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LAND TAXES — PREREQUISITES AND OBSTACLES: BOLIVIA¹

BY GERALD W. SAZAMA*

DEVELOPMENT economists widely agree that agricultural land taxes have powerful potential to induce economic growth, yet public officials frequently lack the mechanisms to establish the tax at all or to make it effective. For example, in Latin America only 13 of the 21 nations have a general agricultural land tax on the books, and only three or four of these get more than 2 percent of government revenue from the tax.²

Because Bolivia's land tax problems seem to be shared by many countries and because it has recently been making some interesting advances in this field, it provides an excellent case study of the institutional problems facing a country which wishes to enact a new land tax or improve its existing one.

Although the reader will quickly learn that the author is favorably disposed to agricultural land taxation, this paper does not try to justify such a tax. That is the work for other studies and other authors.³ Rather, the objective is to look for the prerequisites necessary for the enactment of an effective

land tax (Section I), and to consider important issues that arise and must be resolved before a land tax can be put into action (Section II). After an examination of the Bolivian experience an attempt will be made to draw up some general principles on the institutional prerequisites and structure of an agricultural land tax (Section III).

Bolivia is mostly on a high plateau in the Andes mountains; what remains is a tropical lowland region fronting the Amazon River Valley. The plateau is a region of traditional farming; the lowlands contain the new colonization areas and commercial plantation type farming. Bolivia is a very poor country; it had a 1968 per capita income of \$203, the second lowest in Latin America and among the lowest in the world. While 64 percent of the population is rural, agriculture generated only 24 percent of gross domestic product. Rate of literacy is only 35 percent, and a very high percentage of the population used only Indian languages.⁴

In 1952 Bolivia had a thorough indigenous land reform. Many peasants took over the land and enforced their own redistribution of property. The revolution of 1952 caused a rapid change in the social structure of society. Many of the landed oligarchy in the traditional areas lost their property. The tin mines were nationalized and a substantial part of the mine owners lost their power. Although these changes will probably have important long-range effects, limitations of economic resources and other forces have resulted in a substantial slowing of the

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¹Based on Analisis Económico del proyecto de impuesto único para el sector agrícola, a report by the author written for the Government of Bolivia and the United States Agency for International Development Mission in Bolivia, August, 1968. Roberto Gumucio of the University of Wisconsin Land Tenure Center in Bolivia provided invaluable information and ideas on Bolivian land taxes.

²The number of countries with a land tax is from an internal report of the fiscal affairs division of the Panamerican Union, Washington, D.C. Figures on property tax revenue as a percent of total are from a survey by the author of national, international and academic documents. The four countries are Chile, Uruguay, Costa Rica and Colombia.

³See for example: "Land Taxation and Land Reform," by Gerald W. Sazama and L. Harlan Davis, Aug. 1969 (ditto copy); Haskell P. Wald, *Taxation of Agricultural Land in Underdeveloped Economies*, Harvard Press, Cambridge, Mass., 1959; and Walter W. Heller, "The Use

of Agricultural Taxation for Incentive Purposes" pp. 245-269, in *Agricultural Taxation and Economic Development*, Haskell Wald, Ed., Harvard Press, Cambridge, Mass., 1954.

⁴*Statistics from Economic and Program Statistics* (United States Agency for International Development Mission to Bolivia, March 1968); Cornelius Zondag, *The Bolivian Economy, 1952-1965* (New York; Praeger, 1966); and *Notas sobre la economía y el desarrollo de América Latina* (United Nations Economic Commission for Latin America; Santiago, Chile, April 1969).

process of change in recent years. In spite of this, many of the original results still remain.

Since 1961, Bolivia has been considering the enactment of a land tax.⁵ The prospects ebb and flow and the tax still has not been enacted. Nevertheless, an excellent draft of the law has been formulated. A careful look at this experience can provide new insights into the requirements for effective land taxation.

