

Contents

Summary of activities in 2017.....	2
Centre for Land Tenure Studies	4
Board of the Centre for Land Tenure Studies	4
People at CLTS.....	4
Mission.....	5
CLTS Working Papers	6
Journal papers.....	13
CLTS Reports	17
CLTS Papers statistics at S-WoPEc and RePec.....	17
Conference participation	21
Contributed to Documenting Award winning policy	22
Articles in Forskning.no.....	23
Won Poster Prize at the 3rd International Congress "Hidden Hunger".....	27
PhD defences in 2017	27
Website	27
Brage	27
Forskning.no.....	27
Attachment 1	29
Attachment 2	31
Attachment 3	32

Summary of activities in 2018

In 2018 the Centre for Land Tenure studies has produced 10 CLTS Working Papers and one CLTS Report. It has also registered 8 papers published in international journals by CLTS related researchers but probably this is an underestimate of the activity at NMBU as we face difficulties motivating NMBU staff to report relevant activities to CLTS and utilize the CLTS webpage.

The “Tverrforsk” project “Land Renting and Agricultural Transformation in Norway” with Stein Holden, Geir Harald Strand, Erling Berge, Espen Sjaastad and Håvard Steinsholt, that ended in 2017 got its final paper published in the journal *Kart and Plan* in 2018.

School of Economics and Business

Professor Stein Holden and Associate professor Mesfin Tilahun are continuing their studies of youth business groups that have been allocated rehabilitated communal lands in Tigray Region of Ethiopia. A new research proposal to NORGLOBAL2 was funded by the Research Council of Norway in 2018 and the project starts in January 2019 and lasts for four years. The project includes collaborating partners at Wageningen University, The Netherlands (prof. Erwin Bulte), Osnabrück University, Germany (prof. Stefanie Engel), University of Queensland, Australia (prof. John Quiggin), and Dag Einar Sommervoll and Arild Angelsen at HH-NMBU. The project will combine surveys with experiments including Randomized Control Trials focusing on training of youth business group members. A paper on the importance of Ostrom’s design principles for the performance of the youth business groups has been accepted for publication in the journal *World Development* in 2018. Stein Holden also presented papers on this youth research at the CSAE conference in Oxford, UK, 18-20th March 2018, and at the Nordic Conference in Development Economics in Helsinki, 11-12th June 2018.

The Adoption of Conservation Agriculture in Malawi project funded by CGIAR, led by Stein Holden with Samson Katengeza (PhD-student at NMBU) and Monica Fisher (University of Idaho) as research collaborators, finalized the writing of three papers that all have been accepted for publication in international journals. Christian Thierfelder (CIMMYT) was invited in as co-author of two of the papers.

Stein Holden presented at a joint symposium on “Land Rental Markets as a Pathway into Agriculture for Youth in sub-Saharan Africa” at the International Conference of Agricultural Economics, 2018; Vancouver, Canada, with researchers from IFPRI, CIMMYT, and Purdue University.

Professor Dag Einar Sommervoll joined HH in 2017. He is currently interested in spatial price variation in housing markets and how machine learning algorithms may improve housing market models. Recently, he has started collaboration with Stein Holden on the analysis of experimental data from Malawi and Ethiopia. He is also included among the researchers involved in the new NORGLOBAL2 project “Youth Business Groups for Sustainable Development: Lessons from the Ethiopian Model”. The same is the case for professor Arild Angelsen.

Federico Camelli, PhD-student at HH with Arild Angelsen as main supervisor, defended his PhD-dissertation “Persistent miscoordination: an economics of Amazon fires” on 21st March, 2018. His given topic for public lecture is “Forest fires: Causes, Effects and Policy Implications”.

Amare Tekaly, PhD-student at HH with Arild Angelsen as main supervisor, defended his PhD-dissertation "Incentivized forest conservation: spatial econometric and experimental evidence" on 25th April, 2018.

Samson Katangeza, PhD-student at HH under the NORHED "Climate Smart Natural Resource Management and Policy" (CLISNARP), defended his PhD-dissertation on adoption of climate smart agricultural technologies in Malawi in August 2018. He has also worked with Stein Holden and Monica Fisher on the Adoption of Conservation Agriculture technologies project in Malawi with three joint papers accepted for publication in international journals.

Muuz Hadush, PhD-student at HH-NMBU associated with the NORAD funded NORHED "Climate Smart Natural Resource Management and Policy" (CLISNARP) project (but with Quota scholarship) finalized his PhD-dissertation for submission. His PhD-dissertation focuses on the role of livestock in land use intensification in Ethiopia. He has one joint paper with Stein T. Holden and Mesfin Tilahun that has been accepted for publication in the international journal Agricultural Economics (to be published in 2019).

Menasbo Gebru, PhD-student at HH-NMBU under the NORAD funded NORHED "Climate Smart Natural Resource Management and Policy" (CLISNARP) project, wrote a first paper co-authored by Stein Holden and Mesfin Tilahun (supervisors) on land rental markets and smallholder commercialization in northern Ethiopia. The paper is a CLTS WP and has been submitted to an international journal (revised and resubmitted once). He also presented a second paper at the International Conference on Agricultural Economics in Vancouver, Canada, 28th July-2nd August 2018.

Desta Brhanu, PhD-student at HH under the NORHED "Climate Smart Natural Resource Management and Policy" (CLISNARP) project and Stein Holden have a joint paper accepted for presentation at the International Conference on Agricultural Economics in Vancouver, Canada, 28th July-2nd August 2018. The paper is on sharing arrangements in sharecropping contracts in northern Ethiopia and was submitted to an international journal (revised and resubmitted).

Sarah Tione, PhD-student at HH under the NORHED "Climate Smart Natural Resource Management and Policy" (CLISNARP) project, participated in an international land tenure course in South Africa in January/February 2018. Sarah is writing her PhD-dissertation on land tenure reforms and tenure insecurity in Malawi with Stein Holden as main supervisor.

Girma Berhe, PhD-student at HH under the NORHED Climate Smart Natural Resource Management and Policy (CLISNARP), writes his dissertation on the impact of the Productive Safety Net Program (PSNP) and on second stage land certification in Ethiopia. He also had a paper accepted for presentation at the International Conference of Agricultural Economics, 2018, Vancouver, Canada, but due to problems obtaining Visa Stein Holden had to present the paper there.

Selam Afework, PhD-student at HH under the NORHED Climate Smart Natural Resource Management and Policy (CLISNARP), completed her fieldwork for her PhD-dissertation in northern Ethiopia on land tenure, land markets and land rehabilitation in spring 2018. She combines land registry data from First and Second Stage Land Registrations in 1998 and 2015 with field surveys.

LANDSAM

Finalization and possibly defense of dissertation of Ph. D. student Hadsh Tesfa Gebreab.

As a follow up to Ph. D. Student Hadsh Tesfa Gebreab from Mekelle a student from Property and Law has proposed to write her MA thesis on urban land tenure security based on the primary material collected by Hadsh for his dissertation. If this happens, we should support her travel to Mekelle for her field observations.

