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ECONOMIC ASPECTS OF AGRARIAN REFORM  
UNDER THE NEW SOCIETY

by

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## ECONOMIC ASPECTS OF AGRARIAN REFORM UNDER THE NEW SOCIETY\*

*Mahar Mangahas\*\**

### 1. Economic Criteria

There are, in general, three important components to present economic welfare: (a) it consists of the total of all goods and services available for the final consumption of present Filipinos; (b) it consists in the equity or fairness according to which the available goods and services are shared among present Filipinos; and (c) it consists in the total amount of resources presently available, of all types, which are needed for the continued production of goods and services for future generations.<sup>1</sup> These national objectives constitute basic economic criteria by which agrarian reform (and, for that matter, any other government program purporting to have economic objectives) should be evaluated. Therefore we ask: What are the expected effects of the present agrarian reform

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<sup>1</sup> See Mahar Mangahas, "The Measurement of Philippine National Welfare," Development Academy of the Philippines, unpublished paper, August 1974.

on productivity, on equity, and on the state of resources for the future?

The focus here will be exclusively on the tenure-change component of agrarian reform, that is to say, the shifting of farmers from share-tenancy to leasehold tenancy, and from thence to amortizing-ownership and finally to full ownership. There are other government programs in agriculture which are often cited as integral components of agrarian reform, namely production credit (as in Masagana 99), irrigation, agricultural extension, etc. Sometimes the term "land reform" is used to refer to the policy of tenure change, whereas "agrarian reform" is used to refer to a program of tenure change plus subsidized credit and all the other farm policies. But this paper is not concerned with such distinctions. It considers that tenure change is the essential component of agrarian reform, and that the most complex agricultural program, lacking tenure change, would not warrant being termed an agrarian reform. So, for the purpose at hand, "agrarian reform," "land reform," and "tenure change" are interchangeable expressions.

The government seeks changes in land tenure because, obviously, it perceives that leaseholders are economically better-off than share tenants, while owner-

operators are best-off of the lot. (This abstracts of course from the political or national security or other reasons why land reform appears desirable.) It is clear from the mass of legislation and other policy statements over many decades that the hierarchy of owner-operators above leaseholders, and leaseholders above share tenants, has reached the status of an ideology in this country. Actually, this hierarchy is an acceptable one, but the reasons for its acceptability need to be clarified.

## 2. Land Reform Does Not Affect Agricultural Productivity

Owner-operators are economically in the best position, but it is not because they are more productive farmers than either leaseholders or share tenants. This bears emphasizing, since anyone who has read or listened to statements in justification of land reform will have noted the insistence that land reform will help to grow more food for the people. Such statements are made in simple ignorance of the facts. In fact, owner-operators, leaseholders and share tenants are more or less equally

productive.<sup>2</sup> The description used is "more or less," because there is, at the same time, a wide range in productivity from one farmer to another farmer. After all, there are differences from farm to farm in the quality of land, in the quality of irrigation water, in the agronomic knowledge of the farmer himself, and in the incidence of pests, diseases and weather problems. Farming is universally known to be risky business. Thus one will observe a wide range of productivities among owner-operators, and similarly wide ranges among leaseholders and among share tenants. Among these three wide ranges of the tenure groups, there is an enormous overlap, and no difference between the average productivities of the groups can be statistically detected.<sup>3</sup>

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<sup>2</sup>For a summary of the evidence, see International Labor Organization, Sharing in Development: A Program of Employment, Equity and Growth for the Philippines, Geneva, 1974, in particular Special Paper No. 5, "Agrarian Reform". The evidence includes the 1960 Census of Agriculture; numerous small surveys by the International Rice Research Institute, chiefly in Laguna and in Central Luzon; the Sandoval-Gaon survey of Central Luzon; surveys by the Bureau of Agricultural Economics in Nueva Ecija, over seven consecutive seasons; and surveys by the Institute of Philippine Culture in Nueva Ecija, over two seasons.