I. Primary Prerequisites

Before going into a detailed examination of issues involved in formulating a land tax, it will be worthwhile to examine some of the prerequisites for such a tax; i.e., what are the minimum necessary conditions that must be achieved before it is even possible to consider enactment.

An agricultural land tax requires an appropriate composition of political power, a complete inventory of the land, and a certain minimum degree of administrative capacity. The revolution went a long way toward satisfying the first two.

Political Requirements

Enactment and enforcement of a tax law is the end result of a political process. In most Latin American countries there is a politically powerful agricultural elite, which simply refuses to tax itself. The revolution virtually eliminated this oligarchy in Bolivia. Political power of the agricultural sector is now largely in the hands of campesinos (small farmers) and owners of the modern plantation type farms.

Agriculturalists themselves generally favor the tax.⁶ Random interviews made by the author with campesinos and leaders of the

⁵The first specific land tax proposal was apparently put forward by Jorge Jauregui Moya in a typewritten report to the Director General of Revenue, Ministry of the Treasury, January 10, 1961. This report was then substantially elaborated and developed in *Impuesto unificado—El sector agropecuario* (mimeo 1967), preliminary report of an interministerial commission on the tax, largely written under the direction of Roberto Gumucio of the University of Wisconsin Land Tenure Center in Bolivia.

⁶This was especially true during the Barrientos administration. Now that General Ovando has assumed power, there may have been a realignment of political forces.

campesino syndicates indicate that the agriculturalists realize that the old large landowners had to pay taxes, and they correctly believe that taxes paid on their property will legally affirm their ownership, certified now by free titles which the government granted them. The larger owners appear to be agreeable mostly on the grounds of obtaining tax simplification which will make their businesses easier to operate and may result in a reduction and more equitable distribution of overall burden.

In addition to these sentiments within agriculture, there are important pressures from outside the sector, first because of the long-term deficits in the budget, but more importantly because many people outside the sector feel that agriculture is not paying its fair share. It is very difficult to define just exactly what is the "fair share" of taxes for a particular sector. This could be related to relative income distribution and degree of poverty in the various sectors, to some crude benefit principle relating tax obligations to proportion of expenditures benefiting the sectors, or according to some development principle which sees as a necessary part of the growth process the transfer of capital from agriculture to other sectors. No matter exactly what is the reason, leaders in Bolivian commerce and industry do feel that agriculture is not paying its fair share. The following figures can apparently explain some of this feeling. The agrarian sector generated 23.7% of 1967 gross domestic product, and received 16% of 1967 government expenditures, yet it paid only 1.8% of 1967 internal government revenue. Tax revenue from agriculture was only 0.6% of 1967 agricultural output, but internal revenue from all other sectors was 4.9% of gross domestic product of these sectors.

A Cadastral Survey

The second major block to the enactment of a land tax is a good cadastral survey. A fiscal cadaster has two components: a land registry and an assignment of value to each property.

A land registry is virtually in existence for about half of the property owners in the nation. The titling program of the Bolivian Agrarian Reform Service is providing

precise information on property boundaries, identity of owners, classes of property and types of surface.

The second component of a fiscal cadaster, the assignment of a value to each property, is unfortunately a long way off for Bolivia. At present there is no effective land market by which to determine market value, nor are there soils studies of sufficient quality and detail so as to be able to set up proxy values for each property. Even if these existed, the responsibility for carrying out assessments would seriously strain Bolivia's limited administrative resources. Instead of assigning market values to each property, the projected tax jumps over this barrier by being ingeniously designed to charge a fixed peso assessment per hectare of surface.

It is interesting to note that this registry will really be a spin-off from the politically very popular titling process. The register will be useful for recording transfer of titles, for securing agricultural credit, and for planning as well as for calculation of tax bills. Thus, apparently this prerequisite will be satisfied as the secondary effect of other actions rather than by a direct frontal attack. The experience of Chile is very similar. Chile obtained the start of its fiscal cadaster almost as an afterthought for an additional use of extensive data gathered for planning reconstruction after a severe earthquake.

