Essay on how theory fares in

Land reform in

L AND REFORMS are usually adopted for social and political reasons, but they do have economic implications. In particular, the way that rural land is controlled can affect its productivity — and that means the amount of food that is available for the hungry population or the quantity of agricultural commodities that can be exported to earn the foreign exchange necessary for development. Furthermore, if the state expropriates land, the confidence of investors in the security of other investments may be shaken also.

SOME ECONOMIC PRINCIPLES

If one observes a prosperous family farm it is difficult to pinpoint a single source of the prosperity. The family may receive the rent from inherited land that is particularly fertile and well located. The family may earn interest on a substantial accumulation of its own capital in such forms as buildings, machinery, draintiles, or irrigation ditches. The family may also profit by assuming the risk of borrowing capital to use on the farm.

The family may earn a substantial managerial salary by making shrewd decisions about new seeds, fertilizers, and pesticides. The family may earn wages for many hours of work by having several family members work long hours. Family members may earn high wages by working very intensely and directing their efforts toward productive farming, rather than devising ways to shirk productive work or supervising those who are trying to shirk, as is common in large establishments.

From an economic view, society will be better off if it can arrange to have such intense and well directed efforts as the prosperous family farm exemplifies. The conditions under which agriculture will be pursued so efficiently are, however, quite special, so it is worth identifying the prerequisites for efficiency. On the family farm the decisions are made and the work is done by the decision-making unit that enjoys the fruits of the labor. Thus the powerful force of self interest serves to keep all participants performing as they should.

Referring to the "family" as a single decision-making unit begs the question of how large the group can be. This depends not so much on family relationship as ordinarily defined as on the people involved and their culture and institutions. Some people pursue only their own interest even in a group of two, whereas others may pursue the group interest in a *kibbutz* of 100 people. Whatever the number in a particular case, beyond some size the individual ceases to act mainly in the interest of the group.¹

TRADITIONAL LAND REFORM

It is tempting to think of land reform as a device for obtaining the advantages of the family farm in a society that has somehow gone awry. Isn't that what "land to the tiller" means, anyway? The vision of the good and efficient society is particularly seductive when it is accompanied by statistics showing that 2% of the households own 60% of the land. To drive the point home, pictures of uncultivated acres will be juxtaposed with pictures of landless peasants huddled in misery.

The problem is certainly real and serious, but that does

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not mean that the suggested solution is appropriate. In order to know that, we must look not only at the problem and the aims of the reform, but also at what actually

happens when the reform is implemented.2

Yes, conventional patterns of landholding are sometimes both unjust and inefficient, but should a reform be adopted if it will reduce agricultural output and leave the average peasant worse off? Most people would reject the "reform" under those conditions, so it is worth examining what actually happens when land reforms are undertaken in the real world.

IN EL SALVADOR, Phase I of the reform consisted of expropriating large estates (exceeding 500 hectares) and using the land to establish co-operative farms.³ The farms were to pay interest and amortization on the debt, while the former landlords were compensated with long term bonds.

Obviously, compensation can be set above or below the actual market value of the land. Compensation will probably be less than market value in a typical expropriation and will usually be paid in government bonds, which will be partly repudiated by inflation.⁴

Assume for the moment, however, that the price to the buyer and compensation to the seller equal actual market

value. The recipient will be able to pay off the debt only if he can generate at least as much income from the farm as

could a farm owner of average ability.

The Phase I reform, under this criterion, appears unpromising inasmuch as the large holdings were transformed into cooperatives. Not only do large cooperatives always encounter problems in obtaining strong management and in keeping members from shirking, in the case of El Salvador it is not even clear whether current members of the cooperatives have ownership rights that can be sold.

Such uncertainties (to say nothing of those resulting from civil war and political turmoil) inhibit the long-term investments and careful stewardship that are crucial to agricultural productivity. It is not surprising that most Phase I cooperatives in El Salvador are failing. 5 Could any

economist have forecast success?

At first glance, "Phase III" of the land reform in El Salvador appears more promising. (Phase II, which would have expropriated large family farms, was abandoned.) The "land to the tiller" decree permitted tenants and share-croppers to apply for provisional titles to the land that they had been farming. The inherent inefficiencies of the collective farm were not an issue, but other harsh realities did intrude.

