

Full Length Research Paper

Analysis of public awareness and perceptions on foreign land leases in Kenya

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The study analyzed public awareness and perceptions on foreign land leases. Primary data from 200 randomly selected respondents in Tana Delta, Kenya was analyzed using binomial logit model and descriptive measures. Results showed that there was low awareness on specific types of lease investments. Modern information and communication technology channels such as mobile phones and internet mail are the main sources of awareness. Further, duration of residency, land size and membership to land management committees have significant positive influence on awareness. While some respondents consider foreign land leases to be beneficial, nearly half of them associate the leases with marginalization and land grab. Strategies that enhance awareness and beneficial participation of local people in the foreign leases are recommended. In addition, appropriate legislation and penalties are suggested to deter misuse of land management committees as conduits for foreign land grab.

Keywords: Foreign land leases; public awareness; perceptions; Kenya.

INTRODUCTION AND RESEARCH PROBLEM

Public awareness promotes active participation in development. Enhanced awareness provides clarity on public rights and responsibilities, which are essential in protecting the public against exploitation (Mahgoub et al., 2007). Moreover, awareness inculcates a sense of responsibility and balance of decision-making power between development participants (Nair, 2012). Globally, better access to information is recognized as a basic human right that enables society to realize the democratic vision of public participation in development initiatives (Burton et al., 2006). Ultimately, greater involvement of the public in decision-making and development activities, by first ensuring their awareness of what is being done, enhances accountability, promotes citizen confidence and helps to minimize conflicts during programme implementation (O'Loughlin and Weqimont, 2007).

Public access to information and research on their awareness can guide decision-making on investment programmes (Shinnick and Ryan, 2008). In many developing countries, especially within Africa, foreign land leasing is emerging as a new investment frontier. For example, Libya, Qatar and Saudi Arabia have leased

land for agricultural purposes in Ukraine, Kenya and Tanzania, respectively. Globally, over 50 million hectares of land in developing countries is leased by foreign investors (Cotula and Vermeulen, 2009). It is commonly argued in development practice that foreign land leases could offer foreign direct investments, employment and superior technology to host nations (Juma, 2011). However, little is empirically documented on public awareness and perceptions on foreign land leases in Kenya. Moreover, the criteria for approving or failing to endorse such land deal applications on the basis of environmental impact assessments (EIAs) is not explicit because the EIAs only involve the public as passive respondents. Worse still, the results of EIAs are rarely made available for scrutiny by the public (Sulle and Nelson, 2009).

In countries such as Ethiopia and Madagascar where consultations are sometimes done on EIAs for foreign land leases, the consultations are thought to provide greater voice for affected people. However, they do not often confer authority on local communities to shape terms of such investments. At the moment, no African country has practically incorporated principles of free,