Administrative Capacity

The very important remaining barrier is the administrative challenge to the Bolivian government. After the cadastral survey has been accomplished, a land tax is not too much more difficult to administer than a sales tax or tariffs. It is substantially easier to administer than remaining other possibilities of taxation. The problem of administration will be discussed in greater detail in part E of the next section.

Bolivia is well along the way to satisfying the three primary prerequisites of a land tax. Yet, there are many more issues to be resolved and decisions to be made before Bolivia has a working land tax. A closer examination of these additional factors is the objective of the next section.

II. *Important Issues*

Important issues that have to be resolved in formulating a land tax are: tax simplification, the tax structure — base and rate, revenue yield and appropriate uses of this revenue, measurements of the ability to pay the tax, and feasibility of administering the tax. Each of these will be discussed in some detail.

A. Tax Simplification

Bolivia has over seventy taxes covering the agricultural sector, yet these bring in less than 2 percent of government revenue. Most are nuisance taxes, such as tolls on value of agricultural products in order to pass through a province. Because of the confusing array of laws, agriculturalists may fall prey to nonexistent taxes or taxes whose yield never gets into the government treasury.

In spite of the fact that early drafts of the land tax law removed virtually all of these taxes in favor of a "single tax", a later draft removes only 41 of them. The yield of many of the present taxes is earmarked for local governments, the university, roads, etc., and unscrambling all of this earmarking appears to have presented too severe a political and administrative problem. This failure of tax simplification is unfortunate, for it dampens the appeal of a "single tax" and creates further confusion on what taxes are removed or remain in force.

B. Tax Structure

Description

The proposed Bolivian land tax is an ingenious specie of a surface tax. Instead of a uniform flat rate per hectare, these rates are differentiated (1) according to three surface size classes, (2) whether land is in pasture or crops, and (3) according to eleven broad soil types.

The tax rate structure was originally conceived of as a proxy for the income tax because all sectors except agriculture pay such a tax, and because it is impossible to level an income tax on Bolivian agriculture at its current state of development. Typical average annual income per hectare for a basic soil type was calculated from agricultural extension studies. The tax rate on incomes for lower level government workers was applied to this average annual in-

come and the peso per hectare tax rate for small farmers resulted. For example, if the average annual income on a hectare of crop land was 2,000 pesos and the income tax rate was 2 percent, the per hectare rate would be 40 pesos. If a farmer owned 2.5 hectares of crop land in the basic subzone his tax bill would be 100 pesos. The peso rate per hectare for medium farms was set equal to the income tax rate of an urban professional times average annual income per hectare, and for large farms the rate of industrial enterprises was used. In later drafts of the law, the level of the rates and the degree of progression were lowered to a 2, 4, 6 basis for the three size classes.

Income studies were made for both crop land and pasture land in the basic subzone, and the peso per hectare rates for these two types of land were differentiated accordingly.

The last step in formulating the rate structure was relating rates among subzone or soil types. In the titling process each property was classified according to eleven broad and easily identifiable soil types, and these provide a basis for at least crudely distinguishing income earning potential of each property. The commission which drafted the Agrarian Reform Law in 1953 estimated how many hectares would be needed in each subzone to provide a family with the minimum acceptable standard of living. Since the acceptable small farm size was set at 10 hectares in the Northern Altiplano and 35 in the Southern Altiplano, the soil in the north was assumed to be 3.5 times more productive, and, therefore, the peso per hectare rate was 3.5 times higher in the north than in the south. Unfortunately, the agrarian reform law was written with the scanty data then available and under time pressure. Nevertheless, in 1968 this was still the best information available and since these size relations were incorporated into the land reform law, they have the additional advantage of being politically acceptable.

