

Research Report on
Rural Land Cadastre Practice and Its Contribution to Women's Land
use rights and Tenure security: Implication to sustainable livelihoods in
Amhara Region, Ethiopia



Adane Mehari

PhD Candidate in Land policy and Governance

Email: Adsmehari@yahoo.com

25 August, 2020
BDU/ILA
Ethiopia

Table of Contents

ACKNOWLEDGEMENTS.....	2
Abstract.....	3
1. Introduction.....	3
1.1 Back ground of the Study	3
1.2 Land Registration and Cadastre in Amhara Region	4
1.3 Statement of the problem	6
1.4 Research Objectives.....	7
1.5 Research Questions	7
1.6 Methodology.....	7
1.6.1 Sample Size Determination.....	10
2. Literature Review.....	11
2.1 Land Administration	11
2.2 Land Registration and Certification in Ethiopia.....	11
2.3 Cadastre and Cadastral practices	12
2.4 Land Tenure Security.....	13
3. Results and Discussion	14
3.1 Demographic and socioeconomic characteristics of the survey respondents	14
3.2 Land laws contributions to secure women’s land use rights in Amhara, Ethiopia.....	17
3.3 Women Participation in Rural Land Registration and Cadastre.....	19
3.4 Benefits and Challenges of Cadastre for Women land use rights	23
3.4.1 Benefits for women to access and control over rural land use rights	23
3.4.2 Challenges for Women on ensuring their land rights in land registration and Cadastre ...	30
3.5 Opportunities and Gaps of the Land Administration and Use Institution to Process Rural Land Information System.....	35
4.Conclusion.....	39
References.....	42

ACKNOWLEDGEMENTS

I am most grateful to Bahir Dar University Institution of Land Administration academic staffs Dr. Belachew Yeresaw, Dr. Tadessee Amsalu (Asso.prof.), Dr. Achameyleh Gashu (Asso.prof.), and Dr.Gebeyhu Belay for initiating, supporting, and entrusting me to engaging with this assignment, and providing methodological support.

I am grateful to Dr. Zerfu Hailu REILA project deputy technical advisor and Ato Meneberu Alebachew LIFT project deputy technical advisor for their support in providing different data sources for this study.

I have great thanks for women's landholders in Gozamin and Yelemanadensa woreda for their hospitality and for dedicating their precious time and their willingness to share their rational view for this research. And also, my thanks to the KLAU committee from both districts who participated during data collection in the kebeles.

I have great full thanks to Gozamin and Yelemanadensa land Administration and Use offices, woreda courts, prosecution offices, and women and children affairs office staffs for giving data for this study.

I, Adane Mehari has gratefully acknowledged and appreciated the support of the DAAD (German Academic Exchange Service) and all its members for research fellowship funding the fieldwork of this research, without which I could not do anything. I thank you very much, I have got experiences from this research study.

I am indebted and have a great appreciation and thanks to Ms. Jana Bömer for her indispensable support for any matters related to this study and the quick responses on facilitating everything including the funding process.

Abstract

Women in Ethiopia are half of the people who have a high contribution to socio-cultural, political and economic development. This research examines the rural land cadastre practices and its contribution to women's land use rights and tenure security implication to sustainable livelihoods. Access to and control over land is one of the major determinants for the economic development of women in Ethiopia. The land administration system is a clear manifestation of protecting women's land use rights and tenure security to sustainability and environmental management. This realized when complemented by reliable land information management and cadastral systems. This research used a mixed-method research design for quantitative and qualitative data analysis. Primary data was generated by interviewing women landholders, experts, and key informants that participated in legal advising and capacity building for women. Secondary data was collected from relevant literature, and government and non-government organizations' reports.

In Ethiopia Amhara region cadastre has been implemented for several years. It enables women to access and control over land use rights and improved their livelihoods. This study examined that rural cadastre solved women's land disputes which were violated by the deceptive practices of men. SLLC helped the security of tenure and economic benefits for women in land investment, land rental market, and made collaterally land use rights. Besides, the rural land laws of the country gave good opportunities for women to use their land rights. Therefore, perceptions of women on the importance of cadastre have been increasing. Despite this, the participation of women in cadastre has many gaps. Women's landholders were not actively involved in the process. Especially women who are living with a married couple were not participated in cadastre implementation in the field due to awareness gaps, socio-cultural and traditional repellent, and direct and indirect influence from their spouses. The capacity of the institution to execute, process, and update cadastral changes have gaps. So, giving special attention to capacitate women, and capacity building for land administration and use institutions from different sources are indispensable to sustaining the land administration system.

Key words: Women land rights, Tenure security, Land registration, Cadastre,

=====//=====

1. Introduction

1.1 Back ground of the Study

The land is a source of wealth that offers economic benefits through investment, rental market, and collateral credit. Access to and control over land is one of the major determinants for the socio-cultural and economic development of women landholders in Ethiopia. Landholders in Ethiopia had a lack of security of tenure for over a century. Women were the marginalized groups of the population in their landholding use rights. During the Imperial regime (Pre-1975), the land was owned by elites, small-scale farmers were insecure in their land rights; during the Derg regime (1975-1991), land renting, selling, mortgage and sharecropping were prohibited (Adenew and Abdi 2005; Crewett, et al, 2008). Women didn't have the right to landholding like men by any means of land transactions in both regimes. The FDRE government constitution was adopted in 1995, and Article 40 states that the right to ownership of rural and urban land, as well as of all-natural resources is exclusively vested in the state and the peoples of Ethiopia (Pro,1/1995 /Art.3/. Farmers have got the right to use for a lifetime. The existing tenure insecurity in rural households

was partially resolved by the 1995 constitution (Bezabih, et al., 2014), and this has provided women equal property rights with men.

To enhance tenure security, a newly revised land law (pro.456/2005) that allocates legislative power to the federal government to delegates implementations to regional states was formulated in 2005. This arrangement intends to grant landholders to transfer their land rights, rent/lease out holding use right to other farmers or investors without breaking the land administrative rules, and to use the land as collateral (Adnew and Abdi, 2005). Consequently, women have been the most beneficiary of this provision (pro.456/2005).

Ethiopia has made considerable progress in terms of women's land use rights, gender equality, and women's empowerment over the last fifteen years. Sweeping legal reforms have been produced by the government to eliminate gender-based gaps. In the FDRE constitution (pro.1/1995), all forms of violence against women were denounced and legislative, administrative, social, and economic measures were adopted to remove all forms of acts of violence and harmful practices for the women. For example, Art. 35 of the constitution provides the enjoyment and protection of women's rights and Art. 34 of the constitution also obliges the government to enforce the rights of women and eliminate the influences of harmful customs, laws, and practices that cause bodily or mental harm to women. As a result, interventions by the government of Ethiopia have improved women's land use rights.

The constitution gives a guarantee to women landholders to have equal rights with men in landholdings. The revised rural land proclamation (proc.456/2005) also gives a guarantee to women to have land-use rights by providing certificates bearing their name if women are householders. And if a woman is married, her name is written together with the name of the spouse with their photographs attached to the land certificate. Actual changes that improve women's access to land in Ethiopia have been promulgated, but there are still constraints in legal, social, and cultural practices.

1.2 Land Registration and Cadastre in Amhara Region

Land in the Amhara region is the most fundamental economic asset that embraces social, cultural, religious, and political connotations. The holding rights of any person in the Ethiopian land law state that no person shall be expropriated from his/her holding use right without his/her consent unless it is done for equitable re-distribution according to the decision of the people or for the public interest (Gebeyehu, 2013). Land governance deals with the rules, processes, and structures through which decisions are made about access to land and its use (Enemark, et al., 2009). However, ownership rights and holding of lands were not properly documented and because of the inadequate documentation of ownership right inland property, the enormous assets couldn't be turned into capital, which creates the wealth of nations (De Soto, 2000).

Land registration and certification has several benefits for landholders. Land registration is the process of the official recording of rights in the land through deeds or titles (on properties). It

answers the question “who” and “how” (Zevenbergen, 2004). Land registration and certification is a valuable strategy that supports tenure security. Land should be registered so that owners can obtain collateral (Un-habitat, 2012). Benefits will potentially include evidence for the land rights including of the transaction of the parties involved on the land, to gain acceptance and approval from the community, notice to the government, serve as an index-linked to the names of the parties which will facilitate ease of access to information, easier operations for local government, for services and to organize other land management activities. According to Lemmen (2012), cadastre is a public register of the quantity, value, and ownership of the land (immovable property) in a country compiled to serve as a basis for taxation. Likewise, FIG (1995) defines a cadastre as a registry of land information. Cadastre provides the spatial integrity and unique identification of every land parcel, usually through a cadastral map updated by cadastral surveys. The parcel identification provides the link for securing rights in land, controlling the use of the land, and connecting the ways people use the land with their understanding of the land (Williamson, 2010). The main purpose of land registration surveying is to record the location of parcel boundaries accurately so that the disputed or uncertain boundaries can be redefined.

Amhara Region has been implementing the systematic, massive, yet least cost first level land registration and certification process to secure land use rights for farmers. First-level land registration and certification have positive effects in terms of increasing women's land use rights, investment, and land rental market activities. Currently, the regional government of Amhara has been implementing the Second Level Land registration and Certification (SLLC) program. SLLC program is supported by the bilateral and multilateral projects that include REILA - Responsible and Innovative Land Administration, LIFT- Land Investment for Transformation, SLMP- Sustainable Land Management Program, and IFAD- International Fund for Agricultural Development. To maintained the cadastral information, Land Information System (LIS) has been implemented in the Amhara region. National Rural Land Administration Information System (NRLAIS) is a comprehensive software system in Ethiopia that is supposed to operate throughout the country updating land transactions in rural cadastral changes. It supports securing women's land rights. It will record all transfers of those land rights (inheritance, gift, exchange) as well as any encumbrances (rental agreements, right of way, etc.) which may limit those rights. It includes both spatial (digitized maps) and textual (names, identities, addresses, land use) databases integrated into one system (MoA, 2019).

The Amhara region has put the land issue at the top of the socio-economic development agenda (Berhanu and Abdi, 2005). The proclamations (FDRE, 2005; Amhara, 2017) explicitly emphasized women’s rights to land. Women are not generally excluded from using their rights to land. The land law gives affirmative actions for women when land is scarce during distribution. However, such practices have varied from community to community. To eliminate the gaps of the first level certificate and increase tenure security of women landholders in the region, second-level land surveying and registration was carried out using satellite imagery and an aerial photograph. This is because SLLC was more accurate than FLLC and has been implemented with the participation

of the public. Demarcation and registration of the spatial parcel boundary have been implemented with the participation of neighbor landholders and the Land Administration and Use Committee (LAUC), of which two of the committee members were women. For quality verification of the register, data public inspection was implemented in the field at the kebele/village level. After inspection and verification have been implemented, land administration and use the office at woreda level prepares parcel map and issues SLLC for the landholders (Women headed household /single holder/, the Male headed household /joint holder/, Men headed household /single holder/, and other landholders) to secure land use rights. The participation of women in land registration and cadastre at the field and participation in inspection and verification of data in the public display had gaps which were created problems for the quality of the register data.

The overall objectives of implementing the rural land cadastre are to maintain a sustainable land administration system, to regulate land use rights, tenure security, and environmental management and also to facilitate the land transaction, and support women and other vulnerable groups in land use rights. This research is focused on assessing the validity of cadastre practices for rural women's land use rights, tenure security, legal frameworks, and examining the way it is implemented to participate in women in land registration and cadastre. Data management system including land transaction and updating, women participation in the land use rights transfers (like the gift, inheritance, land rental market, and mortgaging) were the other major dimensions of this research.

1.3 Statement of the problem

Amhara region has started to organize rural land cadastral information with a prime objective of enhancing good land governance to support women and other vulnerable groups in securing land tenure. It is clear that if there is good land governance, there will be a stable tenure security system, and the associated benefits for women's land users are improved. According to Zevenbergen, *et al* (2016), the fit-for-purpose and the pro-poor recordation system prescribe inputs to land administration systems that are believed to improve the land tenure security of the poor. The Amhara regional state formulated and revised legal documents including the regional constitution and the rural land administration and use proclamation to support rural land governance. Despite the efforts to collect cadastral data of rural land; the land use rights, participation, and perception of women on cadastre, and the lack of awareness about land transactions and updating the cadastral change are still the major problems for women landholders in the region.

It is stated that redesigning or improving any cadastral system requires a comprehensive study to identify its bottlenecks, weaknesses, and inefficiencies (UN-FIG, 1996). Once these weaknesses and inefficiencies have been evaluated, it is possible to design an alternative system for efficient delivery of services to the land users. Such design often requires changes to legislation, modification of institutional setup and administrative systems, and the use of geospatial technologies.

A complex combination of factors such as poor land cadastre management practices, increasing population pressure, experts' limited skill, gaps to update land transaction in cadastral change,

women and vulnerable groups inability to defend their land-use rights, etc., have been the major causes of tenure insecurity in the region. However, little or no comprehensive research has been carried out to assess the contributions of the rural land cadastre in an attempt to realize empowering rural women in land use rights; the need for women participation and supporting re-designing of the current cadastral practice in line with women interests and appropriate technologies and strategies which might support tenure security of women land use rights. It is, therefore, essential to carry out research that seeks to find out the existing practices of women's land rights on the ground and suggest possible readjustments. This research, in general, hypothesizes that the implementation of rural land cadastre (issued SLLC) has increased tenure security of women landholders and land investment, and rural women have benefited from their land rights through land marketing arrangements such as leasing, using land for collateral and sharecropping, etc.