Dr. Daisaku Shimada from Department of Environmental Science, Fukuoka Women's University and with support from Japan Society for the Promotion of Science, is currently a visiting scholar in the Department of property and law. There will be held a half-day seminar on the management of cultural landscapes in Japan and Norway.

Possible research application on the dynamics of land tenure in rapidly expanding urban environments (to be discussed); possible seminar on the same topic in the Autumn.

Continued work on livelihoods and vulnerability in the Indian Sundarbans, where land tenure forms part of the picture.

LANDSAM – Department of Property and Law

Helen E. Elvestad defended her Ph.D. thesis *Negative covenants in densification projects* on October 26th. Main supervisor: Assoc. professor Katrine Broch Hauge.

Leikny Gammelmo delivered her Ph.D. thesis *Sound procedures of handling applications for changing real property* in December 2018 (public defence on April 12th 2019. Main supervisor: Professor Per Kåre Sky.

Veronica Trygstad started as Ph.D. student. Project title: Land Consolidation Act challenges the cadastre as a national common component: The interface of the Cadastral Act and the Land Consolidation Act.

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

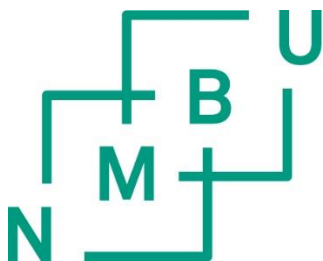
Core team: Ole Hofstad, Stein Holden, Berit Irene Nordahl and Espen Sjaastad.

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, 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.

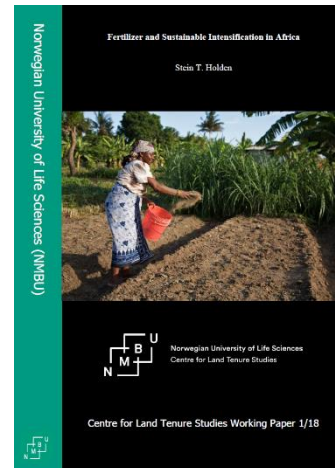
In short we may say that the mission of the Centre for Land Tenure studies is to enhance collaboration across departments at NMBU; to strengthen the visibility of NMBU activities within the field of land tenure; to strengthen NMBU's international collaboration and networks within the field; to contribute 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 Working Papers

1. Stein T. Holden (2018). [Fertilizer and Sustainable Intensification in Africa. CLTS Working Paper No. 1/2018.](#) Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

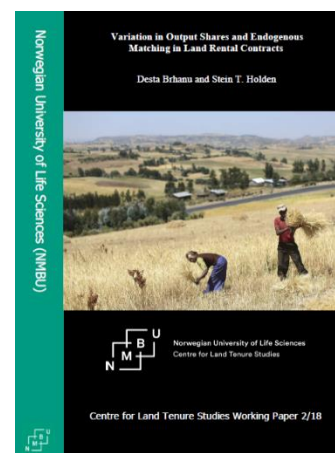
The paper investigates the important role of fertilizer to enhance sustainable intensification and food security in Sub-Saharan Africa based on a multi-disciplinary literature review. The review starts with a macro-perspective taking population growth, economic development and climate change into account. This is complemented with a micro-perspective summarizing findings from comprehensive micro-data in selected African countries.

Agronomic, environmental and economic profitability implications of fertilizer use are reviewed. An assessment is made whether small farmers in Africa should be considered rational or partly irrational agricultural decision-makers and whether this can affect fertilizer use. I then discuss some controversial and promising policy approaches that may have the potential to enhance sustainable intensification and nutrient use efficiency in African agriculture before I conclude.



2. Desta Brhanu and Stein T. Holden (2018). [Variation in Output Shares and Endogenous Matching in Land Rental Contracts. CLTS Working Paper No. 2/2018.](#) Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

We investigate the extent of variation in output sharing in land rental contracts and alternative hypotheses to explain this variation. Close to half of the rental contracts in our study in northern Ethiopia have output shares that deviate from the dominant 50-50 equal sharing. Variation in land quality, the relative bargaining power of landlords and tenants, production risks and shocks are hypothesized to influence output shares. Matched data of landlords and tenants are used. The importance of endogenous matching of landlords and tenants is investigated by assessing how endogenous tenant characteristics are correlated with landlord characteristics.

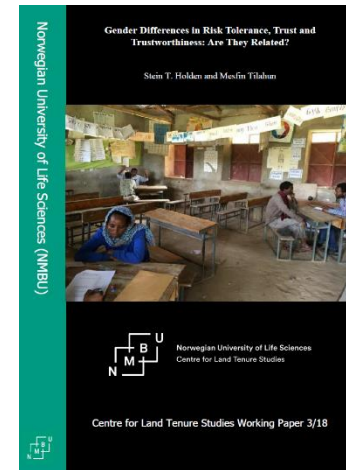


We find evidence of negative assortative matching for key resource characteristics. A control function approach is used to control for endogenous matching in the output share models. The results reveal that production risks as well as relative bargaining power affect output shares in

the reverse tenancy setting with tenants being relatively wealthier and influential than landlords.

3. Stein T. Holden and Mesfin Tilahun (2018). [Gender Differences in Risk Tolerance, Trust and Trustworthiness: Are They Related? CLTS Working Paper No. 3/2018](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

The paper assesses risk tolerance, trust and trustworthiness among male and female youth group members in recently formed primary cooperative businesses in Ethiopia. Male members are found to be more risk tolerant, trusting and trustworthy than females. There is a strong positive correlation between individual risk tolerance and trust for male while this correlation is much weaker for female members.



Individual risk tolerance is positively correlated with trustworthiness for males but not for females. Females are more trusting and trustworthy in groups with more risk tolerant members. Females' trustworthiness is more sensitive to group characteristics and experiences. The findings are consistent with social role theory as males appear more instrumental and females more communal in their responses.

4. Dag Einar Sommervoll and Åvald Sommervoll (2018). [Learning from man or machine: Spatial aggregation and house price prediction](#). CLTS Working Paper No. 4/2018. Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

House prices vary with location. At the same time the border between two neighboring housing markets tends to be fuzzy. When we seek to explain or predict house prices we need to correct for spatial price variation. A much used way is to include neighborhood dummy variables. In general, it is not clear how to choose a spatial subdivision in the vast space of all possible spatial aggregations. We take a biologically inspired approach, where different spatial aggregations mutate and recombine according to their explanatory power in a standard hedonic housing market model.



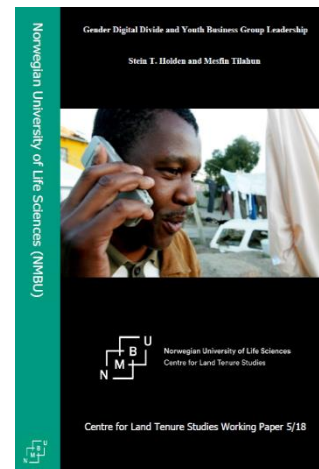
We find that the genetic algorithm consistently finds aggregations that outperform conventional aggregation both in and out of sample. A comparison of best aggregations of different runs of the genetic algorithm shows that even though they converge to a similar high explanatory

power, they tend to be genetically and economically different. Differences tend to be largely confined to areas with few housing market transactions.