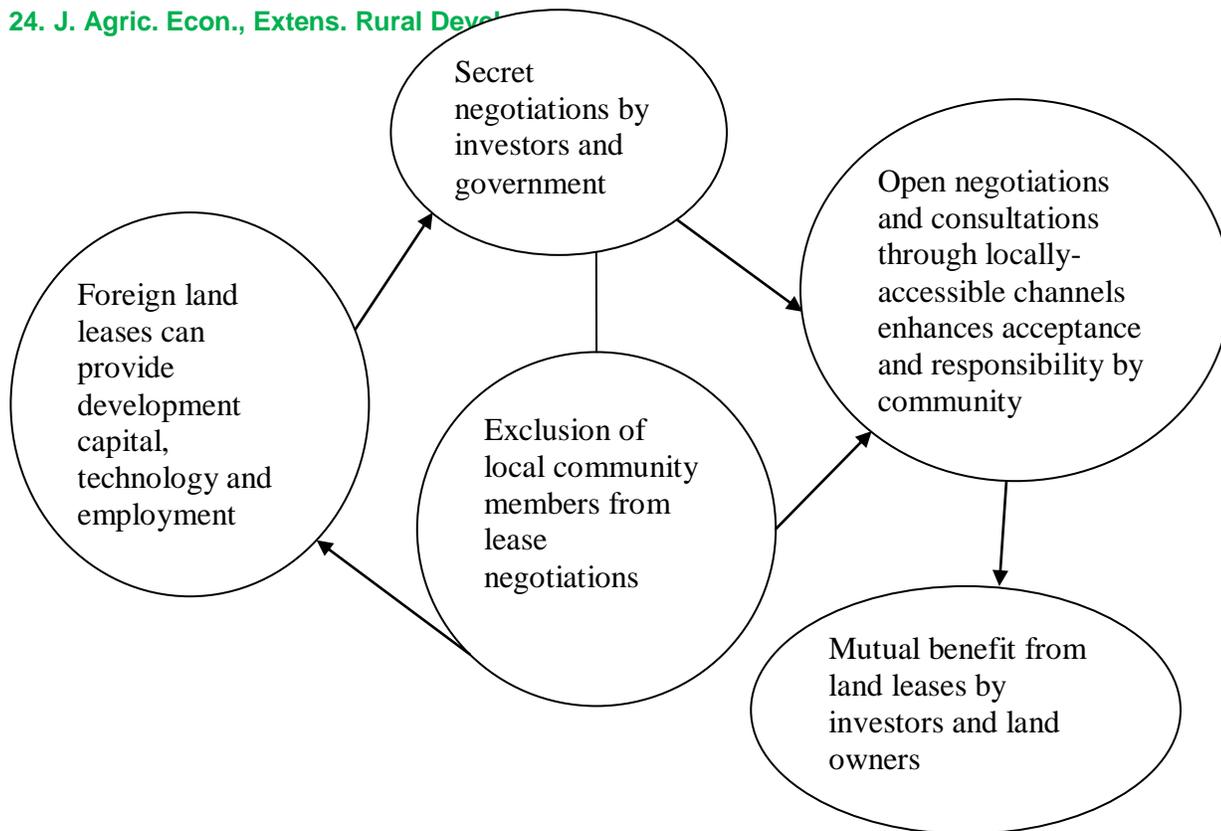


Figure 1. Enhancing local stakeholder participation in foreign land leases through awareness
 Source: Author's conceptualization.

prior and informed consent of local people in its foreign land investment policies. A few exceptional countries such as Ghana, Tanzania and Mozambique have policies that require that approval for land transfers be given by communities and customary leaders who have rights over land in question (Vermeulen and Cotula, 2010). However, the principles guiding land leases in these countries were developed following non-inclusive processes (De Schutter, 2011).

Local people's knowledge, concerns, priorities and perceptions offer important insights for the design of development interventions that would be widely acceptable at community level and those that do not conflict with local culture and way of life (West et al., 2008). Moreover, Bryer (2010) notes that transparency promotes accountability by providing the public with information about what the government and other development actors are doing. Participation allows members of the public to contribute ideas and expertise so that their government can make policies with the benefit of information that is widely dispersed in society. Enhanced citizen participation ensures that formulated policies are more realistically grounded on citizen preferences and draws public sympathy to the difficulties involved in investment decisions (Irvin and Stansbury, 2004). Moreover, improved support from the public creates a less divisive and combative populace to govern and regulate. Thus, improved citizen participation helps to stem deterioration in public trust and widespread hostility to development programmes

(Stivers, 1990). Indeed, assessment of people's awareness on impending initiatives enables the design of development programmes that fit in local contexts and facilitates stakeholder partnerships that enhance legitimacy of such processes (Bryson et al., 2012). Further, citizen involvement produces better decisions that possibly benefit the wider society (Beierle, 1999). The aforementioned issues provide an essential motivation to understand Kenyan public awareness and perceptions on existing foreign land lease investments within their localities. It is envisaged that the findings of such analysis would offer useful insights to ensure local community acceptance and prevent conflicts on foreign lease investments.