1.4 Research Objectives

The main objective of the study is to assess the contribution of rural land cadastre to women's land use rights and security of tenure for sustainable livelihoods in the Amhara regional state of Ethiopia.

The specific objectives of the study are:

- To identify the land laws' contributions to women's rights related to land registration and cadastre to secure land-use rights.
- To identify and analyze the perception and participation of women in rural land registration and cadastre to ensure land use rights of women.
- To assess the benefits and challenges of rural land registration and cadastre to women landholders in the context of the Amhara regional state.
- To explore the opportunities and gaps of the land administration institution to capture, store, and process rural land registration and cadastre practices.

1.5 Research Questions

To achieve the objectives the following research questions were addressed:

- What are the contributions of the land laws concerning rural land registration and the cadastre process to secure women's land use rights?
- How do rural women landholders perceive and participate in surveying, registering, and certifying processes at the community level to ensure land use rights?
- What benefits and challenges do women face from the rural land cadastre and issuance of a second-level certificate in the context of the Amhara region?
- What are the opportunities and gaps of the land administration and use the institution to capture store, and process rural land registration and cadastre practices?

1.6 Methodology

Amhara national regional state is the second largest region in the country and has a total area of 170,752 km² which is geographically located in the North-West of the country. It has a population

of estimated about 25 million. About 84% of the population lives in a rural area with dominantly subsistence agriculture practices. The Amhara region topographically stretches within the altitudinal range from 500 to 4620 m.a.s.l at Ras Dashen in the North Mountains. It has 12 administrative zones, 3 municipalities, 40 city administrations, 142 rural districts, and 3366 rural kebeles. The highlands occupy about 50% of the total landmass of the region. Bahir Dar, which is located at 11° 34' N and 37° 21' E, is the capital of the Amhara National Regional State. Lake Tana, Blue Nile fall, and the Monasteries in the Islands of Lake Tana are the major landmarks. It is the main tourist destination in the North-Western part of Ethiopia. This study aimed to investigate the effects of rural land cadastre on women's land use rights and facilitation of land use right transfers, and ultimately indicated possible strategies to realize sustainable land use rights of women in the cadastral systems. In line with this, several variables affecting women land rights use including their power in decision making, institutional and legal framework arrangements, etc. were explored. The study was conducted in two woredas of the Amhara Region, Ethiopia. One is Gozamin Word in East Gojam zone and the other Yelemanadensa woreda in West Gojam Zone. These two woredas were purposively selected, for the rural land registration and the cadastre was completed and issuance of a second-level land certificate for the landholders was finalized and acknowledged by the BoLAU in the two woredas.

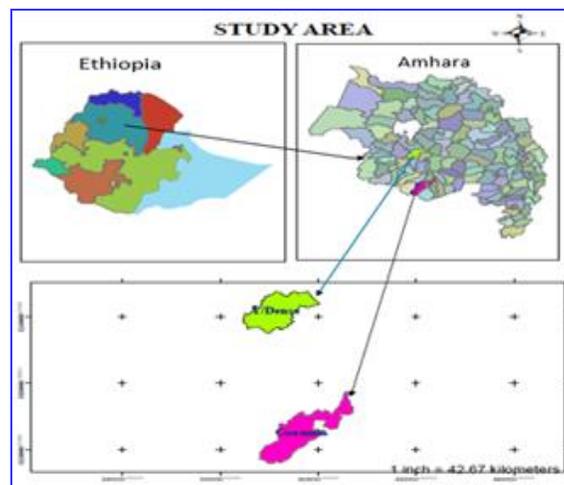


Fig 1. Study Areas

SLLC became the main objective of government policy, and the region was involved in a relatively “high-technology i.e. aerial photograph” for land surveying, demarcation, registration, and certification process to issue the so-called “the second level land certificate” for landholders. SLLC programme has been set by the regional government of Amhara five years ago. Amhara regional state tried to implement the rural land registration and cadastre in the two districts since 2005. Now it has extended its coverage to 40 woredas. Currently, 22 woredas have completed the issuance of a second-level land certificate for the landholders. Therefore, the scope of this research was confined to the first two woredas where SLLC for land holders was accomplished. The survey was carried out in two kebeles (Woneka kebele in Gozamin and Mosobo kebele in Yelemanadensa

woreda). These two kebeles were selected in consultation with land administration and use offices, for their better practices. In each kebele, the field survey researcher contacted the local authorities, explained the purpose of the study, and requested permission to conduct interviews to collect data. The study stratified the respondent landholders into women headed households and men headed households (joint holder). The interviews were held by trained enumerators with the support of the researcher.

The following information were collected:

- The demography of the landholders (gender, level of education of household head, the composition of household, landholding size).
- Types of landholding and certification; involvement to formal transfer (gift, inheritance, rent in/rent out); land using right implementation, problems to land tenure and cadastre practices and other land information access, etc., and
- Perception and participation of women in land surveying, demarcation, registration and certification processes and expectations (information received; understanding of the process; understanding of the contents and purposes of SLLC; gender relation gaps to women landholders).

This research used both quantitative and qualitative methods to clarify concepts, characteristics, descriptions, and measures to demonstrate the implications of the issues under this study. Sources of data were obtained from primary and secondary sources. The primary data was secured from legal documents, survey questionnaires, key informant interviews, and focus group discussions. The secondary data were collected from relevant kinds of literature, government, and non-government reports. The data obtained in the study was strengthened through triangulation. According to Patton (1990) triangulation helps to avoid the problem of relying too much on any single data source or method that tends to undermine the validity and credibility of findings due to the weakness of any single method. A cross-sectional design requires the collection of data on many cases and at a single point in time to gather a body of quantitative data in connection with two or more variables, which are then examined to find out patterns or associations (Descombe, 2007).

Quantitative data was collected from 329 women landholders of whom 125 were from women headed households and 204 women were from men headed households (joint owner). Each household headed was selected by picking every other household from a list of target women in a systematic way from the records kept in each study Kebele. A survey questionnaire was filled in by 41 land administration experts in the two woredas and regional land administration and use offices. Key informants from woreda prosecution offices (5), woreda courts (4), and women and children affair offices (2) were interviewed about their roles to support women on ensuring land use rights for the qualitative survey from Gozamin and Yelemanadensa woreda. Focus group discussions with women landholders (15 participants) from two kebeles were important to obtain information on their lived experiences and views on their land rights to use and control over land.

1.6.1 Sample Size Determination

The population for the quantitative data collection for this study was 397 women landholders and 701 women in male-headed households in Woneka kebele in Gozamin woreda, and 317 women landholders and 455 women in men headed households in Mosebo kebele in Yelmanadensa woreda. The total population in the two study kebeles is, therefore, 1870. So, it was for 1,870 women that the representative sample shares from each kebele, which is from Gozamin Woneka kebele 194 households (women-headed 70 = 0.36*194, and Male & female headed 124 = 0.64*194 landholders), and from Yelemanadensa Mosobo kebele 135 landholders (women-headed 55 = 0.41*135, and Male & female-headed (joint owners) 80 = 0.59*135 landholders) total 329 representative women respondents participated in the study. The researcher deemed necessary to take an independent sample for each Kebele to ensure if there was equal representation of landholders in two kebeles. Therefore, the sample size was determined from the total number of households, and the independent sample was considered from each Kebele. The sample size for collecting the quantitative data for this research was determined using Cochran's (1977) formula as used on Bartlett, Kotrlik, and Higgins (2001).

$$n = \frac{N}{1+N(e)^2}$$

Where:

n = designates the sample size the research uses;

N = designates total number of landholders in both woreda assuming that women in all households are affected by the issue;

e = designates maximum variability or margin of error 5% (.05); and

1 = designates the probability of the event occurring.

Therefore:

$$n = \frac{N}{1+N(e)^2} = \frac{1870}{1+1870(0.05)^2} = 329$$

The required sample size, thus, is 329 women (respondents).

The sample size for each Kebele was calculated using the proportion of the number of households in each Kebele (Gozamin woreda Wonka kebele 1098, Yelemanadensa woreda Mosobo kebele 772) total 1870 land holders. Therefore, Sample size for Woneka= 1098/1870 = 59% =194 and Mosobo 772/1870= 41%= 135. Sum of the survey sample sizes = 194 + 135 = 329.

2. Literature Review

2.1 Land Administration

In Ethiopia, the land is the basic source of wealth. Currently, land administration is the major policy objectives of the government of Ethiopia. To secure the land rights of women farmers, the government has implemented registration and certification of landholding use rights. To automate land registers, NRLAIS has been customizing and implementing. Land Administration (LA). LA is the processes of recording and disseminating information about the ownership, value and use of land and its associated resources, such processes, the determination of rights and other attributes of the land, the survey and description of these, their detailed documentation and the provision of relevant information in support of land markets (UNECE, 1996). On the other hand, in the literature, Dale and McLaughlin (1999) define LA as the processes of regulating land and property development and the use and the conservation of the land, the gathering of revenues from the land through sales, leasing, and taxation, and the resolving of conflicts concerning the ownership and use of the land. According to Williamson *et al* (2010), land administration is the process run by the government using public or private sector agencies related to land tenure, land value, land use, and land development.

2.2 Land Registration and Certification in Ethiopia

Land registration is a process of the official recording of rights in the land through deeds or as a title on land properties (FIG, 1995). Cole and Wilson, (2017) identified a parcel of land as it can be represented by a written document that uniquely identifies the parcel. Besides, the written description allows for the land to be recorded in a central deed repository and also locate it on the cadastral maps. It is used as a capital asset in addition to its physical life and ability to support human life. Thus, descriptions have played an important part in aiding the protection of claims to land under the legal systems and in allowing the consideration of land as a commodity. On the other hand, Henssen (1995) visualized the combination of the object (parcel)-Right (stewardship) - Subject (man) model to show man to land relations.

Land registration is a system, Zevenbergen (2004) described it as a set of elements together with the relationships between elements and between their attributes related to each other and their environment to form a whole and aims to reach a certain goal. A modern land registration system is computerized and uses data from various sources to be as accurate and as complete as possible (Dekker, 2005). Land Administration System (LAS) is used to provide tenure security and to implement land policy. LAS covers land registration and cadastre. Information provision can help for multiple purposes: taxation, legal or tenure security, support of land market and mortgage industry, support in spatial planning (land consolidation, re-allotment, re-adjustment, and land reform) and others. LAS implementation can be centralized or decentralized (Bogaerts and Zevenbergen,2001; UNECE,1996).

A register of the title is an official record of rights in defined units of land as vested for the time being in some person or body, and of limitations, if any, to which these rights are subject. Land

ownership is transferred through registration of title rather than by the use of deeds (Cole and Wilson, 2017). Its main purpose is to simplify land transactions and to certify to the ownership of an absolute title to realty. A land title is a written document that provides proof of ownership, and this ownership is also recorded in a publicly recognized central land registry (Bezu & Holden, 2014). Rural land registration is a title based in Ethiopia where systematic and massive registration system has been implemented. Modern land titles are associated with high quality and accurate maps and coordinates that can be used to verify the exact spatial boundaries of such property. Upgrading land-titling systems have been a gradual process in most countries due to the costly and time-consuming nature of the work (Bezu & Holden).

Land registration in Ethiopia started a century ago during Emperor Menelik's regime (Pankhrust, 1966). The emperor issued a decree on land registration throughout the country and ordered land registration that included a cadastral survey in Addis Ababa city to issue a written certificate for Landowners in Addis Ababa in 1906/7. During Emperor Haile Selassie's regime, the Ministry of Land Reform and Administration was established to create a freehold tenure system and for measuring and registering rural land in collaboration with the Mapping Agency (Hoben, 1973). The military government of Derg in 1975 rural land reform established peasant associations to register land and to set boundaries and areas of the parcels for land reform thereby collecting production from farmers. Land users do not hold any legal documents. In FDRE, the current rural land registration and certification have been implemented by regional states on the bases of federal and regional rural land administration and use proclamations. The land surveying, demarcation, registration, and certification processes include land parcel measurement, boundary delineation, collecting information regarding parcels uses under individual holdings, etc., and official land records are kept in woreda land administration and use offices. Landholders are certified in the book of holdings that carrying land and land-related information is under her/his /their name (FDRE, 2005, Amhara, 2017).

2.3 Cadastre and Cadastral practices

Cadastre is a significant part of Land Administration and has various definitions in different academic literature. Cadastre (Zevenbergen 2004; United Nations 1985) is a methodically arranged public inventory of data concerning properties within a certain country or district based on a survey of their boundaries systematically identified using some separate designation. According to Enemark (1999), a cadastre is a parcel-based and up-to-date Land Information System (LIS) containing a record of interests in land (e.g. rights, restrictions, and responsibilities). It includes a geometric description of land parcels linked to other records describing the nature of the interests, ownership or control of those interests, and often the value of the parcel and its improvements. Kaufmann and Steudler (1998) maintained that the need for an accurate and up-to-date cadastral system is so important. Simpson (1976) describes cadastre as a public register of the quantity, value, and ownership of the land in a country compiled to serve as a basis for taxation. Development of modern cadastral infrastructures was used to facilitate efficient land and property markets, protect the land rights, and support long term sustainable development and land

management (UN-FIG 1996). A cadastral survey is a survey of boundaries of land units' (Steudler, 2004).

