

Making Negotiated Land Reform Work

Initial Experience from Brazil,
Colombia, and South Africa

Klaus Deininger

Can land reform have a lasting impact on poverty reduction? The paper describes and evaluates a new type of *negotiated* land redistribution and highlights key areas that merit attention in designing programs of this nature.



Summary findings

Deininger describes a new type of *negotiated* land reform that relies on voluntary land transfers negotiated between buyers and sellers, with the government's role restricted to establishing the necessary framework for negotiation and making a land purchase grant available to eligible beneficiaries.

This approach has emerged — following the end of the Cold War and broad macroeconomic adjustment — as many countries face a second generation of reforms to address deep-rooted structural problems and provide a basis for sustainable economic growth and poverty reduction.

Deininger describes initial experiences in Brazil, Colombia, and South Africa. It is too soon to know whether negotiated land reform can rise to the challenges administrative land reform failed to solve but the data so far suggest that:

- Negotiated land reform can succeed only if measures are taken to make the market for land sales and rental more fluid and transparent.
- Productive projects are likely to be the key to market-assisted land reform. The potential for project productivity establishes an upper bound on the price to be paid and a basis for financial intermediaries to evaluate the project. It also requires beneficiaries to familiarize themselves with the realities they're likely to confront as independent farmers and the limits to how much land reform can help them achieve their goals.
- The only way to effectively coordinate the entities involved in the process is through decentralized, demand-driven implementation.
- The long-run success of land reform depends on getting the private sector involved and using the land purchase grant to "crowd in" private money.

This paper — a product of Rural Development, Development Research Group — is part of a larger effort in the group to monitor and evaluate a number of innovative approaches to land reform in various countries. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Maria C. Fernandez, room MC3-542, telephone 202-473-3766, fax 202-522-1151, Internet address mfernandez2@worldbank.org. The author may be contacted at kdeininger@worldbank.org. January 1999. (34 pages)

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Making negotiated land reform work:

**Initial experience from Colombia, Brazil,
and South Africa**

Klaus Deininger

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Abstract:

The paper describes background, initial experience, and future challenges associated with a new “negotiated” approach to land reform. This approach has emerged as, following the end of the Cold War and broad macro-economic adjustment, many countries face a “second generation” of reforms to address deep-rooted structural problems and provide the basis for sustainable poverty reduction and economic growth. It reviews possible theoretical links --through credit market or political channels- between asset ownership and economic performance. Program characteristics in each country, as well as lessons for implementation, and implications for monitoring and impact assessment are discussed.

1 INTRODUCTION

Theoretical reasons and empirical evidence suggest that land reform may provide equity and efficiency benefits. A large body of research has demonstrated the existence of a robustly negative relationship between farm size and productivity due to the supervision cost associated with employing hired labor. This implies that redistribution of land from wage-operated large farms to family-operated smaller ones can increase productivity (Binswanger et al. 1995). In addition, access to assets in general and land ownership in particular is associated with improved access to credit markets and can provide benefits as an insurance substitute to smooth consumption intertemporally. By enabling the poor to undertake indivisible productive investments (or by preventing them from irreversibly depleting their asset-base) measures to improve the distribution of assets could lead to higher aggregate growth, thus improving both equity and efficiency (see Bardhan et al. 1997 for references). Aggregate cross-country regressions as

well as more micro-level evidence confirm the poverty-reducing and growth-enhancing impact of a better distribution of productive assets.

This apparent potential notwithstanding, actual experience with land reform has in many instances fallen short of expectations. Despite—or because—of this, land reform remains a hotly debated issue in a number of countries (e.g. Zimbabwe, Malawi, South Africa, Guatemala, El Salvador, Brazil, Colombia) some of which are spending considerable amounts of resources for this purpose. A mechanism to provide an efficiency- and equity-enhancing redistribution of assets that would increase overall investment at a cost that is comparable to other types of government interventions would be very desirable.

This paper describes a new type of *negotiated* land reform that relies on voluntary land transfers based on negotiation between buyers and sellers, where the government's role is restricted to establishing the necessary framework and making available a land purchase grant to eligible beneficiaries. Section two discusses the land reform experience in general, thus providing the historical background and conceptual basis for the subsequent argument. Section three is devoted to a more detailed description of negotiated land reform in Colombia, covering the reasons for choosing a negotiated approach, its principles, and its implementation in a number of pilot municipios. Section four compares the mechanisms utilized to those adopted in Brazil and South Africa and briefly highlights some of the implications for monitoring the new approach. Section five concludes.

2 LAND REFORM: POTENTIAL AND HISTORICAL EXPERIENCE

While land reform has long been the subject of policy debate, the motivation for addressing land issues has shifted considerably over time. Initial discussions were largely motivated by political considerations, supported by the notion of the inverse farm-size productivity relationship. This notion had received empirical support from cross-sectional studies across states (Kutcher and Scandizzo, 1979), countries (Berry and Cline 1979), or individual farms (Barraclough, 1970).¹ More recent contributions have emphasized the importance of asset ownership in situations characterized by incomplete contracting (Bardhan et al. 1998), elaborating on models such as Dasgupta and Ray 1986 and 1987 and Moene 1992. The underlying idea is that, in situations characterized by credit rationing, individuals may not be able to undertake indivisible investments in human capital (schooling) or productive assets (wells, bullocks, or perennials with a long gestation period) that need to be financed through credit. This idea has been

¹ One of the first studies to provide both a theoretical model and an empirical investigation of the potential impact of land reform indicates that, based on district level data from India, land reform can indeed have a positive impact on wages and employment (Rosenzweig 1978).

formalized in a number of theoretical models where lack of collateral keeps individuals in “poverty traps”, unable to undertake highly profitable indivisible investments (Galor and Zeira 1993, Eckstein and Zilcha, 1994).²

In such a setting, the poor would fail to get out of poverty not because they are inherently less productive or lack the necessary skills, but because informational imperfections preclude them from access to credit markets and because, as a consequence, they never get the opportunity to utilize or fully develop their abilities. If this is true, a one-off redistribution to low wealth groups could strictly dominate other policy instruments (Hoff and Lyon, 1994). In particular it will, in the medium to longer term, be more effective and less costly than continuing redistribution of income (e.g. through social programs) which would be associated with strong disincentive effects (Banerjee and Newman 1993; Mookherjee 1997).

Support for the importance of asset (and income) distribution for economic outcomes is provided by cross-country regressions which indicate the presence of a significant negative impact of the initial *asset* distribution on subsequent economic growth (Birdsall and Londono 1997). This growth-reducing impact is particularly severe for the poor (Deininger and Squire 1998). Indeed, overall inequality seems to have an important impact on societies’ ability to effectively and quickly respond to exogenous shocks (Rodrik 1998), the level of crime (Fajnzylber et al. 1998), and the degree to which special interest groups are able to appropriate rents –with implications for overall productive efficiency (Banerjee et al. 1997).

Although inequality may significantly affect economic performance, historical examples for major changes of inequality within a country are rare (Li et al. 1998). More specifically, the success of land reform was critically dependent on the form of production into which it was introduced. In *landlord estates* where tenants already cultivated the land and all that was required was a reassignment of property rights, land reform was relatively straightforward and associated with significant productivity increases and the emergence of stable systems of production.³ The main reason is that the organization of production remained the same family farm system, and that beneficiaries already had the skills and implements necessary to cultivate their fields. Organizational requirements of conducting such land reforms were minimal –making them comparable to the “stroke of a pen” reforms familiar from the literature on macro-economic reform. Indeed, since the end of World War II, landlord estates in Bolivia, large areas of China, Eastern India,

² Though still accumulating, empirical evidence does support some of these conclusions (Jalan and Ravallion, 1997, Fafchamps and Pender 1997).

³ While it would be desirable to have more studies examining the productivity impact of such reforms in quantitative terms, there is agreement in the literature that such reforms have been associated with significant increases in output and/or productivity (Callison 1983; Koo 1968; King 1977, Lieten 1996, Besley and Burgess 1998, Dorner and Thiesenhusen 1990, Otsuka 1991).

Ethiopia, Iran, Japan, Korea, and Taiwan have been transferred to tenants in the course of successful land reforms.⁴

By contrast, land reform in *haciendas*, i.e. systems where tenants had a small house-plot for subsistence but worked the majority of the time on the landlord's home farm, has been very difficult, up to the point where the "game of Latin American Land Reform" was declared to be lost (de Janvry and Sadoulet, 1989). In the large majority of cases large landowners responded to the threat of land reform with large-scale evictions long before governments were able to effectively implement laws aimed at tenant protection or land reform. They either resumed extensive livestock production and ranching or -aided by significant credit subsidies- started highly mechanized self-cultivation (Binswanger et al. 1995). This reduced tenant welfare, depopulated farms, and created further difficulties for redistributive land reform. The experience with land reform in these environments points towards three specific difficulties:

First, the transfer from large to small farmers requires a change in the pattern of production, construction of complementary infrastructure, subdivision of the farm, and settlement of additional beneficiaries over and above the workers who have already been living on the farm.⁵ Farms acquired for purposes of land reform have generally not been farmed at full capacity, were run down or decapitalized, or highly mechanized. In all of these cases failure to bring in additional beneficiaries, to provide resources for simple works (cleaning of pastures, fencing, construction of basic infrastructure, etc.) during the startup phase, and to ensure the availability of productive assets and technical assistance to go with the land have often contributed to the failure of reform efforts.⁶

Second, land reform beneficiaries, even if they are workers of the former farm, are rarely accustomed to making independent entrepreneurial decisions, a constraint that is particularly important if (as in many of the cases described above) realization of the potential benefits from land reform requires significant modifications in the farm's cropping pattern. Programs that are limited to the mere transfer of land, without training and technical assistance, have made it difficult for beneficiaries to quickly reach an equilibrium characterized by high levels of productivity and savings and, to the degree that beneficiaries were not able to get access to these, may have resulted in a permanent decrease in agricultural productivity.

