



The Effect of Land Use Changes on Rural Household Economy along Highways

The case of Addis Ababa – Modjo highway, Ethiopia

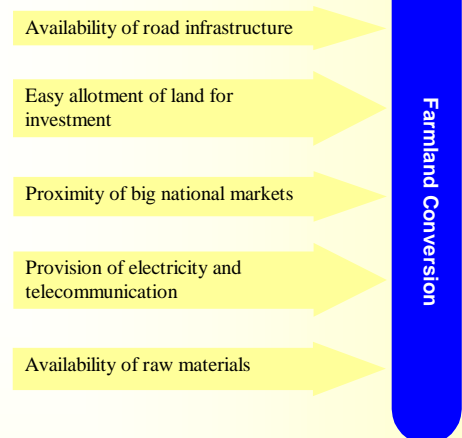
Master's Thesis by Yohannes Regassa

Ethiopia has been vulnerable to repeated drought. Food self-sufficiency remain the major national agenda. In order to innovatively close the food deficit gap reported over the years, improving agricultural efficiency and productivity is one of the important measures among others that need to be pursued.

Negative Consequences of Prime-Farm Land Conversion
Nevertheless, land conversion to non-agricultural purposes are occurring along highways affecting prime-farmlands. The research finding indicates that economic situation of farming households affected by land conversion in the study area has significantly deteriorated compared to situation. the before conversion. The average land holding size of households has significantly declined. Limited livelihood diversification opportunities are exacerbating the situation.

Underlying Causes of Inappropriate Land Use
The absence of land use plans that optimize between societal interest, national economy and the environment constitute the major cause of the problem.

Driving Forces of Land Conversion
Land use changes occurring along highways are driven by infrastructure, communication and marketing facilities.



Land being converted to non-agricultural purposes near the highway

Number of cases	Affected Households		DF	Sig. at 95% confiden
	conversion in Birr	conversi on in Birr		
45	8485.84 (6152.63)	6382.49 (4321.26)	44	1.30%

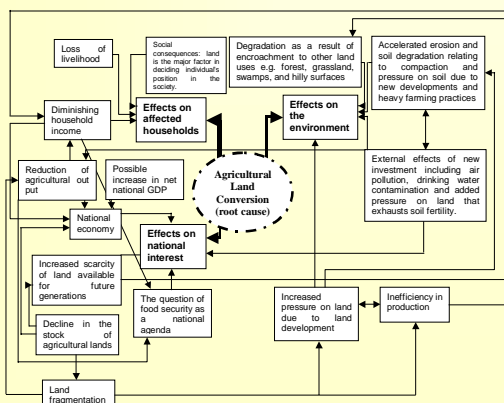
Statistical significance test for household economic situation

Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Hectar equivalent of maintained land size - past land holding size in hectar	-0.75	0.90	0.13	-1.02	-0.48	-5.60	44	1.3236E-08

Statistical significance test for household land holding size change

Further Effects of Land Conversion

In addition to its effect on household economy, the effect of land conversion on the environment and the national interest of the country are also important aspects.



Relationship figure on the effects of land conversion

Conclusions and Recommendations

Opportunities to Improve the Current Situation:

- **Development of comprehensive regional land use plan**
 - Needs huge investment and can not be done by the economy of developing countries like Ethiopia. There is a need to prioritise hotspots and prepare regional plans in step-wise approach.
 - Investigation of natural endowment of the area to be used as an input in the land use planning process
 - Participation of to be affected households
 - Provision of adequate infrastructures and communication facilities
 - Backing up land use planning procedure and implementation with legislation
- **Agricultural land reserve**
- **Land banking**

Sustainable Livelihood for Affected Households

Support in creation of alternative livelihood for rural household subject to expropriation should be part of the overall program.