<sup>3</sup>See M. Mangahas, V.A. Miralao and R.P. de los Reyes, Tenants, Lessees, Owners: Welfare Implications of Tenure Change, Institute of Philippine Culture, Ateneo de Manila University, Quezon City, 1974.

For different tenure groups to be equally productive, it must be that they are equally efficient in using agricultural inputs. This is confirmed by the same set of evidence. One also finds that there are no significant differences between owner-operators, leaseholders and share tenants with respect to (a) the rate of acceptance of high-yielding varieties; (b) the proportion of planted area which is treated with fertilizers and other agricultural chemicals; (c) the rate of use of mechanical weeders, sprayers and threshers; or (d) expenses for hired labor, tractor and thresher rentals, and costs of seed, fertilizers and chemicals, i.e., the production inputs aside from land.

The conclusion from this is that the effect of tenure on productivity is neutral. It is important that this fact be accepted, even though it may diverge from the received doctrine. The explanation I would offer for this phenomenon is based on recognition of the landowner's participation in the farm decision-making process. The decision on what variety to plant is usually taken jointly between landlord and tenant. The landlord often controls the amount of fertilizer to be applied by means of the credit he extends; and other examples can be

offered. The hypothesis is that landlords, or their representatives, also have an incentive to raise farm productivity as much as possible, and that this incentive tends to counteract the disincentive which tenants, relative to owner-operators, may have.

It is possible that this explanation is flawed. Someone else may have a better understanding of the workings of tenancy with respect to farm operations. At this time, the form of the explanation is less crucial than the plain acceptance of the facts which demand the explanation. And the fact is that owner-operators, lessees and tenants are equally productive. This implies that land reform cannot be expected to contribute an addition to the national food supply. Improvement in agricultural productivity will continue to come from more irrigation, better plant varieties, more fertilizer, etc. Land reform cannot substitute for these. Neither is land reform a necessary element for these factors to redound to increased farm productivity, as the experience with irrigation projects, HYV's, and so forth, has shown. Thus the benefits derivable from land reform do not lie within the first welfare criterion, that of productivity.

Three other points which relate to productivity deserve mention. First, the evidence cited earlier pertains to farmers who in all likelihood have been in their respective tenure statuses for some time, over which the landlord-tenant relationships have become well established. While this evidence may be used to derive long-run expectations, it fails to allow for possible problems of adjustment in the short-run. Since there has been very little land reform thus far, there is very little data on cases of actual switching from share tenancy to either leasehold or owner-operatorship, or switching from leasehold to owner-operatorship. In the meantime, there is a justifiable apprehension that the dislocations brought about by land reform in the landlord-tenant relationship, particularly with respect to credit, may cause a temporary decline in productivity. The massive Masagana 99 credit program was conceived partly on account of this (and partly to speed up recovery from the 1972 flood disaster).

Second, the productivity analysis has been concerned mainly with the so-called current inputs, such as labor and fertilizer, to the neglect of the capital inputs. There is a need to also gather data which relate farm tenure to investments in farm equipment and in land



improvement. It is possible that security of tenure will encourage amortizing owners to invest, either individually or jointly, in irrigation pumps, land drainage, etc. In this way, land reform may have an effect on the stock of agricultural resources for the future. This is the third welfare criterion earlier mentioned. However, there has not yet been sufficient research to determine the effects of tenure change on agricultural investment. As a preliminary guess, I would expect that tenure change is also neutral with respect to investment. Landlords probably also participate substantially in the decision to invest, and have incentives to do so since the increased land productivity will also raise their incomes from the land. Thus land reform might simply bring about a transfer of incentives from one party (the landlord) to another (the tenant), without a real increase in over-all incentives.