Evaluation

The basic economic effects of the tax are generally sound. Since the tax base does not include improvements, it does not discourage complementary investment. Since it has a fixed rate on land area, it does not dis-

courage work effort as a pure income tax or sales tax might. In fact, this fixed rate probably stimulates small positive income effects; i.e., harder work to recuperate lost income.

The progressive rate structure does bring out some interesting conflicts between the goals of equity and economic efficiency. Progressive rates are appropriate if the tax is to be levied according to ability to pay as measured by income. However, the tax is essentially a land tax, and if such a tax is progressive by farm size it discourages large farms. As a result of the revolution, Bolivia's problem is just the opposite; its farm sizes are too small. Still, any negative effect of the progressive rates is moderated by their low level and by applying their brackets marginally; i.e., the low rate is to be paid on all property owned up to the small size limit, the middle rate on property between the small and medium limits, and the large rate on all property above the medium limit.

A third consideration is the neutrality of the various subzone rates. Other things being equal, resources will migrate from relatively highly taxed areas to relatively lowly taxed ones. Although the differences among subzone rates is at least conceptually related to differences in productivity, there could be some unneutrality due to the fact that the rate interrelationships were based on faulty data. However, this should not be a serious worry, again because the projected rates are low, and in addition the proposed law contains a provision to use part of the proceeds for improved measurement of the base.

Another problem with a surface tax is that the base of the tax is limited by the extent of agricultural land. With fixed rates, revenue could only grow slowly as more land is brought into production. There is no mechanism to reflect such economic changes as growth in the market, changes in productivity, etc. Value changes have to be dealt with exclusively by changes in the rate structure and since these take legislation, the revenue elasticity of the tax will be very low. This problem could be corrected by having the rates grow *pari passu* with a moving average of the value of agriculture output.

Finally, in the evaluation of the rate structure a tax that is progressive by farm size cannot be equitably levied without special arrangements for common pasture lands, or lands farmed under an Indian communal system. The proposed law deals with this problem reasonably well by taxing these lands at the small property rate and dividing the total bill on a per head basis, though for common pasture land it might be better divided according to ownership of livestock.

C. Revenue Yield and Its Uses

Another topic to consider in formulating the tax is its potential revenue and appropriate uses of that revenue.

Since it is administratively impossible to levy a tax on untitled property, revenue yield depends on the extent of completion of the titling process. As of 1969 better than half of the properties had been titled. Titling is scheduled for completion in 1973. With the proposed rates, and assuming 100 percent collection efficiency, the tax would then be expected to yield \$20.5 million. This amount would be a substantial revenue source capable of generating 18 percent of projected total revenue and 35 percent of projected internal revenue. If the tax were decreed before completion of titling, it, of course, would yield proportionately less revenue, and yield would grow as the titling process proceeds.

As mentioned, the proposed rates were decided upon as a result of a combination of applying urban income tax rates to average income per hectare of agricultural land, and a series of political agreements. However, the rates were set with only partial revenue yield estimates available. Now that more complete revenue estimates are available, the rate structure may be again revised further downward, or the tax may be levied on just large and medium farms. This latter change would result in a tax which would yield about 35 percent of the above estimated revenue.

The present draft of the law earmarks all revenue. After payment of the costs of administration, about 15 percent of the yield is designated for a fixed annual payment to institutions which received earmarked funds under laws to be removed by a tax simpli-

fication program; an additional 5 percent is slated for research to provide the basis to modify the rate structure every five years; and finally the remaining funds are designated for the agricultural sector. The portion from small farms is to be used for community development projects in the countryside; the portion from medium and large farms for new agricultural projects selected in accordance with priorities of the agricultural development plan.

The primary determinants of the allocation formula were probably political. The law does not specify the percentage for collection cost, but the standard payment to the Revenue Service is a very high 15 percent. Payment of previously earmarked funds to institutions obtaining revenue under laws removed is apparently an attempt to placate them. The revenue earmarked for the agricultural sector is a definite attempt to get taxpayer acceptance. The campesinos believe, and usually correctly so, that they pay taxes only to improve conditions in the capital, La Paz. The government does nothing obvious for them, it just collects taxes. To overcome this problem, and for reasons of distributive justice, the revenue from small farmers is earmarked for small and conspicuous development projects in the different communities.

