigates attitudes towards legalizing land sales and Willingness to Accept (WTA) sales prices and compensation prices for land among smallholder households in the southern highlands of Ethiopia. Household panel data from 2007 and 2012 are used. The large majority of the sample prefers land sales to remain illegal, and the resistance to legalizing land sales increased from 2007 to 2012.

While resistance against land sales was strongest among the most land poor in 2007, the relatively more land rich had become more negative towards legalizing land sales in 2012.



Younger age and more education were not associated with a more positive attitude towards legalizing land sales. In the same period, perceived median real land values increased sharply but also exhibit substantial local variation with higher land values in areas with better market access. Stated minimum land sales prices increased with farm size in 2012. The substantial increase in perceived land values, high economic growth and outmigration of youth have yet to persuade the rural population in southern Ethiopia to open the land sales market.

11. Bezabih, M., Holden, S. T. and Mannberg, A. (2015). [The Role of Land Certification in Reducing Gaps in Productivity between Male- and Female-Owned Farms in Rural Ethiopia](#). *Journal of Development Studies* 52 (3): 360-376.

This paper analyses the impact of a low-cost land certification programme on the productivity of female-headed households. The hypotheses tested in the paper emphasise on the interaction between the constraints that female-headed households face in terms of insecure land tenure, lack of productive resources and suboptimal land market participation, on the one hand, and the tenure security benefits of certification on the other.

Our findings show that land certification has a positive effect on land market participation and productivity. Our analysis also suggests higher marginal effects of certification on female-headed households' productivity, compared to the male ones.



CLTS Reports

Reports published by CLTS present background material or supporting information relevant for land tenure studies. The intention with the series is to make available and preserve documents that are not usually publishable as journal articles. Technical documentation of data and data collection is not often published in sufficient detail to be helpful for replication studies. Such detailed documentation is nevertheless important and sometimes necessary background material to understand also published articles.

1. Holden, S. T., Bezu, S. and Tilahun, M. [How Pro-poor are Land Rental Markets in Ethiopia? CLTS Report No. 1/2016](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway

This study builds on data collected over a 15 year period (1998-2013) in three regions in Ethiopia through funding from the Research Council of Norway, Norwegian Ministry of Foreign Affairs, NORAD, Global Land Tools Network (GLTN) of UN-Habitat, The World Bank, and Norwegian University of Life Sciences (NMBU). A large number of persons have been involved in the data collection.

The most significant contributors have been Fitsum Hagos and Hosaena Ghebru in Tigray, Tewodros Tefera and Million Tadesse in Oromia and SNNP in addition to students from NMBU, Mekelle University and Hawassa University and the authors of this report. This report is essentially a desk study utilizing the various data sets and has been financed by GLTN and NMBU. The Federal Land Administration, Ministry of Agriculture, as well as Regional Land Administrations in Tigray, Amhara, Oromia and SNNP have also supported the study. We are particularly thankful for the constructive support from director of the Federal Land Administration Tigistu Gebremeskel. We are also thankful for the support from Clarissa Augustinus, Solomon Abate, Esther Obaikol and Oumar Sylla at the GLTN for the facilitation of the project.

2. Berge, E. [Jordleige og strukturendringar i norsk landbruk. CLTS Report No. 2/2016](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway

Denne rapporten er ein del av forskingsprosjektet «Jordleie og strukturendringar i norsk landbruk». Prosjektet er eit forprosjekt der målet er å få til ei landsomfattande gransking av prosessane som flytter bruksrettar til jordbruksareal mellom eigarar og leigarar og kva typar kontraktar som vert tekne i bruk. Forprosjektfasen er finansiert av ei løyving frå NMBU sitt Tverrforsk program for 2014.