Third, there is the notion of the "family-sized farm," which crops up every so often in Philippine land reform thinking, despite its growing irrelevancy. The farm, which is the operating unit and hence the unit relevant to issues of productivity, must be distinguished from the estate, which is the unit of ownership. There

is some evidence that smaller farms are more productive than larger ones, but this is as yet merely of academic interest.<sup>4</sup> Land reform aims to dissolve present estates into many small units, such that the operating unit becomes equivalent to the owned unit. Under the present mode of implementation of Operation Land Transfer, the size of the operating unit is not in fact being changed. One reason may be the fact that the farm-size norms stated in Presidential Decree No. 27 (three hectares if irrigated, five hectares if rainfed) are arithmetically impossible to implement. According to the Department of Agrarian Reform, there are about one million rice and corn tenant farmers, working farm lands of about 1.8 million hectares in area. No matter how the cake is cut, there only exists an average of 1.8 hectares per tenant, and some tenants can have more only if some others have less. On this note we turn next to the matter of equity.

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<sup>4</sup>See V.W. Ruttan, "Tenure and Productivity of Philippine Rice Producing Farms," Philippine Economic Journal, 5:1, 1966, pp. 42-63.

3. The Potential Economic Benefits from Land Reform Are in the Improvement of Equity

Whether one considers on-farm incomes or off-farm incomes, it is a fact that owner-operators do have the highest incomes among the three basic tenure groups. Their farm income is the highest simply because they do not have any rental to pay. In effect they have two sources of farm income -- their labor and the land which they own. Such operators, and the other members of their families, also have higher-paying sources of off-farm income (higher status jobs, poultry, perhaps a tricycle for hire) than either leaseholders or tenants. This may be due partly to higher educational attainment among family members, and partly to greater accumulated savings, factors both linked to the basic income advantage they have over tenants.

Leaseholders, by definition, are tenants who pay land rental of a fixed amount (fixed usually in terms of sacks of the product). On the other hand, share tenants pay rentals determined as a proportion of (usually) total output net of the costs of harvesting and threshing, and net of repayments to the landlord of any loans which may be due; thus the landlord obtains both rental income and

interest income. Under Philippine rural conditions, the absolute amount payable as rent is typically less under a leasehold agreement than under a share rent agreement. Thus a leaseholder's farm income is typically greater than a share tenant's, even in the absence of government intervention. As we know, in the first phase of implementation of the 1963 Agricultural Land Reform Code, the government sought not only to shift the form of contract to leasehold but also to reduce the leasehold rent. Those leaseholders whose rentals were in fact limited to the prescribed ceiling may be termed "reform leaseholders," in order to distinguish them from ordinary leaseholders, who are not as well off.

The hierarchy thus expands to a group of four:

- a. owner-operators;
- b. reform leaseholders;
- c. ordinary leaseholders; and
- d. share tenants.

Counting only the income derived from the farm, it has been estimated that owner-operators have an income which is about 33% greater than that of reform leaseholders, or 40-60% greater than that of ordinary leaseholders,

or 130-140% greater than that of share tenants.<sup>5</sup> It bears repeating that these income differentials are due entirely to rental differentials. Clearly, what the tenant stands to gain by moving up the hierarchy is equivalent to what the landowner stands to lose in the form of rentals. This is before counting possible compensation the government may grant to the landowner, in one form or another, and about which more will be said later.

Land reform rests on the fundamental proposition: there is a social consensus that the gain to tenants by rental reduction or elimination is more important to national welfare than the corresponding loss of landowners. This occasion being an Institute on Agrarian Laws, I should like to call your attention to an economic "law" even more fundamental than the Law of Supply and Demand, to wit: you can't get something for nothing. It implies (a) if it is fairly certain that some people enjoyed a gratuitous gain, then it is equally certain that some other people had to pay for it; and (b) if it is fairly certain that no person has been required to give anything

<sup>5</sup>See ILO, op. cit., p. 475. Actually, when both off-farm and on-farm incomes are considered, the difference between incomes of leaseholders and share tenants narrows very considerably. This is because share tenants take more time to work off the farm, and make more income than lessees that way.

up, then it is equally certain that no other person has obtained a gratuitous benefit.

The effect on national welfare of an economic transfer from one party to another can be evaluated only by means of a judgment, whether explicit or implicit, which compares the welfares of the two parties. There is no escaping this value-judgment. Everyone is entitled to make it, whether he be landlord, tenant or third party, and it is the responsibility of government leadership to discern the social consensus. As I proceed to describe the system of economic transfer within Philippine land reform, my own values may peep through here and there. Naturally, I too claim the privilege.