METHODOLOGY

Conceptual framework

Foreign land leases have potential to spur economic growth if well designed and managed. However, lack of stakeholder consultation and involvement leads to inadequate awareness and participation by local communities. This exclusion results in resentment and disruption of such investments by local inhabitants. Transparent negotiations of such deals is necessary in order to enhance local acceptance and responsibility, thereby stimulating sustainable participation while protecting local land access rights (Figure 1).

Sampling and data collection

The study was conducted in Tana Delta; a key agricultural as well as tourist area at the coastal region of Kenya (KNBS, 2011). Survey respondents were selected through systematic random sampling approach, which is a statistically representative method and suitable when there is lack of a comprehensive sampling frame (Horppila and Peltonen, 1992). Through the use of structured questionnaire, face-to-face interviews were conducted to obtain information from 200 respondents in July 2012. As documented by Bateman et al. (2002) and Bennett and Birol (2010), the compelling reasons for face-to-face interviews as opposed to other survey modes include the possibility to verify relevant respondent, it enables clarification of survey questions in interviews and guaranteed high response rates. The survey questionnaire captured data on respondents' socio-demographic characteristics, awareness and sources of information on foreign land lease investments, perceptions on whether the leases are beneficial and if respondents in the local community have specific preferences for lease investors from particular geographic origins.

Model estimation

A binary (binomial) logit model was applied to investigate determinants of local community members' awareness of foreign land leases in their localities. This is considered to be the most appropriate model given that the dependent variable is discrete and dichotomous, i.e., aware or not (for details on logit models, see Greene, 2003). Following McFadden (1974) the model is specified as:

$$\text{Prob}[Y_{ij}=1] = \frac{\exp(\beta' x_i)}{1 + \exp(\beta' x_i)} = \Lambda(\beta' x_i) \quad (1)$$

The subscripts i and j denote an individual in the community and awareness (1=aware, 0=not aware), respectively. Equation (1) is the reduced form of the binomial logit model, where the x_i row vector of explanatory variables for i^{th} individual are the independent variables and the non-observed ε 's are assumed to follow a distribution of logistic probability with a density function given by:

$$F'(\beta' x_i) = \quad (2)$$

Empirically, the model was estimated as:

$$\text{Pr}[CABR_i = 1] = \beta_i X_i + \varepsilon_i \quad (3)$$

where $CABR$ is the probability of awareness by the i^{th} individual (1=aware, 0=not aware); X is a vector of factors that are posited to influence individuals' probability of being aware of foreign land leases; β_i is a

vector of parameters to be estimated, while ε is the statistical random term.

Further, marginal effects were estimated to measure instantaneous effects of changes in any explanatory variable on the predicted probability of awareness, holding other explanatory variables constant. The marginal effects are computed as:

$$\beta_m = \left[\frac{\partial(\beta_i X_i + \varepsilon_i)}{\partial \beta_i X_i} \right] \beta_i \quad \text{for continuous independent variables} \quad (4)$$

or

$$\beta_m = \text{Pr}[CABR_i = 1] - \text{Pr}[CABR_i = 0] \quad \text{for dummy-coded variables.} \quad (5)$$

The binary logit model and marginal effects were estimated using LIMDEP version 9.0/NLOGIT version 4.0 software (Greene, 2007).

RESULTS AND DISCUSSION

Sample socio-demographic features

As shown in Table 1, up to 70% of respondents are generally aware of existence of foreign land leases in Tana Delta area of Kenya. In terms of residency status, most of them are local residents compared to upcountry immigrants. Consistent with national gender distribution (KNBS, 2011), there are slightly more male than female persons in the sample. Less than one-fifth of the respondents belong to land management committees and most of those in this category are aware of existing large-scale land investments in the area. The average monthly household income is Kshs 10,700 with the unaware respondents having slightly higher amounts than the aware respondents. Consistent with recent findings by Smalley and Corbera (2012) the average land holdings per household are less than 10 acres.