In the first place, the owners of many expropriated small farms were not the handful of hereditary landowners of large estates, but rather the upwardly mobile small farmers and merchants who saw the purchase of small

practice by WILLIAM S. PEIRCE

he REAL world!

farms as good investments. Such people are both comparatively numerous and extremely vigorous in defense of their property.6

The expropriation created uncertainty about property rights in general as well as land tenure in particular. Indeed, only about 50,000 of the estimated 117,000 farmers eligible to claim land under Phase III did so, and about one-third of those who filed claims did not end up with land because they were threatened or evicted or they moved away.

RADITIONAL land reforms are not identical in different countries, but the U.S. Agency for International Development and the World Bank have promoted an integrated package that includes land reform, agricultural finance, technical assistance, and provision of seeds, fertilizers, and pesticides.

Such a plan may sound attractive until one realizes that the result is to replace a market of competing middlemen with a handful of bureaucrats and a franchised monopolist. The results that Grace Goodell reported for the Philippines suggest that "land reform" was just an excuse for the corrupt sale of privileges to the politically favored.8 Perhaps Goodell's example is an extreme case, but it seems wise to assume that all governments include some corruptible people.

The fundamental problem with traditional land reform is that it defies the economic market, as well as the balance of political power. (Even the political problems have economic implications because resistance to the reforms, as occurred in El Salvador, leads to instability of tenure and insecurity of investment.)

If markets are functioning reasonably well one should expect land and other economic inputs to come under the control of the individuals who can make the best use of them. If one assumes that people are reasonably intelligent and effective at pursuing their own interests, then what role is left for government in determining land ownership?

It is traditional for economists to call upon government to improve the efficiency of the market, but this may necessitate some surprising recommendations.

- If, for example, small farmers are able to obtain mortgages only at outrageously high interest rates, the solution may be to change the laws to make it easier for mortgage lenders to foreclose and hence to attract more money into that market.
- If laws or customs (such as primogeniture) inhibit the sale of land to those who can use it best, or if tenure is so insecure that ownership becomes unnecessarily risky, then government has a role in correcting such imperfections.

FUNDAMENTAL LAND REFORM

If the government limits itself to reducing such minor imperfections, it will appear to be taking insufficient action; indeed, one should not expect much improvement from such steps. On the other hand, the traditional land reform as promoted by U.S. Agency for International Development does not get at the roots of the problem and causes serious difficulties of its own.

Taking land from one person (with or without some

NOTES -

- 1. This analysis is fully developed in Mancur Olson, The Logic of Collective Action (Cambridge, Massachusetts: Harvard University Press, 1965).
- For an attempt to identify the range of activities that can successfully be managed by government, see William S. Peirce, Bureaucratic Failure and Public Expenditure (New York: Academic Press, 1981).
- The land reform and its results are analyzed in U.S. Agency for International Development, Inspector General, Regional Inspector General for Audit (Latin America), "Agrarian Reform in El Salvador, A Report on its Status" (Washington, D.C.: Audit Report No. 1-519-84-2, January 13, 1984).
- The Korean experience suggests that land reform will be un-successful unless most of the land value is confiscated from the landlords, according to Hwan Sung Ban, Pal Yong Moon, and Dwight H. Perkins, Rural Development (Cambridge, Massachusetts: Harvard University Press for Council on East Asian Studies, 1980), "Studies in the Modernization of the Republic of Korea: 1945-75," Monograph No. 89.
- Audit Report, pp.8-24. See the Wall Street Journal, 21 February 1984, p.28.
- Audit Report, p.25
- Grace Goodell, "What Life after Land Reform?" Policy Review No. 24 (Spring 1983), pp.121-148.

payment) to give to another has to inflict some costs. If it did not, the individuals could have arranged the transaction on their own. The assumption that the forced transaction improves justice requires that the gains of the buyer exceed the costs borne by the seller. The transaction will almost certainly reduce output unless markets have been extremely ineffective in putting resources under the control of the most productive managers.

