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# INSTITUTIONAL ARRANGEMENTS FOR FARMLAND DEVELOPMENT : THE CASE OF ETHIOPIA

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## ABSTRACT

Land is an asset of enormous importance for billions of rural dwellers in the developing world. Increased land access for the poor can also bring direct benefits of poverty alleviation, not least by contributing directly to increased household food security. In countries where agriculture is a main economic activity (e.g. Ethiopia), access to land is a fundamental means whereby the poor can ensure household food supplies and generate income. Therefore, this study aimed to sketch-out institutional arrangements to get access to farmland and to empirically examine institutional mechanisms to settle dispute arising from contracting farmland in Amigna district. The result revealed that land rental markets appeared to be the dominant institutional arrangement to get access to farmland next to Peasant Association allocated arrangement. This created breathing space for short-term land acquisition for landless and/or nearly landless farm households. Moreover, the dominant transactions took place among a neighbour followed by transfers between friends in the same peasant association, and relatives in the same peasant association. The foregoing discussion with key informants revealed that such transfers are informal and there are no formal rules and regulations to enforce land transfers to reduce high risk that may arise from these transactions. Regarding the mechanisms used by the sample respondents' in order to resolve disputes, farmers claimed their rights through local elders, religious leaders, and local institutions. This may be due to the perception of legal uncertainty over landholdings particularly in the case of rental contracts, which existed informally. Therefore, policy and development interventions should give emphasis to improvement of such institutional arrangements that create venue for land access.

#### Introduction

Questions about land markets are central to development policy, as underlined recently

in 2008 World Development Report. The policy immensely advocates liberal reform that attempted to fortify private markets (primarily

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via rentals) in a way that enhance efficiency and equity outcomes (World Bank, 2007).

Over the past two decades a wave of proposals for land tenure reform in many African countries raised questions about land markets as a means of allocating land that have profound political and economic implications (Toulmin and Quan, 2000). However, until late twentieth century, it was a perception of land as being relatively abundant due to low population densities in many parts of the continent that influenced policy makers' views to give little attention for land markets in development policy (Deninger and Feder, 2001).

Ethiopia is one of the largest countries in Africa both in terms of land area (1.1 million km<sup>2</sup>) and population (about 74 million). Ethiopian economy is based mainly on agriculture which provides employment for 85 per cent of the labour force and accounts for a little over 50 per cent of the GDP and about 90 per cent of export revenue (CSA, 2007). Demeke (1999) and Belay and Manig (2004) noted that access to land is an important issue for the majority of Ethiopian people who, in one way or the other, depend on agricultural production for their income and subsistence. Similarly, FAO (2002) pointed out that in areas where other income opportunities are limited (for example, rural non-farm employment creation); access to land determines not only household level of living and livelihood, but also food security. The extent to which individuals and families are able to be food secure depends in large part on the opportunities they have to increase their access to assets such as land.

However, as population grows, the pressure on land is increasing and opportunities of getting land for allocating to newly emerging households are quite limited since then. As a result of increasing population of young farmers who are often landless, there

will be unbalanced resource endowment (Bezabih et al., 2005). In Ethiopia, the average landholding is only about one hectare per household and the population growth rate is creating increasing pressure on land and other natural resources (CSA, 2007). Nevertheless, it is also felt that in area of no frequent land redistribution, there is a skewed landholding pattern that might have resulted in landlessness (Bruce, 1994; Hussein, 2001). The cumulative effect of skewed landholding pattern, heterogeneity in resource endowment, and uncertainties and limitations in credit and other markets leads to the emergence of informal land transactions and the opportunities to trade and exchange factor endowments (Teklu, 2004; Freeman et al., 1996).

In Ethiopia, land has been owned by the state since 1975. Following the 1975 land reform proclamation, the derge regime (1975-1991) prohibited both fixed cash rental and sharecropping tenancy relations. The current government lifted these restrictions (however, the duration and area of land supplied to the markets are limited) and at present there are different institutional arrangements in place that help to get access to farmland (Belay, 2004; Yared, 1995).