Land surveying practice has always been at the very heart of land tenure and cadastral systems. A well-recognized criterion for measuring the actual success of a cadastre was identified by Dekker, (2005) who included: *Security*: the system should be secure such that a land market can operate effectively and efficiently; *Clarity and Simplicity*: the system should be clear and simple to understand and use. Complex forms, procedures, and regulations will slow the system down and may discourage the use of the system; *Timeliness*: the system should provide up-to-date information in a timely fashion; *Fairness*: in development and in the operation, the Cadastre should be both fair and be perceived as being fair; *Accessibility*: within the constraints of cultural sensitivities, legal and privacy issues, the system should be capable of providing efficient and effective access to the registered data on land for all users; *Cost*: the system should be low cost or operated in such a way that costs can be recovered fairly and without unduly burdening users; *Sustainability*: the organizational and management arrangements, the procedures and technologies, and the required educational and professional levels are appropriate for the particular jurisdiction.'

2.4 Land Tenure Security

To secure land tenure, people should receive legal title to their holding. Legal titles are an important source of tenure security for land users (World Bank, 1993; Deininger, 2003). Policies about land are policies about the society, how it shall be organized and governed and what relationship there shall be between the different groups and people in the society (McAuslan, 1987). A detailed explanation was made by Cole and Wilson, (2017) on land tenure and interest on land use. Land tenure may be said to be the relationship, whether defined legally or customarily, among people, as individuals or groups, to land. Land tenure is an institutional rule invented by societies to regulate behavior. Land tenure and property rights will be used to refer to the rights that individuals, communities, families, firms, and other community structures hold in the land and natural resources (USAID, 2007). Tenure systems define who can hold and use resources, for how long, and under what conditions. Cole and Wilson identified that different forms of land tenure can be found within a given society; for example, *Rights in common*, especially for many agricultural uses, may be held in trust for the citizens. *Private tenure* is where rights to land are assigned to a private entity, which may be an individual, a husband and a wife, a corporation, or other groupings. *Communal tenure* is when rights are assigned to a community where any member of that group has the right to use. *Open access tenure* is when rights are assigned to no one in particular and no one can be excluded. *Governmental tenure* is when rights are assigned to some authority in the public sector. Similar way, SIDA (2009) and Feder and Feeny (2009) categorized property rights in land as open access, communal property, private property, and state (or public) property.

Landholding types in Ethiopia are private, communal, and state holding use rights (FDRE, 2005; ANRS, 2017). Rights in the land may be simplified by categorization into use rights, control rights, and transfer rights. Rights may also be classified as formal or informal (Cole and Wilson, 2017). Formal property rights are those acknowledged by the state and which may be protected through legal means. Informal property rights lack official recognition and protection. There is widespread agreement among scholars that tenure security is an important condition for people to invest more on land, increase productivity, and promote development.

Security of land tenure is highly stimulated by a well-functioning, easily accessible, state-controlled land registration giving certainty of land titles and protection against violations of the ownership of rights to land. Once people are feeling secure, they will improve their livelihoods (De Soto, 2000). Security of tenure is the right of access to and use of the land and property is underwritten by a known set of rules, and the right is justifiable (UN-Habitat, 2004). In the same perspective, Williams (2011) stated that the security of tenure involves legal protection against forced evictions and other threats to residents and users of property whether they own it or not. UN-Habitat (2013) claimed that good governance for citizens encompasses full respect of human rights and the rule of law, effective participation, transparent and accountable processes and institutions, efficient and effective public sector, empowerment of people and general equity, sustainability, and attitudes and values that strengthen the accountability of all involved in the governance process.

3. Results and Discussion

3.1 Demographic and socioeconomic characteristics of the survey respondents

The quantitative data was collected from and analyzed on the following demographic and social characteristics of survey respondents. Respondents were asked about their land size, power of land right decision, and marital status as well as educational backgrounds.

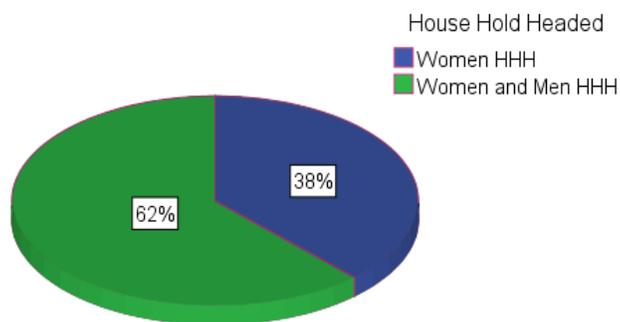


Figure 2. Women respondents' share to Household headed (Source: Own Survey)

Concerning marital status and holding occupation of women, the above chart illustrates that 204 (62 %) of the respondents were coupled (joint owner), and 125 (38 %) of the respondents were single (occupied land holding individually).

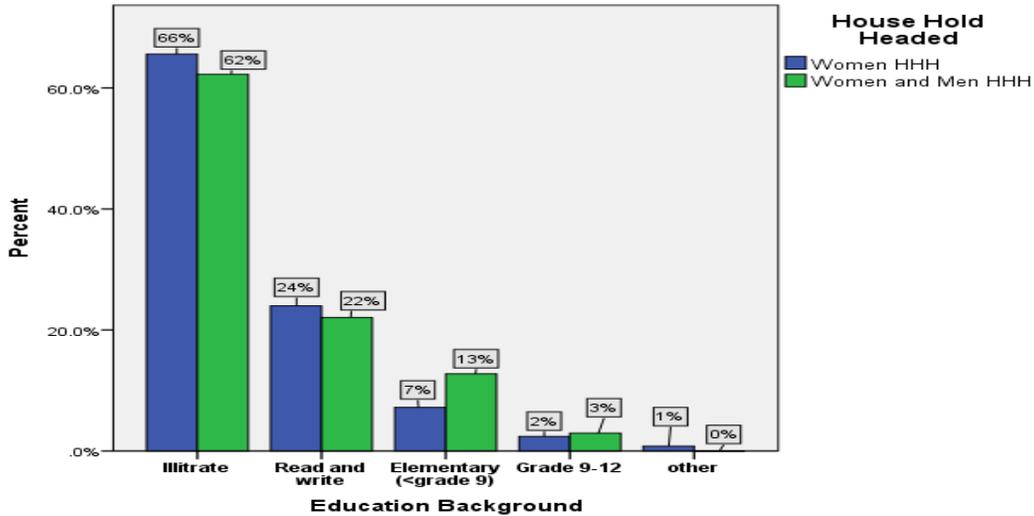


Figure3. Landholder respondents' educational background (Source: Own survey)

The above chart demonstrates the responses that were obtained about the educational background of the respondents. Out of 125 women, HHH respondents; 66% women were illiterate, 24% could read and write, 7% had an elementary academic education, 2% had the second cycle academic education and 1% of women had a higher-level academic education, and from 204 women and men headed respondents; 62% of women from women and men HHH were illiterate. This shows us that the majority of the respondents of the landholders were illiterate that means 66% of women HHH and 62% from women and men HHH were illiterate. The survey findings on the educational status of respondents reflect that there was a high illiteracy rate among women in the study area which could be a possible reason to tenure insecurity, on understanding land laws to claim and exercise their rights. On the other hand, concerning to land administration institution staff member respondents, as the chart below shows, the majority of experts had BSc in different disciplines in the study area of the two districts.

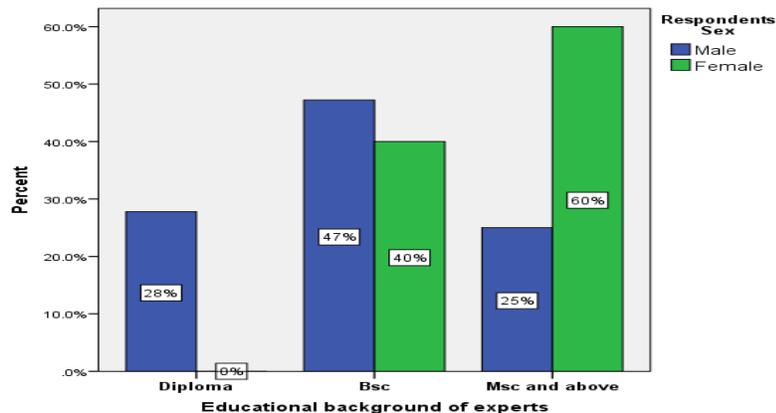


Figure4. Expert respondents' educational background (Source: Own survey)

About the holding size share, the women HHH (14%) and women and men HHH (5%) of the respondents had less than 0.5ha, 72% of women HHH, and 53% women and men HHH of the respondents had 0.5ha to 1ha landholding. On the other hand, 42% of women and men HHH and 14% of women HHH had more than 1ha landholding. See the chart below that shows the detailed land size share of the households.

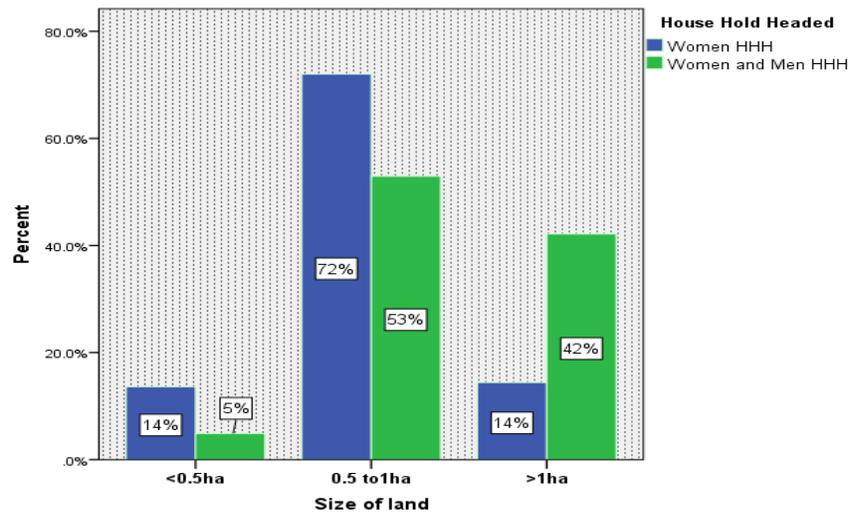


Figure5. Women's land size distribution to household headed (Source: Own survey)

Table1. The holding size mean score between women headed and men headed(T-Test)

Group Statistics					
	House Hold Headed	N	Mean	Std. Deviation	Std. Error Mean
Size of land	Women HHH	125	2.01	.531	.048
	Women and Men HHH	204	2.37	.577	.040

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
Size of land	Equal variances assumed	42.414	.000	-5.727	327	.000	-.365	.064	-.490	-.239	
	Equal variances not assumed			-5.843	279.165	.000	-.365	.062	-.487	-.242	

So, from this comparing group variables, we understand that there is a significant difference at ($\alpha = 0.000$) on the occupation of land size between Women household headed and Men household headed that women-headed had less occupation of landholding size compared to men household headed land size occupation of women, but had more share participation in 0.5ha to 1ha compared

to women who had holding share with their spouse. In conclusion women headed land holder have less occupation that of the counterpart of men headed landholders in land size occupation. As USAID 2016, “women’s participation in agricultural production and their ownership of agricultural land in sub-Saharan Africa, women comprise 48.7 percent of agricultural labor, but only 15 percent of agricultural landholders, A study in Ethiopia indicated that the average land area women control was 43 percent smaller than that controlled by male farmers. Other research in the Tigray Region revealed that plots owned by female-headed households were 23 percent smaller those owned by men”.

3.2 Land laws contributions to secure women’s land use rights in Amhara, Ethiopia

The land is one of the basic sources of wealth in which women and other communities depend on to sustain their livelihoods. Women in Ethiopia are half of the population was marginalized in society to accessing and controlling rural land. There were social, cultural, and traditional violence and the supremacy of men to women land use rights which were the common problems in the community. Thus, securing land rights has a profound impact on the economic growth of women. Land rights to women can be defined as access to land and the ability or power to a decision on their land-use rights. Women’s right to land includes the right to acquire, manage, and dispose of property obtained either through self-acquired means or inheritance (UNECA, 2006). International human rights instruments pay attention to the protection of women’s property rights in access to and control over land. About this, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) stipulates gender equality and underlines the significance of access to land and tenure security to sustain the livelihoods of rural populations. Article 14(2) of the CEDAW enshrines that ‘States Parties shall take all appropriate measures to eliminate discrimination against women in rural areas to ensure the equality of men and women, in that they can equally participate in and benefit from rural development.’ The problem of tenure insecurity for the landholders in Ethiopia had been deep-rooted for a century. Lack of a right to secure land rights exposes women not only to systematic poverty but also to other related problems such as chronic hunger and malnutrition (UNECA, 2004).