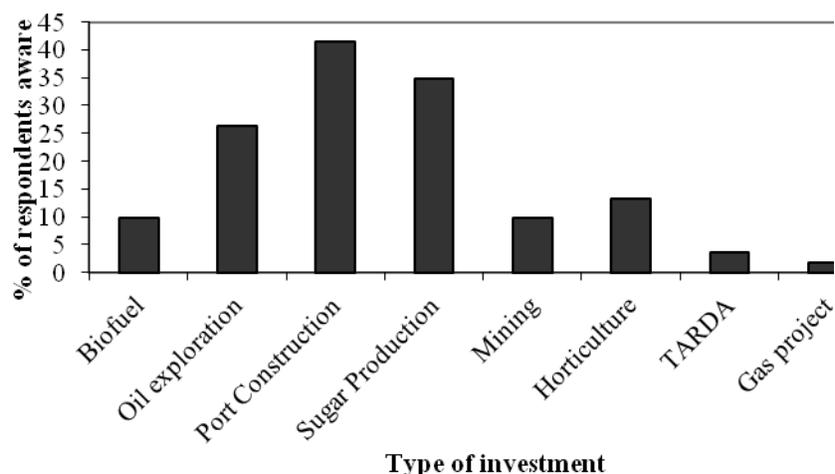
Majority of the respondents are crop farmers, while less than 10% engage fully in pastoralism, fishing, trade or other activities such as tour guide operations in the coastal tourist beaches in adjacent towns of Kilifi, Malindi and Mombasa (table 1).

When probed to indicate the specific foreign lease investment project (s) that they were aware of, less than half of the respondents could identify any lease type. This points to lack of consultation of the local people in the design and implementation of the leases. There are eight types of lease investments in the area (Figure 2). However, of all the lease investments, residents have slightly higher awareness of Lamu port construction and Mumias Sugar Company deals because these were characterised by some degree of publicity (occasioned by state-sponsored Presidential project launch) and involvement of an established local company, respectively. Awareness of gas exploration and activities

Table 1: Sample characteristics

Variable	Aware respondents (n = 140)	Unaware respondents (n = 60)	All respondents (n = 200)
Residency status (% of respondents)			
Upcountry immigrant	42.9	28.3	38.5
Local resident	57.1	71.7	61.5
Gender (% of respondents)			
Female	40.0	50.0	43.0
Male	60.0	50.0	57.0
Percentage membership in land management committee	16.4	8.3	14.0
Main occupation (% of respondents)			
Crop farming	90.0	90.0	90.0
Pastoralism	2.9	1.7	2.5
Fishing	4.3	1.7	3.5
Trade	1.4	5.0	2.5
Others (e.g., tour guide)	1.4	1.7	1.5
Average duration of residence in the area (years)	17.0	15.4	16.5
Average land size (acres)	9.0	7.0	8.4
Average distance to the market centre (km)	8.2	8.6	8.3
Average distance to government land office (km)	11.4	15.1	12.5
Average age of respondents (years)	40.6	39.0	40.1
Average number of years of formal schooling	7.0	6.3	6.8
Average monthly household income (Kshs)	10,400	11,200	10,700

Source: Survey Data (2012).

**Figure 2.** Respondents' awareness of various lease investments in Kenya

Source: Survey Data (2012).

Of the Tana and Athi River Development Authority (TARDA) are lowest. The general low public awareness reinforces the observation by Vermeulen and Cotula (2010) that there is often lack of consultation of the local people in the design and implementation of the land lease deals; negotiations are usually held in secrecy.

Moreover, the findings of this study are consistent with those of Binda et al. (2012) who noted that in Rwanda only 26% of landlords were aware of existence of land lease rates.