Prosjektgruppa, Stein Holden (leiar), Espen Sjaastad, Håvard Steinsholt og underteikna, studerer i forprosjektet situasjonen i 3 kommunar, Ås (0214), Norddal (1524), og Rissa (1624). Denne rapporten fortel om datainnsamlinga for Norddal kommune. Vi tar i bruk opplysningar frå fleire kjelder: Matrikkelen, Landbruksregisteret, kommunale arkiv og egne intervju. Prosjektet har støytt på fleire typar hinder som har seinka gjennomføringa. Det første hinderet var ein meir tidkrevjande prosess enn forventa med å få tilgang til registerdata. Det andre var problema med å få folk til å svare på eit tilsendt skjema med spørsmål. Svarraten vart for låg mellom eigarar som ikkje sjølv er aktive jordbrukarar til at vi kan bruke data som opphoveleg tenkt.

Frafallet var særleg stort for Norddal der vi berre brukte web- og post-utsending av skjema. Der ein personleg leverer ut skjema og hentar dei igjen går det betre. Men det er ein metode som ikkje kan nyttast i ei landsomfattande gransking som var det langsiktige målet. Den er heller ikkje brukbar når eigarane er spreidd over heile landet. Kombinasjonen av datakjelder gir likevel grunnlag for visse typar konklusjonar. Somme observasjonar vert presentert i innleiingskapittelet. Desse vil bli utdjupa i artiklar etter kvart. Underteikna vil her få takke alle som tok seg bryderiet med å svare på skjema eller fortelje underteikna om sin eigen situasjon. Sjølv om data ikkje kunne brukast som opphoveleg planlagt har dei gitt verdiful innsikt i ein omstillingsprosess som norsk jordbruk er midt oppe i. Eg vil og få takke prosjektleiaren Stein Holden for høvet eg har fått til å studere ei viktig side ved eigedomstilhøva i dagens norske jordbruk.

CLTS Papers statistics at S-WoPEc and RePec

S-WoPEc acts as a clearing house and central repository for bibliographic data about Nordic working papers in Economics. In most cases, the working papers are also available in electronic form and can be downloaded from S-WoPEc. S-WoPEc is part of RePEc (Research Papers in Economics), an effort to coordinate the dissemination of information about Working Papers in Economics.

Table 1. Download statistics from RePec in 2015 - 2016

Month	Abstract views 2015	Abstract views 2016	Downloads 2015	Downloads 2016
January	131	57	196	14
February	70	81	57	28
March	68	67	16	68
April	48	79	9	24
May	37	62	20	15
June	55	47	66	16
July	43	87	22	14
August	44	61	12	14
September	83	67	17	18
October	70	56	14	13
November	42	77	7	27
December	53	56	5	8

*Downloads are the files downloaded from RePec.
Source: RePec

RePEc statistics for 2016 shows that there were in total 259 file downloads and 797 abstract views of the CLTS working papers in RePec. Total number of file downloads have decreased from year 2015, when there were 441 file downloads. However, total number of abstract views increased by 53 compared to year 2015.

Table 2. Download statistics from S-WoPEc in 2015-2016

Month	Abstract views 2015	Abstract views 2016	Redirected files 2015*	Redirected files 2016*
January	72	130	59	2
February	66	131	92	34
March	25	56	100	19
April	49	81	10	3
May	64	57	46	2
June	83	89	63	19
July	147	72	11	4
August	92	104	0	2
September	43	129	2	2
October	49	186	3	4
November	138	128	3	4
December	58	124	1	23

*Redirected files are the files downloaded from the CLTS website.

Source: S-WoPEc

In 2016 there were 118 downloads from the CLTS website and 1287 abstract views of the CLTS working papers in S-WoPEc. This is a decrease of 272 in the number of downloads from the CLTS website from year 2015 and an increase of 401 in the number of abstract views in S-WoPEc compared to the previous year.

Conference participation

March 15th: Stein T. Holden held invited plenary talk with the title "A Land Tenure Module for LSMS" at 17th Annual World Bank Conference on Land and Poverty in Washington DC, USA.

April 16th-19th: Mesfin Tilahun Gelaye held presentation with the title "The Economics of land degradation in Africa: Benefits of Action Outweigh Costs" on the launching of the ELD Africa Report and a side event of the 6th Special Session on African Ministerial Conference on Environment (AMCEN), Cairo, Egypt.