5. Stein T. Holden and Mesfin Tilahun (2018). [Gender Digital Divide and Youth Business Group Leadership. CLTS Working Paper No. 5/2018](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

We assess the gender difference in mobile phone ownership among youth business group members, and how it affects election into leadership and group board positions in recently established rural youth business groups in northern Ethiopia.

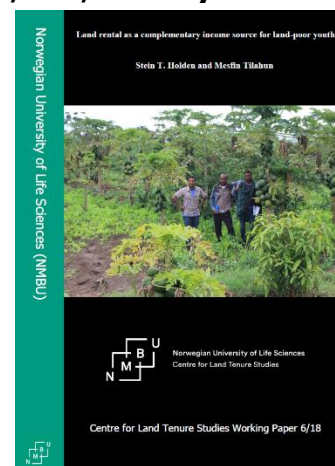
Based on data on 1125 youths from 119 youth business groups where 32% of the members were female, 37% of the females and 70% of the males owned mobile phones. Male members were twice as likely to become board members and five times as likely to become group leaders. While there was a strong gender effect, having a mobile phone had an even stronger effect enhancing the likelihood of members becoming board members by 17.4 percentage points. Male gender and mobile phone ownership had equally strong effects on members becoming group leaders.



Male group members were on average older than female group members, and with there being a significant age effect, this also contributed to the male dominance in group boards and leadership positions. Education also increased the likelihood of members becoming leaders and board members but this did not increase the gender gap in selection into such positions, as females were equally well educated as males.

6. Stein T. Holden and Mesfin Tilahun (2018). [Land rental as a complementary income source for land-poor youth. CLTS Working Paper No. 6/2018](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

Continued high population growth in already densely populated rural areas in parts of Sub-Saharan Africa makes it harder for youth to choose agriculture as their main source of income. We investigate whether near landless youth can still access rented land as a complementary source of income. We utilize a unique data set of rural youth that have been allocated rehabilitated communal land to form formalized business groups for joint business activity.

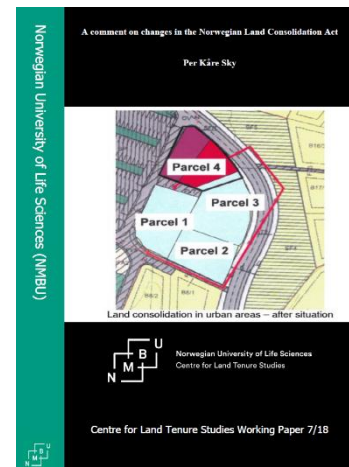


They rely on complementary sources of income and land renting is one of these. Using data from a sample of 1138 youth business group members from 119 youth groups in five districts in the Tigray region of Ethiopia, we find that land renting is a complementary income source for 29% of these youth. It is the most important source of income for 16.8% of the youth and the second most important source of income for 14% of the youth. Access to rented land is constrained, however. Male youth who own oxen and ploughs are much more likely to be able to rent land. Utilizing a trust game to elicit trust and trustworthiness of the youth, we also found a positive association between trust and access to rented land. Trust reduces transaction costs and more trustworthy youth have better access to rented land.

The importance of trust is also illustrated by the dominance of kinship contracts and contracts with close neighbors reducing the costs of monitoring tenants. The dominance of sharecropping contracts also contributes to rationing and low allocation efficiency in the market. The prohibition of land sales also limits the potential of the "agricultural ladder" to facilitate youth climbing out of poverty through purchase of land.

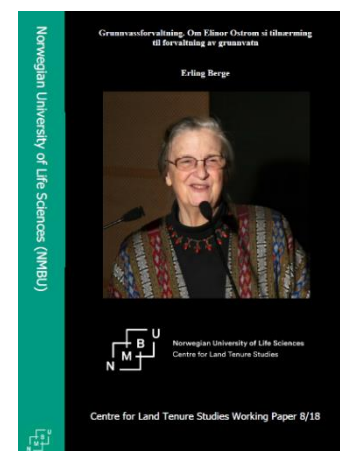
7. Per Kåre Sky (2018). [A comment on changes in the Norwegian Land Consolidation Act. CLTS Working Paper No. 7/2018.](#) Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

The Land Consolidation Act has recently been revised. The changes came into force on 1 July 2006 and 1 January 2007. The main changes in the Act are that the land consolidation court now has formal jurisdiction to handle land consolidation cases for all types of properties independent of location, unless particular cases are specifically removed from the court's jurisdiction in the Act. The Act provides for two new types of land consolidation cases in Section 2. The paper analyzes these different revisions.



8. Erling Berge (2018). [Grunnvassforvaltning. Om Elinor Ostrom si tilnærming til forvaltning av grunnvatn. CLTS Working Paper No. 8/2018.](#) Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

The paper discusses the challenges present in the management of groundwater. The theoretical approach of Elinor Ostrom is presented and her study of the management of groundwater in Southern California in the 1960ies is used to illuminate how the bottom up process for developing a sustainable system of governance works in



California. The most general challenge for a management system is to establish reasonably accurate knowledge about the extent of the groundwater reservoir, a list of the holders of rights to access or pump the groundwater, and the amount taken by those who exercise their rights. If the rights holders are to govern themselves, they need an institutional framework that allows them to create a legally valid constitution for those who have rights in the groundwater. The system of Home-rule that governs local management of public affairs in California provides such framework. This has been studied as polycentric governance.

9. Stein T. Holden (2018). [The Economics of Fertilizer Subsidies. CLTS Working Paper No. 9/2018](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

Fertilizer and other input subsidies have been a prominent component of agricultural policies in many Asian and African countries since the 1960s. Their economic and political rationale is scrutinized with emphasis on the second generation of targeted input subsidy programs that were scaled up in Sub-Saharan Africa (SSA) after 2005. The extent to which they full-fill the goal of being 'market smart' is assessed after inspecting the potential for such subsidies in SSA.



The new fertilizer subsidy programs do not live up the market smart principles and suffer from severe design and implementation failures. While a clear exit strategy was one of the key principles, this principle has been neglected with the result that most current programs are more 'sticky' than 'smart'. They have only partially achieved the intended impacts and have resulted in a number of unintended negative impacts. Redesign should start from a pilot stage testing basic mechanisms.

10. Erling Berge (2018). [Understanding Norwegian Commons. CLTS Working Paper No. 10/2018](#). Centre for Land Tenure Studies, Norwegian University of Life Sciences, Aas, Norway.

The paper reviews the development of the legal status of Norwegian commons from the first known legislation on commons. The development can be divided into 5 periods.