⁴ Conceptually, one would expect productivity gains to be proportional to the improvement in work and investment incentives associated with the post-reform regime. In cases where security of tenure had already been high before the reform, where cash-rent (rather than share rent) contracts had prevailed, and where landlords had provided tenants with access to markets for credit, inputs, and outputs, one would expect static efficiency gains from land reforms to be modest and the bulk of reform benefits to come through enhanced investment incentives (and credit access on better terms) associated with land ownership.

⁵ In many cases where large farms were distributed exclusively to the resident labor force (e.g. in Peru, Nicaragua, Honduras, and Cuba), the resulting units were too large to be able to reap the benefits from utilization of family labor. As a result, production on the reformed farms was often characterized by pervasive labor problems and failure of productivity increases to materialize.

⁶ The only exception is where already well-established plantations were redistributed to the former workers, a case that is very costly and characterized by relatively low social benefits (Adriano et al. 1990).

Third, in rural environments with multiple market imperfections, providing beneficiaries with access to land but not with access to markets for output and credit may fail to make them better off than before. This will be the case particularly if landlords had provided their labor tenants with inputs, credit, or market outlets before the reform.⁷ Land markets will therefore have to be viewed in the context of the operation of other factor markets.

These generic land reform difficulties were, in past attempts to effect the redistribution of land to the poor, often exacerbated by implementation-related issues. Instead of aiming to increase productivity and reduce poverty, the main goal of many land reforms in the past has been to calm social unrest and allay political pressures by peasant organizations.⁸ Such reforms had often been initiated in response to political pressure (or to divert attention from other problems) rather than as part of a long-term rural development strategy.⁹ The resulting reform measures were generally designed ad hoc, bore little relation to actual needs on the ground, and commitment to them faltered once social emergencies had subsided. Furthermore, attention often focused on the politically vocal and well-connected peasants rather than rural dwellers with the best ability to make productive use of the land, or the most deserving on poverty grounds.¹⁰

The cost of carrying out land reform were often increased by the continued existence of implicit and explicit distortions which drove land prices above the capitalized value of agricultural profits and made it attractive for land reform beneficiaries to sell out to large farmers, thus contributing to re-concentration of holdings.¹¹ Also, instead of aiming to create conditions that would improve the functioning of land rental and sales markets to complement state-led reform efforts, governments have often completely outlawed or severely restricted the operation of land rental (and to a lesser degree sales) markets. This has eliminated an important opportunity for landless individuals to acquire farming experience, made the

⁷ In Ireland, in the early 20th century, a large scale “negotiated” land reform transferred of 9.3 million acres (about half of the agricultural land available) from landowners to tenants but had a very limited impact on productivity. One reason is that land reform –which was enacted on top of earlier legislation- did little to alter the structure of production or increase investment incentives. Another issue, probably more important, is that land reform led to a *worsening* of access to credit, by limiting the ability of new landowners to mortgage land while at the same time cutting off informal credit they had earlier obtained from the landlord (Guinnaune and Miller, 1997). Severely restricted access to credit, together with insecure property rights have also led to widespread selling of land by former land reform beneficiaries in Nicaragua – often at prices way below the productive value of the land (Joakin 1996). Lack of access other markets has been identified as a key obstacle to the initiation and success of independent small farming operations in Eastern Europe (Brooks and Lerman 1996).

⁸ This would be consistent with an interpretation of land reform as a piecemeal strategy by the rich to avoid the imminent threat of revolt – with backtracking as soon as the threat weakens as modeled by Horowitz (1993).

⁹ Even where a genuine commitment to breaking the power of landed élites, agrarian reforms were generally designed by urban intellectuals with little idea of the realities of agricultural production and a sound suspicion against the ability of small-scale cultivators to manage on their own. let alone to be able to increase productivity (Barraclough 1970).

¹⁰ The importance of political factors is also evident from a number of Eastern European countries where political constraints generally led to a relatively “inefficient” way of implementing land reform –through physical restitution of plots rather than compensation of former owners through fungible cash payments (Swinnen, 1997).

¹¹ Despite attempts to limit beneficiary desertion through imposition of legal restrictions and severe punishment in case of contravention, there is considerable anecdotal evidence on land sales by reform beneficiaries in Nicaragua, Colombia, and El Salvador. In a recent Census of Brazilian land reform settlements, only about 60% of land reform beneficiaries were actually found tilling their land.

progress of land reform totally dependent on bureaucratic efforts, and complicated the task of targeting assistance to the poor. This complete reliance on government spawned complex regulations and cumbersome bureaucratic requirements to implement land reform which stretched available administrative capacity (Lipton 1974) and resulted in highly centralized processes of implementation. Government bureaucracies at the central level –justified by the need to provide technical assistance and other support services to beneficiaries- proved expensive and, unable to utilize information from the local level, often also quite ineffective.

3 NEGOTIATED LAND REFORM IN COLOMBIA

3.1 BACKGROUND

3.1.1 Land reform before 1994

In Colombia, land reform has been a long-standing concern to correct an extremely inequitable distribution of land, to increase the productivity and environmental sustainability of agricultural production, and to reduce widespread rural violence. Maldistribution of land in rural areas, while dating back to the *encomiendas* given out following the Spanish conquest, has been reinforced and exacerbated in more recent times by a number of policy related factors.¹² These include:

- (i) Tax incentives for agriculture that implied that rich individuals acquired land in order to offset taxes on non-agricultural enterprises.
- (ii) Legal impediments to the smooth functioning of the land rental and sales markets. Share tenancy was either directly outlawed or, when this was lifted, discouraged by the fact that tenants would receive property rights to whatever land improvements they had made, making it in principle impossible to terminate their leases.
- (iii) Credit and interest rate subsidies plus disproportionate protection of the livestock subsector provided incentives for agricultural cultivation with very low labor intensity (World Bank, 1996).
- (iv) The use of land to launder money that had been acquired by drug lords.

¹² It is well known that market imperfections that are commonly encountered in rural areas of developing countries can lead to concentration of land in the hands of larger producers (e.g. Carter and Mesbah 1993). However credit market imperfections alone –without policy interventions- can not explain the heavy *underutilization* of land in Colombia where 75% of potential cropland are currently under pasture – it would presumably be more profitable for large landowners to rent out to sharetenants rather than to use land for extensive cattle ranching or to leave it completely fallow.

These factors have profound implications for factor use, employment generation, and welfare in rural areas. First, while small farmers were often driven off their traditional lands to eke out a living in marginal and environmentally fragile areas, much of the best agricultural land (75 percent of the land suitable for crop production) was devoted to extensive livestock grazing or not farmed at all due to violence (Heath and Binswanger 1996). This suggests that there are indeed large tracts of unutilized or underutilized land which could be subjected to land reform in order to increase agricultural productivity - a notion in line with available empirical evidence.¹³

Second, rather than making use of labor, economic growth has been labor-saving. Since the 1950s, the rate of growth of rural employment has been significantly lower than aggregate economic growth, which is surprising even by the standard of other Latin American countries (Mision Social 1990). This appears to have increased peasants' inclination to support, or at least live with exceptionally high levels of rural violence that increasingly constitute a drag on the whole economy (estimates in the Colombian press put the losses associated with rural violence at about 15 percent of GDP). The government sees the reduction of rural violence as an important goal of land reform.

Third, structural adjustment made the lack of adaptability in the large farm sector particularly blatant. Elimination of credit subsidies caught large mechanized farms that cultivated mainly traditional crops with minimal labor inputs in a debt-trap that made them unable to adjust to the new environment and take advantage of the opportunities for exports of nontraditional and more labor-intensive crops. Unable to respond to the loss of agricultural protection in a productive way, the large farm sector resorted to large-scale lobbying. Establishment of a dynamic small farm sector would, it was hoped, enable Colombia to capitalize on its agro-ecological diversity and significantly increase its exports of traditional and nontraditional crops.

None of these concerns are new. The maldistribution of productive resources, especially land, was identified as one of the root causes of economic stagnation by a World Bank mission in the 1950s. In 1961, the government established the National Land Reform Institute (*Instituto Nacional Colombiano de Reforma Agraria* or INCORA), to bring about a more equitable distribution of assets in the rural economy. However, even though considerable amounts of resources were spent on land reform (INCORA's average annual budget in the late 1980s was about US\$140 million), most was spent on a

¹³ Balcazar (1990) summarizes the existing literature in three points, namely (i) small farms farm more intensively than large farms, as measured by value of output per unit area; (ii) between 1973-76 and 1988 average physical yields on small farms have increased by about 82% (this seems to be an unweighted average across different types of crops) whereas those on large farms have remained stagnant; (iii) regional as well as commodity-specific studies do not find any systematic relationship between farm size and adoption of new technology or improvements in productivity.

large bureaucracy¹⁴ and almost 35 years of operations had produced little visible effect on the ground. INCORA appeared to be more effective in regularizing spontaneous settlement on the frontier than in converting the landless into successful agricultural entrepreneurs in areas that were previously cultivated by large owners. Even where land reform did distribute land, lack of capital forced many beneficiaries to abandon full-time agriculture and rent out part or all of their land, often to the old landlord. In the aggregate, between the 1960s and 1990, the Gini coefficient of the operational land distribution fell by only 3 percentage points, from 0.87 to 0.84.

3.1.2 The new Law and its implementation

Not unrelated to the loss of INCORA's traditional source of finance -a share of duties on agricultural imports that was eliminated with agricultural trade liberalization- a law was passed in 1994 that would allow for a more decentralized and demand-driven process. However, despite favorable preconditions, and the government's expressed determination to distribute one million hectares within four years, the land reform program had a disappointingly slow start.¹⁵ Before describing the new implementation arrangements that emerged to improve on this, it is worthwhile to consider the main reasons for this lackluster performance and the measures taken to address this issue.