The objectives of the study were:

- \* To explore institutional arrangements that facilitate access to farmland and
- \* To examine institutional mechanisms to enforce rental contracts.

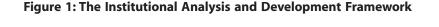
#### **Framework of Analysis**

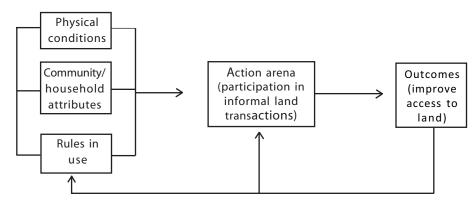
This study was designed in the lines of Institutional Analysis and Development (IAD) framework developed by Ostrom *et al.* (1994). The analysis consists of three major components such as initial conditions, action plan, and outcomes. The initial conditions, in this study context, refer to a set of issues where explanatory variables are emanating from. Action arena is influenced by a number of exogenous variables, broadly categorised to be physical/material conditions, attributes of the community/household, and rules that create incentives and constraints for certain actions (Ostrom *et al., 1994*). Based on Ostrom *et al.* (1994) components of initial condition are explained as follows;

*Physical/material conditions*: Includes livestock ownership, landholding, and financial endowment that the households possess, mobilise, use and exchange with others. It also refers to the physical infrastructural development in the district that has an influence on the renting behaviour of the households.

Community (household) attributes : The community/household broadly involved in the situation is another important variable. Several attributes of the community/household may influence the outcome of an action situation. These include demographic attributes such as education level, size of the household/ community, and employment level. Rules –in-use (formal and informal rules or norms): Each action is influenced by sets of rules-in –use. These are the rules actually used by the people to guide or govern their behaviour in repetitive activities (Ostrom, 1992). Ostrom (1992) also noted that changing the working rules of an activity could result in changes to the outcome of the activity. In the context studied, it refers to any rules or norms in place that help to increase access to land.

As configured in Figure 1, the framework considers the effects of all components in the initial condition on the action arena in which participation in informal land transactions is viewed as dependent variable. Therefore, assessing major reasons and degree of influences of those variables on the initial conditions in the action arena is the central theme of this empirical analysis. In the action arena, the decisions of households to participate in informal land transactions is influenced by imperfection in credit market, heterogeneity in the distribution of initial wealth and specific human capital, and rationing of off-farm labour opportunities which are constituted in the initial conditions (Skoufias, 1995; Sadoulet et al., 2001).





Source: Based on Ostrom et al. (1994), modified.

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Rural areas are commonly affected by credit rationing. Asymmetric information's together with dispersed location of potential clients as well as poor rural infrastructure make it very inconvenient for lending institutions to provide their services. As a result, farmers are left solely with their own capital, most often insufficient to cover all necessary investments connected with cultivation. Accordingly, farmers limited by financial constraints, notwithstanding their managerial abilities and others endowment in their possessions, can not engage in land market transaction (Sadoulet *et al.*, 2001).

To examine determinants of household participation in land rental markets, the range and diversity of assets at one's own disposal need to be a point of concern. Thus, the decision of household to participate in these markets is influenced by skewed landholding pattern, imbalance livestock ownership, and in-proportional labour force of the household (Skoufias, 1995).

Land transactions can play an important role for several reasons. First, it provides land access to those who are productive but own little or no land. Second they allow the exchange of land as the off-farm economy develops. Third, they facilitate the use of land as collateral to access credit markets (Deininger *et al.*, 2004). To benefit from these outcomes of land rental markets, the existing rules or norms must ensure security of property rights. This is a prerequisite that determine willingness of individuals to enter the action arena (Deininger *et al.*, 2004).

However, in conditions where poor infrastructure development, lack of well enforced property rights, and poor institutional developments (credit market imperfection that deny smallholders insurance against shocks such as bad harvest or accident), land markets lead to distress sale (Belay, 2004; Deininger *et al.*, 2004; Teklu, 2004). This is a negative consequence where individuals come across after evaluating the outcomes of action arena. As indicated in Figure 1, the result of evaluation of the outcomes will have an implicit or explicit implication on both action arena and initial condition.