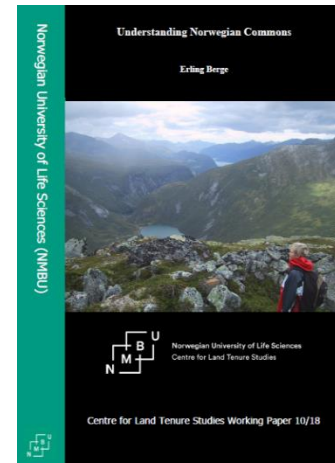
The first period lasted until about 1300. In this period, the commons changed from being a local matter for the chiefs and the local thing to become a national resource where also the King had rights to resources for defence of the realm.

The second period is the big population decline 1350-1550 where Norway lost 60% of its population and the King and his bureaucracy moved to Copenhagen. The commons reverted to a local issue.

The third period lasted from about 1550 to 1814. The powers of ownership were now seen to reside in the Crown. It had moved from the local community to the state. The rights of common were respected and should remain as they had been from old on. Limitations on the commoner's exploitation were introduced. Rights of common were held by active farms and stunted to the needs of the farm. At the same time, the Crown started large-scale exploitation of the forest resources and selling off forestland to sawmill owners and timber merchants.

In the period 1814 to 1857/1863 the state's ideas about the commons were recast into 3 types of commons and one type not mentioned in the legal texts that here is called hamlet commons.

In the period after 1863 the limitations and regulations of the exploitation of the commons continued. By the end of the 20th century, the rights of common were reduced to rights of forests and pasture tailored to the needs of the farm. However, the development in farming and recreation activities of the population changed the usage of the commons. The rights of fishing and hunting in state commons came close to an all men's right. The national community expanded its use of the commons by defining much of their areas to be protected lands providing landscapes for recreational activities and production of ecosystem services.



Journal papers

1. Klaus Deininger, Fang Xia and Stein T. Holden (2018). [Gendered Incidence and Impacts of Tenure Insecurity on Agricultural Performance in Malawi's Customary Tenure System](#). *Journal of Development Studies*, doi: [10.1080/00220388.2018.1425395](#).

Registration of individual title to land in order to create legal security has been the central concern in the rich literature on land and law in Africa. The problem of legal insecurity is approached here from a different angle which has received relatively less attention: dispute settlement.

The article results from the observation of land disputes in local political arenas. It portrays a local legal cultural universe in which legal insecurity arises especially from legal situations stressing group consensus. It appears that people who are accused of witchcraft and groups which are said not to belong are particularly vulnerable in such a legal culture.



The conclusion argues that this case material reveals connections between law, land and the creation of social order which may throw light on many other situations. It pleads for more attention to be paid to the development of jurisprudence in attempts to create legal security.

2. Stein T. Holden, Geir-H. Strand, Erling Berge, Espen O. Sjaastad and Håvard Steinsholt (2018). [Regional variasjon i jordleie og bruksstruktur: En studie basert på tre utvalgte kommuner](#). *KART OG PLAN*, 78: 1–14.

Renting of farm land has increased rapidly in Norway and is involving close to 45 percent of the agricultural area currently in use. This development is a combined result of technological changes, economic transformations, agricultural policies, and legal regulations. Technological and market forces tend to push a development towards fewer, bigger, and more efficient farms. Agricultural policies and legal regulations have delayed this transformation.



Agricultural land is relatively rarely sold on the open market. This is due to legal restrictions as well as socio-cultural barriers. Land renting facilitates a more rapid transformation towards larger operational units whereby inactive owners can fulfill their legal obligation to maintain active agriculture on the land without having to sell it. It is also a mechanism giving the remaining active farmers access to more land. This study assesses the changes in land renting and farm size structure in Norway. Regional differences are addressed through case studies. The underlying driving forces behind, and possible consequences of, expanded renting of land are discussed.

3. Monica Fisher, Stein T. Holden, Christian Thierfelder and Samson P. Katengeza (2018). [Awareness and adoption of conservation agriculture in Malawi: what difference can farmer-to-farmer extension make?](#) *International Journal of Agricultural Sustainability*, 16 (3): 310-325.

Despite the potential of conservation agriculture (CA) for increased crop yields, energy savings, soil erosion control, and water-use efficiency, smallholder farmers in sub-Saharan Africa have been slow to adopt. Farmer-to-farmer extension (F2FE) may have a role to play in overcoming the information access problems and lack of knowledge that may preclude widespread adoption. This study uses data for 180 lead farmers linked to their 455 followers to investigate how F2FE influences awareness and adoption of CA technologies in Malawi.

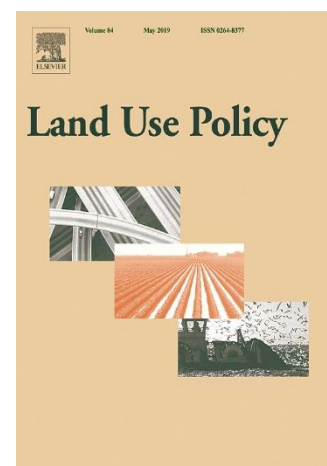
Results from a bivariate probit model for follower farmer awareness and adoption of the three CA principles (minimum soil disturbance, crop residue retention, and crop diversification) reveal four main findings: First, lead farmer motivation increases their effectiveness at diffusing CA practices to their followers. Second, lead farmer familiarity with and adoption of CA both matter to the spread of CA practices, but familiarity appears more important. Third, lead farmers play a more critical role in increasing awareness than adoption of the CA practices. Finally, F2FE is a complement rather than a substitute for other sources of agricultural extension in Malawi's pluralistic extension system and should support but not replace current systems. Research and policy implications are discussed.



4. Stein T. Holden, Monica Fisher, Samson P. Katengeza and Christian Thierfelder (2018). [Can lead farmers reveal the adoption potential of conservation agriculture? The case of Malawi.](#) *Land Use Policy*, 76 (July): 113-123.

This paper assesses the adoption potential of conservation agriculture (CA) and related technologies in Malawi, where CA appears appropriate to protect against land degradation and climate risks (droughts and floods). Estimation of adoption rates and their determinants is complicated by the relatively recent introduction of some of these technologies and limited awareness of CA principles and practices among the general population of smallholder farmers.

We propose and use a lead farmer promoter-adopter approach, which relies on the promoters having had sufficient exposure and access to the technologies, their interest to adopt CA not having been distorted by excessive incentives, and them not being overly different from other smallholders in the target population. These conditions are reasonably satisfied in our application with a sample of 175 lead farmers from four districts in central and southern Malawi.

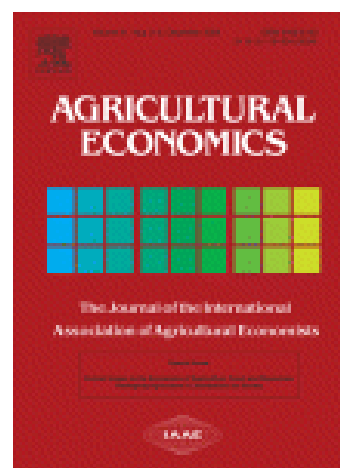


Conditional on lead farmers being familiar with the technologies, we find adoption rates of 56% for organic manure and crop rotation, 26% for minimum tillage, 30% for mulching, and 12% for herbicide application. Lead farmers recommend CA and supporting agricultural practices to their followers at rates of 66% for organic manure, 49% for crop rotation, 45% for minimum tillage, 27% for mulching, and 6% for herbicide application. Assuming the validity of the promoter-adopter approach, these findings together suggest that, in central and southern Malawi, organic manure and crop rotation (in central Malawi only) have the highest adoption potential, mulching and minimum tillage come next, and herbicide application has the lowest potential. Ninety-seven percent of the lead farmers had adopted three or less of these technologies, full adoption of CA is therefore unlikely and suggest other reasons than information constraints as major impediments to its full adoption.