To overcome the "fundamental financing problem of the poor" (Binswanger and Elgin 1988, Carter and Mesbah 1993), i.e. the fact that fully mortgage-based financing of land purchases by the poor is infeasible, the Colombian Land Reform Law provides for a land purchase grant. The grants amounts to 70% of the negotiated land purchase price, up to a maximum that was based on historical land reform allocations.¹⁶ However, the grant was restricted to the purchases of *land* and could not be used to undertake complementary investments. This created incentives for collusion between sellers and buyers to overstate land prices, divide the surplus between them, and let the government foot the bill.¹⁷ The resulting incentive structure was strongly biased in favor of the transfer of developed agricultural land

¹⁴ In the early 1990s the administrative costs of transferring land were very high, amounting to about 50 percent of the total land reform budget or about \$15,000 per beneficiary.

¹⁵ This failure to proceed more swiftly with implementation of the negotiated model of land reform was not due to resource constraints but rather institutional rigidities and resistance. In fact, resources available for market assisted land reform were accumulated until the end of the year and then disbursed in a rushed process that bore little relationship to the regulations of the law, using the argument that it would be better to spend the resources imperfectly than losing them.

¹⁶ For historical reasons, the grant was set to be 70% of the purchase price of the land. The remaining 30 percent of the land purchase price, plus any additional start-up investment, has to be obtained from other sources - either the farm household's own resources or a regular loan from a financial institution at market rates, i.e. without any specific subsidy for land reform beneficiaries. It was hoped that by sharing the risk, financial intermediaries would provide additional assurance of the economic viability of land reform enterprises. While the high level of subsidy received strong political support from large landowners, experience thus far indicates that beneficiaries would be better served by a more modest grant that can be used for either land purchase or investments related to the startup of the new enterprise, i.e. that the 70% is too high.

¹⁷ Landlords have in many instances overstated the price of land, and—by covering the complete land value with the 70 percent grant—have obtained a subsidy element of 100 percent. Consequently, in 1996 the price of land acquired through "direct intervention" by INCORA

close to infrastructure and already well endowed with the necessary complementary investment. This tended to reduce land reform to a mere redistribution of existing assets rather than the creation of new ones, by targeting underutilized lands and helping beneficiaries to undertake significant investments. To deal with these issues, it was clarified that the goal of market assisted land reform is the establishment of viable productive projects (*proyectos productivos*), rather than the mere transfer of land. A mechanism was devised to facilitate use of grant funds to finance non land investments, thus overcoming the bias inherent in previous legal provisions.¹⁸

A second issue was that, to create viable agricultural enterprises, rather than a “rural proletariat”, a target income from full time agriculture (equivalent to a minimum farm size of about 15 hectares) was legally required. This neglected the potential of the poor—especially those in proximity to urban areas—to derive income from a variety of sources and left little room either for the exit of unsuccessful beneficiaries or the gradual expansion of the holdings of successful ones through rental or purchase of additional land. It also demonstrated little awareness of the requirements, in terms of human capital, other assets, and experience with financial and marketing institutions, associated with operating a 15 hectare farm.¹⁹ As a result, the law was in danger of concentrating large amounts of subsidies on a well-connected “agrarian bourgeoisie” while leaving the majority of potential beneficiaries uncovered.²⁰ To overcome this shortcoming, the target income was reduced by one third and, rather than being based on general averages, is to be assessed based on a project-specific plan elaborated by beneficiaries that included income from non-agricultural sources.

Finally, even though the law provides for an exemplary and elaborate institutional structure²¹ to facilitate an encompassing process of reform, the fact that there was little incentive for local leaders to actually establish the necessary structures implied that it was difficult to make the model operational and ensure

(under a residual budget) was lower than the price of land acquired by beneficiaries through “negotiated” land reform in the open market, leading to widespread dissatisfaction and calls for the return to the interventionist paradigm.

¹⁸ Given that this regulation creates another layer of bureaucracy, transaction costs, and uncertainty about approval (or scope for politically motivated interventions), it would have been more desirable to change the underlying legal framework than develop ad-hoc solutions.

¹⁹ The concentration of benefits may be expedient from a political point of view - especially if the benefits can be appropriated by the about 10-15% of the peasantry that is politically well organized and that closely collaborates with INCORA. However, comparison with European standards can put the farm size issue in perspective. In 1990 (the latest year for which these statistics are available), average farm size in the EU (including former East Germany) was, with 14.8 hectares, slightly below the Colombian “minimum size” of 15 hectares. Average farm sizes in Greece and Italy are only 4 and 5.6 hectares, respectively, and even in the Netherlands and Germany, the average size of well-established farms was only 16 hectares (Eurostat 1995).

²⁰ The categorical prohibition of rental of land reform land (included in the 1994 law) is unlikely to be enforceable, and may even be counterproductive in that it would discourage successful reform beneficiaries from intensification on part of their land and renting out the other part while preventing unsuccessful reform beneficiaries from exiting.

²¹ The institutional structure is exemplary from a conceptual point of view, comprising (i) decentralized decision-making characterized by maximum local participation expressed through the pre-eminent role of the local councils; (ii) private sector involvement in bringing together potential buyers, provision of complementary credit, and technical assistance to continue during the first two years of production on the land received; and the (iii) limitation of INCORA to a regulatory role preventing misuse of funds, ensuring that regulatory requirements are met, and coordinating the different government agencies involved.

effective beneficiary participation. Lack of dissemination of the law prevented a truly democratic process at the local level. Continued subsidization of INCORA drove out private service providers²² and “success” continued to be defined in terms of transferring land and exhausting budgets than in establishing viable rural enterprises. To change this, a shift of responsibility for approval from INCORA’s headquarters to regional offices had to be accompanied by transferring resources directly to local communities and by clarifying that, among others, existence and functioning of a municipal council was a precondition for *municipios* to become eligible for land reform funds.

3.2 IMPLEMENTATION

While the first two years of program implementation highlighted critical shortcomings, they provided little insight in how to actually implement such a program. In this section we use the experience from five pilot *municipios*, selected to reflect the heterogeneity of the country,²³ to illustrate four key elements for implementation namely

- (i) making land reform a program “owned” by the local government, thus achieving better integration of land reform with existing municipal development priorities or investments and at the same time greatly reducing transaction costs;
- (ii) requiring the elaboration of productive projects that provide the basis for a more programmatic approach to beneficiary training, negotiation of land prices, and an economic evaluation of the expected benefits and costs of land reform;
- (iii) establishing a decentralized and “hands on” program of beneficiary training that would act as a means of pre-selecting beneficiaries (based on their willingness to participate), help them to overcome their structural difficulties, ensure greater “ownership” and ultimately economic sustainability of projects;
- (iv) insisting on a transparent and public process of project approval and linking the needed mechanisms of accountability directly to a process of monitoring and evaluation that links to the municipal land reform plan, aims to quickly detect deviations from targets and the reasons for

²² Private real estate agents, who were supposed to act as information brokers in making potential buyers and sellers aware of market demands, found it difficult to compete with comparable INCORA services which were offered free of charge. In addition, INCORA’s continued involvement in the decision-making process—including its ability to manipulate political levers—put the institution in a position to virtually guarantee a “successful” outcome.

²³ These *municipios* are San Benito Abad in Sucre, Riveria in Huila, Fuente de Oro in Meta, Montelibano in Cordoba, and Puertowilches in Santander. While continued guerrilla activity throughout Colombia undoubtedly affects the scope for implementing land reform, acceptance of and support for the process at the local level has virtually eliminated guerrilla-related disruptions.

them, and forms the basis for an in-depth impact assessment of the land reform process at a later stage.

The expectation is that the steps taken by local governments to improve infrastructure and functioning of other factor markets, together with the land-reform specific measures (described in detail below), would improve potential beneficiaries' capacity to negotiate and make productive use of land and at the same time reduce the gap between the net present value of agricultural profits and land prices. This, in turn, would reduce the size of the land purchase grant required per person, thus making it possible to use a given amount of grant money to attend to a larger number of beneficiaries.

3.2.1 The Municipal Land Reform Plan

A key document in the pilot municipios has been a municipal land reform plan. This plan, elaborated in a decentralized fashion, contains information about demand and supply of land for land reform purposes, and a characterization of the institutional environment and responsibilities for land reform. Following a systematic procedure to establish a municipal plan is expected to have three main benefits.

The first is to *identify potential demand* for this type of land reform. This includes steps such as raising awareness among the beneficiary population and help target the most needy, to establish a transparent process that can ground land reform firmly within the context of other local development initiatives, to identify the potential demand for land reform, and to develop realistic expectations about the extent to which land reform can contribute to the solution of existing problems.

A second benefit is to *identify potential supply* and to generate the basis for reasonably competitive land markets by ensuring that supply of land (at reasonable prices and in areas suitable for small farmer cultivation) exceeds demand.

A final issue is the establishment –at the local level- of the *institutional infrastructure* needed for effective implementation of land reform. To ensure sustainability of land reform projects, it has proven to be critical to identify NGOs who are able to provide continuing technical assistance, and financial institutions who are in a position to extend and effectively supervise credit to land reform beneficiaries. These elements, together with information on the contributions expected from different participants (beneficiaries, central government, local institutions), makes it much easier for local authorities to elaborate a coordinated program of land reform that is in line with the specific needs and opportunities, including the fiscal capacity, of the *municipio*.

Identification of potential beneficiaries

Under the process followed before initiation of the pilots, selection of beneficiaries was often arbitrary and ad hoc. Despite the regulations of the new law, INCORA continued to select beneficiaries on a case by case basis once a given farm had been put up for sale and central approval for the release of the necessary land purchase funds had been obtained. In these cases, to be able to disburse funds quickly, sales of farms were often quite secretive, despite the existence (on paper) of a needs-based qualification system. The selection committees that were established included workers of the existing farm who were generally careful not to admit too many contenders from outside.²⁴

To ensure participation beyond the membership of well-established *campesino* organizations and a transparent and more competitive market for land, this approach has, in the pilot municipios, been replaced by a procedure that aims to create the basis for land transactions through a more competitive market. To identify potential demand, a systematic information campaign to disseminate the law, with subsequent inscription of potential land reform beneficiaries (*aspirantes*) in a registry to be maintained by INCORA, is conducted throughout the *municipio*. A questionnaire provides basic information on beneficiaries' educational level, their agricultural experience (if any), their income sources, and their access to other types of government services such as education or health. Based on this, a pre-qualification, essentially a means test based on assets, is conducted.