The constitution of Ethiopia (FDRE, 1/1995 Art. 25 the right to equality, art. 34 marital, personal and family right, art.35 equal rights of women with men, and art. 40 the right of property) recognizes gender equality. Article 9(4) of the Constitution provides that all international agreements ratified by Ethiopia shall become an integral part of the law of the land. The Constitution accords women equal rights with men regarding the use, transfer, administration, and control of the land. They shall also enjoy equal treatment in the inheritance of property (Article 35 (7)). The Constitution explicitly prohibited that laws, customs, and practices that oppress or cause bodily or mental harm to women (article 35(4)). The gender-responsive provisions of the Constitution are reinforced through other national legislations such as the Rural Land Proclamation and the Family Code. Property and land rights in Ethiopia is governed by the statutory law

(includes family law, property law, and rural land administration and use proclamations) and customary practices (tribes and clans in low land of Ethiopia).

Under Article 5(1) of the federal rural land administration and use proclamation, 456/2005 women who want to engage in agriculture shall have the right to access and use rural land. The land use right of peasants, semi pastoralists, and pastoralists have no time limit (pro 456/2005 Art. 7/1/, proc. 252/2017 Art.5/3/). Any person (including women) who is a peasant farmer, semi pastoralist, and pastoralist have a right to acquire rural land through gift or inheritance. Land obtained in such manners shall be measured, registered, and given holding a certificate by a responsible government institution (pro 456/2005 Art. 6/1,3/). When land is jointly held by husband and wife or by other persons, the holding certificate shall be prepared in the name of all the joint holders (Pro. 456/2005 Article 6/4/). Regarding the transfer of rural land use right, (article 8/1/) allows rural land certificate holders to rent in/rent out the land they hold to other farmers or investors provided that they have enough land for their livelihood.

It is, therefore, recognized that the land rights of rural women are enriched in FDRE, 1995 of the constitution, rural land administration and use proclamation No. 456/2005, No. 252/2017 and the revised rural land administration and use regulation No.159/2018; and directives used in Amhara .region to implement registration and cadastre to strength security of tenure for women in landholding use right is an important step that determines land rights. It states that land use rights must be recorded on the land certificate to protect women's land-use rights.

A landholding certificate containing the land parcel list to be prepared in her/their names and photograph(s) are attached will be given to the landholder by woreda rural land administration and use the office (pro.252/2017, Art. 35/1/). The landholding certificate is evidence of the legally protected rights of the women's landholders. Judges may not consider any documentary evidence or any witness before consulting the landholding certificate when there is a certificate (pro.252/2017, Art. 35/2/). The land certificates include the names of all parties if the land is held by spouses or by other persons in common (women and men) (pro.252/2017, Art. 35/3/). When marriage is concluded after the landholding certificate was given in the name of one spouse, both spouses may agree to hold the land in common. As an affirmative action, for women where the spouses agreed to have common holding rights, their certificate will be changed into the name of both spouses and will provide freely without service charge (pro.252/2017, Art. 35/4/). The landholding certificate indicates the main rights and obligations of the landholder (pro.252/2017, Art. 35/6). As women respondent reflection, existing land laws could secure the land rights of women to access and control the landholding use rights. Table2 illustrates that most of the respondents agreed that it is enough to protect the land rights of women and their land-use rights were secured. But due to misinterpretation of law and forgery evidence from men has been problems to their land tenure security during registration and certification, and boundary disputes. So, it needs to properly interpret, exercise, and manage the land issues for women based on the intentions of the law to secure their land use rights.

Table 2. Respondents (women) view on Legal provisions adequacy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	292	88.8	88.8	88.8
	No	37	11.2	11.2	100.0
	Total	329	100.0	100.0	

Source: Own survey

On the same idea, respondents from the land administration institution agreed that the current rural land laws secured land rights of women to register and use and control over their land use rights.

Table3. (Experts' reflection on) The existing rural land laws of Amhara region has gaps to support women land use rights

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	5	12.2	12.5	12.5
	No	35	85.4	87.5	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

Source: Own survey

When the land belongs to a woman headed household, it must be certified in the name of a woman's household headed. When the land is owned commonly between spouses, it is mandatory to issue a certificate in the name of both a husband and a wife (Pro.252/2017).

3.3 Women Participation in Rural Land Registration and Cadastre

To address tenure insecurity, a new approach has been implemented to solve problems through registration and certification of rural landholding use rights. Registration of land holdings and issuance of land certificates to women landholders has recently become a policy in the regional state of Amhara. To adjudicate and secure land rights for landholders; the land registration and certification program has been implemented into two levels (the first level land certification and second-level land certification). This is because of capacity problems in the region in different aspects and to fit-for-the the purposes of security of tenure to women, men, and other land users.

Registration and cadastre have been implemented with the participation of the community (women and men) at large and with Kebele Land Administration and Use Committees (KLAUC) members (including women). Kebele Land Administration and Use Committees are elected by the people of the local Kebele. In one kebele (sub-district), there is one land administration and use

committee. One kebele has been divided into three sub kebeles and has three sub-land administration and use committees. Each committee has seven members. In each member of the committee, there were two women committee members. But the participation of women to rural land cadastre has gaps. The KLAUCs has a great role to assist the adjudication process of women holding right and are given the power to administer rural lands in their respective Kebeles. In each kebele, there is one land administration and use an expert. Technically KLAUC was supported by kebele land administration and use an expert. Adjudication and registration of the landholding use rights have been determined in the participation of neighbors' landholders (including women) and LAUC and it is the process of the final and authoritative determination of the existing rights and claims of people to land. In the Amhara region, about 4 million landholders have been registered their holding right; 99 % of the landholders received the FLLC (BoLAU). The share of women-headed in FLLC in Amhara region is indicated in figure 6.

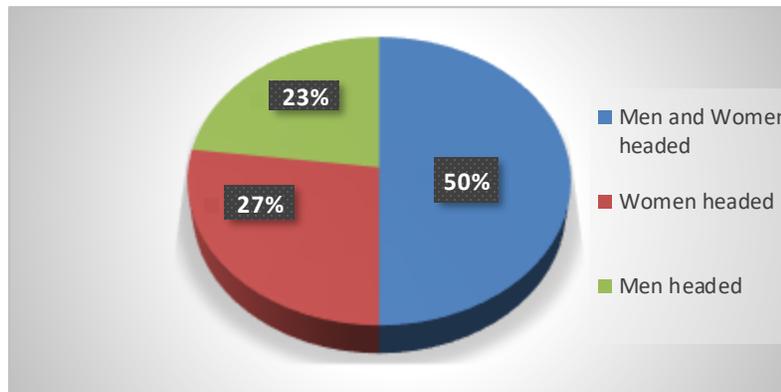


Figure 6. Women’s share in FLLC to household headed (Source: Own survey)

FLLC was used as evidence by field teams to secure women's land use rights during surveying, demarcation, registration, and cadastre practices at the field to issue SLLC. FLLC was not supported by parcel maps of the registered holdings. To address the limitations of FLLC and to support by parcel maps for the holding use rights of the landholders; the regional state of Amhara has implemented SLLC which was aimed at improving tenure security and maintaining and updating records and enhancing land information management. The Ethiopian Rural Land Administration System (RLAS) is based on systematic and parcel-based land registration and cadastre. Landholding registration puts the accent on the relation to subject-right that answers who owns how cadastre puts the accent on the relation to right-object that answers the place where it is found and the size of land parcel.

Second level land registration and certification are a systematic adjudication process was based on the principle of holding of property rights (private, communal or state holdings) that guarantees the holder lifetime use right of rural land (Pro.456/2005; pro. 252/2017). The land tenure and registration system can be considered as the title registration system as the right itself are registered with the name of the landholders (women and men) and the objection of that right with its

restrictions and responsibilities. SLLC process has five major steps: (1) Public awareness and communication on SLLC procedures; (2) Field demarcation and adjudication tasks related to surveying and mapping of parcel boundaries and the assessment of landholders' legal rights; (3) Data entry and digitization; (4) Public display for verification, identification of objections and possible corrections, where the data is further processed and approved for inclusion on a register of land rights, and (5) Certificate issuance whereby certificates showing the parcel boundaries, occupancy and land rights are printed and made available to landholders (MoA).

Women's landholding rights are registered in a land register, which is a parcel-based digital database organized by the region, woreda, and kebele. Each land parcel is registered as an electronic record showing the Unique Parcel Identifier Number (UPIN), the particulars of the related land right holder(s), the rights of the holder(s) on the parcel and limitations thereof (encumbrances) and several attributes related to the parcel (e.g. area, land use).

As Amhara region rural land proclamation (pro.252/2017), the rural land surveying is carried out with the participation of the people using the combination of land and photogrammetric systems (Art.45). The land registration is updated when faces changes of the landholder or parcel or both. The function of updating the rural land registration data is carried out by the kebele land administration and use committees (including women) and woreda offices (Art. 43).

In this research study area, more than 98% of women landholders have obtained SLLC (BoLAU). Implementation and issue of SLLC for women have differed from the FLLC processes by; sizes of individual parcels that are identified and mapped using an aerial photograph on, which landholders identify their parcel boundaries assisted by trained field teams. As a result, this was solved boundary problems, land use rights, and land transactions problems of women. The identification of the parcel boundary was held in the presence of their neighbors, KLAUC, and village elders.

Table 4. Women's Participation in land registration and cadastre for SLLC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	162	49.2	49.2	49.2
	No	167	50.8	50.8	100.0
	Total	329	100.0	100.0	

Source: Own survey

The local women to the community validate the assertions of the landholders' land rights during demarcation and public display stages of the SLLC process. Each woman landholder as an individual or jointly (if there is a basis for the joint rights) received second-level certificates supported by a parcel map for each parcel. Village elders and women representatives work with the Field Teams and serve as informant farmers in resolving land-related disputes. Village elders assist when incidents of Women Headed Household (WHH) boundary disputes or women from

Men Headed Household (MWHH) violation by their spouses are reported. On the other hand, rural land cadastre was implemented with the support of stakeholders to ensure women's land-use rights. These include Woreda Administration, Women and Children Affairs offices, prosecution offices, woreda court, and Grievance hearing offices. In the fieldwork, land investment for transformation (LIFT) project that support to the cadastre implementation in the region, also assigned Social Development Officers (SDO) as part of the field teams specifically to identify and support women who appear to be vulnerable to the dispossession of rights during the SLLC process (LIFT, 2019). But, as we see in the table 4, half of the respondents' reflection confirmed that women did not participate during land registration and cadastre practice in the field. For women land use rights, SLLC is expected to help as evidence to solve and reduce conflicts over land boundaries and user rights among land users. It supports ensuring tenure security of the women, elders, and children. In 40 woredas of the Amhara regional state, second-level land registration and certification have been implemented, and 32 % (1249202) landholders have received SLLC (BoLAU, 2019).

The number of landholders that were received individually by WHH, MHH, and jointly MWHH when compares out of 1,249,202 of the totals; joint holder (men and women) accounts for 674658, individual holder of women headed without spouses 321456, and men headed without spouses is 253087 of the totals. The share of women-headed landholders in SLLC is indicated in figure7.

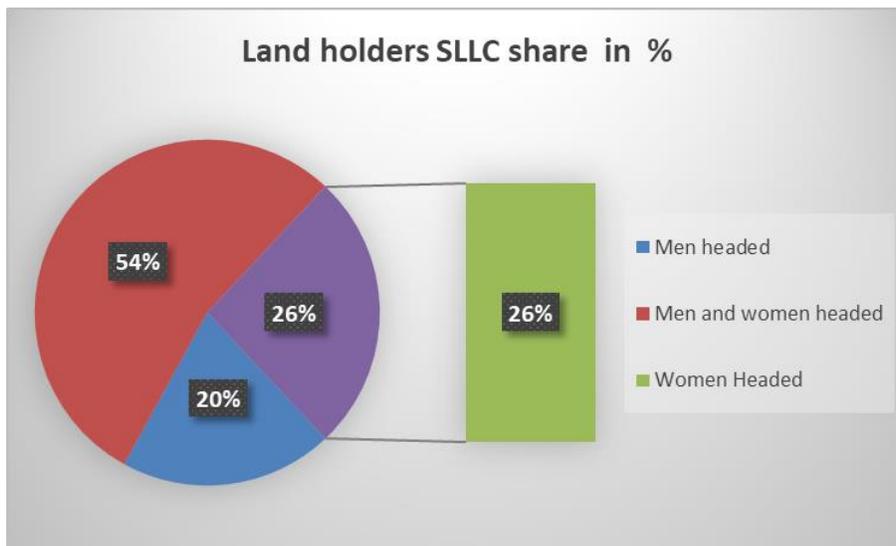


Figure7. Women's headed landholders share in SLLC (Source: Own survey)



SLLC for women from Yelemanadensa woreda (Source: Own)

Table5. SLLC Received (Women respondents)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	316	96.0	96.0	96.0
	No	13	4.0	4.0	100.0
Total		329	100.0	100.0	

Source: Own Survey

3.4 Benefits and Challenges of Cadastre for Women land use rights

3.4.1 Benefits for women to access and control over rural land use rights

Women’s economic empowerment can be achieved by providing equal access to and control over the land resources and the elimination of gender gaps. The formal legal systems for equal land rights and tenure security in Ethiopia are constitutional that gives grant to gender equality to access land. The purpose of second-level land registration and cadastre in the Amhara region was to solve the weaknesses that were observed in the first level land certificate and to upgrade the first level land certificate status to SLLC which has a parcel map. According to respondents’ reflection, SLLC is more important and secured women's land-use rights than FLLC. This is because it identified the exact size of the parcel, the location of the parcel, adjacent neighbors of the parcel, and includes the holders' names.