#### Methodological Approach

The Study Site: This paper is based on evidence from four peasant associations in Amigna district in Arsi zone, which are characterised by informal land transactions that are predominant. It is located between 7°45' - 8°07' N latitude and 39°40' - 40 ° 38' E longitudes. The total geographical area of the district is about 134,372 ha with 21 per cent Weyna-dega, and 79 per cent Kola, and consists of 18 rural PAs and one urban PA (Addele) (ABOARD, 2009). It is located at about 260 km and 134 km far from Addis Ababa and Assela, respectively along the main road to the southeastern direction of Ethiopia. The altitude of the area ranges between 560 meters at the lowest to 2100 meters at the highest above mean sea level. The mean annual rainfall of the district ranges between 900 mm and 1200 mm with a mean temperature of 20 -250C. Central Statistical Authority (CSA) (2007) indicated that the total population of Amigna district in 2007 was 73224.

Referring to land use pattern of the district, cultivated land constituted 23.62 per cent of the total area in the district. On the other hand, about 19 per cent of the district is covered with forest. Moreover, substantial part of the land in the district (6.86 per cent) comes under non-agricultural use (ABOARD, 2009).

Sampling and Data Collection: The research design was based on a two-stage sampling procedure. In the first stage, among the 19 peasant associations found in the district, four PAs with similar agricultural production systems and fairly similar access to major road and urban centres were selected purposively based on information from ABOARD and other institutions found in district offices. In the second stage, a total of 118 sample households were selected randomly using probability proportional to sample size technique (Table 1).

# Table 1 : Number of Households and Sample Size by Peasant Associations

Peasant Associations	Total number of households	Sampled households
Bammo	621	34
Gubbissa	449	25
Medewelabu	667	36
Dimma	412	23
Grand total	2149	118

Source: Own Survey, 2009.

Data Analysis : An in-depth qualitative analysis of selected cases was performed by looking into the specific factors that drive farmers into informal land transactions. A descriptive analysis was employed to analyse qualitative and quantitative data. The descriptive analysis such as frequency tables were used to determine institutional arrangements to get access to farmland in the study area.

#### **Results and Discussion**

Emerging Institutional Arrangements to Get Access to Farmland in the Study Area: Land transactions have long provided a mechanism for providing access<sup>1</sup> to land for those who seek it and thereby for enhancing land utilisation. There were three notable institutional arrangements to get access to farmland in the district such as administrativebased (PA allocated land and inherited land), re-emerging informal market<sup>2</sup> based, and informal non-market based arrangements. Majority of farm households had land through administrative based allocation (PA-land). Hence, it was the dominant institutional arrangement receiving largest share (78.1 per cent) of total land cultivated of sample respondents (Figure 2). Land rental transaction was widely practised in the district agriculture. Rented-in market was the preferred contract in the district with an average of 8.857 per cent of total cultivated area (Figure 2).

The surface reading of the survey result also revealed that for farmers with no access or less access to rental markets and PA allocated land; there were also informal arrangements akin to the customary based systems in the district (e.g., inheritance, and borrowing). Inheritance was the second major means of acquiring land in the district as indicated by about 9 per cent of cultivated land of sample respondents (Figure 2).

There were other means for land acquisition (0.72 per cent) that are particularly important for the growing 'landless' farmers who often seek land through the informal markets but constrained by lack of cash and equity capital such as oxen.

They borrowed<sup>3</sup> land from their parents and close relatives. The foregoing discussion also revealed that the institution of marriage acts occasionally as a non-market device (borrowing) for getting access to land and pool labour, especially between landholder femaleheads and landless male labour. The remaining 0.18 per cent of land was acquired through informal mortgaging.