June 6th-7th: Mesfin Tilahun Gelaye held presentation with the title " The Economics of land degradation in Africa: Implications of Actions to the SDG's and Adaptation to Climate Change" on the parallel session of the Natural Resource Management Group at the NORHED conference on Knowledge for Development, Oslo, Norway.

June 28th- July 1st: Rolf Barlindhaug and Berit Nordahl held presentation with the title "Price setting behaviour of developers in urban residential regeneration projects" at ENHR 2016 Governance, territory and housing, Belfast, Northern Ireland.

September 23rd-26th: Sam Katengeza held presentation with the title "[Adoption of Drought Tolerant Maize Varieties under Rainfall Stress in Malawi](#)" at [5th African Association of Agricultural Economists \(AAAE\) Conference](#) in Addis Ababa, Ethiopia.

Collaboration with the World Bank on land issues in Malawi



Foto: <https://swedish-fh.squarespace.com/malawi-program-info/>

Stein Holden has contributed to a new initiative by the World Bank to promote better land governance in Malawi. One of the outcomes of this was a World Bank Policy Research Paper with the title "[Gender-differentiated impacts of tenure insecurity on agricultural performance in Malawi's customary tenure systems](#)" written together with Klaus W. Deininger and Fang Xia.

Policy Research Working Paper "[Gender-differentiated impacts of tenure insecurity on agricultural performance in Malawi's customary tenure systems](#)" is part of a larger effort by the World Bank to provide open access to its research and make a contribution to development policy discussions around the world.

Abstract

Many African countries rely on sporadic land transfers from customary to statutory domains to attract investment and improve agricultural performance. Data from 15,000 smallholders and 800 estates in Malawi allow exploring the long-term effects of such a strategy.

The results suggest that (i) most estates are less productive than smallholders; (ii) fear of land loss, although not exclusively due to estates, is associated with a 12 percent productivity loss for females, which is large enough to finance a low-cost tenure regularization program; and (iii) failure to collect realistic land rents implies public revenue losses of up to US\$50 million per year.

From Assistant to Associate Professor



Foto: Privat

In 2016 Mesfin Tilahun Gelaye, post doc student at the School of Economics and Business (NMBU) and coordinator of Capacity Building for Climate Smart Natural Resource Management and Policy (CLISNARP) NORHED program at Mekelle University, has been promoted to Associate Professor at Mekelle University.

Won Graduate Students and Young Scholars' Case Study Competition

The African Association of Agricultural Economists conducted its [5th International Conference](#) in Addis Ababa, Ethiopia on the 23rd-26th September. The theme of this conference was "Transforming smallholder agriculture in Africa: The role of policy and governance".

As part of the invited panel sessions, the Association hosted a Case Study Competition to encourage graduate students and young scholars with an interest in the development of African agriculture to share their views. Studies had to be related to the impact of agriculture on the welfare of agricultural households. These Case Studies were peer reviewed and the best three were selected for presentation and one was awarded the prize.



Foto: Håkon Sparre

Paper "Does minimum tillage improve livelihood outcomes of smallholder farmers? A micro-econometric analysis from Zambia" written by Hambulo Ngoma, PhD student at the School of Economics and Business, came out as a top paper and won the the Graduate Students and Young Scholars' Case Study Competition. The paper assesses the impacts of minimum tillage – the main component of conservation agriculture – on smallholder farmer livelihoods in Zambia.

Specifically, it assesses the impacts of adopting minimum tillage on household income, crop income and crop revenue using an endogenous regression framework applied to cross sectional survey data from 751 plots in Zambia. Hambulo used the endogenous switching regression framework to account for heterogeneity in the decision to adopt minimum tillage or not and to consistently predict actual and expected outcomes for adopters and non-adopters.

PhD defences in 2016

Hambulo Ngoma has defended his PhD thesis with the title "Conservation agriculture, livelihoods and deforestation in Zambia" on the 19th of December.