A major problem facing the tax is that the Bolivians really have given little thought on how to spend it. It is true that some type or degree of earmarking may be necessary in order to get higher compliance by providing visible results of the tax, and in order to meet political and administrative requirements necessary for the acceptance of the tax. Nevertheless, I believe that the degree of earmarking should be the minimum necessary to achieve these objectives, and at the same time any earmarking introduced should be consistent with Bolivia's overall planning objectives.

As the Japanese experience has shown, revenue of this magnitude could have a dramatic impact on economic development in Bolivia.⁷ A tax on agriculture which can

⁷See for example "The Role of Agricultural Land Taxes in Japanese Development" article #37 in *Readings on Taxation in Developing Countries* edited by R. Bird and O. Oldman, 1967, The Johns Hopkins Press, Baltimore, Md.

yield 35 percent of internal government revenue opens up some very important intersectorial allocation questions. Can agriculture use this most efficiently or could the capital be used better in other sectors? If agriculture, how can it be used best within agriculture? These extremely important planning questions have not yet been faced. Without a well thought-out general plan for the use of the revenue, much of it could be dissipated. If the projected level of revenue cannot be absorbed in an intelligent way, it would be better to reduce the rates to a point where the resulting revenue could be used beneficially for the country.

The possibility of developing a local government supplement to the land tax was examined. Theoretically this supplement would allow local initiative to develop projects according to their interest. In the Bolivian context this presently appears to be unfeasible, since only a few areas have sufficiently well-organized local government. In many areas, the surtax could be a convenient device to line local officials' pockets. In other areas funds would be used for urban services in the provincial or departmental capital and little would go for the direct benefit of those in the countryside.⁸ These points bring up the interesting question of what institutional format will be used to disperse the funds now earmarked for local development projects. Perhaps the tax could be used as a mechanism to stimulate the needed local institutions.

D. Ability to Pay

A tax which can increase government internal revenue by 35 percent could be very burdensome, especially in a country with such low per capita income. Even though agriculture pays a much smaller percent of its output in taxes, per capita income in the agricultural sector is only \$59, while in the non-agricultural sectors it is \$375.

Nevertheless, investigations indicate that the proposed tax would not be overly burdensome even for the smallest farmer.

If one capitalizes the proxy 2 percent

⁸For the Colombian experience in this, see L. Harlan Davis, *Economics of the Property Tax in Rural Areas of Colombia*, Research Report No. 25 (Madison: Land Tenure Center, University of Wisconsin, September, 1967).

income tax rate at a 20 percent rate of interest (the bank rate in Bolivia), this tax amounts to only a 0.4 percent property tax. A rate of 4 pesos per thousand pesos of market value of property does not seem excessive, but more evidence is desirable.

Several government officials and researchers who had had extensive experience in the countryside were interviewed. The consensus was that virtually all campesinos have cash income at sometime during the year and thus have sufficient cash available to pay the tax. The proposed rates are quite low, and, in fact, the tax bills in colonization zones after tax simplification may even be less than the total taxes paid under the present structure.

These conclusions were supported by the studies that could be found which contained information on agricultural income. A study by an agricultural economist from Cornell comparing four villages in the traditional areas with four in colonized areas found that about 50 percent of families earned income from day labor averaging \$117 annually and, in addition, some 20 percent of the families had commercial income from small shops, etc., averaging \$217, and so opportunities to earn cash income appear to be readily available.⁹

Perhaps the most interesting evidence comes from an intensive socio-economic study of 35 haciendas made by the University of Wisconsin Land Tenure Center. The haciendas are scattered throughout the densely populated parts of the country; none is included from the newly settled areas. They were selected by trained social scientists with extensive experience in Bolivia, so as to be typical of their region. General information was gathered on all occupants, and then intensive interviews were made with a typical subset of the inhabitants.