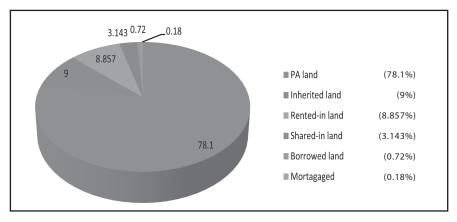


Figure 2: Share of Different Modes of Acquisition of Total Cultivated Farmland

Source : Own Survey, 2009.

Overview of Land Rental Market Activity in the Study Area: From the 88 households interviewed, 35 households are involved in adjusting their operated farm size by rentingin land (20 non-PA land allocated households and 15 PA land allocated households) (Table 2). This is due to the fact that they owned<sup>4</sup> little land in general; they need to rent land to increase their farm operations. The survey data indicated that this happens mostly through renting-in land. On the other hand, Table 2 shows that from 83 households interviewed, about 36 per cent are involved in renting-out (all are PA land allocated households) their plots of farmland. In general, the size of land rental market is high both in terms of the number of market participants and size of land supplied to the market.

Household type	Frequency	Per cent	PA allocated	Non-PA allocated
Not renting-in	53	60.2	53	0
Land renting in Total	35 88	39.8 100.0	15 68	20 20
Not renting-out	53	63.9	53	0
Land renting-out	30	36.1	30	0
Total	83	100.0	83	0

 Table 2: Frequency Distribution of Sample Households by Land Rental Markets

Source : Own Survey, 2009.

Reasons for involvement in Land Rentingin and Renting-out Markets: Of the 35 respondents who reported to have rented-in land, nearly 94 per cent indicated that their principal reason for renting-in land is the small size of their landholding. In this regard, the

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survey result revealed that the renter households had an average landholding of 1.25 hectares. The respective figure for the nonrenter sample households is 1.77 hectares. Other reasons cited by the respondents for renting-in land include, availability of extra oxen, availability of extra cash, availability of extra labour, to assist land right holders who could not cultivate their land because of old age, poor health, and lack of working capital. The remaining 6.1 per cent failed to specify the reasons for renting-in land (Table 3).

Reasons for land rent-in	Responses	% of responses (N=76)	% of cases (N=35)
Shortage of own land	31	40.8	93.9
Availability of extra cash	16	21.1	48.5
Availability of extra oxen	23	30.3	69.7
Availability of extra labour	3	3.9	9.1
To assist land right holder	1	1.3	3.0
Others not specified	2	2.6	6.1
Total	76	100	230.3

Table 3: Percentage Distribution of Respondents by Reasons for Transfer-in Land

Percentages of cases do not add up to 100 because of multiple responses. Source: Own Survey, 2009.

Table 4 presents that the survey respondents identified lack of oxen as the main reason for renting-out their plot(s) of land (about 30 per cent), followed by shortage of

seed (about 28 per cent). The survey result revealed also that land is rented-out by some farmers who had no sufficient labour, lack of working capital, and who were disabled.

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Reasons for land rent-out	Responses	% of responses (N=83)	% of cases (N=30)
Shortage of seed	23	27.7	76.7
Availability of extra cash	20	24.1	66.7
Availability of extra oxen	25	30.1	83.3
Availability of extra labour	8	9.6	26.7
Disability	4	4.8	13.3
Others not specified	3	3.6	10.0
Total	83	100	276.7

Percentages of cases do not add up to 100 because of multiple responses. Source: Own Survey, 2009.

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Land Access and Relationship Between Actors: This was the role of the concrete market setting, the constellation of actors, the community in which the market is located and the multilateral relationships between actors. Some of the indications were trust and identity between actors, but the topic had received very little systematic analysis.

One interesting outcome of this survey was that land rental transaction was made among people who know each other very well. More precisely, the dominant transaction took place among a neighbour which accounts for 48.6 per cent followed by transfers between friends in the same peasant association (17.1 per cent), and a relative in the same peasant association (14.3 per cent). The foregoing

discussion with key informants revealed that such transfers were informal and there were no formal rules and regulations to enforce land transfers to reduce high risk that may arise from these transactions. The land policy of the region declared formal operation of land rental markets; however, sample households lacked awareness of the policy reform. As a result, farmers preferred their neighbours, friends, and relatives. With respect to the location of the rented-in land, the great majority of the respondents (88.6 per cent) reported that land they rented-in is located within their peasant association. However, the fact that 11.4 per cent of the sample respondents rented land from other villages showed that rental transaction was not completely confined to the boundaries of the village (Table 5).

