PROPERTY REGIMES IN ECONOMIC DEVELOPMENT: LESSONS AND POLICY IMPLICATIONS Daniel W. Bromley

I. INTRODUCTION

This chapter is concerned with property regimes and property relations as they pertain to development projects undertaken in the interest of improving the management of natural resources. Development projects represent new streams of income and associated benefits to a local community, and sometimes to the nation-state in which these communities exist. But most development projects bestow the bulk of their beneficial (and harmful) effects on those in closest proximity to the development intervention. Sometimes these new circumstances will have been sought by those in the local community. Sometimes the development project will appear without local initiative.

The major difference in the long-run performance of these two types of projects can be profound indeed. One thing we know with almost striking certitude is that when local citizens have played a role in the conception of a development project, the chances for success are usually better than when projects simply appear from outside and are seen either as gifts, or as impositions. While this matter is not central to the issues I wish to raise here, the point bears mention because it addresses a fundamental issue in the domain of "ownership"—whether we think of ownership in relation to land and related natural resources, or in relation to alterations in the social and economic circumstances among local people arising from development projects.

Perceptions of ownership arise in the domain of property relations in and around the community into which development projects appear. These property relations will dominate the probability of success of all projects concerned with land and related natural resources. The

centrality of property relations arises not because property relations connect people to land and other physical objects. Rather, property relations are central in development because they connect people to each other <u>with respect to land and related natural resources</u>. Notice that the emphasis is not on people and objects, but on people <u>in relation to objects or circumstances</u>. Property relations are simply socially constructed contractual arrangements among a group of people with respects to objects and circumstances of value to them. Property relations are created by human communities to mediate individual and collective behaviors regarding objects and circumstances of value to the members of the community.

It often happens that development projects are less successful than they would otherwise be precisely because the existing property relations have been ignored. Or, just as frequently, failure arises because the existing property relations have been misunderstood.

My purpose here shall be to address property relations in the context of developmental efforts. Some of these developmental efforts will have as their purpose the mitigation of natural resource degradation. Other such efforts will be primarily concerned to increase agricultural production and other income-earning possibilities. And of course some projects will seek to do both of these things. In my discussion I will try to summarize what we have learned over the years in the domain of property relations in the developing world. I will call attention to what has worked and what has not worked with respect to project design and implementation. And I shall draw implications for policy reform and institutional design. In essence, I shall try to emphasize those things that are necessary components of a development program focused on land use and land management in the developing world. To help the reader focus on the essential issues here, I shall begin with a section on the <u>lessons learned</u>. I will then turn to an elaboration of why these particular findings are—or seem to be—true.

2

II. PROPERTY REGIMES: LESSONS FOR DEVELOPMENT PLANNING¹

A. Property Regimes Are Part of the Larger Institutional Structure.

Perhaps the most obvious place to start is to recognize that property relations over land and related natural resources must be understood as part of the larger institutional structure of a society [Bromley, 1989]. In other words, property regimes are a social construct and therefore cannot be seen as something apart from the society in which we address development problems. It is curious that one must make this point, but the evidence is clear that some development planners imagine that property regimes stand apart from local culture. They are often likely to suppose, as well, that there is but one possible property structure that exists—or ought to exist—throughout the world. Their favorite candidates are: (1) that into which they (the development planner) were socialized; or (2) that which was implicit (or explicit) in the particular discipline in which they were trained.

As social scientists, we are acutely aware that the institutional setup of a Muslim society is very different from one that is Hindu or Christian. We readily accommodate those differences in our analysis of development projects. A rural health program must be structured differently if it is intended for Pakistan than if it is being implemented in Paraguay. A livestock project must look very different in northern India than in eastern Africa. A program to improve primary schools would be quite different in Yemen than it would in the Philippines. That is, we have now learned that development programs and projects must be crafted to different cultures and institutional structures.

¹ I will use the term property "relations" and property "regimes" interchangeably. Both terms are much preferred to the more common property "rights" because they focus on the full panoply of property structures in a particular community. To talk of property "rights" is to jump immediately to a more legalistic and judicial idea as opposed to the social dimension of property regimes and property relations. To deal with property "rights" is to enter the domain of contention and disputes, whereas to deal with property relations is to address structures of contractual relations among economic agents.

Despite this cultural sensitivity to programs and projects, there is often a degree of institutional singularity when it comes to property regimes. For some reason, economists will often find it difficult to admit that property regimes can and do show as much variability across cultures as do other social arrangements. The reason for this difficulty, no doubt, is that property relations are incorporated into economic models and economic analysis such that there is but one way in which to organize behavior. Private (individualized) property is implicit in a theory of economic behavior that reifies individual autonomy predicated on rational self interest. Simply put, no other property regime is consistent with a theory of behavior founded on methodological individualism.²

But the institutional arrangements of a society—of which property relations are of current interest—must be understood as a reflection of prior values and expectations regarding future opportunities. Just as there is no "right" culture, there is no "right" property regime. Rather, there are property regimes responding to, indeed reflecting, manifold interests and priorities. As observed by Dahlman:

In the process of defining property rights, the economic system must make two interrelated decisions...The first is to decide on the distribution of wealth; who shall have the rights to ownership of the scarce economic resources even before, as it were, trading and contracting begin. The second refers to the allocative function of property rights; they confer incentives on the decision makers within the economic system...one set of decisions must be treated as endogenous for the system, and constitute the exogenous conditions for each trading agent in the resulting set of trades; the second set of decisions is made in the context of the making of these trades [Dahlman, p. 85].