Under the draft law one of the highest tax bills per hectare would be 18 pesos (about \$1.50)¹⁰; a man who owned the

⁹"A Social Economic Comparison of Eight Agricultural Communities in the Oriente and Altiplano," by Halso L. Wessel, report to Agency for International Development in Bolivia, June, 1966, under contract AID/12-1206.

¹⁰The 1968 exchange rate was 12 Bolivian pesos per one United States dollar.

maximum size small farm in any subzone would have a tax bill of 140 pesos. According to a sample of 378 interviews from the Wisconsin study, only 10.3 percent of the sample have a net cash income of less than 500 pesos; on the other hand 45 percent have over 3,000 pesos (see Table I). There may be a few medium farmers included in the sample, but virtually all are small farmers, with less than the maximum size holding.

Everyone in the sample had some cash income; only 17 of the 378 in the sample had a net cash income smaller than 250 pesos. Calculating the exact tax burden for these 17 showed that 10 of the 17 would have a tax burden of 5 percent or less of imputed family income, and only three had a tax burden greater than 20 percent, the highest being 32 percent.

In all these reports it is interesting to note the widespread availability of cash. Some have said that an important by-product of a land tax will be to introduce the campesino to a money economy. Apparently much of this has already been accomplished.

Finally, since the tax proposal removes a confusing array of taxes which easily open avenues for extortion, true tax simplification could well lower the actual burden for many.

E. Administrative Feasibility

A high stumbling block for any tax is the scarcity of administrative capacity needed to collect the tax. A principal advan-

tage of this tax is that it would be very easy to collect, since it requires only a few skilled personnel once all properties have been titled.

As mentioned in Section I, a property register can be easily obtained from the information gathered by the Agrarian Reform Service under its titling program. From this registry of property, tax bills on each property can be readily and automatically calculated. An IBM printout can give three copies of the tax bill, one for the central office and two for the tax collector. When the tax collector receives payment, one of the copies is the taxpayer's receipt, the other he returns with the payment to the office. This process is basically simple, accurate and honest. The only potential for corruption would be for the collector to overcharge, but this could be protected against by extensive public education.

However, one problem in the collection process is how efficiently to reach the large number of small taxpayers. Approximately 95 percent of the taxpayers are small farmers and therefore will have a bill of \$12 or less, yet they will be responsible for about 65 percent of the revenue. As a first step this will require 24 departmental officials and 102 provincial officers plus about 10 mobile collection teams who travel through the countryside by jeep.

Collection of the tax will require a massive publicity campaign in the countryside to make the campesinos aware of their tax obligations as well as the fact that if they

TABLE I
Distribution of Net Effective Cash Income
of Land Tenure Center Sample

Net Cash Income (Bolivian Pesos)	Percent of Sample
0 - 499	10.3
500 - 999	12.5
1,000 - 2,999	32.3
3,000 - 9,999	38.4
10,000 and over	6.5
TOTAL	100.0

Source: University of Wisconsin Land Tenure Center in Bolivia, "A Study of the Agrarian Structure in Bolivia," (unpublished report).

do not pay for five years their title will revert to the state. Radio is omnipresent, the rural syndicates have important political influence and are organized through most of the countryside. Many communities have rural teachers who could transmit the information.

The taxpayers will have to appear at the provincial offices, or at appointed locations with the mobile vehicles. They may pay the tax themselves or, more likely, make a local syndicate leader responsible for bringing their tax payments all at one time to an office, similar to the old land tax collected on a per head basis. These problems are not insurmountable, but they will be difficult.

In comparison, collection from the large and medium farmers will be very easy. There will be fewer than 10,000 of them and virtually all are aware of their legal rights and obligations. Newspapers, along with radio, will probably be sufficient to get information to these agriculturalists.