#### 4. Land Reform Under the New Society

During 1963-1972, the Philippine land reform program concentrated on shifting rice and corn tenants upwards in the hierarchy from categories (c) and (d) to category (b). Nevertheless, by the time the President declared martial law in September 1972 -- from which time we date the New Society -- probably only one-fourth of such tenants had become reform leaseholders.

Another one-fourth were ordinary leaseholders, and the remaining one-half were still share tenants.<sup>6</sup> There was also a relatively minute number of amortizers under the 25-year payment terms of the 1963 Code. During 1967-1973, the Land Bank had purchased only 78 estates (including one purchased after declaration of martial law), covering only 17,238 hectares.<sup>7</sup>

With the New Society, land reform shifted from the rental reduction stage to the land transfer stage. Presidential Decree No. 27 of October 1972 provided the basic legislation by which tenants are to become full owners after fifteen equal annual amortizations on land valued at two-and-a-half times the average harvest of three normal crop years immediately preceding promulgation of the decree, at 6% annual interest. The original

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<sup>6</sup> ILO, *op. cit.*, p. 475. The Department of Agrarian Reform reports that two-thirds of rice and corn tenants had become "lessees by operation of law," i.e., reform leaseholders, by 1972. But this seems overstated.

<sup>7</sup> See M. Mangahas, "The Political Economy of Rice in the New Society," U.P. School of Economics, Discussion Paper 74-10, July 1974, p. 25.

intention<sup>8</sup> was to choose a land value and amortization terms such that the annual amortization would approximate the annual rental of a reform leaseholder under the 1963 Code. In the context of the tenure hierarchy, the intent was to create a new class, that of "amortizing owner," at the same economic level as the reform leaseholder during the amortization period. Thus the reform leaseholder's rental payments would in effect be relabeled amortization payments, the essential difference being that amortizations terminate (in 15 years) whereas rentals do not terminate. The gain to an ordinary leaseholder would be greater, for not only would his new payments be terminal, they would also be at a lower level than his former rentals. And clearly, the gain to a share tenant would be the greatest of all.

The widely-accepted procedure by which to compare a set of terminal payments to a set of non-terminal payments is to compute the present values of the two sets of payments. A discount factor is needed, similar to an interest rate, which in essence reflects the degree of

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<sup>8</sup>See Jose Medina, Jr., "The Meaning and Intent of Presidential Decree No. 27," paper read at the Seminar-Workshop on Agrarian Reform for College Instructors and Professors in the Bicol Region, Legaspi City, February 8, 1973 (mimeo).



undesirability of having to wait for a specified period for a given sum of money, instead of having it immediately. This factor can be termed the rate of time preference.

On the assumption that the tenant's rate of time preference is 20% per year, it has been estimated that the gain in income on account of implementation of P.D. No. 27 would be about 2% in case the tenant was formerly a reform leaseholder, 23% in case the tenant was formerly an ordinary leaseholder, and 84% in case he was formerly a share tenant.<sup>9</sup> We may conclude (a) that P.D. No. 27 will benefit most those who did not yet benefit from earlier land reform programs; (b) it gives hardly any added benefit to those who already enjoyed rental reduction under the earlier program; and (c) the benefit is therefore mainly due to the payment-reduction feature (for ordinary leaseholders and share tenants), and only a small portion can be attributed to the terminality feature.

The exercise can be carried through on the landlord's side as well. The landlord faces, under P.D. No. 27, a set of terminal receipts, with each receipt within the fifteen year period less than his previous receipts, in

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<sup>9</sup> ILO, op. cit., p. 499.

case his tenant was not yet a reform leaseholder. On the assumption that the landlord's rate of time preference is 15% per year, it has been estimated that the loss in income of the landlord on account of implementation of P.D. No. 27 would be about 12% in case the tenant was formerly a reform leaseholder, 26% in case the tenant was formerly an ordinary leaseholder, and 54% in case the tenant was formerly on share-rental basis.<sup>10</sup> We therefore conclude that the landlords who stand to lose the most are those who had not yet come under the scope of the earlier program; whereas those whose rentals had already been reduced to the maximum set by the 1963 Code stand to be deprived of only a modest amount of income.