Experience indicates that enabling potential beneficiaries to register at public offices and police stations in outlying villages has considerably broadened the outreach of the program. Contrary to the procedures followed earlier by INCORA, the information supplied is checked for consistency, resulting in the elimination of a large number of non-qualified applications. The names of rejected and accepted *aspirantes* (with reasons for rejection) are posted publicly. The publicity of the selection process seems to have increased accountability, and facilitated a better understanding of the scope and limitations of land reform by local authorities and potential beneficiaries. In all of the pilot *municipios*, alternative programs have been initiated to (temporarily or permanently) take care of the specific needs of groups who will not be able to benefit from land reform in the immediate future. These programs include chicken hatcheries and other micro-enterprises for female household heads, construction of rural roads under seasonal food for work schemes, as well as reforestation of environmentally fragile zones.

²⁴ While one would expect that the transfer of large and relatively extensively cultivated farms would provide an opportunity for accommodating additional workers, the opposite often happened in practice, due to the unwillingness of existing workers to reduce their share and the associated incentives to exaggerate the amount of land needed to establish a productive unit. This tendency to expel laborers is well known from the theory of cooperatives.

In addition to generating awareness for the program, its potential target group, and the characteristics of demand, the process of beneficiary selection also provides a basis for local authorities to integrate land reform into a broader program of capacity building and social assistance at the municipal level. This could contribute to the resolution of at least some aspects of the potential conflict between the dual objectives of equity and efficiency which is to some extent unavoidable if land reform is to make a long-term sustainable contribution to poverty reduction.

Creating the basis for a functioning land market

The availability of large amounts of unutilized or underutilized land in large holdings implies that, in a reasonably fluid land market there would be plenty of supply to enable potential beneficiaries to choose the most suitable lands and negotiate to obtain a competitive price. In practice, however, land markets have found to be thin, highly segmented, characterized by high transaction costs, and often pushed into informality (FAO, 1994). Credit market imperfections, lack of market information by potential sellers, and the lack of farm models suited to the specific needs and factor endowments of small agricultural producers, have prevented such an outcome and contributed to the fact that beneficiaries under the old-style reform program often acquired marginal lands at highly exaggerated prices without making productive use of it.²⁵

In the pilot municipios, a procedure similar to the identification of demand for land is being followed on the supply side as well. The first step is to determine ecologically suitable zones and, based on cadastral information, establish an inventory of the land according to size classification that could be used to identify target areas for agrarian reform. Areas where land reform would result in environmental hazards, where soil fertility is insufficient, or where the existing ownership structure is already characterized by small to medium-sized holdings, are thus eliminated *a priori*. This gives beneficiaries a better idea of where to focus their efforts, helps to set realistic goals, and puts into perspective the potential contribution of land reform for solving the social problems of a given *municipio*. It increases not only awareness of the scope for land reform as compared to other options aiming at overall development of the municipio (and the degree to which the success of land reform will depend on such complementary measures), but also forces local governments to think about potential levers (from land taxes to land price information systems and training to increase the productive capacity of potential beneficiaries) that they can utilize to

²⁵ As highlighted earlier, even under the new land reform law, rationing was largely by non-price means—including outright corruption—and the main challenge for landowners willing to sell was to obtain clearance from the regional and central INCORA offices regarding the availability of funds to purchase their land which was seen as the precondition for proceeding with negotiations.

achieve an process of “integrated land market development”.²⁶ Experience from the pilots indicates that land that had traditionally been offered to INCORA for land reform was often of marginal quality and hardly suitable for land reform while some of the best land continued to lie idle or underutilized. Specific measures to resolve this issue have included:

- Increasing sellers’ awareness of the scope and potential for alternative forms, such as land rental that could temporarily or permanently provide potential beneficiaries with access to land increases efficiency and may serve as a springboard for the landless to acquire the information and agricultural experience necessary to put together a productive project.
- Encouraging more effective collection of existing municipal land taxes - a strategy in line with the central government’s desire to increase the revenue base of local governments and to gradually reduce the need for central transfers.
- More effective and systematic dissemination of information not only among potential buyers but also any sellers of land, specifically information on the mechanisms of market-assisted land reform and the modalities of payment under this program.

There is justified concern that a program that provides targeted support to land purchases may contribute to an increase in land prices, and therefore benefit former landowners rather than the poor farmers who receive the land. To deal with this, it has been decided that, to be eligible for land reform benefits, municipios need to provide evidence (using actual sale inscriptions/offers by landowners) that existing land supply is at least three times the amount of land to be transacted under the land reform program.

Institutional basis

Experience suggests that, in the absence of technical support during the startup phase and without access to markets for finance and outputs, the sustainability of newly initiated land reform settlements will be limited. The municipal plan thus contains a list of qualified providers of technical assistance from which potential beneficiaries can choose one to use the part of the land purchase grant that is earmarked for technical assistance. In addition, it aims to identify financial institutions that would be willing to lend to land reform beneficiaries. The rationale for this is simple: It is likely to be futile to initiate a large process of land reform in a municipio where neither credit nor product markets are accessible to potential beneficiaries or where capacity to provide technical assistance is grossly inadequate. While identifying financial intermediaries who would in principle be willing to lend to land reform beneficiaries does not

²⁶ In principle the decentralized implementation mechanism, if coupled with competitive allocation of funds across municipios, should eliminate the scope for spending scarce resources on municipios where land reform is not economically feasible and outmigration is the most cost-

imply that every application will automatically be approved, it can help both parties to be more clear about the rules of the game from the beginning and, in addition, significantly reduce the search cost to be incurred by individual beneficiaries.

3.2.2 Formulation of productive projects

To help beneficiaries assess the requirements, opportunities, and risks they will face as independent farmers more realistically, elaboration of model farm projects has proved to be critical. While these models are necessarily abstract and therefore not directly applicable to the circumstances of specific beneficiaries or farms, they enable beneficiaries and technical assistance providers to be more specific about key factors such as marketing channels, input supplies, working capital requirements, etc. that need to be made more concrete during the subsequent process.

Under the approach followed by INCORA, where agricultural productivity received little if any consideration, beneficiaries generally elaborated their "productive projects" *after* getting access to the land, with little systematic guidance and no discretion in the use of the technical assistance funds which were administered by INCORA (often with "beneficiaries" receiving no benefits at all). Without a clear understanding of the economic potential of the farms to be established, expected returns, and alternative options (within or outside the land reform program), beneficiaries' ability to engage in substantive bargaining was greatly diminished. It was only natural that INCORA took the lead in "negotiating" with the landlord;²⁷ a type of negotiation which ordinarily amounted to a mere formality and generally resulted in acceptance of the price set by an "independent" valuer who was contracted by the landlord and paid in proportion to the assessed farm value.

The pilot experience has indicated that, unless beneficiaries have a clear idea of productive opportunities consistent with their abilities *before* they formulate productive projects that form the basis for "shopping" for land, it is very difficult to break this deadlock. To this end, agricultural professionals that are contracted through beneficiary representatives help establish crop budgets for a range of options actually practiced in the *municipio* and conduct training courses and meetings to disseminate them. Aggregation of these into farm plans involving more intensive land use and sustainable income to beneficiaries provides the basis for the formulation of "productive projects" by individual beneficiaries. Only after

effective form of satisfying demands for land. Due to the limited extent of the pilot, no such cases have, as of yet, been encountered.

²⁷ This perception is illustrated by the fact that official records for the land transferred in 1996 indicate that in all cases where no credit from Caja Agraria was needed (because the seller advanced the 30% complementary credit to the buyer), a farm plan or productive project was "not required".

potential beneficiaries have understood the model budgets, including their requirements and economic implications, do they proceed to a pre-selection of farms they might like to visit.

Thus, instead of being regarded as a tedious necessity to obtaining access to complementary credit (as under the old program), farm plans under the pilot program acquired significant importance in a number of aspects. First, from a substantive point of view the farm models that have been established thus far do constitute a break with the past in that the main goal is to provide full employment of the family's labor force throughout the year. Second, farm plans are characterized by a focus on high value crops rather than traditional bulk commodities, greater diversification of crop production, and an important livestock component. Third, all plans include a significant "garden plot", setting aside about one hectare for domestic consumption needs (including chickens, one pig, and a cow) and intensive cultivation of vegetables or fruits, the surplus of which is to be sold in the market. In the process of shifting emphasis towards these goals, the importance of land area has declined significantly – in many cases the land area is between 30% and 50% of what had been the standard under earlier land reform programs. In addition to this, farm plans also serve as a first step towards the identification and prioritization of investment needs, and to provide a justification for guiding the allocation of public funds to the most productive use.

3.2.3 Beneficiary training and project approval

Negotiated land reform requires beneficiaries to take considerable initiative and perform tasks such as group formation, selection of a viable farm model, adaptation of this general model to the conditions of a specific farm, identification of the productive value of at least a number of farms available for sale, negotiation of a purchase price with the farm owner, arrangement for a credit to finance the land and capital requirements that are not covered by the purchase grant, formulation of a strategy to establish needed on-farm infrastructure, and eventually cope with the challenges and risks associated with sustaining an economically viable farm enterprise. Given their limited endowments and experience, potential beneficiaries are generally unable to go through the steps required in a "negotiated" type of land reform without assistance. In fact, while most of the beneficiaries pre-selected in the pilot had some kind of agricultural experience, almost one quarter was illiterate and 70% had 5 years or less of formal education. While many were in a great rush to receive land, their ability to negotiate or manage resources was clearly limited. Furthermore, even though many beneficiaries came in pre-existing groups, these groups were often based on coincidence more than on similarity of interest. The capacity of these groups to resolve internal conflicts or to devise effective strategies to achieve common goals was low or non-

existent. Problems that will inevitably arise in jointly establishing and sustaining an agricultural enterprise would probably have led to the paralysis or breakup of many of these groups.²⁸

To remedy this, and thus increase the scope for land reform to lead to productivity-enhancing outcomes, an in-depth training program for pre-selected *aspirantes* was developed.²⁹ This program, which is financed from INCORA's administrative budget, aims to cover not only abstract principles but to enable beneficiaries to formulate a viable farm plan. The "theory" part includes topics that range from group dynamics and negotiation to economic analysis, farm management, and budgeting. Simultaneously, or as soon as beneficiaries have tentatively formed groups and decided for certain crop combinations, this is translated into practice in the context of visits to farms that have been offered for sale, calculation of the potential of these farms to generate revenue, the implications for the price that can be paid, the needed startup investments to allow productive use of the farm, and the way in which these can be effected in practice by the beneficiary group.