III. *General Lessons*

The Bolivian experience can perhaps indicate a few general lessons on the prerequisites and obstacles of agricultural land taxes.

There are three major prerequisites for agricultural land taxation.

1) *Appropriate political circumstances:* A primary barrier to a land tax is a politically powerful agricultural elite, an oligarchy which refuses to tax itself. Until this group either changes, as is the case in Venezuela, or is removed, as in Bolivia, or other sectors gain dominant influence, as in Chile, no effective land tax will be possible.

2) *Fiscal Cadaster:* Clearly defined ownership and some basis of differentiating tax burdens is necessary. Because of its usefulness for planning and legal purposes, a cadaster usable for taxation is frequently obtained as a spin-off from some other project rather than by direct efforts to obtain one for tax purposes alone. The minimum requirement for a land tax is a clear definition of ownership and property limits. As experience is gained and the level of development increases, this registry can evolve into a more sophisticated cadaster.

3) *Administration:* Successful administration of a tax requires not only the ability to collect the tax, but also the ability to spend its revenues intelligently. A low land tax is capable of generating substantial amounts of revenue which can have significant development impact in the agricultural sector as well as other sectors. If the projected level of revenue cannot be absorbed in an intelligent way, it would be better to reduce the yield to a point where the resulting revenue could be used beneficially for the country.

Since a surface tax is not complex, tax bills are easily calculated, easily understood, and they minimize the opportunities for corruption and evasion so available with most other taxes. Still an important complication in collecting such a tax is how to reach the many small farmers. This will have to be done by extensive publicity, many provincial offices, mobile vehicles, etc.

There are other general observations which are stimulated by investigations of the Bolivian land tax.

1) *Tax Simplification:* Removal of the multitude of small nuisance taxes on agriculture is necessary for assisting achievement of taxpayer acceptance for the new land tax, and for certainty and clarity of the tax system. However, simplification may be difficult to obtain because of the vested interest of those who received earmarked revenues from the previous taxes.

2) *Rate and Base Structure:* Design of a land tax can create a conflict between economic and equity criteria. Parallels with an income tax may call for a progressive tax by size of holding, but this rate structure will have some small disincentive effect on farm size. If the larger size farms are needed, this is an undesirable effect.

Revenue from land tax will have very low income elasticity unless special precautions are taken to adjust base or rates. This is especially difficult with a surface tax whose base is limited by the extension of agricultural land.

So that it does not harm allocation of complementary resources within agriculture, the rate structure will have to reflect true economic differences in the different classes:

of property, and the structure will have to be changed periodically so that it reflects changes in basic economic conditions.

Finally this discussion of the institutional problems of land taxes in Bolivia again indicates that land taxes cannot be imported. Rather, they must be the products of local ingenuity and be designed for local conditions.

3) Ability to Pay: A land tax can yield substantial revenue, and still remain well within the ability to pay from cash or total income of even smallest farmers. Because land accurately reflects income in the extensive agricultural sector of a developing society, a land tax is more more just than in a developed society.

4) Earmarking: The Bolivian experience reaffirms the dictum that the earlier the stage of political development, the more earmarking may be necessary to smooth the introduction of any tax. Nevertheless, earmarking formulas should not only be political, but also they should be consistent with the overall planning objectives of

the country. For maximum flexibility earmarking should be kept to the lowest level possible.

5) Local Supplements: Because of the low stage of development of local governments, use of local tax rate supplements can open opportunities for easy graft money for local political chieftains, or the proceeds may be used for the provincial capitals' benefits and not enough for the surrounding agricultural region. The supplement could be used to stimulate development of local governments, but this would have to be done carefully.

The potentialities for a successful introduction of a land tax are unfortunately ambiguous. Simple species of the land tax are very easy to administer and therefore, unlike other taxes, they can be successfully levied at a very early stage of economic development. Yet, they require a set of political circumstances and a clear registry of property that except for special conditions may not be available until higher stages of development are attained.