5. Samson P. Katengeza, Stein T. Holden and Rodney W. Lunduka (2018). [Adoption of Drought Tolerant Maize Varieties under Rainfall Stress in Malawi](#). *Agricultural Economics*, 70 (1): 198-214.

We examine adoption of drought tolerant (DT) maize varieties using a four-round panel dataset from six districts in Malawi. There is an increase in adoption of DT maize from 3% in 2006 to 43% in 2015 in our data. We focus on the effect of past drought exposure on adoption and the likelihood of DT maize being distributed under the Farm Input Subsidy Programme (FISP). Results show that past exposure to drought increases the probability of DT maize seed being distributed through FISP.

Farmers who accessed maize seed subsidy coupons and were previously exposed to late season dry spells are more likely to use the seed subsidy coupon to redeem DT maize seed. The likelihood of adoption and adoption intensity (area under DT maize) are positively influenced by previous early season dry spells and access to seed subsidy. Previous late season droughts also positively affect adoption intensity. On the other hand, area share under DT maize is positively correlated with early season dry spells and past exposure to late season dry spells but negatively related to seed subsidy. FISP in Malawi appears to have stimulated adoption of DT maize directly through subsidy and indirectly through generating farmers' experiences of the performance of DT varieties under drought conditions.



6. Stein T. Holden (2018). [Fertilizer and sustainable intensification in Sub-Saharan Africa](#). *Global Food Security*, 18 (September): 20-26.

The paper investigates the important role of fertilizer to enhance sustainable intensification and food security in Sub-Saharan Africa (SSA) based on a multi-disciplinary literature review. The review starts with a macro-perspective taking population growth, economic development and climate change into account. This is complemented with a micro-perspective summarizing findings from comprehensive micro-data in selected African countries.



Agronomic, environmental and economic profitability implications of fertilizer use are reviewed. The poor but efficient hypothesis is assessed in light of recent evidence in behavioral economics. Is low fertilizer use due to hard constraints farmers face or partly due to irrational behavior, and what are the policy implications? Two policy approaches, input subsidy and productive safety net programs, are reviewed and their potential roles to enhance sustainable intensification and nutrient use efficiency in SSA agriculture are discussed before I conclude.

7. Ghebru, H. and Holden, S. T. (2018). Land rental markets and rural poverty dynamics in Northern Ethiopia: Panel data evidence using survival models. *Review of Development Economics*, 23 (1): 131-154.

There is growing interest in understanding the links between land reforms, land markets, and poverty reduction in Africa. The study uses four-wave panel data from the northern highlands of Ethiopia to assess the dynamics of rural poverty taking into account the status of participation of rural households in the land rental market.

Applying both nonparametric (Kaplan–Meier estimator) and semi-parametric survival models that control for duration dependence of poverty transition, results show participation and degree of participation on the supply side of the tenancy market (landlords) have highly significant and positive effect on the chances of escaping poverty while the same cannot be said about the demand side of the tenancy market (tenants).



The empirical evidence also confirms that households headed by older and literate people have relatively larger exit rates from poverty as compared with households headed by younger and illiterate ones. Though transacting farmers may engage them-selves in win–win rental arrangements by the time they join the tenancy market, results indicate that gains are unequal as those tenants who enter the markets from low economic leverage (were poor) are liable to face a lower margin of net gains, which may limit their ability to move out of poverty.

8. Stein T. Holden and Sosina Bezu (2018). Exchange asymmetries in productive assets: Tools, fertilizer or cash? *World Development*, 115: 269-278.

Exchange asymmetries in individual decision-making have attracted substantial attention from economists since Thaler (1980) referred to the phenomenon that losses are weighted more heavily than gains as an “endowment effect” and related it to loss aversion and prospect theory. We used a field experiment to investigate exchange asymmetries in productive assets among poor rural respondents in Ethiopia. Farmers were randomly allocated two types of productive assets (tool or fertilizer) or cash, with a choice to keep the productive asset (cash) or exchange it for cash (productive asset). Loss aversion was proxied with a separate experiment and was used to assess the importance of endowment effect theory to explain exchange asymmetries. Our study finds a significant



exchange asymmetry and a greater exchange asymmetry for the more popular tool than for fertilizer. Loss aversion could explain a small but significant part of the exchange asymmetry in tools, but trade experience did not reduce the exchange asymmetry. The findings are relevant for whether to use targeted in-kind or cash transfers to stimulate technology adoption and enhance food security among poor rural households. The results imply that in-kind transfers may stimulate input use or investments more than cash transfers.

9. Terje Holsen (2018). [Neoliberal urbanitet – om betingelser for bruken av de urbane offentlige rommene \[Neoliberal urbanism – on the conditions for the use of urban public spaces\]](#). *Tidsskrift for samfunnsforskning*, 59 (3): 304-318.

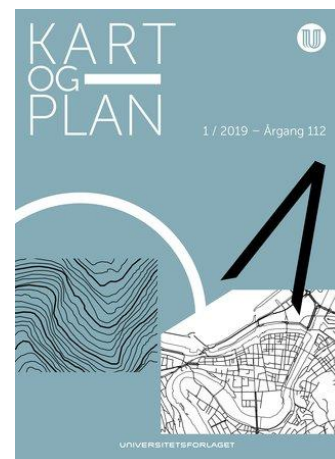
Neoliberal policies and project-based urban development changes the conditions for the use of urban public spaces. Two trends emerge; increased private management of traditional public spaces and privately owned land made publicly available. The distinction between public and private is diminishing. More of urban life takes place in privately owned, privately managed or both privately owned and managed public spaces. As a result, one sees the development of club goods.



Internationally, considerable attention has been devoted to the impact of this development on the use of urban public spaces. Many studies have been concerned with how neoliberal urban development limits its use - understood as a privatization of the public spaces. Intentions given through property rights, management, activities, architecture, etc. will each in its own way partly facilitate and partially limit the possibilities of use. However, use is not controlled solely by intentions. People's perception of the possibilities of use might be just as important. Intentions to privatize can be challenged by actual use. Hence, the concept of privatization cannot be understood from formal property rights or unilaterally through the relationship between public authorities and the market. The rights perspective must be nuanced and the understanding of what it means that a room is public must be elaborated - as a basis for further empirical studies of how the neoliberal urban development affects the use of public spaces.

10. Terje Holsen (2018). [Kampen om fellesrommene: Om ekskludering og inkludering i de urbane offentlige byrom \[The fight for common spaces: On exclusion and inclusion in urban public spaces\]](#). *Kart og plan*, 78 (2): 101-113.