Contrary to widespread fears, lack of local capacity has not been a problem in developing these training programs. Local Universities, NGOs, farmers' organizations, and government institutions (including INCORA) are enthusiastic to utilize synergies in providing such support in the expectation that they will follow the projects at least through the establishment phase. While the costs of this component are not negligible (about US \$ 1,800 per beneficiary), this is not only less than one third of what was spent by INCORA under the old process but can be more than justified in terms of the outcomes achieved in negotiations. Prices paid for comparable farms under the pilot were about 40% lower than what had been paid in the previous year under INCORA's program.³⁰ Furthermore, while under the INCORA process some beneficiaries cancelled technical assistance contracts that had existed under the previous owner, pilot beneficiaries are keenly aware of the importance of continuing technical support and provisions to pay for this service out of farm revenues are made in all of the respective farm budgets.

A review of unsuccessful land reform cases had indicated two main reasons for failure. One was the absence of a fully funded plan to undertake the investments needed to convert the large farm into an enterprise suitable for small farmer cultivation, and the lack of funds to carry beneficiaries through to the first harvest. To deal with this, the training phase is utilized to develop, together with beneficiaries, a

²⁸ Indeed one of the surprising insights from the pilot was that virtually all of the groups that had initially existed were disbanded and replaced by new ones that were based more on commonality of interest (e.g. in specific production systems) or complementarity in experience.

²⁹ The number of pre-selected *aspirantes* is about double the number of those that could be accommodated as beneficiaries with given budgets to allow for attrition and to ensure that potential beneficiaries do indeed compete in trying to put together the most viable farm projects.

³⁰ These price differences are not due to quality factors. In one case, a farm neighboring (and almost identical) to one that had been acquired in 1996 by INCORA (supposedly under the market-assisted program) was acquired under the pilot with a price saving of about 40% -money which beneficiaries used to pay for complementary investments and working capital. In other cases, discounts of similar magnitude were obtained on the "official valuations" that had been commissioned by the landowners.

detailed plan (monitored by indicators) for the on-farm investments needed to convert the farm into a smallholder enterprise. The ability to obtain partial funding for the startup activities undertaken during this phase has proven to be critical for the project's success.

The second problem was related to lack of access to credit and output markets. Under the pilot, agreements have been reached with a number of cooperative banks already active in rural areas to lend to land reform beneficiaries and thus compete with the government-owned bank that has traditionally provided financing to land reform beneficiaries. The preferred arrangement bears similarity to contract farming whereby the bank works closely with the providers of technical assistance (ensuring that the farm business established by beneficiaries would indeed generate the desired revenues) and help farmers market produce. This enables them to supervise the use of the credit more closely, to ensure that enterprises are indeed developing their productive potential, and to deduct loan repayments at the source, rather than relying on unrealistic expectations of foreclosure. Problems of inter-institutional coordination (essentially the inability of the institutions who have traditionally administered these funds to work with non-governmental institutions) have prevented extending this model to all of the pilot municipios. However, beneficiaries from all the pilot municipios are unequivocal in their preference for dealing with a predictable private sector institution rather than with an unpredictable bureaucracy that is directly or indirectly dependent on government.³¹

In line with the principle that responsibility has to rest at the local level, all of the pilot municipios decide about the approval (and funding) of specific productive projects in public sessions of the municipal council – generally with record attendance. In these sessions beneficiaries have to present and defend their project, thus not only indicating that they understood the critical issues, but also providing an example to guide other candidates for the land purchase grant and thus setting the stage for a transformation of the image of land reform in more general terms. In addition to generating positive feedback loops – beneficiaries who were selected in last year's INCORA land reform projects have already demanded access to similar technical assistance- this also establishes the basis for community-based monitoring and social control to ensure that beneficiaries' performance does actually live up to expectations.

³¹ Indeed, obtaining financing for the projects elaborated by beneficiaries in the pilot municipios developed into one of the main obstacles for smooth implementation. Even though all projects had been thoroughly evaluated and approved at the local level (including visits by bank representatives), it took the government owned *Caja Agraria* between four and five months to obtain central approval from Bogota. This severely damaged the goodwill of landlords who wanted to sell and jeopardized beneficiaries' ability to proceed with their plans in a timely fashion and was often combined with dictating of changes to the projects which were incompatible with beneficiaries' preferences or needs. In view of this, all the parties (including beneficiaries) involved in the pilot agree that the pilot experience can be successfully transformed into a broader national program only if the monopoly of *Caja Agraria* is broken and private sector institutions finance land reform projects. This would, of course, imply that they assume some of the associated risks.

3.2.4 Monitoring and evaluation

It is well known that decentralization without adequate mechanisms of accountability may not have the desired consequences. In addition to helping focus on project quality rather than merely physical quantities (e.g. land transferred) as an outcome indicator, a system that monitors successive stages of land reform implementation would help to quickly identify and rectify unforeseen deviations from the program's overall objectives, in addition to assessing its long-term impacts. Use of a grant-based mechanism that relies on market transactions to redistribute productive assets is an innovative approach and the strong reliance on decentralized mechanisms of implementation generates a tremendous opportunity to learn from innovative practices that are developed in some communities. Careful monitoring is therefore essential to assess the degree to which the program attains its overall goals and to identify means for improving on implementation. This is critical to provide greater responsiveness to operational difficulties than has been available in INCORA practices. Table 2 relates key components of monitoring and impact evaluation to the issues discussed in the municipal land reform plan.

To provide answers to these questions, it is necessary to consider which instruments are best suited to reach particular target groups, maximize the net benefits of land reform (or minimize the cost of its execution), and are compatible with a rapid attainment of the government's quantitative goals and how they perform in terms of beneficiaries' adherence to the project plans they have established (and the associated economic benefits). Of course, the most important question is what the direct and indirect impacts of such an approach on agricultural productivity and poverty reduction are and how it compares with other instruments at the government's disposal, such as construction of infrastructure or support to education. This would facilitate a judgement regarding when, and under what conditions, land reform can constitute a sustainable and worthwhile use of public funds.

Table 2: Key variables for land reform planning, monitoring, and impact assessment

	<i>Municipal land reform plan</i>	<i>Monitoring</i>	<i>Impact assessment</i>
Beneficiaries	Beneficiary identification Beneficiary profile (capacity; welfare) Training requirements Specific projects	Grant per beneficiary/employment. Group formation. Additional employment generated. Targeting efficiency. Improvements in access to land.	Increase in income Consumption smoothing (assets). Credit market access Social services. Reduction of violence
Projects	Demand and supply of land Char's of productive projects Complementary investments needed Cost by component	Characteristics of farms transferred. Implementation of projects. Repayment performance (planned and actual). Targeting of under utilized lands	Agricultural productivity Environmental sustainability Reconcentration of land?
Institutions	Institutional capacity: Local and central government (tech. assist. legal framework) Private Sector (banks, input suppliers, marketing) NGOs (training, evaluation))	Effectiveness in dissemination and capacity building Efficiency of land transfer process. Private sector/NGO participation.	Strengthened local government. Fiscal sustainability Degree of decentralization

Monitoring aims to ascertain whether the program actually achieves its objectives and whether it is doing so at low cost. To this end, it describes what is happening on the ground, compares it to original objectives, and uses the information to update original parameters. The information provided can also be used to (i) assess whether the mechanisms utilized do reach target populations and areas (i.e. poor rural dwellers and underutilized lands); (ii) provide an *ex-ante* estimate of the expected benefits of land reform, both in terms of productivity and poverty reduction; and (iii) provide information on whether implementation is progressing as expected. *Impact assessment*, in turn, is concerned with the ultimate impact, both direct and indirect, of the program on household well-being, agricultural productivity, environmental sustainability, and institutional strengthening. To this end a nation-wide LSMS-type household survey, and a farm survey, will be used as a control group, to be compared to a panel of beneficiaries and lands that will be established under the program.

4 COMPARISON WITH OTHER COUNTRIES

In addition to Colombia, Brazil and South Africa have, under different conditions, recently initiated programs of negotiated land reform. With an institutional background very similar to that of Colombia (presence of land reform legislation and a central land reform institute dating from the early 1960s), negotiated land reform in Brazil has been driven by individual states' initiative. The purpose of the Brazilian interventions is to establish cheaper, more agile policy alternatives to centralized land reform in an environment where the issue of land reform is high up on the political agenda and potential beneficiaries have at least some idea of what to do with the land.

By contrast, negotiated land reform in South Africa has been adopted in the context of the national reconstruction program, in an environment in which productive small-scale agriculture was eradicated almost a century ago. This implies that, in its present form, the program bears many similarities to an urban settlement project and greater effort is required to establish the decentralized infrastructure necessary to implement land reform, to provide complementary services such as marketing and technical assistance, and to increase beneficiaries' agricultural and entrepreneurial capacity.

4.1 BRAZIL

With a land distribution among the most unequal in the world, Brazil's situation is similar to Colombia's in a number of respects. There is a very large and vocal political demand for land reform; a recent FAO study estimates the number of families who are potential candidates for land reform at 2.5 million. A land reform institute (INCRA) was established in 1969, distributing 10 million hectares to 200,000 families and colonizing about 14 million hectares for about 75,000 beneficiary families since then. Land reform has recently acquired considerable political importance; a federal Minister for Agrarian Reform was appointed in 1996 and the land reform budget tripled from US\$0.4 billion in 1994 to \$1.3 billion in 1995 with a further increase to \$2.6 billion proposed in 1997.