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Land transfer from	Cases	Per cent	
A neighbour in the same PA	17	48.6	
A relative in the same PA	5	14.3	
A friend in the same PA	6	17.1	
A relative outside the PA	4	11.4	
Other person in the PA	3	8.6	
Total	35	100	

Table 5 : With Whom Land Renting-in was Effected

Source : Own Survey, 2009.

As per practice with whom land rent-out was effected, most transfer arrangements were limited to close kin because of mutual trust among them. About 43.3, 36.7, and 6.7 per cent of households who rented-out their land were exchanged among neighbours, relatives or in-laws and friends, respectively (Table 6). This was possibly because of the ease at which arrangements were made (not written, often without witness), their flexible nature, and limited view of land tenure security.

#### Table 6 : With Whom Land Renting-out was Effected

Land transfer from	Cases	Per cent
A neighbour in the same PA	13	43.3
A relative in the same PA	11	36.7
A friend in the same PA	2	6.7
Neighbour and a relative in the same PA	4	13.3
Total	30	100.0
Source : Own Survey, 2009.		

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Land Disputes and Dispute Settlement: As stated above, the tasks of protecting and enforcing use and transfer rights specified in the Constitution as well as laws governing land administration are vested in regional government. Disputes arising with regard to PA land were adjudicated in the PA-court, which represents the lowest administrative and jurisdictional level. However, even though land transfer right through rental markets is constitutional and legally valid in the recent land reform of the Oromia region, these markets were yet operating informally in the study area. In fact, this was due to lack of public awareness on their rights, structures, and mechanisms to enforce those rights enshrined in the recent land reform of the region.

From a total of 65 households participating in land rental markets, 39 households reported that they had cases of dispute in land (Table 7). A general look at the most frequently cited causes of land disputes were likely to arise over violation of agreed use of land, shirking in assessment of harvest to be shared, trespass (boundary conflict), and failure in payment of rent and renewing the contract. Inappropriate utilisation of land such as late ploughing, sowing, weeding, harvesting, and inefficient use of fertiliser were reported as causes for dispute between two parties in the case of sharecropping arrangement. The discussion with some sample respondents revealed a positive contribution of recently introduced land use certificate in reducing trespass conflict.

Because operation in land markets was perceived as informal by the respondents, there was no much evidence on the extent to which disputes arose from breaching informally arranged contracts. Often such contracts were arranged between close community members and subject to societal norms and values, and hence indigenous institutions played an important role.

Regarding the mechanisms used by the sample respondents in order to resolve disputes which rose, nearly 59 per cent of the responses claimed their rights through local elders, religious leaders, and local institutions (Table 7). This may be due to the perception of legal uncertainty over landholdings particularly in the case of rental contracts, which exist informally. Another explanation that has been used to account for the dominant role of these informal institutions to enforce the dispute was not only legal uncertainty but also transaction costs associated with enforcing land rights were high to those landholders who were aware that land rental markets were legal. A surface reading of households' perception on informal enforcement mechanisms revealed that informal rules of enforcement are transparent, and the institutions were in place to enforce the rules than legal mechanisms to enforce the contract.

Moreover, the foregoing discussion with key informants demonstrates that in the case of disputes, the court system is working slowly and generally not effective in enforcing or solving rental or ownership disputes in the district.

The result also demonstrates that informally arranged land rental markets are tightening more likely between close relatives and friends (as stated above). The major reason cited by the respondent to the question why they prefer close relatives or friends to rentout their land is due to fear of dispute that may arise. In fact this shows us that rental contracts are largely self-enforced. Therefore, this tells us prevalent problems of land rental contract enforcement in the study area.