The main sources of awareness on existing foreign-held land leases are information and communication

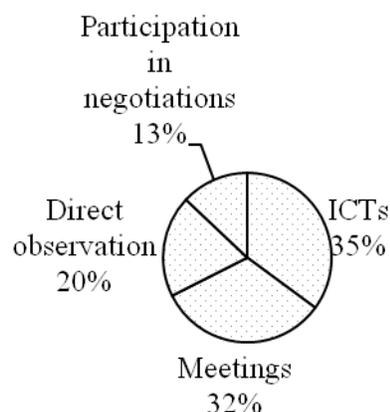


Figure 3. Main sources of information on land lease investments

Source: Survey Data (2012).

technologies (ICTs), local workshops/meetings, direct observation of the lease investments and participation in lease negotiations (Figure 3).

A part from radio, modern forms of ICTs (including mobile phones and internet mail) are the main ICTs used to access information on land leases. This demonstrates the emerging crucial role of ICTs in creating development awareness and bridging the information gap. However, non-ICT avenues still account for two-thirds of information sources, perhaps due to the observation by Chagutah (2009) that weak packaging of information may not effectively promote local stakeholders' use of technological advancements. Consistent with the findings of Otieno (2012), the study noted that within the ICT use category, radio accounted for 40%, internet and mobile phones 36%, while other ICTs such as television and print media constituted a minor share of ICT applications in foreign land lease information search. In other studies (see for example Van Mele et al., 2010) use of television videos has been shown to significantly enhance dissemination of extension messages.

Determinants of awareness on foreign land leases

The estimated results on factors that influence awareness of foreign lease investments are shown in Table 2. As expected, more years of residency in an area increases chances of obtaining information on local initiatives such as the leases. However, there is a significant negative relation between local residency and awareness. This confirms what Vermeulen and Cotula (2010) refer to as 'taking our land over our heads'

implying that foreign lease negotiations are often held secretly with immigrants while bypassing local residents. Respondents with larger land sizes are more likely to be aware of foreign leases, perhaps due to their search for alternative enterprises in which to diversify their livelihood strategies for better economic returns. Further, as noted by Ellis (2000) the pursuit of optimal asset strategies explains the desire by those with large farms to find alternative uses such as leases that would possibly offer better returns. Contrary to common perceptions, proximity to government land offices does not seem to provide any advantage in terms of information on foreign leases. Rather, the results show that what is important in furthering awareness on foreign land leases is membership to land management committees. This finding confirms the observation by Deininger (2011) that weak land institutions and processes lead to manipulation of land records and transactions in developing countries.

Public perceptions on foreign land leases

In order to understand respondents' perceptions on foreign land leases, they were asked to state whether they agree with various perceptual statements regarding land leases. Close to 60% of the respondents agreed with the statement that 'foreign land leases are beneficial to local communities in terms of providing employment opportunities, technical expertise/skills and socio-economic services such as education and healthcare'. However, nearly half of the respondents expressed agreement with statements suggesting negative implications of foreign land leases (Figure 4). Questions

Table 1. Binomial logit results of determinants of public awareness on foreign land leases in Kenya

Variable	Coefficient	Coefficient p-value	Marginal effect	Marginal p-value	Elasticity
Constant	1.054 (0.693)	0.128	0.211 (0.136)	0.121	-
Residency duration (years)	0.024* (0.014)	0.085	0.005* (0.003)	0.083	0.110
Residency status (1 = local; 0 = immigrant)	-0.659* (0.386)	0.087	-0.127* (0.071)	0.072	-0.108
Land size in acres	0.067* (0.037)	0.072	0.013* (0.007)	0.066	0.156
Distance to government land office (km)	-0.024* (0.013)	0.078	-0.005* (0.003)	0.078	-0.082
Age in years	-0.010 (0.013)	0.441	-0.002 (0.003)	0.440	-0.114
Gender	0.207 (0.337)	0.539	0.042 (0.068)	0.541	0.033
Monthly income in Kshs	-0.00002 (0.00002)	0.307	-0.000004 (0.000004)	0.305	-0.057
Membership in land management committee	1.097* (0.597)	0.066	0.178** (0.074)	0.016	0.033

Notes: statistical significance levels: **5%; *10%. Standard errors are shown in parentheses. Sample size (n) = 200.