The large majority of these federal funds will be spent according to the old process which has been costly (about \$30,000 per beneficiary) and bureaucratically cumbersome. However, state governments in the Northeast have been moving ahead and set up a decentralized market assisted pilot scheme.³² This scheme (supported by a 90 million \$ external loan) aims to speed up the land reform process, reduce costs, and provide the basis for a model that could eventually be adopted nation-wide.³³

The main differences from the old mechanism are the following (compare table 1):

- (i) Rather than relying on a lengthy process of expropriation, land is selected by community-groups on a willing seller-willing buyer basis. This is expected to reduce the price of land from currently

³² The steps involved in the process of expropriation, which is applicable to land that is utilized to less than 80%, are as follows: First there is a visit by an INCRA mission to assess the value of land and improvements, followed by expropriation through presidential decree and confirmation of expropriation through a federal court (*emissao de posse*) in a process that takes about a year. Once this is accomplished, landowners are compensated with *Titulos da Reforma Agraria* (with a real interest rate of 6%; bearing a discount of 25-40% in the market); anecdotal evidence of excessive compensation abounds. The necessary infrastructure investment is then included in the subsequent year's INCRA budget (it takes 1-2 years for the infrastructure to be established) and INCRA announces that the land is available, selecting beneficiaries based on agricultural skills, although in practice all cases are limited to regularization of existing squatter settlements. Once selected, beneficiaries are eligible for credit from PROCERA (max US\$7,500; average US\$4,500), a special program for land reform beneficiaries administered through INCRA (with an effective subsidy of about 70%).

³³ The emphasis on land reform by the federal Government and the initiation of alternative approaches by state Governors (essentially in the hope of being able to demonstrate that they are able to deal with the problem more effectively) is certainly not unrelated to the political strength

US\$11,000 to \$3,000, mainly by avoiding the need to pay for expensive land improvements that are of little use for small scale agriculture. Funds for the land purchase are extended to beneficiaries as a pro forma credit that has to be repaid upon *emancipacion*, an official declaration that the farmer is now able to farm independently, that is combined with the transfer of the title.³⁴

- (ii) Instead of compensating landlords with highly discounted government bonds, they are paid cash. This provides a strong incentive for landowners—including many banks who hold title to large tracts of land as a collateral for non-performing loans—to sell land to land reform beneficiaries.
- (iii) Government's role is reduced to providing assurance that there are no problems with the land titles, and ensuring that the price negotiated between community groups and landlords is within acceptable boundaries. Projects are approved at the state level.
- (iv) Technical assistance is provided on a strictly demand driven basis; beneficiaries can use part of the community grant made available under a World Bank loan to contract private providers; *CONTAG* (Federation of Rural Workers) participates in the state councils and assists with information dissemination and land purchase negotiations.
- (v) The only commonality between pilots and the nation-wide land reform process is the fact that beneficiaries under the new process have access to a subsidized loan under a special program (PROCERA) for land reform beneficiaries.

While the broad principles are similar to those in Colombia, the process is considerably more flexible and agile. The main points of difference are the following:

- (i) Since grant financing is provided for complementary and community-level infrastructure rather than land itself, beneficiaries who expect to repay their land purchase loan have an incentive to bid down the price for land as much as possible. This creates an incentive to focus on lands that are currently underutilized, thus reducing the expected purchase price and directing land reform to areas where the social gains from the intervention are maximized.
- (ii) The process of beneficiary selection is less formal and bureaucratic than in Colombia, relying on an infrastructure of existing community associations to conduct information campaigns. Community control facilitates greater flexibility in project execution but also creates a danger that, without mechanisms for supervision and *ex-post* accountability, landowners select former workers as

of the landless movement (*Movimiento sem Terra, MST*). Whether the MST will modify its approach in favor of the old type of land reform projects will, among others, also depend on the degree to which the new approach will be able to live up to expectations.

³⁴ The number of land reform properties that have been emancipated is minuscule.

beneficiaries and a minority of politically vocal and well represented monopolizes a large part of program benefits.

- (iii) As long as beneficiary organizations exist that can assist farmers in preparing projects and in the initial stages of establishment, the solution chosen—where technical assistance can be financed, on a voluntary basis, through the community grant—is appropriate. However, evaluation of the initial projects should examine whether this prevents beneficiaries from shifting to higher value crops and a shift in production patterns.
- (iv) Given the high subsidy element (about 70%) in the working capital credit provided to beneficiaries, availability of government funds for this credit may easily become a binding constraint for program implementation. In addition, the longer-term economic viability of land reform beneficiaries will depend critically on their ability to gain access to alternative sources of working capital and marketing channels. This, together with the question to what degree beneficiaries do actually expect to repay even working capital credits, could become one of the critical issues for the long term success of land reform.

Given the political importance of land reform and the limited knowledge of both the most appropriate mechanisms to implement this reform as well as the magnitude of the productivity and poverty-impact, the government has established the Central Institute for Agrarian Studies to (i) encourage discussion between all parts of civil society, academics, and politicians on land reform issues; (ii) carry out a thorough and careful monitoring and evaluation of the land reform process either directly or through local institutions; (iii) make the data collected in this process available to national and international researchers, thus acting as a hub in a broader network of countries and researchers interested in negotiated land reform.

4.2 SOUTH AFRICA

While South Africa shares with Brazil and Colombia a highly unequal land distribution, policies that neglected the land rights of the non-white population have systematically exacerbated these inequalities. The Native Lands Act of 1912 prohibited the establishment of new farming operations, sharecropping, or cash rentals by blacks outside of the reserves, which made up only 7.7% of the country's area. Inside the reserves an artificial form of "traditional" tenure with maximum holding sizes and restrictions on land transactions was imposed. Subsequent policies of "black spot removal" transferred the large majority of black farmers who had legitimately owned land outside the reserves into the homelands where tenure

restrictions, high population density, and lack of capital and market access made commercial agriculture virtually impossible. Labor laws that discriminated against blacks in favor of white workers and generous capital subsidies contributed to successive evictions of large parts of the black population from white farms, where they had been employed as labor tenants and farm workers (Binswanger and Deininger, 1993).

While the Native Lands Act was repealed in 1993, the momentous task of a comprehensive reversal of these policies and their consequences was left to the government that entered power following the 1994 elections. In attempting to do so, this government had to contend not only with the extremely unequal land distribution (the average amount held per person was 1.3 hectares by blacks compared to 1,570 hectares by whites) but also the lack of any local government structure, widespread absence of administrative capacity, a highly indebted large farm sector, and fear that redistribution would wreak havoc with agricultural productivity and jeopardize national food security. The government decided to adopt a land reform policy that would redress the injustices of apartheid, foster national reconciliation and stability, underpin economic growth, improve household welfare, and alleviate poverty (Government of South Africa, 1996). The three central components of this policy are as follows:

- (i) *Restitution*: Legal processes have been put in place to compensate (in cash or kind) individuals who had been victims of forced removals after 1913. All Restitution cases are dealt with through the Land Claims Court and Commission, established in 1994 to which claims had to be submitted within a specified time period (end of 1997). Hopes to be able to complete the legal process in a speedy manner have been disappointed – as of the end of 1998 less than 10 (out of about 10,000) cases have been resolved. As expected, the inability of the vast majority of the population to furnish written evidence has made this option feasible for only a small part of the population.
- (ii) *Land tenure reform*: This component seeks to improve tenure security of all South Africans by recognizing individual as well as communal ownership rights to land, giving people the right to make decisions about their own tenure system, adjudicating disputes, reforming tenancy laws, and attempting to end discrimination against women in land allocation and holding. It is intended to create the administrative infrastructure that will provide hitherto disadvantaged groups with access to land under a wide array of arrangements that are in line with agro-ecological endowments and community characteristics. It is hoped that this will provide the regulatory environment for a land rental market by transferring land to more productive users, redressing the inefficiencies of the apartheid system.

(iii) *Redistribution*: As the main component of the government's land reform policy, redistribution aims to complement the market by providing land for productive and residential purposes to a large number of rural blacks who were dispossessed during apartheid and who are interested in obtaining land. It aims to do so by providing a one-time Settlement/Land Acquisition Grant of R15,000 (US\$3,300), the amount of which is equivalent to the National Housing Subsidy available in urban areas to eligible beneficiaries, defined as anyone with a monthly salary below R 1,500. The choice of negotiated land reform rather than expropriation (which, as in Colombia, can still be used as an instrument of last resort) was based on the need to maintain public confidence in the land market, and more generally to affirm the government's respect for individual property rights. It also reflects the recognition that in other countries expropriation has failed to provide rapid access to land for a large number of people and instead degenerated into lengthy political maneuvering and rent-seeking. The number of potential land reform beneficiaries is considerable; estimates indicate that there are about 200,000 labor tenants and 1 million farm workers, and as many as 7-8 million blacks in the reserves (not all of which would, of course, be interested in land reform).

The fact that the large majority of the rural population has never seen a successful and productive small farm, and that many of the land reform beneficiaries themselves seem to believe that efficient agricultural production is possible only on large farms, gives capacity building particular importance. The South African government is well aware of these issues and has set up a number of pilots in different provinces to accumulate experience and improve the execution of land reform. These projects are now gathering momentum and have provided a number of valuable lessons, many of which are currently being integrated into government policies:

- (i) The almost complete fungibility of the land purchase grant represents an important advantage over the Brazilian and Colombian models. It prevents individuals without comparative advantage in farming from becoming land reform beneficiaries just to secure the government subsidy, while at the same time eliminating the possibility that land reform will inflate land prices. However, the absence of any effective beneficiary contribution has resulted in the formation of unwieldy organizational structures (the average "Community Trust" established under the program comprises about 200 households) which are geared more towards acquisition of land than successful operation of an agricultural enterprise.
- (ii) While it is the government's goal to execute land reform with maximum local participation, the lack of an institutional structure has up to now made effective decentralization and beneficiary participation difficult. This has resulted in huge demands being placed on DLA staff and at the same

time considerably slowed down the process (the projected time for DLA to process a project is about 14 months, and often more time is required). While progress has been made in addressing this issue, real involvement of local players is likely to require some devolution of decision-making authority (at present each land designation has to be signed by the Minister himself) and a shift towards *ex post* control. This, of course, is contingent on appropriate information systems being in place.