The ability to self-enforce is often contingent on socio-economic status of the household. The discussion with some selected individual sample households reveals that the poor are at a disadvantage in enforcing contract because of the implied high financial requirement. As a result, the burden of enforcing the contract falls heavily on poor households.

Moreover, unless enforcement of land rental contract gives a guarantee for those

who comply with this rule, the incentive to participate in land rental transactions will decrease. In fact this will hamper emergence of dynamic land rental markets that hinder farmers to share the benefit emerging from it.

Institutions used	Responses	Per cent of responses	Per cent of cases (39 valid cases*)
State court	12	12.5	30.8
PA administration	24	25.0	61.5
Local elders	33	34.4	84.6
Local institutions	9	9.4	22.1
Religious leaders	15	15.6	38.5
Social court	3	3.1	7.7
Total responses	96	100.0	

#### Table 7: Institutions Used by Sample Respondents to Settle Dispute

\* Percentages of cases do not add up to 100 because of multiple responses. Source : Own Survey, 2009.

### Conclusions

The political and financial difficulties with land redistribution have led to renewed interest in finding other ways to make land accessible to poor farmers. Land transactions, whether through sales and share tenancies, loans or gifts, have long provided a mechanism for providing access to land to those who seek it and thereby for enhancing land utilisation.

The study first describes institutional arrangements that help to get access to farmland as well as tend to understand with whom land transactions are effected. It examines how the interaction of a great number of factors can drive farmers in informal land transactions. It develops insights about particular drivers that drive households to participate in informal land transactions which are key to access farmland.

The study reveals, notwithstanding state ownership and control, there are multiple modes of acquiring arable land with different bundles of rights governing access, use and transfer. The rural communities are moving towards market oriented multiple and flexible tenure arrangements. However, the rights in these informally arranged rights systems may have social legitimacy and sanction, but juridical uncertainty prevails because the statutory law of the country prohibits market transactions. Although some regions are relaxing legal constraints, land marketing remains illegal in the Constitution, which is the supreme law of the country. For farmers with no access to official channel or rental

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markets, particularly those with little farm experience, skills and cash, land access through kinship and social networks, including the transmission of land rights through inheritance and within families are in place in the district.

The analysis on land rental contract enforcement demonstrates that perception of legal uncertainty over informally arranged land rental markets remains high. An important lesson from the experience of the study is that farmers preferred informal institutions to resolve the disputes not only due to lack of awareness on operation of formal land markets but also due to fear of high enforcement cost prevailing in the formal process.

This result sheds light on the room for strengthening institutional mechanism to enforce rental contract and reduce the burden on self-enforcement with minimum enforcement costs in the long-run and further improving the role of local institutions used for dispute settlement even in the prevailing informal land rental transactions in the shortrun.

#### Notes

- <sup>1</sup> Access to land refers to "the ability to use land" and " other natural resources, to control the resources and to transfer the rights to the land and take advantage of other opportunities ". (IFAD, 2008: cited in Yigremew, 2001).
- <sup>2</sup> Informal land transactions cover market-mediated (rental contract s such as crop-sharing and cash rental) and non-market mediated transfers (for example, borrowing or gifts).
- <sup>3</sup> Borrowing is a temporary arrangement (often for one production season) of receiving the right to cultivate land. This arrangement is often made between people who are related through kinship (Teklu, 2003).
- <sup>4</sup> In the Ethiopian context, households do not formally "own" land, since the 1995 Constitution proclaims all land to be the property of the people. However, land allocated by the Peasant Association has many characteristics of usufruct ownership, though land may not be sold or mortgaged and future redistributions have not been ruled out in the region under study.