Thus a close examination of the terms of payment originally envisioned by P.D. No. 27 reveals that the potential transfer from landlord to tenant is not markedly greater than that provided for under the 1963 Code. If the purpose of the decree was to legislate a much stronger land reform than before, then it was not quite a radical

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<sup>10</sup> ILO, op. cit., p. 500. A lower time preference rate is used for the landlords' case on the premise that landlords can afford to be less impatient than tenants.

document. The decree nevertheless can promote a substantial improvement in equity to the extent that it provides a new vigor to the implementation of the legislation; for even a weak but thoroughly implemented law does more good than a powerful but unimplemented one. Let us therefore examine the recent progress in land reform implementation more closely.

The statistic officially used to chronicle the progress of Operation Land Transfer is the number of Land Transfer Certificates which have been issued. The rate at which the LTC's are issued is so rapid that one's statistics get obsolete within a few weeks. As of June 14, 1974, LTC's had been issued in the names of 179,000 farmers, or 17% of the target; but by now (November) the number has certainly exceeded 200,000. The number is indeed so impressive that perhaps to note certain qualifications may not be considered misanthropical.

In the first place, there apparently are a large number of certificates which have not yet reached the proper recipients, on account of being contested, undelivered, or pending, or containing erroneous information. Secondly, receipt of an LTC does not definitely imply that the amortization period has begun. One source reports

that, as of September 16, 1974, the landlord-tenant agreements which had been reached on land valuation comprised only 140 landlords, 6853 tenants, and 9494 hectares.<sup>11</sup> These land valuations are supposed to be decided upon by Barrio Committees on Land Production, on which both tenants and landlords are to be represented. About one thousand such committees have been organized so far, but unfortunately the rate of progress on land valuation agreements has been rather slow. Prior to the conclusion of a land valuation agreement, it cannot be presumed that the amortization process has begun; whereas, as our earlier exercise showed, the great bulk of P.D. No. 27's potential benefit is realizable during the amortization period itself.

Another important issue is the retention rate.

P.D. No. 27 states that "reformation must start with the emancipation of the tiller of the soil from his bondage."

It also states that "in all cases, the landowner may retain an area of not more than seven hectares if such landowner is cultivating such area or will now cultivate it." Here is a clear-cut dilemma. It is a plain logical

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<sup>11</sup>See Tsutomu Takigawa, "A Note on the Agrarian Reform in the Philippines Under the New Society," forthcoming U.P. School of Economics Discussion Paper, November 1974.

impossibility to (a) grant each and every tenant the opportunity to own the land he tills and simultaneously (b) allow the landowner to retain a portion, however small, of presently tenanted land. If (a) is of higher priority, then the retention rate must be zero. If (b) is of higher priority, then some tenants will wind up either ejected or converted into hired farm labor; thus tenancy might be abolished by eliminating tenants but not providing them with land.

We have now begun to touch on the equity issue from the landowners' viewpoint. The hierarchy among landowners is determined primarily by the size of the estate. The larger the estate, the greater the ability to absorb the transfer-loss on account of land reform; and vice-versa for small estates. The implementation of Operation Land Transfer -- or at least the LTC component of it -- thus proceeded in stages: first the 100 hectare and above group, then the 50-100 group, next the 24-50 group, and just this November the 7-24 hectare group. Each successive stage involves a larger number of landowners, of progressively lower ability to shoulder loss, and hence the opposition to the implementation of the program has also grown progressively. (In the 0-7 hectare

group, the DAR estimates there are 183,000 landowners, or 83% of all landowners having rice or corn tenanted land.)

5. A Progressive Land Reform Compensation Scheme

The natural concern for the welfare of the small landowners can be easily attended to by means of a repayment scheme which is progressive rather than proportional. The present scheme implies that an owner of 1,000 hectares will receive 100 times as much as an owner of 10 hectares. In this case land reform might break up an estate but not the wealth and economic as well as political power formerly deriving from it.