- (iii) Beneficiaries' access to complementary services and infrastructure has been problematic – a situation that was exacerbated because responsibility for these services rests outside DLA, the agency responsible for land reform execution.³⁵ These shortcomings can be addressed by empowering emerging local governments to play a stronger role in coordinating the different institutions involved at the local level. In addition, more systematically incorporating the private sector (banks and other financial institutions, as well as current land owners) in the formulation and evaluation of farm plans, the provision of technical assistance, as well as marketing and input supply, could effectively address the current problems of “aftercare”.
- (iv) While there is strong emphasis on elaboration of land use and business plans by beneficiaries, many of these plans have been elaborated by entities who do not have responsibility for the long-term economic success of the project and do not contain arrangements for technical assistance in the project's establishment phase. The experience from land reform in Latin America illustrates that, in the absence of clear plan that is available before accessing the land, there is a danger that beneficiaries will eat up whatever capital stock was transferred with the farm and subsequently revert to survival farming. This neglect of the productivity aspect of land reform, often exacerbated by unwieldy group sizes and lack of coordination among different institutions, could seriously threaten the poverty-reducing potential of this intervention, in addition to having negative environmental consequences (Cross et al., 1996).³⁶

³⁵ Based on a case study of one of the provincial land reform pilot in Kwazulu Natal, Cross et al. (1996) report four main shortcomings, namely (i) a complete lack of interinstitutional coordination (e.g. concerning access to water resources); (ii) underestimation of the time and energy required for legal issues such as adjudication between conflicting land claims; (iii) political tensions between ANC and IFP (at the national and provincial level, respectively) which prevent the effective delivery of services other than land to the beneficiaries, and (iv) a tendency to interfere by local chiefs who perceive land reform mainly as a means to enhance their own power which depends on the number of people they are able to accommodate rather than the productive success of the programs that are established.

³⁶ “NGOs and pilot structures are.... beginning to be afraid that they would not be able to do more than provide land redistribution beneficiaries with the minimum of land and secure tenure and that this alone would amount to just dumping them - equivalent to the apartheid practice of dumping removals victims in the middle of the veld with no shelter and no way to make a living” (Cross et al. 1996 p. 166).

5 CONCLUSION

To demonstrate that negotiated land reform can provide a solution to the problem of asset maldistribution observed in many developing countries, two key questions need to be answered. First, one needs to show that the new approach is more effective and less costly than earlier land reform attempts. Second, it will be necessary to establish that investment of scarce government resources in land reform is warranted.

While a final judgement on whether or not negotiated land reform can rise to the challenges that administrative land reform has failed to solve will have to await availability of appropriate data,³⁷ the experience from the three countries provides valuable lessons that can guide attempts to implement programs of land reform. It suggests that (i) land reform through negotiation can only succeed if measures are taken to make the market for land sales and rental more transparent and fluid; (ii) productive projects are a core element of market-assisted land reform that is designed to establish economically viable and productive projects at a socially-justifiable cost rather than to transfer assets; (iii) the only way to achieve effective coordination of the various entities involved in this process is through demand-driven and decentralized implementation; and (iv) the long run success of land reform is likely to depend critically on getting the private sector involved in implementation, and the ability to utilize the land purchase grant to “crowd in” private money.

Making land markets more transparent and fluid: While there is broad agreement that selection of land and beneficiaries should be demand-driven and effected at the local level, the problem is that the conditions for local land markets to function, such as information on land prices as well as beneficiaries’ ability to assess the value of a piece of land or the potential productive returns of its more intensive cultivation, are often limited. Three mutually reinforcing strategies to deal with this constraint are (i) the provision of technical assistance at the community level, including assessment of the adequacy of the land price at the point of transaction; (ii) co-financing of the land purchase through a private financial intermediary which, because it shares in the risk of default, will have an incentive to assess the economic feasibility of the proposed farming project; (iii) a “market information system” to provide prices for plots transacted in the market - both with and without use of a land purchase grant.

Negotiated land reform is a complement, rather than a substitute for other forms of gaining access to land, especially land rental. In this sense, land rental should be understood as a means for beneficiaries to accumulate experience and start-up capital thus reducing the size of the land purchase grant required under a model of negotiated land reform. This has to replace an understanding whereby renting out might

³⁷ Data for such an exercise will hopefully be supplied by the monitoring systems that are established in all of the countries described.

cause owners to lose their land or renting in may cause tenants to become ineligible for a land purchase grant. Up to now none of the models considered here have contemplated in depth the potential benefits of inter-regional migration, and ways to encourage such migration to reduce the cost of a land reform program and at the same time enhance its impact on productivity.

Focusing on productive projects: Productive projects are likely to be the key of market assisted land reform (i) because it is the only objective criterion to put an upper bound on the price that can be expected to be paid; (ii) because it provides a necessary basis for financial intermediaries to evaluate and eventually support such projects; and (iii) because it requires beneficiaries to familiarize themselves with the realities they are likely to confront as independent farmers, and in the process provides them with greater clarity on their own aspirations as well as the potential—and the limitations—of land reform to contribute to the attainment of these goals. In contrast to previous plans that were imposed from the top with little awareness of local constraints, these plans aim to create the basis for a more transparent market at the local level and are the starting point rather than a substitute for more active beneficiary involvement.

Decentralizing implementation: Experience with centralized land reform has revealed it as a slow –and costly- alternative to decentralized negotiation. In Colombia, the whole pilot, from the first dissemination efforts to project approval by a technical committee and local financial intermediaries, was completed within 7 months³⁸ – with landlords being the most eager party to see it advance. Prices paid under the decentralized approach were about 40% below the cost of land that had been paid earlier and beneficiaries see a major benefit from training and detailed project planning in their ability to negotiate independently with landowners and the fact that they have a clear idea of how to proceed once they receive the land. Similar figures are available from Brazil where the presence of community-organizations allowed even more speedy implementation. Even in South Africa, where the absence of local institutions at the start of the program made a relatively centralized mode of implementation necessary, the rapid emergence of local governments has already facilitated significant steps toward greater decentralization and advances in program implementation.

Maximizing private sector involvement: Two lessons have become evident about the financing of land reform. First, restricting a land reform grant to a specific part of the land reform package to the exclusion of others (as was originally the case in Colombia) is likely to be counterproductive; a flat grant that can

³⁸ Following approval of productive projects at the local level, centralized institutions (INCORA and Caja Agraria) engaged in endless soul-searching and tried to reject projects because they were “too far from infrastructure” (even though construction of a bridges or rehabilitation of roads were part of the farm development plan) or otherwise not suited for smallholder cultivation. Even though in the end all of the projects were approved, this did much to undermine the credibility of the process with sellers.

be used for all types of expenditures (as in South Africa) is clearly preferable. Second, without effective beneficiary contribution and assured access to financial markets as a part of the land reform package it will be difficult for beneficiaries to develop financially sustainable operations. There seems scope for exploring possibilities of combining this with mechanisms aimed at sustainable savings generation. Given the high transaction costs of providing credit in rural areas and the increased need for monitoring when most clients lack previous exposure to credit, it is important that this issue be given sufficient attention. This relies heavily on the formulation of economically viable and technically feasible productive projects. Getting participants—government bureaucrats and NGOs as well as potential beneficiaries—to realistically assess the potential as well as the dangers inherent in negotiated land reform is critical.

Such a focus on “integrated land market development” that aims to develop land markets jointly with markets for other factors may offer potential not only in situations such as the ones described here where land is distributed very inequitably. It may also help countries (e.g. Nicaragua, Honduras, El Salvador) where large land reforms has not had the desired productivity impact to realize the productive potential of the reform sector and provide a model for “fair” dispute resolution in situations (e.g. Uganda) where overlapping claims and long-standing disputes over land ownership have severely affected the productivity of land use. If negotiated land reform achieves to direct efforts towards policies that make markets work better for the poor, and at the same time helps beneficiaries improve their human capital endowments, change from passive objects into subjects of the process, and convert a one-time subsidy into a permanent improvement of their livelihood, it will have more than achieved its purpose.

Table 1: Comparison of mechanisms to implement market assisted land reform in Colombia, Brazil, and South Africa.

	Colombia		Brazil		South Africa
	<i>INCORA</i>	Market Assisted	<i>INCRA</i>	Market Assisted	Pilots
Land selection	Selection by <i>INCORA</i> de factor based on political pressure; Cost of \$ 18,000 - 22,000 per family.	By beneficiaries; with means to increase transparency and provide technical assistance.	Purchase or expropriation; average cost of \$ 11,600 per family; mainly legalization of occupied lands.	Negotiated by community; willing seller (including banks)- willing buyer; expected cost \$ 3,000 per beneficiary.	Community initiative.
Land financing	70% of land value (up to \$ 22,000) as grant (20% cash; 50% bonds); 30% through <i>Caja Agraria</i> credit (lengthy delays).	Commercial bank administers grant resources and provides additional credit for land purchase and working capital.	TDA's for unimproved land and cash for improvements and crops; beneficiaries in theory expected to pay back; not enforced.	Loan to approved beneficiaries from a commercial bank (considerable subsidy element).	Max. grant of R 15,000 for land purchase; separate planning grant.
Beneficiary selection	Point scheme for social need and agricultural experience; in practice ad-hoc selection based on individual farms.	Comprehensive registration; and pre-selection based on social criteria. Final selection based on productive projects.	Through <i>INCRA</i> based on examination of agriculture knowledge; in practice almost all are regularized squatters.	Self-selection of beneficiaries; clearance of price and title by State Land Institute; decentralized approval. Occupied lands ineligible.	Self-selection of beneficiaries subject to maximum income criterion (< R 1,500 per month).
Farming project definition	Perceived to be necessary only to obtaining a Bank loan.	Key issue for selection; different forms of technical assistance available. Farm models available at municipal level.	No specific arrangements.	Up to 8% of project value available for technical assistance in project preparation and implementation. Farm models elaborated at state level.	Provincial plan is a precondition but few specific guidelines provided and no farm models are elaborated.
Other financing	Credit for land and working capital is the big bottleneck causing implementation delays.	Independent financial institutions to provide integrated credit for the whole project.	Credit of up to \$ 1150 (average \$ 610) for food and housing and \$ 7,500 (average \$ 4,500) for working capital. 70% subsidy element; minimal cost recovery.	Access to PROCERA credit like other land reform beneficiaries.	Responsibility of beneficiaries.
Off-farm investments	Complex set of interinstitutional coordination with little results up to now.	Identified and priced in municipal land reform plan.	Provided by <i>INCRA</i> (\$ 3,200 in 1994, now up to \$ 8000); almost all for roads.	Grant of \$ 4,000 per beneficiary; disbursed directly to community.	Services and to some extent infrastructure are provincial responsibility; coordination with the center is still weak.