Table 6. Respondents’ view on SLLC is more important than FLLC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	239	72.6	72.6	72.6
	No	90	27.4	27.4	100.0
Total		329	100.0	100.0	

Source: Own survey

When women secure their land rights; decision power to access and control over land will increase. The recent land law (proc. No. 252/2017) in the Amhara region recognizes women's right to acquire rural land free of charge and to use it equally with men. This law specifically stipulates women's rights through joint titling, which incorporates names and photographs of both husband and wife on the title certificate. When joint holders get divorced, the holding will be divided into two equal parts and the woman will get her share and will receive a new holding title certificate with parcel maps in her name. The previous book of holding which issued in the name of husband and wife will be canceled by land administration officer and will be returned to the woreda land administration and use office.



SLLC to Women landholders from Gozamin woreda (Source: own)

The right of women to access land is advocated as part of poverty reduction efforts in the country. As of Pro. No.252/2017 /Art.39/, a high care shall be taken when the holding of children who have no guardian or legal agent, disables', weaklings', women's and aged shall get registered and be assured in order not their right be violated due to the absence of these parties. Secured land rights support to long-term investment, enforceable, transferrable, and socially and legally legitimate. In pro.252/2017 (Art.18/1/) women landholders who got certificates in SLLC have the right to develop their landholding jointly with a private investor making contracts written and also can mortgage use right to a financial institution which has given recognition by the country's National Bank for not more than 30 years (Art.19/1/). Access to land and tenure security is closely linked to other natural resources, such as water and forests, but the scope of this quick guide is restricted to women's access to land (SIDA). Secured access to land acts is a source of empowerment achieved by increasing women's economic security and increasing their control over household decisions. For example, in Nepal, 37 percent of women who owned land had a household decision, compared to 20 percent of women who did not own land (USAID,2016). In Ethiopia, a household land certification program led to a 44 percent increase in the likelihood of a wife deciding which

crops to grow on lands under her control (USAID,2016). Women’s access to land and property is central to women’s economic empowerment because land can serve as a base for food production and income generation, collateral to a financial institution, and a means for savings for the future. As rural land proclamation (pro.252/2017) of Amhara region, women have rights to transfer their holding use rights to another person by means of inherit, gift or rent. The rural land registration and cadastral practices support for facilitating land transactions for landholders. Cadastral changes may occur through inheritance, gift, divorce, exchange, rent/lease out, and mortgage.

- *Inheritance*: in case of death of the holders, the landholding use right is transferred to another person (or group of persons). Woman landholders can transfer her holding as well as use the right to any person who engaged in the agricultural activity or to any other person who wants to engage in this activity through inheritance (pro.252/2017, Art. 17/1/).

Table7. Respondents (women) participation to acquiring land through inheritance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	32	9.7	9.7	9.7
	No	297	90.3	90.3	100.0
	Total	329	100.0	100.0	

Source: Own survey

Inheritance is one of the means of acquiring land in the region, for example from FGD reflection, Wro Truayent has acquired land through inheritance equally with her husband from her husband's parents and get SLIC with her name together with her husband name with a photograph attached on the book of holding. And Wro Mantegebosh with her sister from their parents inherited land and received SLIC. This shows that the law supports and gives an affirmative action that women to access land from their relatives. In Amhara, 107,146 landholders (52852women HH) acquired land holding through inheritance from their relatives in three consecutive years. When comparing in 2019 and 2017, it has increased by double in women's landholders from 2017 to 2019 who acquired land through inheritance (BoRLAU, report). See in the chart figure8.

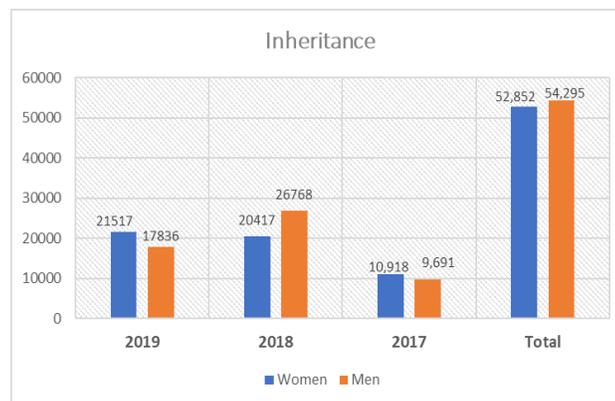


Figure8. Women’s participation in inheritance (source: BoLAU)

- *Gift*: in case a landholder/s/donates its land (or part of) to another person (or group of persons); Woman who is registered and certified in SLLC can transfer their landholding use right through a gift to her child or grandchild or any other family member who engaged in agriculture or wants to engage in this activity as far as it does not exceed the maximum ceiling of holding in the law. They can also transfer to any other person who engaged in the agricultural activity that the woman landholder believes she/he has served or has been serving her as far as the landholder gives the document approving in written (Art.16).

Table8. Respondents (women) participation in receiving land through gift

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	30	9.1	9.1	9.1
No	299	90.9	90.9	100.0
Total	329	100.0	100.0	

Source: Own survey

Table9. Respondents (women) participation on Giving land to others

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	32	9.7	9.7	9.7
No	297	90.3	90.3	100.0
Total	329	100.0	100.0	

Source: Own survey

If the landholding is held by a spouse or other persons commonly, the contract made to transfer through gift shall be effective only when the common holders agree. This is evident that Wro Yegardu who was one of the participants in the FGD acquired land through a gift from her grandparents. On bases of current proclamation (since 2017) legal provisions, women transferred their land-use rights through the gift. Based on the land administration and use institution report, 48156 landholders (24156 women) transferred their holding rights through a gift for their child and guardians in three consecutive years (BoRLAU, report). The level of awareness of women's landholders to transfer their holding use right through gifts, it has been considerably increasing within these three years. In 2019, a great number of women participants transferred their landholding rights through a gift to their child compared to 2017. See in the chart in figure 9.

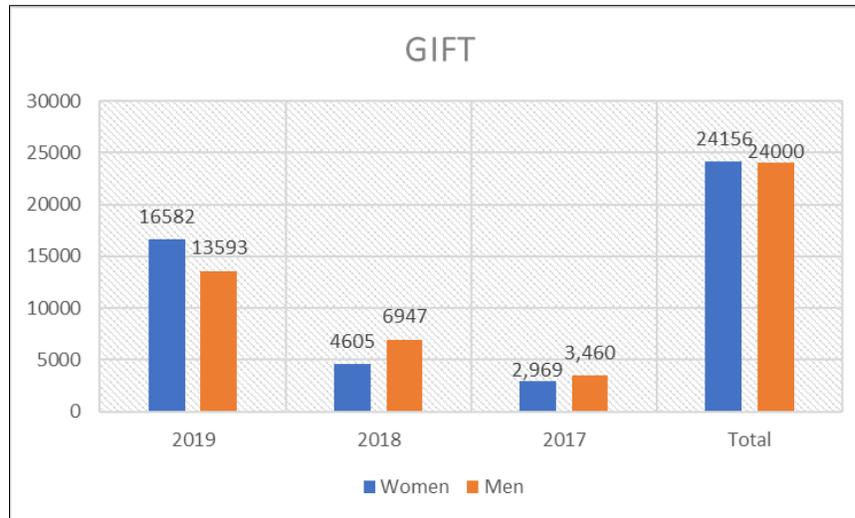


Figure9. Women's participation in gift (Source: BoLAU)

- Rent*: Renting for a certain period does not include the transfer of landholding right. Women who are registered for holding and received SLLC can transfer using their right to any person through rent contract as far as “it does not displace” themselves from their holding (Art. 15/1/). The maximum period of rent in rural land is 30 years for permanent fruit plants or preferred tree types, and 10 years concerning annual crops (Art.15/9/). Based on this provision, even though the law prohibited to rent all holding, from the FGD participants Wro Mantegebosh who has SLLC for her holding confirmed that renting her all parcels for the annual crop for three years on traditional contract agreement through the witness of elders because she hasn't had the capacity to cultivate the land so that she preferred to work in a rental market.

Table10. Respondents (women) participation to rent out land use rights

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	55	16.7	16.7	16.7
No	274	83.3	83.3	100.0
Total	329	100.0	100.0	

Source: Own survey

Table 11. Respondents (women) participation to rent in land use right

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	66	20.1	20.1	20.1
No	263	79.9	79.9	100.0
Total	329	100.0	100.0	

Source: Own survey

Regarding their land use right to rent out and rent in, respondents reflected that it is their participation in renting land use right is insignificant compared to those who didn't participate.

But in the Amhara region, in three consecutive years, 17512 landholders (6834 are women-headed landholders) rented their land using rights to other users through written rent contract agreements. Women's participation in renting in 2019 was increased by 2213 when compared to women from 2017 (BoRLAU, report).

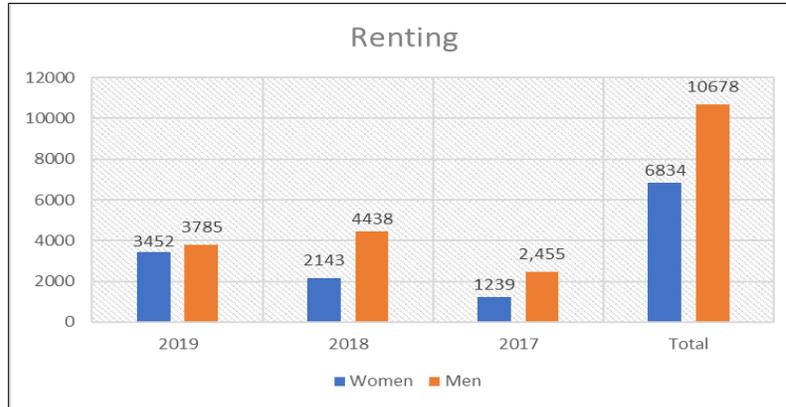


Figure10. Women’s participation in rental market (Source: BoLAU)

- Mortgage*: Mortgage using the right to a financial institution for a limited time does not include the transfer of landholding right. Women who have SLLC can mortgage their land using the right to the financial institution which has been given recognition by the country’s National Bank for not more than 30 years. Developing rural landholding in collaboration with a private investor and mortgaging land holding use rights to financial institutions are encouraging improvements, by supporting the rural women to sustain their livelihoods in the Amhara region. De Soto (2001) claimed that: “The poor cannot produce capital because they do not possess assets. But they hold these assets in defective forms. Because the rights to these possessions are not adequately documented, these assets cannot readily be turned into capital, cannot be traded outside narrow local circles where people know and trust each other, and cannot be used as collateral for a loan.” Concerning this, in the Amhara region, women landholders who have received SLLC have started to collateralize their land using right to financial institutions.

Table12. Respondents (women) participation on mortgaging land

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	12.5	12.5	12.5
	No	287	87.2	87.5	100.0
	Total	328	99.7	100.0	
Missing	System	1	.3		
Total		329	100.0		

Source: Own survey

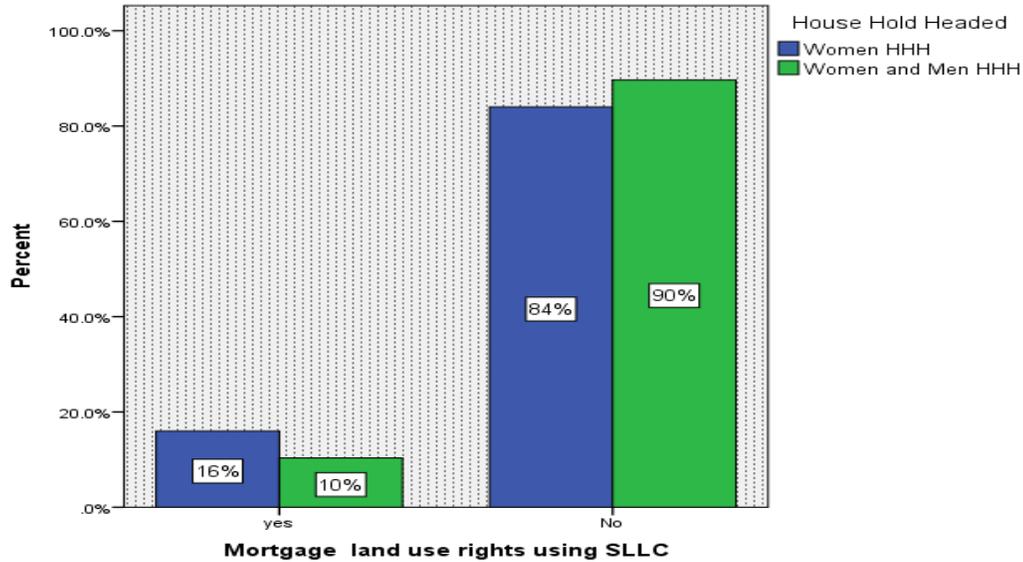


Figure11.Respondents’ participation in Mortgaging land using the right (Source: own survey)

Regarding collateral participation, the participants confirmed that women didn’t put up their land to the mortgage. They reflected that they are worried because they consider it as a threat to pay the loan back if they face bankruptcy, whereas the remaining respondents echoed that they were not informed about how to collateralize using their land. In 2019 as BoLAU report, 5877 landholders who received SLLC have made collateral to financial institutions individually for a total birr 199,833,800.00 loans. From participants, the share of women's participation compared to men was 51% from the total. It shows us that if the land right is secured; women will be free and feel a sense of ownership to access and control over their land use rights. This encourages them to put up additional investment of land to increase their income (See the participation of women to collateral in the chart in figure 12).

