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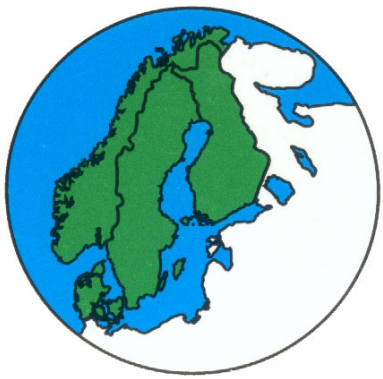

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ABSTRACTS

Carbon based policy instruments versus agricultural commodity market in stopping tropical deforestation

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We analyze in this study how the carbon based policy instruments and market for two agricultural commodities, viz. soy and oil palm affect the conversion of tropical forestland to agriculture. To formally establish the link between tropical forest clearing and agricultural product market, we first analyze the role of carbon market options available through REDD arrangements in a landholder's supply of land to agricultural through forest clearing. Then we analyze how the demand of forest-cleared land reacts to agricultural commodity price changes and to income and carbon tax levied on agribusiness. Finally, we determine the market equilibrium price and quantity of forest-cleared land that is used to produce agricultural products, and show how the equilibrium reacts to the changes in carbon and agricultural commodity prices and to carbon and income taxes levied on the agri-business. The study contains two major parts. In the first part, we analytically introduce the supply and demand sides. The supply side is illustrated with a two-period utility maximization model in which a community, i.e. the landholder maximizes its utility from consumptions and amenity values of standing forest. The total consumption in two periods is formulated such that it does not exceed the forestland value in the current period and an external non-forest asset. On the other hand, the agribusiness company, which represents the demand side of the analysis, is assumed to follow a Cobb-Douglus production technology to produce its output, i.e. an agricultural product using the purchased land, labor and other inputs. Its profit maximization problem incorporates the cost of transporting final product to the market from the production site, and an income and a carbon tax imposed on the company. In the second part, we do the analysis numerically by illustrating the models with two cases, one for oil palm plantation in Selangor province, Malaysia, and the other for soy plantation in Chaco forest area in Paraguay. The results show that with the increase in the price of fresh oil palm fruit bunch and soy, the market equilibrium for land shifts upward and to the right increasing both the land price and

quantity of land needed, which implies more forest clearing. However, with the increase in the current carbon price, exactly opposite shift in the market equilibrium occurs, which is because of the land supply curve's shifting leftward. The similar shifting in both the land supply and the market equilibrium is observed when the agri-business firm is levied with higher income and carbon tax than the forestry, and when the transportation cost is higher. These imply that paying for forest carbon to the community and levying comparatively higher tax on the income and for the carbon emission of the agri-business company – that uses forest cleared land as input – do discourage deforestation. In addition, the higher the distance of agricultural frontier of forest from the market, the less is the deforestation.

Corporate social responsibility, forestry and societal change – a developing country perspective

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This paper investigates the mechanisms through which corporate social responsibility (CSR) in the forestry sector may contribute to broader societal changes in a developing country setting. The aim is to provide for improved understanding of the conditions under which CSR may or may not contribute to societal changes. On the basis of a review of the CSR literature focusing on the natural resource related industries in developing countries, it is argued that many CSR theories make implicit assumptions regarding the nature of the State and power relations between groups in society that may be questionable. In particular, two assumptions are identified. First it is often assumed that the State in which companies practise CSR seeks to maximise the welfare of society at large. Second, it is also assumed that stakeholders can reach agreement through deliberative processes. With point of departure in the case of the Ghanaian logging industry, the general adequacy of these two assumptions are discussed and challenged from the perspective of the forestry sector in developing countries.

Keywords: corporate social responsibility, societal change, logging industry, Ghana.

Improving the conservation status of the Udzungwa Mountains? The effect of Joint Forest Management on bushmeat hunting in the Kilombero Nature Reserve, Tanzania

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This study examines the effect of Joint Forest Management (JFM) in a component of the Kilombero Nature Reserve recently gazetted to improve the conservation status of high biodiversity forests in the Udzungwa Mountains of the Eastern Afromontane biodiversity hotspot. The evaluation is based on a temporal comparison spanning seven years of JFM and establishment of a TANAPA ranger station using bushmeat hunting as an indicator. Results reveal that number of active hunters had declined, primarily due to TANAPA's patrolling. But hunting effort had been displaced from hunting with riffles in the grassland to hunting with traps and dogs in the forests increasing the threat to endemic species and leading to decline of relative densities of targeted species on village adjacent transects. Hunters perceived few benefits from JFM that were largely unused, inaccessible and communal in nature. Suspicions of embezzlement of JFM funds and high village development contributions were important drivers of continuing hunting. Dissatisfied with JFM, most hunters actually preferred that TANAPA managed the forest. Considerable attention to correcting these problems is required before this model of JFM should be scaled up and implemented in remaining villages surrounding the Kilombero Nature Reserve.

Keywords: Joint Forest Management, Bushmeat Hunting, Compliance, Displacement, Governance, Udzungwa Mountains, Tanzania.

Livelihood strategies and poverty in rural Nepal

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Knowing types of poor, their approximate number and asset characteristics, and contextual factors associated with wealth help improve identification of suitable poverty intervention strategies. Monetary measures (i.e. income and consumption) do not fully capture these multiple aspects - primarily because they are stochastic by nature (in particular income) and because households may pursue highly different income strategies not well captured by income groups. This paper present a non-monetary method to poverty analyses, by classifying households into livelihood strategy groups as opposed to e.g. income groups. Correct identification of livelihood groups help improve our understanding of (i) which livelihood options are poverty reducing and which are not, and (ii) the outreach of likely poverty intervention strategies. Household level activity variables and application of latent class cluster analysis are used to identify major rural livelihood strategy groups. Determinants for livelihood choice are analysed using multinomial logit regression. The results are based on a one-year survey of 836 rural households from four study locations with varying market access. The locations are distributed across the three main physiographic zones in Nepal. The survey included detailed information on household demographics, income and assets. Identification of livelihood groups, their expected wealth status, and asset and access constraints that limit economic advance are used to suggest appropriate targets of intervention.