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Competitive Land Rents: The Bane of Forest Conservation in Edo State, Nigeria

¹C. Kalu and ²K.O. Ilavbarhe

¹Department of Forestry and Wildlife, Faculty of Agriculture,
University of Benin, Nigeria

²Department of Agric Economics and Extension Services,
Faculty of Agriculture, University of Benin, Nigeria

Abstract: Competitive land rents are necessitated by the adoption of perfect competition elements in allocation of forest lands. Thus, forest lands are exposed to other land uses which are adverse to conservation and the maintenance of permanent vegetation cover in Edo state forest estates. The resultant effects are depletion of the forest land area which at the inception of forest reservation was 25% of the total land area of the state. Therefore, attention of forest managers and policy makers should be directed to adoption of competitive land rents in some areas and in other areas a strict observation of forest policy, law and regulation in order achieve the balance in the system.

Key words: Competitive rents, forest allocation, value, price, conservation

INTRODUCTION

Stake holders of forest land have always demonstrated an ability to develop competitive enterprises that provide employment in ecological services (Sarre *et al.*, 2010). This is in the areas of harvesting of timber and non-timber forest products and the value addition. The land covered by vegetation has the possibility to be used for various purposes. This necessitates the competition for forest land to be used for forest conservation as well as other human endeavours. The ownership of forest and its land is the source of many problems which results in conflicts in Nigeria as well as most West African states (Sarre *et al.*, 2010).

Once the timber resources are clear felled, the land is scrambled for, for various uses. This ensures payment of competitive land rents. On the other hand, forest land is competed for to be used to meet the desires for various human endeavours as well as economic system. Most times economists oppose maximum sustained yield management of forest resources and advocate the use of forest land for alternative economic ventures (Samuelson, 1995).

Most importantly, economic and social reasons have always being the driving force. However, forest reservation exists which suppose to restrict new entrants to use forest land, in practice, new entrants in the use of forest land is somewhat often granted opportunity to use the land. This accounts for competitive land rents paid for such a resource. In Edo state, forest estates covered 572,373 ha at the inception of forest reservation. This acreage has declined to 133,234 ha in 2006 as a result of competition for forest especially for agricultural production (Azeke, 2002). Competitive land rents affect the felling cycles of forest resources which stood at 50, 5 and 3 years in 1945, 1980 and 1990, respectively (Kalu and Ishkuemen, 2005).

Corresponding Author: C. Kalu, Department of Forestry and Wildlife, Faculty of Agriculture,
University of Benin, Nigeria

It indicates outright payment at an opportunity cost rate that is perfectly determined in freely competitive market. This is the cost of using a piece of land via payment of rent to the owners of forest land mostly government. The rate of land rental varies from low to high cost. For instance, if the forest land covers a small expanse of land and very close to the market to avoid heavy transportation cost, then the competitive land rate is high. On the other hand, if the land is extremely plentiful and far from market the rent will be very low (Klemperer, 1996).

This study focuses on forest land rents, allocation and/or dereservation, values of alternative land uses, benefits and challenges of competitive land rents and their effects on forest conservation.

Forest Land Rents

In competitive markets land rents are determined by evaluating use and best management plan. In fact, some lands are unsuitable for certain uses like agriculture, due to their dryness, wetness or sloppy nature. Whenever a general type of use is fixed for example forestry, land features might exclude some species of plant and animals or management practices. This is by assessing the suitability of certain species that is by recognizing the species that do well in certain ecozones and how they respond to given management practices. This helps the forest land owner to exclude impossible and impractical options so that economic consideration can deal with the remaining option to be chosen.

In market economy, the principle of present value maximization is the driving force that determines land use (Klemperer, 1996). Land tends to be used for the activity that generates the greatest net present value for future satisfaction to the owner. This helps to determine the land use as well as the usage. For example, if timber is the most valuable use, the best management regime is that which maximizes present value. This evaluation helps us to determine the number of tree per acre, when and what to thin, how much fertilizer to be applied and when to clear-cut or replant.

Forest Allocation and/or Dereservation

Forest allocation entails granting of temporary right or permanent ownership right to a forest resources exploiter or forest land developer. First and foremost, a prospective forest exploiter applies for concession in the forest estates; forest reserve and free areas. In the first instance, the concession involves granting of right to exploit well stock timber resources. Subsequently, forest concession entails granting of right to harvest the relics after series of harvesting / logging over the years. Some items paid for forest allocation are constant while others vary from one forest reserve to another (Table 1).