There is a widespread notion that there is a struggle for the urban public spaces, a struggle affected by the way resources and their development are managed in the context of neoliberal urban development. Our urban environment expresses meaning; it embodies expectations, possibilities and limitations. As a result, some people are excluded from the common spaces, while others are included.

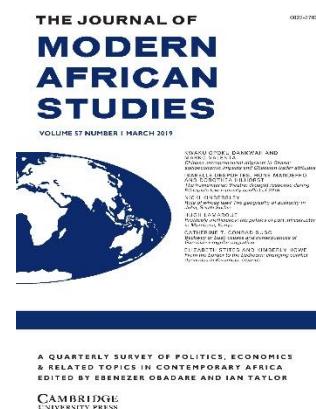


The urban common spaces are often referred to as «public spaces», and these are expected to be open and accessible to all. This article discusses who «everyone» is, and how ownership of this community is constituted. The backdrop for the discussion is what is often referred to as neoliberal urban development.

11. Randi Kaarhus (2018). [Land, investments and public-private partnerships: what happened to the Beira Agricultural Growth Corridor in Mozambique?.](#) *The Journal of Modern African Studies*, 56(1): 87-112.

Influential discourses present Foreign Direct Investment (FDI) as essential for agricultural development in Africa; a parallel, critical debate on 'land rushes' has denounced Land Grabs, demanding increased accountability in FDI-based land deals. This article explores an initiative located in central Mozambique, the Beira Agricultural Growth Corridor (BAGC).

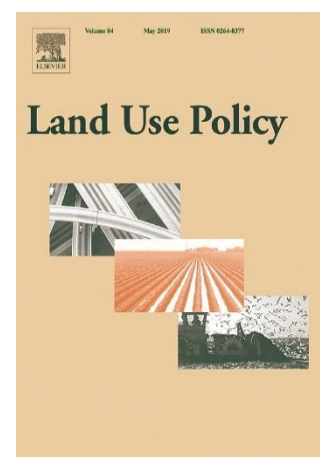
It shows how the international fertiliser company Yara set out to enrol actors at different levels in business, governance and agricultural development into BAGC as a public-private partnership to promote commercial agriculture. Very soon, however, Yara made shifts in its engagement and market strategy, leaving the BAGC initiative to supporting donors and local producers. The analysis presented here shows how the tension between 'patient-capital' requirements, high risks and low immediate returns have shaped this case over time – in a context of a national political economy framed by extractive-resource dynamics.



12. Raymond Achu Samndong, Glenn Bush, Arild Vatn and Melissa Chapman (2018). [Institutional analysis of causes of deforestation in REDD+ pilot sites in the Equateur province: Implication for REDD+ in the Democratic Republic of Congo.](#) *Land Use Policy*, 76: 664-674.

As DRC moves from REDD+ readiness to implementation, analysis of the causes of deforestation at the local level is paramount. The present study contributes to this by assessing both proximate and underlying causes of deforestation in two REDD+ pilots of the Équateur province. The study found that agricultural expansion through shifting cultivation is the main proximate cause of deforestation. This activity is accelerated by logging that simplifies clearing of land. Logging also contributes to the total biomass loss from the forest. Shifting cultivation is driven by the poverty conditions of the study area.

Poverty is also linked to the political and institutional structures of forest governance. These structures are controlled by political elites who influence local decisions to clear forests. While actions to curb deforestation might be challenging, this study suggests that addressing the underlying causes through effective land use planning and

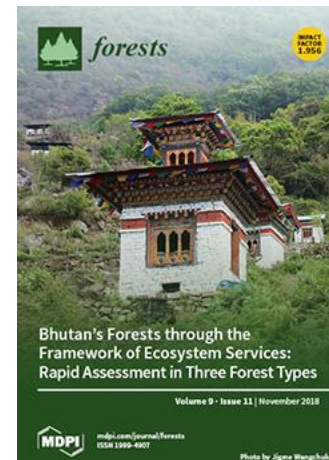


developing robust accountable institutions while providing alternative economic opportunities to the local population are necessary.

13. Raymond Achu Samndong and Arild Vatn (2018). [Competing tenures: Implications for REDD+ in the Democratic Republic of Congo](#). *Forests*, 9 (11): 662-679.

The capacity of the Democratic Republic of Congo (DRC) forests to sequester carbon has attracted interest from the international community to protect forests for carbon storage and alleviate rural poverty by establishing REDD+ (Reduced Emissions from Deforestation and Forest Degradation). Using information gathered from interviews, focus groups, field observations, and policy document analysis, this paper demonstrates that REDD+ is not well adapted to the institutional structures of forest governance in the DRC, including both statutory and customary tenure.

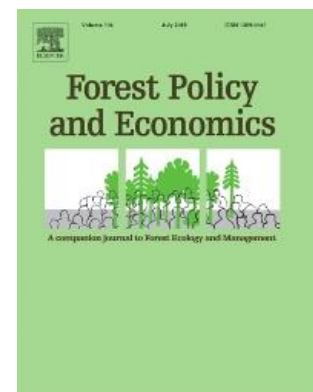
The lack of harmonization between these systems has created a situation of competition between state and customary authorities. This has created opportunities for powerful actors to 'shop' between the two systems to attempt to legitimize their expanded use and control over forest resources.



As the REDD+ process evolves from the preparation to the implementation phase, competing institutional structures may negatively impact the effectiveness of REDD+, as well as the distribution of costs and benefits. While the newly enacted community forest law provides an opportunity to recognize customary rights to forestland, the lack of functional local government at the district and village levels has prompted REDD+ pilot project organizers to establish new village organizations for REDD+.

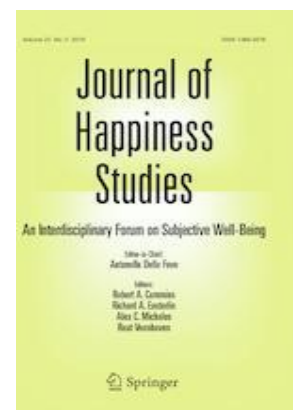
14. Hambulo Ngoma and Arild Angelsen (2018). [Can conservation agriculture save tropical forests? The case of minimum tillage in Zambia](#). *Forest Policy and Economics*, 97 (C): 153-162.

Minimum tillage (MT) is a key component in the promotion of conservation agriculture (CA). This paper asks whether MT reduces cropland expansion and thus deforestation. We develop a theoretical household model of land expansion, and test hypotheses by estimating a double hurdle model using household survey data from 368 smallholders in rural Zambia. About 19% of the farmers expanded cropland into forests, clearing an average of 0.14 ha over one year. Overall, we do not find significant associations between MT adoption and reduced deforestation among households in our sample, while higher labor availability and crop yield stimulate expansion. Yield augmenting agricultural technologies (such as MT) may not reduce expansion unless combined with other forest conservation measures.



15. Victoria Reyes-García, Arild Angelsen, Gerald Shively and Dmitriy Minkin (2018). [Subjective wellbeing and village vs. national income inequality in the developing world](#). *Journal of Happiness Studies* (online).