Even if opportunities for gains in efficiency are present, the likelihood that they can be achieved by an instrument as blunt as a law seems small. After all, the existence of vast acreage in the hands of one landowner may indicate either the great economic power of that landowner or the poor quality of the land. In the latter case, giving the property to a few hundred peasants is more likely to lead to bankruptcy, soil erosion, and poverty than to social justice and efficiency.

If the conventional type of land reform is too blunt and imperfect, are we to do nothing at all? Perhaps it is worthwhile to list the objectives and then to see whether there is an approach to them that is more promising than traditional land reform.

SECURITY: Whatever reforms are adopted should encourage the feeling of security of tenure for the landowner. Security of tenure is vital in inducing the landowner to improve the land. Insecurity, by contrast, encourages him to "mine out" the land by permitting erosion, decline of fertility and deterioration of improve-

The fragile jungle or mountain soils to which many of the less developed countries will have to resort require a particularly long time horizon if they are not to be ruined. A problem with traditional land reform is that expropriation is a powerful signal of the insecurity of land titles.

EFFICIENCY: It is particularly important in poor countries that land be managed by the most efficient

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Economic rent tax can be a boon managers in the most efficient way. Any reform should

◆ Continued from Page 7

help to speed the adjustment of land tenure arrangements to changing technology, prices, and other variables. It is inconceivable that traditional land reform could be sufficiently flexible over time and place to allow for the variety of farm sizes and employment relationships that are appropriate to the diverse conditions in even a small

While a family-sized farm remains the appropriate scale of operation for many situations, in other circumstances economies of scale, poor soil quality, or the requirements of particular crops may call for huge spreads with a large investment in equipment, structures, or improvements to

It is unlikely that the cooperative form of ownership would lead to the most efficient management of a large operation, but in any event the land reform should encourage efficiency, rather than predisposing to a particular form of organization or scale of output.

JUSTICE: From an economic view, as well as a moral one, the reform should facilitate rather than compel. Size of the holding is not a measure of the justice of the claim to the title nor are legislators and bureaucrats experts on agricultural techniques.

State monopolies are no more gentle than private ones. Individuals left to their own devices will eventually move toward efficient solutions; so if we can arrange matters in such a way that we are comfortable with the justice of the outcome, we are better off relying on the market rather than the government.

PRESSURE: Compulsion is also an inferior technique

SIMPLE BENEFITS

THE connection between rent and sales price of land is simple, but so important that it is worth spelling

Ordinarily, the market price of the land will be the present value of the net returns that prospective buyers think it will earn.

"Present value" means that the future returns must be discounted to allow for the interest rate. That is, if a person expects to receive \$110 one year from now and the interest rate is 10%, the present value of the payment is \$100. If he had the \$100 today, he could invest it at 10% and it would grow to \$110 a year from now.

Similarly, the present value of a payment of \$110 for which one must wait two years is \$90.91, because in two years' time it will grow to \$110.

More generally,

present value of a payment to be received t years in the future is the future value divided by (I + i)', where i is the interest rate.

A piece of land is usually expected to yield not one return but an infinite series.

If each return is the same, and the interest rate remains constant, then the market price of the parcel of land is the annual rent divided by the interest rate. That is, if property is expected to yield \$100 per year forever and the interest rate is 10%, the market price will be \$1,000.

Suppose that a tax were levied which took \$90 of the \$100 rent each year. If the tax is expected to be permanent, the market price of the land is also reduced by 90%. This is the essential feature of the tax on economic rent that makes it an effective land reform.

because it does not exert steady pressure in the right direction. Traditional land reforms inevitably take the form of

returns from his improvements - before the reform. The ideal reform would apply unremitting pressure year in and year out to move land into the control of the person who can make the most productive use of it. Furthermore, the ideal reform would not compel sales, and it would reward the seller for any improvements he has made.

random shocks. If the timing of a reform were predictable

everyone would try to unload his land - and to extract the

LABOUR: In the quest for efficiency, as well as justice, it is important to distinguish between the returns to land and the returns to hard work, accumulation of capital, or superior management. Landowners in El Salvador lost the herds they had built up and the capital they had invested, as well as the land. It is not the creation of wealth that the State should penalize. On the other hand, the State could tax away the economic rent of land without damaging

TAXING RENT AS A LAND REFORM

It is the distinction between the return to land and the returns to the other inputs that provides the key to a meaningful, permanent, and continuing reform of land tenure arrangments. The return to unimproved land is described as economic rent. The economic rent of agricultural land varies with its location and fertility.