Permit for forest allocation entails the following procedures which are strictly adhered to in order to ensure effective and sustainable management of forest resources. Most importantly payment of fees precedes granting of license for allocation such as:

Retention fee	= N250.00-N300.00 per computed
Forestry trust fund	= N50,000.00
Development level	= N5,000.00
Annul renewal fee	= N50,000.00 per 2nd and 3rd year forest operation

Compartment is equivalent to 1 mile Square and it is a unit area of management of forest land management.

Table 1: Average cost of items for some forest Allocation: 2003-2005 (N'000)

Forest reserve	RF	SDL	FTF	RL	RF	DFR
Ehor BC 15/1	250	5	50	20	-	-
Ehor BC 16/1	250	5	50	20	50	20
Owan BC 12	250	5	50	30	50	20
Ekiadoloe	250	5	50	20	-	-
Owan BC 12	250	5	50	25	50	20
Iguobazuwa 6/1	250	5	50	17	50	20
Owan BC 12	250	5	50	14	-	20
Ora-Iuleha-Ozalla (N)	250	5	50	10	-	-
Ohosu BC 1	250	5	50	60	50	20
Ora-Iuleha-Ozalla (S)	250	5	50	12	50	20
Ehor BC 15/1	250	5	50	27	-	-
Ohosu BC2	250	5	50	20	50	20
Ehor 16/1	250	5	50	23	-	-
Okomu BC 10	250	5	50	31	50	20
Ebue BC 21/3	250	5	50	30	50	-
Ekenwan BC 24/2	250	5	50	36	-	-

Source: Edo State Ministry of Environment (2005). RF: Registration fee; SDL: Special development levy; FTF: Forestry trust fund; RL: Registration level; RF: Renewal fee; DFR: Donation to forest registration

The verification of the payment of the above fees is carried out before approval of forest land concession. This allocation is based on the forest area, or number of trees or the stock density of the resources.

The guidelines for forest allocation are identified as:

- Allocation of forest compartment to real operators of forests, which is elimination of the activities of intermediaries, middlemen
- Earmarked girth limit for tree felling/logging
- Operators to be considered for a license (allocation) are only those that can independently carry out forest operations with logging equipment

Value and Price of Forest Land

The value of any good is determined by the interaction of supply and demand as well as the costs spent in producing such good (Gwartney and Stroup, 1987) In fact the cost exists in the mind of the decision maker based on the expectation and the expected value of the forgone alternative. The cost of producing any good is the most important factor influencing the number of units produced for a given market. Land in most cases is regarded as free gift of nature; made available without expenditures of efforts and costs. Thus, cost does not really take part in determining value. The value of forest land is derived from the timber and non-timber resources. Timber falls into either of two classes of good depending upon whether it is a natural forest and a part of land or grown in a plantation at a cost as a produced good.

The valuation of forest land by Edo State Government does not depend on the purchase price or the cost of forest operations like log monitoring and fire protection. Most importantly value is the major consideration. It reflects the forest owner's investment (State Government) in the timber. The amount of money received as a payment for selling of forest land may either be good or bad investment, that is when the price is higher than economic value of computed cost of production. In practice, the computed cost of forest operations is not strictly adhered to in fixing value and price of forest land. In fact, the value of stumpage is measured by the difference between the price of final product and the costs incurred in producing the product. If it is sawn-wood, the costs include both direct and indirect expenses of logging, sawing, finishing, piling and a reasonable percentage for risk. Whatever remains is the value of the timber.

Forest lands are used for myriads of purposes whenever timber is clear felled or vegetation totally removed. The value of land depends largely on the end-use or the purpose it is to be used, the distance to the city centre and the accessibility to good road network.

In competitive market economy land is bought by the highest bidder (Klemperer, 1996). For instance, a logged over forest land of a given site quality is offered for sale by Forestry Department after dereservation. The land could be used for reforestation, agriculture, residential, recreational and industrial uses provided it is not isolated, sloppy or degrade soil type. There are various buyers who are interested in the land and they project different costs and revenues from the land. Considerations are given to many cash flows which enable a financially astute investor to calculate present values given bid prices per acre or given unit of measurement. These situations vary from one location to another.

Benefits and Challenges of Competitive Land Rents

In a record time, the planning of forest estates by Edo State Government and local authorities as well as stakeholders has come to depend increasingly on economic decisions making. Perhaps to a greater extent in other areas of government investment, Urban development has developed an elaborate planning methodology based on principles of cost-benefit analysis. In practice, methodology of marginal cost-benefit calculations have been used in the selection of individual projects and in the determination of aggregate investment levels. This methodology has been criticized frequently over the years mainly because it is a partial approach and appears to ignore the long run repercussions of long term investments and benefits for marketing for land and housing (Wheaton, 1977). The changes in rents and density that invariably follow investment have often raised the question whether benefit or costs are being created in addition to those occurring directly to high way users as well as users of forest estates as free riders.