References

- Adriano, L.S., Y. Hayami, and M.A.R. Quisumbing 1990. *Toward an Alternative Land Reform Paradigm, A Philippine Perspective* Ateneo de Manila University Press, Manila
- Balcazar, Alvaro. (1990) 'Tanaño de finca, dinamica tecnologia y rendimientos agricolas', *Coyuntura Agropecuaria*, 7/3:107-125.
- Banaerjee, Abhijit V., and Ghatak, Maitreesh. (1996) 'Empowerment and efficiency: the economics of tenancy reform', Massachusetts Institute of Technology.
- Banarjee, Abhijit V. and Newman, Andrew F. (1993) 'Occupational choice and the process of development', *Journal of Political Economy*, 101/2: 274-298, Chicago: The University of Chicago.
- Banerjee, Abhijit, Dilip Mookherjee, Kaivan Munshi and Debraj Ray. (1997) 'Inequality, control rights and rent seeking: a theoretical and empirical analysis of sugar cooperatives in Maharashtra', Boston University.
- Bardhan, Pranab, Samuel Bowles, and Herbert Gintis. 1996. "Wealth Inequality, Wealth Constraints and Economic Performance." To appear in *Handbook on Income Distribution*, Anthony Atkinson and François Bourguignon (eds.), forthcoming 1998.
- Barracrough, S.L. (1970) "Agricultural Policy And Land Reform." *Journal of Political Economy* : pp. 906-947.
- Berry, R.A. and W.R. Cline (1979) *Agrarian Structure and Productivity in Developing Countries*, ILO Geneva
- Besley, T. and R.Burgess (1998), *Land Reform, Poverty Reduction, and Growth: Evidence from India*, LSE mimeo
- Binswanger, Hans P., and M. Elgin. 1988. "What are the Prospects for Land Reform?" in A. Maunder and A. Valdes, eds., *Agriculture and Governments in an Interdependent World*. Proceedings of the Twentieth International Conference of Agricultural Economists, Buenos Aires.
- Binswanger, Hans P., Klaus Deininger, 1993. South African Land Policy: The Legacy of History and Current Options, *World Development*;21(9), September 1993, pages 1451-75
- Binswanger, Hans P., Klaus Deininger, and Gershon Feder. 1995. "Power, Distortions, Revolt and Reform in Agricultural Land Relations." in *Handbook of Development Economics*, Volume III, J. Behrman and T.N. Srinivasan (eds.), Elsevier Science B.V.
- Birdsall, Nancy, and Juan Luis Londoño. 1997. "Asset Inequality Matters: An Assessment of the World Bank's Approach to Poverty Reduction." in *American Economic Review* 87 (2): 32-37.
- Brooks, K. and Zvi Lerman (1994) *Land reform and farm restructuring in Russia*, World Bank Discussion Paper 233, Washington DC
- Callison, C.S. 1983. *Land to the Tiller in the Mekong Delta, Economic, Social and Political of Land Reform in Four Villages of South Vietnam* (University Press of America), Lanham MD
- Carter, Michael R., and Dina Mesbah. 1993. "Can Land Market Reform Mitigate the Exclusionary Aspects of Rapid Agro-Export Growth?" *World Development* 21 (7): 1085-1100.
- Cross, C, Mngadi, T, Sibanda, S and Jama, V. (1996). Making a living under land reform: Weighing up the chances in KwaZulu-Natal. Chapter six in Lipton, M, Ellis, F and Lipton, M. (eds), *Land, Labour and Livelihoods in Rural South Africa: Volume II: KwaZulu-Natal and Northern Province*. Indicator Press, University of Natal, Durban, South Africa.
- Dasgupta, P., Ray, D. 1986, 'Inequality as a determinant of malnutrition and unemployment: Theory', *Economic Journal* 96 (1986), 1011-1034
- Dasgupta, P., Ray, D. 1987, 'Inequality as a determinant of malnutrition and unemployment: Policy', *Economic Journal* 97 (1987), 177-188

- De Janvry, A., and Sadoulet, E. (1989) 'A study in resistance to institutional change: the lost game of Latin American land reform', *World Development*, 17:1397-1407.
- Deininger, Klaus, and Lyn Squire. 1998. "New Ways of Looking at Old Issues: Inequality and Growth." *Journal of Development Economics* Vol 57/2, 257-85
- Dorner, P., and Thiesenhusen, W.C. (1990) 'Selected land reforms in East and Southeast Asia: their origins and impacts, *Asian Pacific Economic Literature*, 4:69-95.
- Eckstein, Zvi and Itzhak Zilcha. 1994. "The Effects of Compulsory Schooling on Growth Income Distribution and Welfare." *Journal of Public Economics* No. 54 (July): pp. 339-359.
- Eurostat 1995, SPEL – Daten fuer die Landwirtschaft der EU = SPEL Data for EU Agriculture = Dounees SPEL pour l'Agriculture d l'EU, Luxembourg: Office des Publications Officielles des Communautés Europeenne.
- Fafchamps, Marcel and Pender, John. (1997) 'Precautionary saving, credit constraints, and irreversible investment: Theory and evidence from semi-arid India'.
- Fajnzylber, P., Lederman, D, and N. Loayza (1998), What causes violent crime? World Bank, mimeo
- FAO 1994, Mercado de Tierras en Colombia, Rome, mimeo.
- Galor, Oded and Joseph Zeira. 1993. "Income Distribution and Macroeconomics." *Review of Economic Studies* 60: pp. 35-52. Oxford: The Review of Economic Studies Limited.
- Government of South Africa. 1996. "Our Land." Green Paper on South African Land Policy. Head Office, Department of Land Affairs.
- Guinnane, Timothy W. and Miller, Ronald I. (1997) 'The limits to land reform: The land acts in Ireland, 1870-1909', *Economic Development and Cultural Change*, 45/3:591-612, University of Chicago Press.
- Heath, John, and Hans P. Binswanger. 1996. "Natural resource Degradation Effects of Poverty and Population Growth are Largely Policy-Induced." *Environment and Development Economics*, Volume 1, Part 1. Cambridge University Press.
- Hoff, Karla and Andrew B. Lyon. 1994. "Non-Leaky Buckets: Optimal Redistributive Taxation and Agency Costs." *NBER Working Paper Series* No. 4652. Cambridge, MA: National Bureau of Economic Research.
- Horowitz, Andrew W. (1993) 'Time paths of land reform: a theoretical model of reform dynamics', *The American Economic Review*, 83/4:1003-1010.
- Jalan, Jyotsna and Ravallion, Martin. (1997) 'Are the poor less well insured? Evidence on vulnerability to income risk in rural China', The World Bank.
- Jonakin, Jon. (1996) 'The impact of structural adjustment and property rights conflicts on Nicaraguan agrarian reform beneficiaries', *World Development*, 24/7:1179-1191.
- King, R. (1977) *Land reform: a world survey*. London: G.Bell and Sons.
- Koo, A.Y.C. (1968) *Land reform and economic development: a case study of Taiwan*. New York: Praeger.
- Kutcher, G.P., and Scandizzo, P.L. (1981) *The agricultural economy of Northeast Brazil*. Washington, D.C.: World Bank.
- Li, H., Squire, L. Zou, H.F. (1998) Explaining international and intertemporal variations in income inequality. *Economic Journal* 108, 26-43
- Lieten, G.K. (1996) 'Land reforms at centre stage: The evidence on West Bengal', *Development and Change*, 27, 111-130.
- Lipton, Michael. (1974) 'Towards a theory of land reform', in: D. Lehman, ed., *Peasants, Landlords and Governments: Agrarian Reform in the Third World*, New York: Holmes & Meyer.

- Mision Social.. 1990. Ministerio de Agricultura, Departamento Nacional de Planeacion.. *El Desarrollo Agropecuario en Colombia*, Tomo I. Bogotá, D.E., República de Colombia.
- Moene, K.O. 1992, 'Poverty and Landownership', *American Economic Review* 82 (1992), 52-64
- Mookherjee, Dilip. (1997) 'Informational rents and property rights in land', in: J. Roemer,ed., *Property Rights, Incentives & Welfare*, Macmillan Press, 1997.
- Otsuka, K. (1991) 'Determinants and consequences of land reform implementation in the Philippines', *Journal of Development Economics* 35:339-55.
- Reydon, Bastian Philip and Pedro Ramos 1996, *Mercado y Politicas de Tierras*, UNICAMP/IE, Campinas
- Rodrik, Dani 1998, *Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses*, Harvard University, mimeo
- Rosenzweig, Mark R. 1978. Rural wages, labor supply and land reform: A theoretical and empirical analysis, *American Economic Review* 67 1987. , 847-861
- Swinnen, Johan F. M. 1997, Does Compensation for Disruptions Stimulate Reforms? The Case of Agrarian Reform in Central and Eastern Europe, *European Review of Agricultural Economics*;24(2), 1997, 249-66
- World Bank. 1996. *Review of Colombia's Agricultural and Rural Development Strategy*. Washington, D.C.

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