There is no economic principle that requires proportional payment, however, particularly when the equity criterion is of prime importance. Payments can be progressively structured in the same sense that the Philippine individual income tax is progressively structured. In both cases, the ability-to-pay tax principle will justify raising the proportional burden of the wealthy, rather than maintaining it at the same level as the non-wealthy. There can be land size

brackets with diminishing (marginal) payments per bracket, just as there are income tax brackets with increasing (marginal) tax rates per bracket. Furthermore, the proportion payable in cash can be raised for small landowners relative to large ones. A specific example is offered below:

Example of a Progressive Land Reform Compensation Scheme

Size of Estate (Ha.)	Compensation Rate	Cash %
7.00 or less	₱5,000/ha.	50
7.01 to 12.00	₱35,000 plus ₱4,000/ha. in excess of 7.00	40
12.01 to 24.00	₱55,000 plus ₱2,000/ha. in excess of 12.00	30
24.01 to 50.00	₱67,000 plus ₱1,000/ha. in excess of 24.00	20
50.01 or more	₱93,000 plus ₱500/ha. in excess of 50.00	10

In this example, the basic land price is set at ₱5,000 per hectare, or somewhat less than the average price being paid by the Land Bank in the relatively few purchases it has made. (As of June 14, 1974 the Bank had purchased only 1,860 hectares from a total of 30 landlords, at an average price of over ₱6,000 per hectare.) These lands were heavily encumbered by mortgages and unpaid taxes, obligations which were then shouldered by the Bank. Counting

these as effective cash receipts by the landlords, the cash:bonds payment ratio is effectively 35:65, in contrast to the officially declared ratio 10:90.)<sup>12</sup> [It is designed such that lower prices are paid for land in excess of certain base levels. For instance, the owner of 12 hectares would receive only ₱55,000 instead of ₱60,000. On the other hand, the owner of 50 hectares would receive only ₱93,000 (or an average of ₱1,860 per hectare) instead of ₱250,000. Thus the burden of the land reform program is not made to apply proportionately, in recognition of the social view that a loss of 7 hectares means much more to an owner of only 7 hectares than to an owner of 50 hectares.]

## 6. Conclusion

The main points of the argument may be summarized:

(a) Land reform does not affect productivity.

Thus urban consumers will not be affected very much by land transfers. Care should be taken that land reform is not regarded as a substitute for the direct means of

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See Mangahas, "The Political Economy of Rice in the New Society," p. 26n.



raising food production.

(b) Land reform can potentially improve equity.  
This will be its primary accomplishment, and should be  
considered as a sufficient justification for land reform.  
There is no need to concern the program with the  
productivity objective.

(c) Land reform under the New Society may bring  
about substantial improvements not so much from the legis-  
lation as compared to the implementation. It was shown  
that the terms for compensation set by P.D. No. 27 were  
not quite radical, and that the potential gains still are  
to be found mainly in the reduction of the size of the  
payments -- whether called rent or amortization -- made  
to the landlord.

(d) Therefore the progress of the present reform  
should be monitored through an examination of the amounts  
actually being paid to landlords, with less emphasis on  
the number of Land Transfer Certificates being issued.  
There is a marked contrast between the number of LTC's  
issued and the number of land valuation agreements reached  
between landlords and tenants, or for that matter the  
number of purchases concluded by the Land Bank.

(e) The retention rate should be zero. In order not to deprive any tenant-tiller of the right to become an owner-operator, it is logically impossible to allow a landowner to retain a portion of presently tenanted land.

(f) Small landowners deserve proportionally greater compensation than large landowners. Just as the poorest farmers (the share tenants) deserve more attention than those relatively well-off (the reform leaseholders and the amortizers), so too do the small landowners deserve relatively greater compensation. This is particularly essential if a zero retention rate is to be implemented. A specific example was suggested whereby the owner of less than 7 hectares would receive ₱5,000 per hectare, 50% in cash, whereas the owner of 50 hectares would receive ₱1,860 per hectare, 10% in cash.