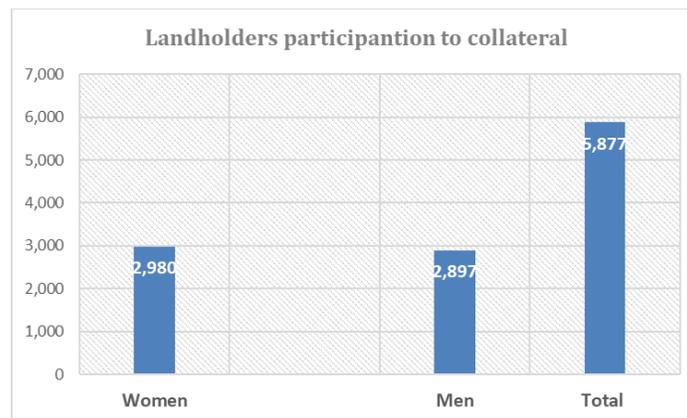


Figure12. Women’s participation to collateral land use rights (Source: BoLAU, 2019)

When women have secure rights to land, they make investments to improve land and acquire better quality inputs, participate in land rental markets, and receive more income. For example, in

Tanzania, women with strong land rights were 3 times more likely to work off-farm, earned up to 3.8 times more income, in Rwanda, women who have land titles was correlated with a 12 percent increase in women taking out loans, in India, more secured land rights led to an 11 percent increase in women who decided whether to sell crops produced on such land (USAID,2016). SLLC for women in the Amhara region has ensured equality of women's rights with men (spouse), secured their land transaction, supported for rental market and collateral, and has given solutions for violent vulnerable groups, solved boundary disputes use as evidence in the court. Especially, for women headed, disables, weaklings, and the old, it ensured their land-use rights during registration and cadastre practices. When women secure property rights including rights to the land they cultivate, they improve their status, which leads to greater influence over household decisions (FAO, 2012). Experts' reflection confirmed that the second level of land certificate is more important than the first level in securing women's land rights and producing property.

Table13. SLLC is more important than the first level in securing women land rights (experts' response)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	2.4	2.4	2.4
	Agree	11	26.8	26.8	29.3
	Strongly Agree	29	70.7	70.7	100.0
	Total	41	100.0	100.0	

Source: Own survey

3.4.2 Challenges for Women on ensuring their land rights in land registration and Cadastre

Women in Ethiopia constitute half of the country's population and the majority of them live in rural areas. The government of Ethiopia has enacted different rural land administration legislations which give them the power to access and use land rights. Securing land rights is the basic structure to increase agricultural productivity, the social and economic empowerment of the rural women landholders, and natural resource management. Cadastral surveying and mapping are technical processes that officially record the spatial location or extent of land rights that have typically been adjudicated and demarcated in the field. Women faced different problems when securing their land rights in the first level land certification that were explored during the second level land registration and certification process. The rural land registration and cadastre practices addressed women's threats in their implementation to achieve positive results for women. The distribution of land rights and opportunities for access to land will have implications for the distribution of wealth, rates of economic growth, and the incidence of poverty (Cotula *et al.*, 2004). For women's landholding rights and land use and cadastre participation in the SLLC process, customary practices have denied women's equality with men in some communities in the Amhara region. Many women in the community lacked legal awareness to participate in land registration and

cadastral practices in the field to ensure their land use right. The local authorities, especially at Kebele level, were highly unwilling to enforce the legal rights of women. For example, in the SLLC process during the parcel boundary demarcation practices in the field, exclusions of some women from joint certification with their husbands, local administrators' lack of realization on ensuring gender equality in land rights were observed. Providing false information to their wives, taking advantage of wives' temporary absence at homes during demarcation and adjudication, intentionally excluding wives during registration, lying marital status deliberately to avoid joint registration, assigning a woman to represent his wife for registration purposes, initiating a false disagreement to exclude wives during land registration and cadastre were some of the deceptive practices used by some male households headed or husbands which was explored during the implementation of cadastre (BoLAU; LIFT,2019). The other problem is that women's landholders would not participate in awareness creation and training regarding cadastre. Inferring from FGD responses, we can understand that all the participants agreed that awareness creation was given for men. However, women could not get training about land administration law, land registration, and cadastre in their kebeles where the trainer focuses on awareness creation only for men. Women were excluded from the KLAU committee selection process participation because of traditional and cultural practices, it is simply a matter of presence at the community meeting and they accept what men were agreed, and for they were not active participants at the community meeting and training events. Table 14 shows us half of women respondents did not participate in training and awareness creation about cadastre and their land-use rights, restrictions, and responsibilities.

Table14. Respondents' (women) training participation in cadastre

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	166	50.5	50.6	50.6
	No	160	48.6	48.8	99.4
	Total	328	99.7	100.0	
Missing	System	1	.3		
Total		329	100.0		

Source: Own survey

Table 15. Respondents' (women) rate about the quality of awareness creation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very low	30	9.1	17.9	17.9
	low	45	13.7	26.8	44.6
	medium	71	21.6	42.3	86.9
	High	20	6.1	11.9	98.8
	very high	2	.6	1.2	100.0
	Total		168	51.1	100.0
Missing	System	161	48.9		
Total		329	100.0		

Source: Own survey

Women’s low participation was a critical problem in the process of SLLC issuance for landholders and to access land information for the public as a whole during the land registration and cadastre. This problem was more especially on women whose spouses (men) were household headed. Women were not able to attend the land registration and cadastre processes because of cultural and traditional influences, workload, lack of training, and awareness for women and the community. It was also due to lack of women representation in the community as meeting events were represented by men household headed of the family. Respondents from experts also reflected and strongly agreed with the view that women's landholders have not participated in the training and community meetings and awareness creation events.

Table16. All land holders including women have equal knowledge about land use rights and cadastre (experts’ reflection).

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Agree	7	17.1	17.1	17.1
Undecided	1	2.4	2.4	19.5
Disagree	31	75.6	75.6	95.1
Strongly disagree	2	4.9	4.9	100.0
Total	41	100.0	100.0	

Source: Own survey

From the table, we can infer that women didn’t have equal knowledge to men regarding land use rights and cadastre. Women perceived that rural land registration and cadastre practices were the responsibility of land administration and use committee and the men. Especially women from joint holders (from men headed) were not available in the field during their land parcel boundary demarcation and registration, and hence they were represented by their spouses (husbands).

Therefore, it was assumed that information dissemination to the community or other household family members has been through household headed members. So, women's landholders in men's headed household were difficult to control and know about their full land information and use rights. SLLC was granted to women land use rights, but deceptive practices and boundary disputes were the common forms of land use rights violations for women including those who have SLLC. SLLC will not avoid threats of disputes, rather it is valid evidence when the cases are presented to the court to bring back into the original existence of the boundary. Lawyers and woreda courts key informants agreed that land registration and a cadastre for compared to FLLC, SLLC has given better opportunities and has been used as evidence to secure rights, build women’s confidence to solve conflicts in the court. SLLC has a better quality of information for expressing location of the parcel; because it can be used to know the exact area of the parcel (size), presence of neighbours of the landholder during a public display in editing and updating and implementing cadastre. Therefore, SLLC was enacted as a grant to women landholders. According to lawyers' view from key informants, it supported to solve complicated cases and it helped violent and vulnerable groups

to get a solution at the court using SLLC. It solved the hidden and forgery rights and gave opportunities to secure the right holder during registration and cadastre.

Although the court can address the problem of land rights of women using the second-level land certificates, many women may not rely on the court system to address the issues as taking cases to judicial procedures requires knowledge of the law and capacity in resources. Inferring from respondents' educational background, most women were illiterate which implies that women could not produce written application or explain a case to court because it would be beyond their capacity.

Based on the data obtained from key informants, this study revealed that women had a lack of land information and the problem of regular updating. As a result, although women received free legal advices, women's land use rights were endangered by falsified evidence in inheritance, gift, and/or renting when they claim the transactions as their own. The contribution of lawyers and courts in Gozamin and Yelemanadensa woredas during land registration and cadastre practices have brought good results in securing the land rights of women. Similarly, women and children affairs offices, together with land administration offices, have attempted to mobilize the community for public display to solve the problem of women and raise awareness for the people about their legal land use rights, restrictions, and responsibilities.



SLLC for Women from Yelemanadensa woreda (Source: own)

Second level land registration and cadastre practicing in the Amhara region have played a great role to support women's landholders on ensuring their landholding use rights. Being this, it has solved men's deceptive practices on women's land rights (see the case stories results in table17 in 3 zones; East & West Gojam, and North Shewa administrative zone in Amhara region that rural land registration and cadastre have been implemented).

Table 17. Challenges and opportunities for women during land registration and cadastre practices

Challenges and Opportunities to women on ensuring their land rights	
Case Story 1	<p><i>“Wro. KimemTsegay is 25-years-old WHH from Emuyit Got, Kusquam kebele, GonjiKolella woreda West Gojam zone, Amhara region. She has grown with her grandparents. After the death of her grandparents, she was supposed to be a legitimate heir together with her uncle. But her uncle registered the whole parcels in his name alone. During demarcation, she reported the case to the Field Teams (FTs). After the FTs got enough information from the community in public display and Woreda Land Administration Office about the case, they reached a verdict to register her name as a joint holder with her uncle, under holding number 754 (Source: BoLAU ; LIFT, 2019).”</i></p>
Case Story 2	<p><i>“Wro. Wudie Anelay is a 45-years-old woman with a disability (hearing and speaking impairment) from Kosoye Got, Addis Hiwot kebele, GonchaSisoEnesie woreda, East Gojam zone, Amhara region. Wro.Wudie has 2 parcels Ato BayewTegegne in the South and Ato Getnet Abate in the West are neighbors in her parcel. Taking advantage of her disability, these two neighboring holders extensively encroached on her land until half of her land left. During adjudication and demarcation, Wro. Wudie appealed, but the two individuals refuted the allegation and continued to disprove the encroached section as part of their parcels. As the Social Development Officer (SDO) has created a good understanding of SLLC on Vulnerable Group land right, the Field Team gathered information on the boundaries from the KLAUC and community elders during demarcation. Based on the evidence from the KLAUC and community elders, the real boundary has been delineated from both directions and the parts plowed by these two individuals have been reinstated to Wro. Wudie and registered with unique parcel ID 0225/01 in her name (Source: BoLAU; LIFT, 2019).”</i></p>
Case Story 3	<p><i>“Wro Lakech is a 60-years-old woman who resides in BasonaWorena Woreda, North Shewa Zone, Amhara region. After her spouse became ill and suffered from a health problem, she rented out some land parcels under a sharecropping arrangement. Three years after her spouse passed away, one of the tenants claimed that he was the heir of the land that had been rented and similarly another tenant claimed rights to the land. The first claimant refused to share the produce from the land under the pretext that he incurred unsettled costs for covering the funeral of Lakech’s late husband. After being intimidated and physically abused, Lakech was displaced from her 6 parcels with her 13-years-old niece. Struggling to survive, she resorted to begging to rent a shelter at the kebele center. One of the tenants conspired with members of the KLAUC to remove the FLLC book of holding which LIFT’s field teams collected as part of the SLLC process. A member of the community divulged this when experts from the Federal Rural Land Administration and Use Directorate (RLAUD) and LIFT visited the kebele to undertake regular monitoring activities. LIFT’s Social Development Officer (SDO) liaised with the woreda land administration offices to investigate the case in which a photocopy of the registration under Lakech’s name was obtained. With legal evidence in hand, a task force comprising of representatives from the Women’s and Children Affairs and Justice Office held a complaints-hearing; the woreda administration office filed charged against the offenders and brought the culprits to the Court of Justice. The court ruled that the land be returned to Lakech, and monetary compensation to be made to her. She could return to her place of residence and be also granted legal protection should the culprits retaliate (Source: BoLAU; LIFT,2019).”</i></p>

Source: (BoLAU; LIFT, 2019)

From the case stories, we can understand that rural land registration and cadastre practices were an important procedure that solved tenure insecurity of women which lacked land rights during FLLC concerning inheritance, boundary encroachment, renting land use right, forgery evidence that excluded women's names. In addition, women's experiences showed that men from the community violated the land use rights of women who were the marginalized groups in the community. From this, we realize that unless women landholders and vulnerable groups are assisted by giving special support, their land use rights will be exposed to violence and their landholding rights can easily be lost whenever they transact.