In fact, competitive land rents have important positive effects on rural economics, economic development, wealth creation, nutrition and health of urban poor as well as social inclusion. It can also lead to some undesirable e outcomes such as deforestation, gross depletion of forest estates whenever forest policy objectives are not strictly adhered to. It encourages the government to set up ambitious structural policies which impoverishes the rural dwellers due to their inability to invest and turn thing around (Losch, 2010). Available research indicates that competitive land rents can be a profitable undertaking especially in the products that are in high demand or have a comparative advantage over rural production. This include land use plan and production of non-timber forest products (Moustier and Danso, 2006). This leaves no doubts in one mind that the situations of competitive land rents are different and unique in many aspects. The unique characteristics of land is that it has no cost of production and it is in existence already, no cost of creating it is involved (Slanlake and Grant, 1999).

Competitive land rents do generate net incomes that in most cases are equivalent to or better than minimum government's paid minimum wage. This is made possible by the prospective owner trying to make maximum use of land to realize the optimum economic benefits. In most cases where by law barriers is removed and policy is then adjusted in favour of unregulated economies, changing of land ownership right proved to be highly dynamic. This includes selling of dereserved forest estates to one individual or group or using the piece of land for various purposes other than forest conservation. Commonly amongst these are construction of residential structures, social overhead and establishment of mono-cultural agricultural plantations.

Land Supply and Forest Conservation

The term land is used to describe all those natural resource over which people have the power of disposal and which this is true of the total yield an income (Slanlake and Grant, 1999). It includes one used for farming, building, forests, minerals deposit, fisheries, water bodies like streams, rivers and so on (FORMECU, 1999).

Economics have always emphasized that the supply of land is strictly limited. This accounts for struggling over a piece of land for various purposes which creates lucrative business for land speculators and touts in the society. Therefore, various uses of forest land are contending with one another depending on economic benefits and other factors considered based on what the laws and policy provisions can permit.

The total supply of land to mankind in the world is synonymous to the surface area available to man. This has the possibilities to be used for various purposes whether at present or in future. Reclamation work has tended to increase the supply in some areas as well as creating future use of an area that was originally impossible to be used for any purposes outside irrigation and fisheries related enterprises. This is to offset some disruptive phenomena like erosion, flooding situation and land slide.

There is no strict limitation in the supply of land where supply of land for particular uses for growing arable crops can be increased by growing less of forest trees or conservation of forest estates. In the same vein the supply of building land can be increased at the expense of farmland or forest plantation establishment. The use of land can therefore be changed. No matter how high the price may rise for sites fronting the high street or easily accessible forest land near the city centre, the supply cannot be increased. This particular feature of land has important economic implications which needed to be considered.

In recent years, great awareness has been created in the limited supply of many natural resources. This is most obviously true forest estates in Edo State which is in constant decline due to continual encroachment of forest land. A rapidly rising world population together with constant demands for higher standard of living has led more pressure on available forest land. On the other hand a set of observations emerges due to growing awareness which multiply the problem of competitive land rents. The most pressing immediate requirement is for an implementation of forest policy to ensure conservation of natural resources (Kalu and Izekor, 2006). Every effort must be made to get a greater value of output per unit of those deplorable resources such as forest products and more attention must be paid to scheme for recovery of such materials for future use. This involves recycling of forest products or reclamation of degraded forest land.

In fact, whenever such resources are abundant and cheap there is little financial incentive to embark upon relatively costly projects of research and recovery. When forests and minerals become more scare and more profitable they become more attractive to profit-seeking enterprises. It is doubtful however, if conservation can be left entirely to market forces and governments. It is of essence that private individuals should be encouraged to be increasingly involved in the matter.

CONCLUSION

Edo State is endowed with natural resources such as abundant forest, land, water and wildlife resources (FORMECU, 1999). These resources are used in various forms to provide numerous goods and services. The demand has been on the increase continually in order to meet human needs, urbanisation, industrialisation as well as meeting social-economic over heads (Kalu and Adeyoju, 2008; FAO, 1997; Simulu, 1977). This accounts for the competitive land rents for various economic need based on various purposes. However, it is a response

to price rise with a policy aimed at boosting dereservation of most of the forest lands due to continual change in land use.

There are conditions set out for forest land allocation in the state. On numerous occasions forest lands are distributed unfairly because they are often grabbed by the influential group in the society.

Therefore, for forest land conservation to be achieved there should be need for close coordination of forest land allocation and sustainable forest conservation. This is to checkmate the narrow forest policy implementation directed at the specific purpose at the expense of other views which affect the general angle of the society like forest conservation.

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