By taxing away most of the economic rent the State could gain the efficiency for which it strives vainly in traditional land reforms, as well as satisfying most views of fairness (after an initial transition period).

The greatest obstacle to the transfer of agricultural land into the control of the most efficient managers (aside from barriers erected by law or custom, which the government must eliminate in any event) is its price. The young, energetic, and efficient farmer cannot obtain title to the land until he has saved his money for many years. By the time he can buy it, he may no longer be energetic enough to put the extra effort into long-term improvements like drainage, irrigation, and terracing.

Agricultural land is thus less likely to be used efficiently than is urban land, where ownership is less closely related to efficient use. Taxing the economic rent of land will reduce the sales price to a level that more people can afford (see box), but the high annual tax makes the land too expensive to hold for anyone but an efficient producer.

By reducing the market price of the land, the tax on economic rent makes it possible for the energetic and efficient managers of each generation to acquire the land, without being bound by the dead hand of the past. At the same time, those who can no longer manage their property effectively are given a continuing incentive to sell because of the unremitting pressure of the annual tax.

In-as-much as the tax on economic rent would be set up as a permanent program, rather than an unpredictable revolution, the incentives to improve property would not





 Working the land . . . traditional ploughing (left) in Uttaradit Province, Thailand, in 1984, while in Henanan Province, China, farmer Li Liangcai cuts wheat, an estimated 22.5 tons from his five hectares holding.

Ten years to 'perfection'

be damaged. The tax ideally would be assessed on the pure economic rent or the raw value of the land, not on the improvements, so the improvements would still bring full market value when sold.

A PERFECT TAX on economic rent requires perfect assessment of the value of the raw land. Since perfection is unattainable, it is important to consider the feasibility of taxing economic rent in comparison with the implementation problems of traditional land reform.

The first point to consider is that an accurate cadastral survey is fundamental to *any* kind of land reform, or indeed to protection of *existing* land tenure in a rapidly changing economy. Four years after its "reform" El Salvador still had not surveyed the expropriated property and established the amount and value of land involved.

It is possible, however, to design self-assessment incentives into a tax on economic rent. For example, a landowner would lose all claim to his land unless he registered a declaration of extent and land value. The assessed values could be mapped for a check of consistency, and sales records would always provide some check of market values. The landowner would still have an incentive to state a low value, but the degree of resistance to reassessment would be far lower than in traditional reforms where the owner loses all claims to the land and its improvements.

Another virtue of the taxation of economic rent is that the reform can be imposed as rapidly or as gradually as is desired. Immediate institution of a tax on economic rent would destroy most of the private value of raw land and hence is similar to expropriation in that respect. If the land were all owned by hereditary drones, or the nation were truly threatened by impending revolution, immediate and full taxation of economic rent could be an acceptable solution

Phasing in the tax over a ten-year period, however, offers many advantages. While the selling price of land would drop quickly because of the expected tax increases, those who had borrowed in good faith to buy land would have time to recoup their investments. Furthermore, the incentives to improve land and the security of tenure would take effect immediately. The increased efficiency would mitigate the impact on the wealth of energetic and skilful landowners.

All in all, taxation of economic rent offers a superior solution to the problems that have often been assumed to require expropriation and forced redistribution of land.

- By relying on markets, rather than coercion, taxation of economic rent is consistent with individual liberty.
- By creating the appropriate incentives, taxation of economic rent would encourage the voluntary sale of land to those who would use it most efficiently.
- It would impose less arduous tasks on the bureaucracy and create less severe political stresses than a traditional land reform.
- Finally, it would provide revenue to the government, rather than worsening the budgetary problems as conventional reforms do.

In view of all these advantages, as well as the poor record of traditional land reform, it is difficult to understand why the U.S. government continues to encourage other countries to expropriate private property and establish communal farms.