3.5 Opportunities and Gaps of the Land Administration and Use Institution to Process Rural Land Information System.

The land register in electronic records shall be updated whenever there is a need to transfer holding use rights, by changing the textual or spatial information. The provision of relevant, understandable, and reliable information is important in land administration. The Land Administration System called National Rural Land Administration Information System (NRLAIS) is the only concerned system with rural land in Ethiopia. It focuses on the process of maintenance of the land register for continuous updating of the land records from land use right's transactions like gift and inheritance, etc. It also provides land information (services) for the development purposes of a country (MoA).

NRLAIS is a comprehensive software system handling both systematic (mass registration and second-level land certification) and sporadic (maintenance of the Land Register/RLAIS) registration throughout the country. The system has a textual component, which is integrated with the spatial components. This was an opportunity to land administration and use offices to capture, process, and update cadastral changes which can be resulted from women's land holders' land use right transactions. ISLA (Information System to Land Administration) is software that was supported to automate the rural land register in the Amhara region. Currently, the land register data from ISLA was transferred to the NRLAIS and customized at regional and woreda land administration and use offices computerized information system to facilitate updating of cadastral changes.

According to the registration framework of the Amhara region, the process for updating land transaction has its procedures: 1) application for the updating of the land registry records will be submitted to the woreda land administration and use office through KLAUC and the kebele land administration and use expert, 2) Investigation by the KLAUC of the application for a land transaction and information, 3) Notification with public hearing and claims at the KLAUC office, 4) if there are no claims or after they have been solved (by kebele leaders and committee or by the woreda court/supreme court), the application is processed at the woreda land administration and use office, 5) After payment of fees is made, the woreda land administration and use office updates the land register and issues a new landholding certificate for women or other landholders who apply. The hard-copies of the land register (at woreda and kebele levels) are updated correspondingly. And finally, a copy of the new landholding certificate is delivered to the landholder through the KLAUC and a kebele LA expert (BoLAU).

In 22 woredas of the Amhara region, NRLAIS software has been customized and implemented to update cadastral changes. This has been a good opportunity for women landholders to facilitate their land use right transfer through different mechanisms. For example, in 2019, through inheritance 657, through gift 591, divorce 28, and renting 132, a total of 1408 landholders have transferred land use rights using cadastral procedures in NRLAIS software (BoLAU, report).

To support and maintain the system, service charges are clearly stated in rural land administration and use regulation under No. 159/2018 (Art.30 /1 to 2/. The exact amount of payment for the various services has been determined taking into account the expenditure and the time that each service would require. The users have to pay the minimum amount of Eth. birr 50 and the maximum amount of Eth. birr 150 to update land transactions (inheritance, gift, divorce, and renting). The amount of payment depends on the types of services that include service at the office and service at the field for cadastre.

The Land Administration and Use institution powers and duties were clearly stated under the proc. No. 268/2018 art.18 (ANRS,2018). It has significant impacts directly or indirectly for the success of the land administration system and tenure security of women's land rights. Woreda Land Administration and use office is responsible for processing land registration and certification, including scanning, geo-referencing, digitizing, editing the parcels, filing in the system; management of field forms and registry book; issuing of certificates, processing land transactions and continuous updating of the land register, and handling land-related disputes that support women land use rights. Institutional capacity is one of the important variables to capture, process, update the cadastral change, and secure cadastral information in the database which supports tenure security of women and vulnerable groups.

Regarding the capacity of the institution, the women respondents from the landholders and the expert respondents from woreda and region land administration and use offices have put their view in different ways. Concerning this, the respondents agreed that the land administration and use office didn't have enough capacity to update and process cadastral changes on NRLAIS because experts have had skill gaps. Table18 shows the experts' views.

Table 18 shows the experts' view of the Woreda land administration and Uses office on Updating land use right changes regularly and efficiently.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree	2	4.9	4.9	4.9
Agree	10	24.4	24.4	29.3
Undecided	4	9.8	9.8	39.0
Disagree	20	48.8	48.8	87.8
Strongly disagree	5	12.2	12.2	100.0
Total	41	100.0	100.0	

Source: Own survey

Table19 shows experts’ reflections about the capacity to capture, store, and process cadastral changes in Land Administration and Use institutions.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	2	4.9	5.0	5.0
	Agree	19	46.3	47.5	52.5
	Undecided	5	12.2	12.5	65.0
	Disagree	12	29.3	30.0	95.0
	Strongly disagree	2	4.9	5.0	100.0
	Total	40	97.6	100.0	
Missing	System	1	2.4		
Total		41	100.0		

Source: Own survey

Land registration and cadastre and issue of a second-level land certificate for women was implemented by the institution to issue SLLC that was helped to secure land use rights of women who have got their SLLC. But the problem here is that as the experts’ reflection exhibits, they could not produce parcel map for the remaining parcel of women and could not properly update the land transaction on the information system of the computer after collecting the land information due to knowledge and skill gaps of the experts. Women participants in FGD from two kebele agreed that they got services from land administration and use offices when they went to the office. In the same way, women respondents from the survey questionnaire asserted that it has the capacity to provide SLLC registration and issuance services for women.

Table20. Respondents’ (women) view about the institution capacity to provide services to women

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	270	82.1	82.1	82.1
	No	59	17.9	17.9	100.0
	Total	329	100.0	100.0	

Source: Own survey

On the other hand, women respondents claimed that they had no knowledge and enough information about their land use right change if they need to update the registration at woreda offices. Women landholders especially those who have had spouse didn’t participate in awareness creation and land registration and cadastre. Traditionally, they believed that their husband was the leader of the household he was enough and could manage to register the landholding use rights. In Addition, traditional and cultural influences from the community were the other challenges they encountered to participate in cadastral practices.

Prosecution office, Women, youth and children affairs offices, and Woreda court are involved in the practices and processes of land registration and cadastre in supporting, advising and deciding on the legal aspects of the land transactions of women land use rights (e.g. inheritance, gift, renting, and on land use disputes with regard to land use rights, restrictions, and responsibilities of users). The land administration and Use institution has made many improvements to secure the land rights of women in that it organizes cadastral data in the computer system and gave services and responses for users.

However, there are gaps that need further improvement in the institution. For instance, key informants from woreda court, lawyers and women and children affairs confirmed that they delays in providing land issue evidences for the court during land litigation, lack of enough and skilled staffs that could produce parcel map for the landholders, poor quality of data and evidence to the court to secure women land rights, lack of permanent features for the boundary that exposes women for boundary trespassing and disputes were the gaps that need solutions. On the same idea, women landholders in FGD confirmed that the land administration institution has had a problem of giving fast responses for women due to skill gaps. For example, Wro Tehune and Wro Denkesh were the participants in FGD claimed that by unknown reasons one parcel to Wro Tehune and one parcel to Wro Denkesh haven't still had a parcel map. Although they claimed repeatedly, they could not get parcel maps.

Table 20. Descriptive statistics and zero order correlation among the variables in the study (N=329)

		Correlations								
		SLLC is more important than FLLC	Participation of women in cadastre	Training for women	Rent out land use rights	Rent in land use right	Registered land right changes	Legal provisions adequacy	LAU Institution capacity	Tenure Security
SLLC is more important than FLLC	Pearson Correlation	1	.100	.265**	.129*	.120*	.115	-.089	-.091	.248**
	Sig. (2-tailed)		.071	.000	.019	.029	.056	.107	.098	.000
Participation of women in cadastre	Pearson Correlation	.100	1	.221**	.227**	-.008	.031	.043	.096	.081
	Sig. (2-tailed)	.071		.000	.000	.891	.610	.440	.082	.143
Training for women	Pearson Correlation	.265**	.221**	1	.229**	.142*	.176**	-.002	.150**	.295**
	Sig. (2-tailed)	.000	.000		.000	.010	.004	.971	.007	.000
Rent out land use rights	Pearson Correlation	.129*	.227**	.229**	1	-.123*	.049	-.073	.040	.142*
	Sig. (2-tailed)	.019	.000	.000		.026	.414	.189	.475	.010
Rent in land use right	Pearson Correlation	.120*	-.008	.142*	-.123*	1	.044	-.158**	-.201**	.184**
	Sig. (2-tailed)	.029	.891	.010	.026		.471	.004	.000	.001
Registered land right changes	Pearson Correlation	.115	.031	.176**	.049	.044	1	-.074	-.029	.001
	Sig. (2-tailed)	.056	.610	.004	.414	.471		.218	.635	.984
Legal provisions adequacy	Pearson Correlation	-.089	.043	-.002	-.073	-.158**	-.074	1	.310**	.112*
	Sig. (2-tailed)	.107	.440	.971	.189	.004	.218		.000	.043
LAU Institution capacity	Pearson Correlation	-.091	.096	.150**	.040	-.201**	-.029	.310**	1	.011
	Sig. (2-tailed)	.098	.082	.007	.475	.000	.635	.000		.849
Tenure Security	Pearson Correlation	.248**	.081	.295**	.142*	.184**	.001	.112*	.011	1
	Sig. (2-tailed)	.000	.143	.000	.010	.001	.984	.043	.849	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

One of the purposes of this research was to examine the relationship of the dependent variable tenure security of women with the independent variables treated in the study. The Pearson correlation coefficient indicated that tenure security of women on land use right and control over it was significantly correlated with SLLC ($r = 0.248, \alpha = 0.000$), training for women ($r = 0.295, \alpha = 0.000$), rent out land use rights ($r = .142, \alpha = 0.010$), rent in land use right ($r = 0.184, \alpha = 0.001$), and legal provisions adequacy ($r = 0.112, \alpha = .043$).

The results indicated that the land registration and the SLLC of individuals would relate with women's security of tenure in land rights, where individuals with SLLC were able to secure about their land parcel of land use right. The level of land use right rent increases as the tenure security increases when SLLC was certified. Similarly, in training for women about land rights, land registration and cadastre increase as the level of tenure security feeling of women increases and the more secure, they feel. Legal provision the other worth considering variable was significantly and positively correlated with the security of tenure. In other words, when the land law provisions are appropriated and secured their land rights it enhances the decision power of women on land use right and control over it. Independent variables training for women, rent in and rent out land-use rights were significantly and positively correlated with SLLC. Similarly, training for women about cadastre with registering of cadastral changes to formal procedure and land use right change was significantly and positively correlated at ($r = 0.176, \alpha = 0.004$), and with a capacity of the institution at ($r = 0.150, \alpha = 0.007$). The implication here is that when women get training, they will come to the formal procedure to get their land use right changes registered like renting registration to the formal office. Training for women was also positively correlated and needs the capacity and efficiency of the institution to raise awareness of the women's landholders about rural land registration and cadastre.

But, on the contrary, the independent variables' adequacy of legal provision and capacity of the institution were correlated negatively with the independent variable rent in land use right of women at ($r = -0.158, \alpha = 0.004$ and $r = -0.201, \alpha = 0.000$) respectively, also the results were significant. The remaining independent variables namely, the participation of women in land registration and cadastre, registration of cadastral land use right changes due to land transactions to the formal procedure, and institutional capacity failed to significantly correlate with the dependent variable the tenure security of women land rights about their land tenure.

4. Conclusion

The land is one of the basic sources of wealth which women and other communities depend on to sustain their livelihoods. Thus, securing the land rights of women has a profound impact on decision-making power and economic empowerment. Marginalizing women in society in accessing and controlling rural land will lead to lacks of fairness and equity in land resources. Women need to get equal opportunity in their land use rights and transactions. The regional government of Amhara in Ethiopia formulated land laws that support to register the land rights of women. The FDRE constitution, family law, and rural land proclamations are legislations that gave power as affirmative action and support to secure the land use right of women to transfer,

administer and control over land equally with men. They have a right to register their landholding use rights and received the second level land certificate (SLLC). Implementing cadastre and issued the second level land certification has provided an important source of tenure security.

In the Amhara regional state of Ethiopia, cadastre was implemented with public participation. Local administration, KLAUC, village elders, and women representatives worked with the field teams (surveyors and registrars) to resolve land-related disputes (like boundary dispute or women's rights violations by others or their husbands) in surveying, demarcation and registration of land parcels. During land parcel surveying, demarcation, registration, and public display of the cadastral results of the SLLC, the participation of local women in the community to ensure their land rights are indispensable. This is, indeed, the most important procedures that the land administration and use institution has implemented integrated with the support of stakeholders (government and NGOs).

This paper realized that the participation of women on land registration and cadastre practices during the fieldwork was very low. The reasons are lack of well-organized awareness creation, cultural and traditional influences together with men's superiority, the workload at home, the women's wrong perceptions that registration could only be by KLAUC, experts, men, and local administration from kebele/village. On the other hand, when we compare the participation of women from women-headed households with women from men-headed households; women from women-headed households are the most participant in cadastre at the fieldwork than from men-headed.

The benefits and challenges of cadastre practices for Women's land use rights were varied from community to community. In other words, it has a variation between the practices of one village to the other village community. It depends on the awareness of the community and the capacity of local administration at kebele and woreda levels. Hence when the local administrators are strong, women have participated in cadastre at the field, and the challenges for women have solved and secured land-use rights. To the opposite, when it was weak, women faced many challenges that impeded to participated in land registration and cadastre, and their land-use rights were violated.