Source: Survey Data (2012).

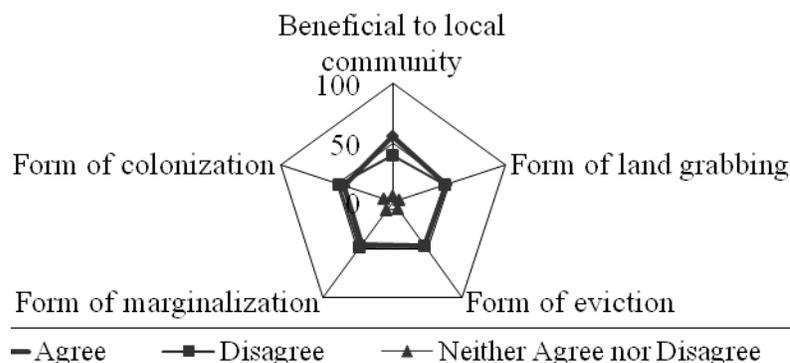


Figure 1. Public perceptions on relevance of foreign land leases

Source: Survey Data (2012).

in this regard sought to find out whether respondents view such land leases as a form of land grabbing, a form of eviction, a form of marginalization of local communities or a form of colonization/return of colonial era through land acquisitions in the guise of 'foreign land investments'. These findings corroborate observations in recent literature, which assert that the 'land rush' in Africa often makes local people vulnerable to

dispossession due to weak land use rights and limited public accountability (Vermeulen and Cotula, 2010)

Geographic origin of investors is important in global development as it helps to understand the preferred direction of flow of foreign direct investment and international cooperation. In the present study, respondents were asked their levels of preferences for

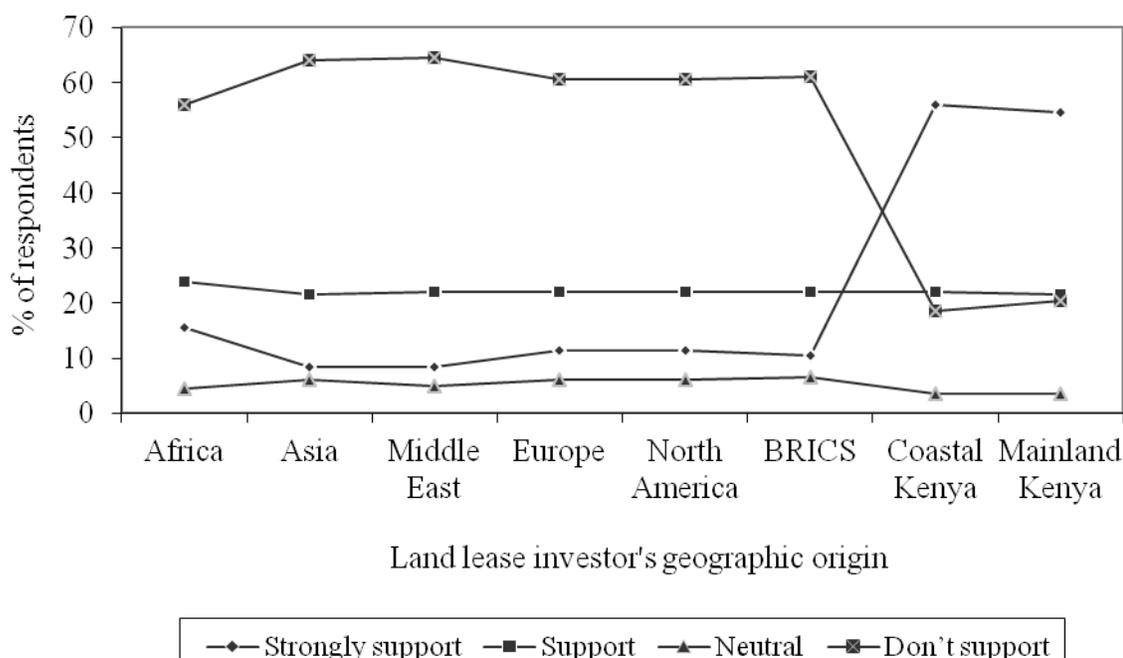


Figure 2. Kenyan public preferences for land investors from different geographic regions