Does income inequality matter for subjective wellbeing? Using data from 5945 individuals residing in 182 villages in rural areas of 21 developing countries, we test the relative importance of income inequality measured at different levels (country and village) in subjective wellbeing. Country-level inequality might increase subjective wellbeing because it signals potential upward mobility, whereas village-level inequality might exacerbate negative effects of local peer-group comparisons on subjective wellbeing. The two measures of income inequality are not correlated, supporting the intuition that these variables might capture different aspects of income inequality.



Although we observe broad patterns that suggest inequality measured at different levels might have associations with subjective wellbeing, and with potentially differing signs, the low magnitude of these associations and their weak statistical significance do not provide enough evidence to support the argument that the level at which income inequality is measured explains overall patterns of subjective wellbeing. Our results therefore leave open for future research the question of what underlying forces might account for these observed patterns.

16. Arild Angelsen and Therese Dokken (2018). [Climate exposure, vulnerability and environmental reliance: a cross-section analysis of structural and stochastic poverty](#). *Environment and Development Economics*, 23 (3): 257-278.

We analyze links between exposure to climate extremes and shocks, vulnerability and coping strategies, environmental reliance and poverty among 7,300 households in forest adjacent communities in 24 developing countries. We combine observed income with predicted income to create four categories of households: income & asset poor (structurally poor), income rich & asset poor (stochastically non-poor), income poor & asset rich (stochastically poor) and income & asset rich (structurally non-poor), and assess exposure and vulnerability across these groups. The income poor are more exposed to extreme climate conditions. They tend to live in dryer (and hotter) villages in the dry forest zones, in wetter villages in the wet zones, and experience larger rainfall fluctuations. Among the income-generating coping strategies, extracting more environmental resources ranks second to seeking wage labor. The poorest in dry regions also experience the highest forest loss, undermining the opportunities to cope with future climate shocks.



17. Sven Wunder, Frederik Noack and Arild Angelsen (2018). [Climate, crops, and forests: A pan-tropical analysis of household income generation](#). *Environment and Development Economics*, 23 (3): 279-297.

Rural households in developing countries depend on crops, forest extraction and other income sources for their livelihoods, but these livelihood contributions are sensitive to climate change. Combining socioeconomic data from about 8,000 smallholder households across the tropics with gridded precipitation and temperature data, we find that households have the highest crop income at 21°C temperature and 2,000 mm precipitation. Forest incomes increase on both sides of this agricultural maximum.



We further find indications that crop income declines in response to weather shocks while forest income increases, suggesting that households may cope by reallocating inputs from agriculture to forests. Forest production may thus be less sensitive than crop production to climatic fluctuations, gaining comparative advantage in extreme climates and under weather anomalies. This suggests that well-managed forests might help poor rural households to cope with and adapt to future climate change.

18. Amy E. Duchelle, Frances Seymour, Maria Brockhaus, Arild Angelsen, Moira Moeliono, Grace Yee Wong, Thu Thuy Pham and Christopher Martius (2018). [REDD+: Lessons from national and subnational implementation](#). Working Paper. Washington DC: *World Resources Institute*.

REDD+—which stands for reducing emissions from deforestation and forest degradation, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries—debuted on the global stage more than a decade ago. The idea prompted high expectations that an approach that featured results-based incentives for reducing tropical deforestation and degradation could rapidly succeed where other approaches had failed.



Since then, over 50 countries have initiated REDD+ strategies; subnational governments have experimented with jurisdictional REDD+ programs; and more than 350 REDD+ projects have been implemented globally. What are the lessons learned from REDD+ initiatives so far? How can these lessons support future forest-based climate change mitigation?

Books

- Angelsen A, Martius C, De Sy V, Duchelle AE, Larson AM and Pham TT (eds). 2018. *Transforming REDD+: Lessons and new directions*. Bogor, Indonesia: CIFOR. Coauthor of six chapters:
- Angelsen A, Martius C, De Sy V, Duchelle AE, Larson AM and Pham TT. 2018. *Introduction: REDD+ enters its second decade*. In Angelsen A, Martius C, De Sy V, Duchelle AE, Larson AM and Pham TT, (eds): *Transforming REDD+: Lessons and new directions*. p. 1–13. Bogor, Indonesia: CIFOR.
- Martius C, Angelsen A, Larson AM, Pham TT, Sonwa DJ and Belcher B. 2018. *Pathway to impact: Is REDD+ a viable theory of change?* In Angelsen A, Martius C, De Sy V, Duchelle AE, Larson AM and Pham TT (eds): *Transforming REDD+: Lessons and new directions*. p. 17–28. Bogor, Indonesia: CIFOR
- Angelsen A, Hermansen EAT, Rajão R and Hoff R van der. 2018. *Results-based payment: Who should be paid, and for what?* In Angelsen A, Martius C, De Sy V, Duchelle AE, Larson AM and Pham TT (eds): *Transforming REDD+: Lessons and new directions*. p. 41–53. Bogor, Indonesia: CIFOR.
- Pham TT, Moeliono M, Angelsen A, Brockhaus M, Gallo P, Hoang TL, Dao TLC, Ochoa C and Bocanegra K. 2018. *Strategic alignment: Integrating REDD+ in NDCs and national climate policies*. In Angelsen A, Martius C, De Sy V, Duchelle AE, Larson AM and Pham TT (eds): *Transforming REDD+: Lessons and new directions*. p. 69–80. Bogor, Indonesia: CIFOR
- Ngoma H, Angelsen A, Carter S and Roman-Cuesta RM. 2018. *Climate-smart agriculture: Will higher yields lead to lower deforestation?* In Angelsen A, Martius C, De Sy V, Duchelle AE, Larson AM and Pham TT (eds): *Transforming REDD+: Lessons and new directions*. p. 175–187. Bogor, Indonesia: CIFOR.
- Angelsen A, Martius C, Duchelle AE, Larson AM, Pham TT and Wunder S. 2018. *Conclusions: Lessons for the path to a transformational REDD+*. In Angelsen A, Martius C, De Sy V, Duchelle AE, Larson AM and Pham TT (eds): *Transforming REDD+: Lessons and new directions*. p. 203–214. Bogor, Indonesia: CIFOR.

CLTS Papers statistics at 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 2017 - 2018

Month	Abstract views 2017	Abstract views 2018	Downloads 2017	Downloads 2018
January	64	50	21	13
February	100	31	51	7
March	89	78	43	16
April	78	85	41	4
May	78	46	54	162
June	42	41	20	88
July	46	37	8	24
August	173	40	34	9
September	85	33	59	18
October	61	66	30	29
November	87	47	49	15
December	49	50	15	5

*Downloads are the files downloaded from RePec.

Source: RePec

RePEc statistics for 2018 shows that there were in total 390 file downloads and 604 abstract views of the CLTS working papers in RePec. Total number of file downloads have decreased from year 2017, when there were 425 file downloads. Total number of abstract views has decreased as well by 348 compared to year 2017.