The right to access and control over land, and gender inequalities in land resources was addressed on the provision of the formal legal systems of the region that support women for equal land use rights and tenure security. This research explored that rural land cadastre have secured women's land use rights than the first level land registration and certification did for women. The SLLC contained the land parcel lists with its geographic references, parcel map for each land parcels, and a prepared green book in her/their name with photographs of landholders attached that was given by the woreda land administration and use offices. SLLC has become a grant to women's land rights. Women participated in the land rental market, mortgaging land using rights, had land use rights equal with men, and can use SLLC as written evidence for land litigation in the court.

Cadastral surveying and mapping are technical processes that had typically been adjudicated and demarcated in the field using aerial photographs. The public hearing to ensure the quality of land surveying, registration and certification using kebele index maps was the challenges for women that could not easily be understood and participated in the approval of parcel boundary. Besides, many women in the community had a lack of awareness of the legal documents to participate in cadastral practices thereby ensuring their land-use rights. The local government authorities, especially at Kebele/village level, were highly hesitant to enforce the legal rights of women in the cadastre practices and process, especially during boundary dispute resolution. During surveying, demarcation, and registration implementation at the field mislead practices used by some rentees to registered the renters land use rights by their name, and mislead practices used by some husbands who tried to exclude their wives from joint certification were problems that observed in the study area. Different factors contributed to gender-based violence that includes the social perception that growing up of male supremacy developed from the previous legal system.

A modern land administration system and cadastral infrastructures will be used to facilitate efficient land rental markets, secure the land use rights information, and support the long-term investment and land management for women. NRLAIS was a good opportunity that cadastral information at woreda was automated and land transactions implemented. NRLAIS supported the security of land information, data maintenance of the land register, and updating of the land records that gave confidence for women's tenure security.

The gaps in NRLAIS implementation, which were observed in the land administration and use institution to execute and process cadastral information are the other critical issues that directly or indirectly affected women's land rights. The challenges in implementing the National Rural Land Administration Information System include little or no capacity to update and process of cadastral changes, could not produce a parcel map that came from cadastral changes. Besides, Land Administration and Use institutions had not sufficient staffs at the local level. Women had consistently claimed on the issues including delaying to get services, providing poor quality of data to the court in the land use rights litigation, lack of permanent features for the boundary of the land parcel that exposed to boundary trespassing and disputes are the most common challenges. The low participation of women in cadastre practices at the village has been challenged to the issuance of SLLC for landholders.

An effective land administration system requires public participation (including women's), and implementing cadastral systems are predominant in the tenure security, economic growth, efficient land markets, and investment. Therefore, to address the gaps, this paper recommends:

- Training for women about land use rights registration and cadastre by the responsible institution is essential that will help to increase women awareness regarding cadastre;
- Specifically, for women landholders, simple and easily accessible communication to cadastral display, and land dispute resolution mechanisms shall be arranged;

- The perception and participation of the community to secure women land use rights during the implementation of cadastre is weak; so, it is better to develop a mechanism for community sensitization about women land use rights;
- Institutions such as courts, prosecution offices, women, youth and children affairs offices, and local administrations are the most important partners on securing women's land use rights that should be strengthened through sensitization. Therefore, the institutions will participate in the capacity building of the community on enforcement of land laws and women land use rights security;
- For women landholders those who had not received the land parcel map and a certificate; the Land Administration and Use institution shall give a fast response for the security of their land-use rights;
- Data clearing, updating, and delaying services for land users are problems that are reported to Land Administration and Use institutions; so, the local government should take measures in the institution material resources, personnel, and technical capacitating.
- In the implementation of the Land Administration Information System, the experts that lack adequate training, could not properly be managed to capture all land parcels information to the system; therefore, the Land Administration and Use institution need to establish a special capacity building campaign to enhance the capacity of the experts.

References

- Adenew and Abdi, (2005). *Research Report 3*, Land Registration in Amhara Region, Ethiopia. Research Report Russell Press, Nottingham. UK.
- Amhara N.R.S., (2019). Land Administration and Use Bureau, Rural land administration and use annual performance report 2018/2019 (unpublished). Bahir Dar, Ethiopia.
- Amhara N.R.S., (2018). The Revised Executive Organs Re-Establishment and Determination of its Powers and Duties in the Amhara National Regional State. Zikre Hig, No. 03. Bahir Dar, Ethiopia.
- Amhara N.R.S., (2018). The Revised Amhara National Regional State Rural Land Administration and Use System Implementation, Council of Regional Government Regulation No. 159/2018. Zikre Hig, No 4. Bahir Dar, Ethiopia.
- Amhara N.R.S., (2017). The Revised Rural Land Administration and Use Determination, Proclamation of the Amhara National Regional State Proclamation No.252/2017. Zikre Hig, No.14. Bahir Dar, Ethiopia.
- Bartlett, J. E., II, Kotrlik, J. W., & Higgins C., (2001). *Organizational research: Determining appropriate sample size for survey research*. Information Technology, Learning, and Performance Journal, 19(1). <http://www.osra.org/itlpj/bartlettkotrikhiggins.pdf>.
- Bezabih, Mintewab, A. Mannberg and E. Siba, (2014). *The land certification program and o-farm employment in Ethiopia*. Grantham Research Institute on Climate Change, and the Environment (168). Economic Geography, Vol.58, No.2 (Clark University).

- Bezu Sosina, Holden Stein, (2014). Demand for second-stage land certification in Ethiopia: *Evidence from household panel data*. Journal, School of Economics and Business, Norwegian University of Life Sciences, P.O. Box 5003, 1432 Ås, Norway.
- Bogaerts, T. and Zevenbergen, J.A., (2001). Cadastral Systems-alternatives. Computers, Environment and Urban system.
- Cole M. George and Wilson A. Donald, (2017). *Land Tenure, Boundary Surveys, and Cadastral Systems*. Taylor & Francis Group. International Standard Book Number-13: 978-1-4987-3165-2 (Hardback).
- Cotula, L., Toulmin, C., Hesse, C., (2004). Land Tenure and Administration in Africa: Lessons of Experience and Emerging Issues. International Institute for Environment and Development, London.
- Creweit W., Ayalneh B., Benedikt K., (2008). Land Tenure in Ethiopia: *Continuity and Changing, Shifting Rules and Quest for State control*. International Food Policy Research Institute, 2033 K Street NW, Washington, DC 20006-1002, CAPRI working paper No. 91.
- Dale, P.F, and McLaughlin, J.D., (1999). *Land administration*. Oxford, UK. Oxford University Press.
- De Soto, H., (2000). The mystery of capital: *Why capital triumphs in the west and fails everywhere else*. New York: Basic Books.
- Deininger, K. (2003). *Land policies for growth and poverty reduction*. (World Bank Policy Research Report No. 26384. Co-publication of the World Bank and Oxford University Press). Washington DC: The International Bank for Reconstruction and Development, The World Bank.
- Dekker L. A. Henri, (2005). In Pursuit of Land Tenure Security: *Essays on land reform and land tenure in Amsterdam*. ISBN 90 8555 111 0. NUR 945/947.
- Descombe, M. (2007). *The Good research guide for small scale social research projects*. Third Edition, Open University Press, England.
- DFID/LIFT, (2019). Protecting Land Tenure Security of Women in Ethiopia: *Evidence from the Land Investment for Transformation (LIFT)*(Report), Addis Ababa, Ethiopia.
- Enemark, S., (1999). *Cadastre, Land Information Systems, and Planning-* is decentralization a significant key to sustainable development? Presented at the UN-FIG Conference on Land Tenure and Cadastral Infrastructures for Sustainable Development, Melbourne, Australia.
- Enemark, S., (2009). Facing the Global Agenda – *Focus on Land Governance*. International Federation of Surveyors, an Article.
- FAO, (2012). The State of Food and Agriculture: *Women in Agriculture –Closing the Gender Gap for Development 2010-2011*, 43.
- F.D.R. Ethiopia, (2005). *Rural Land Administration and Land Use Proclamation*, Proclamation No.456/2005. Negarit Gazeta. Year 11, No. 44. Addis Ababa.
- F.D.R. Ethiopia, (2000). *The Revised Family Code Proclamation No. 213/2000*. Addis Ababa.
- F.D.R. Ethiopia, (1995). *Constitution of the Federal Democratic Republic of Ethiopia, Proclamation No. 1/1995*. Negarit Gazeta. Year 1. No.1. Addis Ababa.

- Feder G. and Feeny D., (2009). *Land Tenure and Property Rights: Theory and Implications for Development Policy*. The World Bank.
- FIG. (1995). *Statement on the Cadastre*. Copenhagen, Denmark, International Federation of for sustainable development. ESRI Press, 380 New York Street, Redlands, California.
- Gebeyehu, B. (2013). Participatory and Pro-Poor Land Administration System of the Amhara National Regional State of Ethiopia: *Lessons and Evaluation of the Current Status*. Paper prepared for presentation at the “Annual World Bank Conference on Land property, The World Bank - Washington DC.
- Henssen, J.L.G., (1995). *Basic principles of the main cadastral systems in the world*. In proceedings of the One-day Seminar held during the Annual Meeting of Commission 7, cadastre and Rural Land Management, of the International Federation of Surveyors (FIG), May 16, Delft. The Netherlands.
- Hoben Allan, (1973). *Land Tenure among the Amhara of Ethiopia: The dynamics of Agnatic descent*. University of Chicago Press, Chicago, and London.
- Kaufmann, J., and Steudler, D., (1998). *Cadastre 2014. A vision for a future cadastral system*. FIG XXI International Congress. The Brighton United Kingdom.
- Lemmen Christiaan, (2012). *A Domain model for land administration*. Netherlands Geodetic Commission. P.O. Box 5030, 2600 GA Delft. The Netherlands.
- McAuslan, P. (1987). *Land Policy: A Framework for Analysis and Action*, *Journal of African Law*, Vol. 31, No. 1/2 (spring, 1987).
- MOA, (2019). Development of rural land administration system. *Land Administration and Land Use Directorate Report (unpublished)*. Ministry of Agriculture, Ethiopia.
- Pankhurst R. (1966). *State and Land in Ethiopian History*. Institute of Ethiopian Studies in association with Oxford University Press, Addis Ababa.
- Patton, M.Q., (1990). *Qualitative evaluation and research methods*. Second Edition, Sage publications, Newdelhi.
- SIDA, (2009). *Natural Resource Tenure- a crucial aspect of poverty reduction and human rights*. Sweden International Development Agency. Stockholm.
- Simpson, S.R., (1976). *Land Law and Registration*. Cambridge University Press.
- Steudler, D., (2004). *A framework for the evaluation of land administration systems*, Ph.D. Thesis. Department of Geometrics. The University of Melbourne, Melbourne, Australia.
- UNECA, (2006). Economic Commission for Africa: *Framework and Guidelines on Land Policy in Africa: Land Policy in Africa: A Framework to Strengthen Land Rights, Enhance Productivity, and Secure Livelihoods*.
- UNECA, (2004). Economic Commission for Africa: *Land Tenure System and their Impacts on Food Security and Sustainable Development in Africa*, Addis Ababa.
- UNECE, (1996). *Land Administration Guidelines with Special Reference to Countries in Transition*. United Nations Economic Commission for Europe. New York and Geneva: Indiana University.

- UN-FIG, (1996). The Bogor Declaration: United Nations Interregional Meeting of Experts on the Cadastre, Bogor, Indonesia.
- UN-Habitat, (2013). *Tools to Support Transparency in Land Administration*. United Nations Human Settlements Programme. HS Number: HS/010/13E, ISBN: 978-92-1-132549-2.
- UN-Habitat, (2012). *Designing a Land Records System for the Poor Secure Land and Property rights for all*. United Nations Human Settlement Program.
- UN-Habitat, (2004). *Global Campaign for Secure Tenure: A Tool for advocating the provision of adequate shelter for the urban poor*. Concept Paper 2nd Edition. University International Law Review 13, no. 3
- UN, (1985). *Report of the Ad Hoc Group of Experts on cadastral Surveying and Land Information Systems*, New York. Economic and Social Council E/CONF.77/L.1.
- USAID, (2016). Land Tenure and Women's Empowerment. Women's Land rights Programming: Past and Present. www.land-links.org/issue/gender-equality/.
- USAID, (2007). Land Tenure and property rights Volume, I: *Frame Work*. Burlington, VT 05402: ARD, Inc.'s.
- Williams, RC, (2011). From Shelter to Housing: *Security of Tenure and Integration in Protracted Displacement Settings*. [www.nrc.no/resources/reports/from-shelter-to-housing-security-of-tenure-and-integration-in-protracteddisplacement- settings/](http://www.nrc.no/resources/reports/from-shelter-to-housing-security-of-tenure-and-integration-in-protracteddisplacement-settings/).
- Williamson I., Enemark S., Wallace J., and Rajabifard A., (2010). *Land administration for sustainable development*. Redlands, California, U.S.A, ESRI Press.
- World Bank, (1993). *Housing: Enabling markets to work*, World Bank Policy Paper, World Bank, Washington, DC.
- Zevenbergen J., De Vries W., and Rohan B., (2016). *Advances in Responsible Land Administration*. International Standard Book Number-13: 978-1-4987-1961-2.
- Zevenbergen, J.A., (2004). *A Systems Approach to Land Registration and Cadastre*. Nordic Journal of Surveying and Real Estate Research. VOL 1.