Source: Survey Data (2012).

land investors from different parts of the world. On average, two-thirds of respondents would prefer to lease land to investors who are either Kenyans or those who reside in Kenya. The least preferred countries of origin of foreign investors for land leases in Kenya are Asia and the Middle East (Figure 5). This nature of preferences could be due to individual respondents' personal prejudices and/or past experiences with investors from the various countries. Of particular interest is the observation that despite intensified penetration by Asian countries and those from the Middle East in land leasing in Africa, they are highly disliked compared to countries in Europe, North America and the BRICS (Brazil, Russia, India, China and South Africa). The implications are that appropriate policy measures that promote fair negotiations in land lease deals and investments are necessary in order to encourage local stakeholder participation and appreciation of all investments, without exploitation and discrimination.

CONCLUSIONS AND POLICY IMPLICATIONS

The study assessed public awareness and perceptions on foreign land lease investments in Kenya. The results show that there is a high general awareness of existence of the leases, but little specific knowledge on individual

lease investment types. Respondents are more aware of lease investments that have had nation-wide media publicity as well as those involving partnerships between local and foreign companies. Modern forms of ICTs especially radio, mobile phones and internet mail are shown to be main sources of awareness on the foreign leases. Further, the study found that the key determinants of lease awareness are duration of residency in an area, being immigrant rather than native, land size and membership in land management committees.

Various policy implications arise from these findings. First, there is need to publicise foreign land leases in order to enhance the transparency of the negotiations. Formation of partnerships between local and foreign companies is also necessary to ensure mutual benefit. Moreover, promoting literacy and access to modern ICTs would also improve public awareness and active participation. However, it is important to regulate the leases (for instance, by giving more use and sale rights to local residents) to prevent dispossession by immigrants. Further, land management committees should be streamlined to discourage their use to fulfil personal interest at the expense of wider community needs. Stiff penalties are also necessary in order to discourage the misuse of land management committees as conduits for foreign land grab.