Conference participation

March 19th-20th: CSAE Conference on Economic Development in Africa in Oxford, UK:

Stein Holden presented paper with the title "Group Trust in Youth Business Groups: Influenced by Risk Tolerance and Expected Trustworthiness" written together with Mesfin Tilahun that has been previously issued as CLTS Working Paper (CLTS WP). Bethelhem Legesse presented paper with the title "Food for Work and Diet Diversity in Ethiopia" written together with Stein T. Holden and Gerald Shively that is as well a CLTS WP.

June 11th-12th: Nordic Conference on Development Economics 2018 at Aalto

University School of Business, Helsinki, Finland: Stein T. Holden presented paper with the title "Gender Differences in Risk Tolerance, Trust and Trustworthiness: Are They Related?" written together with Mesfin Tilahun.

July 28th – August 2nd: 30th International Conference of Agricultural Economics

(ICAE) in Vancouver, USA: Stein T. Holden presented papers with the title "Land rental as a complementary income source for land-poor youth" (co-authored with Mesfin Tilahun) and "Probability Weighting and Fertilizer Use in a State-Contingent Framework" written together with John Quiggin at the He has also presented the paper co-authored with PhD-student Girma Berhe with the title "The Impact of Ethiopia's Productive Safety Net Program (PSNP) on Fertilizer Adoption by Smallholder Farmers: Evidence from Tigray, Northern Ethiopia" written together with Girma Berhe.

July 10th-14th: AESOP Annual Congress in Gothenburg, Sweden: Terje Holsen presented paper with the title "Land assembly through land readjustment in Norway".

September 20th-21th: 3rd conference of interdisciplinary research on real estate in

Groningen, The Netherlands: Terje Holsen presented paper with the title " Negotiations between developers and planning authorities in urban development projects – the case of Oslo, Norway". Published in Grum, B. et al. (eds.) (2018). 3rd conference of interdisciplinary research on real estate. Book of proceedings, 2018 CIRRE conference, Groningen, Netherlands 20-21 September 2018. Ljubljana: Institute of Real Estate Studies. ISBN: 978-90-827076-3-2.

November 15th-16th: 24th Riunione scientifica del Centro Studi e Documentazione sui

Demani civici e le Proprietá collettive: Erling Berge presented paper with the title "Understanding Norwegian Commons".

Seminars



August 28th: Thomas S. Jayne, professor at the Department of Agricultural, Food and Resource Economics at Michigan State University, held presentation on the topic of "The Rise of Medium-Scale Farms in Africa: Causes and Consequences of Changing Farm Size Distributions" on 4th floor of Tower Building, lunch room of School of Economics and Business.



June 18th: Håvard Steinsholt, associate professor at Norwegian University of Life Sciences, Matthew Hoffman, assistant professor at University of Southern Maine and Daisaku Shimada, associate professor at Fukuoka Women's University, held presentations on the topic of "Commons in Japan, Scotland and Norway" in Clock Building, VIP room.

Project Workshop in Addis Ababa

Centre for Land Tenure Studies (CLTS) organized a one-day workshop on "Youth Livelihood Challenges" in Addis Ababa on the 4th of February.

The workshop on "Youth Livelihood Challenges" was organized in connection with the new research project funded by the Research Council of Norway, under the programme Norway - Global Partner (NORGLOBAL2). The programme aims to strengthen the competences and capacities of Norwegian research institutions in development research.

Lead author of ELD and UN Environment Report

Mesfin Tilahun Gelaye, post doc student at the School of Economics and Business (NMBU) and Associate Professor at Mekelle University is the lead author of the study on the "Economics of Land Degradation Neutrality in Asia: Empirical Analyses and Policy Implications to the Sustainable Development Goals" that has been published as the Economics of Land Degradation (ELD) and UN Environment Report.



Photo: Mesfin Tilahun Gelaye

The preliminary results of the study have been presented at the thirteen session of the Conference of the Parties (COP 13) in September in Ordos, China. Together with panelists from UN Environment, UNU, ELD Initiative, and Environmental Pulse Institute, Mesfin Tilahun Gelaye presented the methods and findings of the study as Masterclass program at the World Bank Conference on Land and Poverty on the 23rd of March.

PhD defences in 2018

1. Samson Pilanazo Katengeza has defended his PhD thesis with the title "Climate-Smart Agriculture in Malawi: Uptake and opportunities in the Face of Climate Change" on 28th of August.

Prescribed subject of the trial lecture:

"Adoption of climate-smart technologies: the case for and against input subsidies"

Evaluation committee:

First opponent: Professor, Thomas Jayne, Michigan State University, USA

Second opponent: Associate professor, Costanza Biavaschi, Norwegian University of Science and Technology, Norway

Committee coordinator: Professor Joachim Scholderer, School of Economics and Business, NMBU

Supervisors:

Main supervisor: Professor Stein Holden, School of Economics and Business, NMBU

Co-supervisors: Professor Frode Alfnes and Dr. Menale Kassie



Photo: Samson Pilanazo Katengeza

2. Federico Cammelli has defended his PhD thesis with the title "" on 21st of March.

Prescribed subject of the trial lecture:

"Forest fires: Causes, Effects and Policy Implications"

Evaluation committee:

First opponent: Professor, Andreas Kontoleon, University of Cambridge, UK

Second opponent: Associate Professor, Torfinn Harding, NHH, Norwegian School of Economics

Committee coordinator: Professor, Stein Holden, School of Economics and Business, NMBU

Supervisors:

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

Co-supervisors: Professor, Ståle Navrud, School of Economics and Business, NMBU

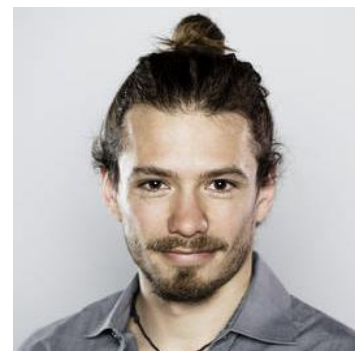


Photo: Federico Cammelli

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/forskningssentre/clts>, where research and activities are published in Norwegian.

Brage

All of CLTS Working Papers and Reports can be obtained in Brage:

CLTS Working Papers: <https://brage.bibsys.no/xmlui/handle/11250/2446458>

CLTS Reports: <https://brage.bibsys.no/xmlui/handle/11250/2446455>

Attachment 1

CLTS Accounts 2018 and Budget 2019

Budget 2018		Accounts 2018		Budget 2019	
Available funding	67474	Available funding	67474	Available funding	53678
Noragric admin expenses (10%)	6000	Noragric admin expenses (10%)	0	Noragric admin expenses (10%)	4000
Web-page and IT purchases	30000	Web-page and IT purchases	9673	Web-page and IT purchases	20000
Seminars	15000	Seminars	0	Seminars	15000
Conference travel	10000	Conference travel	114	Conference travel	5000
Student stipend	5000	Student stipend	0		
		Social costs (AGA + FP)	872		
		Guest lecturers	3137		
Sum	66000	Sum	13796	Sum	44000
Transfer to 2019	1474	Transferred to 2019	53678	Transfer to 2020	9678