Prescribed subject of the trial lecture:

"Barriers to the adoption of agricultural technologies in Africa: theory and empirical evidence".



Foto: Håkon Sparre

Evaluation committee:

First opponent: Professor Salvatore Di Falco, Geneva School of Economics and Management, University of Geneva, Switzerland

Second opponent: Assistant Professor Tessa Bold, Institute for International Economic Studies, Stockholm University, Sweden

Committee coordinator: Professor Frode Alfnes, School of Economics and Business, NMBU

Supervisors:

Main supervisor: Professor Arild Angelsen, School of Economics and Business, NMBU

Course in Land Rights

The course EDS280 Land Rights: An Introduction and Theory, Applications, and Policy was replaced by the course EIE280 Land Rights: An Introduction to Theory, Applications, and Policy in 2015. The course has been redesigned to accommodate the interests of the students from the Department of Landscape Architecture and Spatial Planning by giving more emphasis to urban land tenure and planning issues. There were 20 students who took the course in 2016.

Website

The activities of the centre are documented at the website www.nmbu.no/clts. Our main page is in English, but we also have a Norwegian website

<https://www.nmbu.no/fakultet/hh/forskning/forskningscentre/clts>, where research and activities are published in Norwegian.

Attachment 1

Plans for CLTS for 2017

Stein Holden and Mesfin Tilahun have jointly submitted two papers for the World Bank Land and Poverty conference in Washington DC, 19th-24th March 2017. Both papers are accepted for oral presentation at the conference. Both papers are also issued as CLTS WPs in 2017. One of the papers is a study of the performance of youth groups in northern Ethiopia and assesses the extent to which the youth groups adhere to Ostrom's Design Principles and how this also is related to the performance of the youth groups. The second paper utilizes land registry data from selected communities in northern Ethiopia for which First Stage and Second Stage land registry data have been collected. The data are used to assess the gender distribution of documented land rights and how farm size distribution has changed from the First Stage registration in 1998 to the Second Stage parcel-based registration in 2016. This is the first study of this kind in Ethiopia and in Africa.

Stein Holden and Mesfin Tilahun continues the research on youth groups in northern Ethiopia and have in collaboration with Japanese researchers implemented a vegetation survey for communal rehabilitated land allocated to youth groups. A new round of experiments with the youth groups is planned for the summer 2017. Several papers are planned written in 2017 based on the data collected in 2016.

Several PhD-students on the CLISNARP (Climate Smart Natural Resource Management and Policy) project, funded by NORAD, are working on land tenure related issues. These include:

- a) Menasbo Gebru Tesfay, who assesses how land rental markets can contribute to smallholder commercialization in northern Ethiopia
- b) Desta Brhanu Gebrehiwot studies contract choices in land rental markets in northern Ethiopia
- c) Selam Afework Gorfu studies the investment effects of formalization of land rights in northern Ethiopia
- d) Sarah Tione studies the links between land tenure and household food security in Malawi.

Stein Holden is the main supervisor for these students.

Three papers are planned on the project Adoption of Conservation Agriculture Technologies in Malawi.

Attachment 2

Budget 2016

Available funding	122015
Noragric admin expenses (10%)	12200
Web-page and IT purchases (6447 from 2015 included)	40000
Seminars	30000
Sum	82200
Remainder (transfer to 2017)	39815

Revised budget 2016

Available funding	127758
Noragric admin expenses (10%)	12200
Web-page and IT purchases (6447 from 2015 included)	40000
Seminars	30000
Sum	82200
Remainder (transfer to 2017)	45558

Spending 2016

Available funding	127758
Noragric admin expenses	1145
Web-page and IT purchases (6447 from 2015 included)	6447
Seminars	0
Book project	5000
Sum	12592
Remainder (transfer to 2017)	115166

Budget 2017

Available funding	115166
Noragric admin expenses (10%)	7000
Web-page and IT purchases (13151 from 2016 included)	30000
Seminars	40000

Travel to World Bank Conference 25000

Sum 102000

Transfer to 2018 13166