REFERENCES

- Bateman IJ, Carson RT, Hanemann M, Hanley N, Hett T, Jones-Lee M, Loomes G, Ozdemiroglu E, Pearce DW, Sugden R, Swanson J (2002). Economic valuation with stated preference techniques. A manual. Department for Transport. ISBN: 1-84376-852-6. Cheltenham: Edward Elgar.
- Beierle TC (1999). Using social goals to evaluate public participation in environmental decisions. *Policy Studies Review* 16(3):75-103.
- Bennett J, Birol E (2010). Choice experiments in developing countries: Implementation, challenges and policy implications. Edward Elgar: Cheltenham.
- Binda EM, Daale J, Kairaba A (2012). The impact of land lease fee on land owners: Rwanda case study. Report.
- Bryer TA (2010). President Obama, public participation, and the agenda for research and experimentation. *Int. J. Publ. Participat.* 4(1):5-11.
- Bryson J, Quick K, Slotterback C, Crosby B (2012). Designing public participation processes: Theory to practice. *Publ. Administrat. Rev.* 73(1):23-34.
- Burton P, Goodlad R, Croft J (2006). How would we know what works?: Context and complexity in the evaluation of community involvement. *Evaluation* 12(3):294-301.
- Chagutah T (2009). Towards improved public awareness for climate related disaster risk reduction in South Africa: A participatory development communication perspective. *J. Disast. Risk Stud.* 2(2):113-126.
- Cotula L, Vermeulen S (2009). Deal or no deal: The outlook for agricultural land investment in Africa. *International Affairs* 85(6):1233-1247.
- De Schutter O (2011). How not to think of land-grabbing: three critiques of large-scale investments in farmland. *J. Peasant Stud.* 38(2):249-279.
- Deininger K (2011). Challenges posed by the new wave of farmland investment. *J. of Peasant Stud.* 38(2):217-247.
- Ellis F (2000). The determinants of rural livelihood diversification in developing countries. *J. Agric. Econ.* 51(2):289-302.
- Greene WH (2003). *Econometric Analysis*. 5th edition, New Jersey: Prentice Hall.
- Greene, WH (2007). LIMDEP version 9.0/NLOGIT version 4.0 Econometric Modelling Guide, Econometric Software. New York: Plainview.
- Horpila J, Pelton H (1992). Optimizing sampling from travel catches: Contemporaneous multistage sampling for age and length structures. *Can. J. Fisher. Aquat. Sci.* 49:1555-1559.
- Irvin RA, Stansbury J (2004). Citizen participation in decision-making: Is it worth the effort. *Public Administration Review* 64(1):55-65. DOI:10.1111/j.1540-6210.2004.00346.x
- Juma, C (2011). *The new harvest: Agricultural innovation in Africa*. New York: Oxford University Press.
- KNBS (Kenya National Bureau of Statistics) (2011). *Statistical Abstract*. ISBN: 9966-767-27-4, Nairobi.
- Mahgoub S, Lesoli P, Gobotswang K (2007). Awareness and Use of Nutrition Information of Food Packages among Consumers in Maseru (Lesotho). *Afri. J. Food Agric. Nutri. Develop.* 7(6):1-8.
- McFadden D (1974). Conditional logit analysis of qualitative choice behavior. In P. Zarembka, (ed.), *Frontiers in Econometrics* (pp. 105-145), New York: Academic Press.
- Nair I (2012). Assessment of Consumer Awareness amongst Undergraduate Students of Thane District (India) - A Case Study. *Int. J. Sci. Res.* 2(5):1-7.
- O'Loughlin E, Weqimont L (2007). Global education, public awareness-raising and campaigning on development issues: An overview of evaluation practice and policy. Background paper prepared for informal experts' workshop hosted by the Germany Ministry for Economic Co-operation and Development, Bonn, 19-20 March.
- Otieno DJ (2012). Current status of ICT capacity and services in agricultural extension and advisory services in Kenya. Report presented at the Consultative Stakeholder Workshop on 'Enhancing agricultural extension and advisory services in Africa South of the Sahara through innovative use of ICTs' held by IFPRI on December 13 – 14, 2012 at the ILRI Campus, Addis Ababa, Ethiopia.
- Shinnick E, Ryan G (2008). The role of information in decision-making. DOI:10.4018/978-1-59904-843-7.
- Smalley R, Corbera E (2012). Large-scale land deals from the inside out: Findings from Kenya's Tana Delta. *J. Peasant Stud.* 39:1039-1075.
- Stivers C (1990). The public agency as polls: Active citizenship in the administration state. *Administration and Society* 22(1):86-105.
- Sulle E, Nelson F (2009). Biofuels, land access and rural livelihoods in Tanzania. *Land Tenure in Africa Series*. London: International Institute for Environment and Development (IIED).
- Van Mele P, Wanvoeke J, Akakpo C, Dacko RM, Ceesay M, Beavogui L, Soumah M Anyang R (2010). Videos bridging Asia and Africa: Overcoming cultural and institutional barriers in technological-mediated rural learning. *J. Agric. Educ. Extens.* 16(1):75-87.
- Vermeulen S, Cotula L (2010). Over the heads of local people. Consultation, consent and recompense in large-scale land deals for biofuels projects in Africa. *J. Peasant Stud.* 37(4):899-916.
- West CT, Roncoli C, Ouattara F (2008). Local perceptions and regional climate trends on the central plateau of Burkina Faso. *Land Degradation and Development*, p.1-16. DOI: 10.1002/LDR.842.