#### References

- 1. ABOARD (Amigna Bureau of Agriculture and Rural Development), (2009), Annual Report, Unpublished, Amigna District, Ethiopia.
- 2. Belay Kassa, (2004), Management of Draughts and Famine in Ethiopia, *Journal of Social Development in Africa*, 19(1): 93-123.
- 3. Belay Kassa and W.Manig, (2004), Access to Rural Land in Eastern Ethiopia : Mismatch Between Policy and Reality, Journal of Agricultural and Rural Development in Tropics and Sub-Tropics, 105 (2) : 123-138.
- 4. Bezabih Emana, Kejela Gemtessa, and Melaku Jirata, (2005), Land Transaction and Market Oriented Production : The Case of East Shewa Zone, Ethiopia, Paper Presented to Land and Sustainable Symposium Organised by the FSS, EEA and AESE on August 5, 2005, Addis Ababa.
- 5. Bruce, J.W., (1994), Review of Tenure Terminology : Tenure Brief, No. 1, Land Tenure Center, University of Wisconsin.
- 6. CSA (Central Statistical Authority), (2007), The 2007 Population and Housing Census of Ethiopia.
- 7. Deininger, K. and G. Feder, (2001), Agricultural Production, Hand Book of Agricultural Economics, 1A, 289-325p.

Journal of Rural Development, Vol. 31, No. 2, April - June : 2012

- 8. Deininger, K., J. Songqing, Adnew Berhanu, Samuel G. Selassie and Berhanu Nega, (2004), 'Tenure Security and Land-related Investment : Evidence from Ethiopia', pp.19-50, In : Alemayehu Seyoum (Eds.), Proceedings of the First International Conference on the Ethiopian Economy, Addis Ababa, Ethiopian, Ethiopia Economic Association.
- 9. Demeke Mulat, (1999), Agricultural Technology, Economic Viability and Poverty Alleviation in Ethiopia, Agricultural Transformation Policy Workshop, Nairobi, Paper Presented to the Agricultural Transformation Policy Workshop, Nairobi, Kenya, 27-30 June 1999.
- 10. FAO (Food and Agricultural Organisation), (2002), Land Tenure and Rural Development, FAO Land Tenure Studies No. 3, FAO, Rome.
- 11. Freeman, H., M. Jabbar, and E. Simon, (1996), The Role of Credit in the Uptakes of Improved Technologies, *Ethiopian Journal of Agricultural Economics*, 17(3): 25-40.
- 12. Hussein Jemma, (2001), The Debate Over Rural Land Tenure Policy Options in Ethiopia : Review of the Post 1991 Contending Views, *Ethiopian Journal of Development Research*, 23 (2) : 35-84.
- 13. Ostrom, E., (1992), Crafting Institutions for Self-governing Irrigation Systems, ICS Press, San Francisco.
- 14. Ostrom, E., Gardner, R. and Walker, J., (1994), Rules, Games, and Common Pool Resources, Ann Arbor, the University of Michigan Press.
- 15. Sadoulet, Elisabeth, Rinku Murgai and Alain de Janvry, (2001), Access to Land via Land Rental Markets. pp. 197-227. In: de Janvry, A., Gordillo, G., Platteau, J.-P. and E. Sadoulet (eds.). Access to Land, Rural Poverty, and Public Action, A Study Prepared for the World Institute for Development Economics Research of the United Nations University (UNU/WIDER), Oxford University Press.
- 16. Skoufias, (1995), Household Resources, Transaction Costs, and Adjustment Through Land Tenancy, *Land Economics*, 71(1) : 42-56.
- 17. Tekilu Tesfaye, (2004), Rural Land, Emerging Rental Land Markets and Public Policy in Ethiopia, African Development Bank, Blackwell Ltd, USA.201p.
- 18. Toulmin, C. and Quan, J., (2000), Evolving Land Rights and Policy in Sub-saharan Africa, Pp. 12-48. In : C. Toulmin and J. Quan (eds.), Evolving Land Rights, Policy, and Tenure in Africa, DFID, and London.
- 19. World Bank, (2007), Agriculture for Development, World Bank, Washington DC.
- 20. Yared Amare, (1995), Land Distribution and its Implications for Peasant Differentiation in Wogda, Northen Shewa, *Ethiopian Journal of Development Research*, 17(1) : 25-37.