Property relations—property regimes—are reflections of this <u>pre-allocative</u> function of any economic system. And, by being pre-allocative, property relations must be understood as social constructs whose nature and existence are precisely antecedent to what we ordinarily regard as "economic" behavior.

² Methodological individualism is the philosophical position that the single agent is the <u>sufficient</u> unit of analysis. Contemporary economics is built upon the precepts of methodological individualism.

It is indeed encouraging to see institutional arrangements receiving increased attention in economics. The seminal worksof Ronald Coase and Douglass North have been foundational in this regard. However, intellectual incoherence is inevitable if this recognition of the importance of institutions is allowed to proceed under the patently false notion that institutions are <u>constraints</u> on the otherwise "efficient" workings of an economy. Institutions—property relations—are simply structural attributes of an economy that provide agents with domains of choice within which they may act. They are, at once, constraints and liberation. A property right for Alpha (a liberation) is a "duty" for Beta (a constraint). Property relations exist for just this reason—to liberate Alpha and to constrain Beta. The social problem, therefore, is how it shall be decided that Alpha deserves liberation and therefore that Beta warrants constraint. That question cannot be decided from within economic models which are themselves predicated upon that institutional setup. Nor can that choice be decided upon some claimed "efficiency" grounds for the simple reason that judgments of efficiency are themselves artifacts of the prices and income distribution (and hence structures of "effective" demand) that are the products of a particular institutional structure [Bromley, 1989, 1990].

We are left with the realization that property relations—property structures—must be seen as logically and socially prior to the economizing behavior we attempt to analyze and explain in our economic models. The first lesson, therefore, is that we must understand property regimes as particularistic structures that gain their rationale because they are seen to address fundamental questions about which members of society deserve the protection from the state that property relations entail. Property relations are manifestations of whose interests count in a particular social setting.

B. All Property Regimes Require External Legitimacy.

The previous discussion provides a logical precursor to a second lesson about property relations. One of the very clearest lessons from the past several decades of economic assistance to

the developing world is that customary (and traditional) property regimes have fallen prey to the priorities and imperatives of influential forces at the center of the nation state. Against these pressures—which can manifest themselves in terms of large-scale logging of valuable timber, the encouraged extraction of minerals, the subsidization of commercial fishing fleets, the promotion of massive resettlement projects, or the development of commercial agriculture in pastoral or forest regions—traditional property regimes are nothing. Communities of resource users cannot be expected to be able to resist the economic and political power from the national capital in order to stand up to such pressures for resource extraction.

Sometimes, pressure on local property regimes is more subtle than that suggested above. In particular, perhaps crop agriculture is given preference over pastoral activities. In such instances, the political and economic vulnerability of pastoralists means that the property regimes central to pastoralism will be undermined. If a development project is aimed at improving range and forest conditions for pastoral peoples, then it is a necessary precondition that the property regimes central to this particular economic activity be recognized by the authority system (the nation state). It is not enough that pastoralists have traditional grazing "rights" in a particular area. If the property regime central to pastoralism is to survive incursion by outsiders, then pastoralists cannot be expected to mobilize their own defense of the assets central to their survival. After all, holders of private property are not expected to defend their own claims to ownership; the authority system does that for them.³ Indeed, to have a property right is to know that the authority system will come to your defense against the predatory behavior of others interested in your situation or circumstances.

³ Although we know that in most urban places in the developing world, the inattention and unreliability of official enforcement structures (i.e. local police) means that protection of private property (homes and businesses) has necessarily been "privatized" by those who could afford it. The rest, largely without assets worth serious protection, take their chances.

Property Rights:

But successful development projects and programs require more than the willingness of the authority system to defend the property regimes in a particular location. It is also necessary that the A property right is the capacity of the holder of such right to <u>compel</u> the authority system to come to his/her defense. To have a property right is to have the capacity to <u>require</u> the authorities to defend your interests in an object or a circumstance.

members of the community have developed local structures of authority to manage natural resources in a sustainable manner. Very often development projects come to those areas in which resource degradation is rather advanced. And just as often, part of the reason for that degradation or natural resources will have been a breakdown of authority over the resource—by internal conflict, or by intrusion into the area by outsiders.

The second lesson, therefore, is that any structure of property relations requires a commitment from the recognized system of authority that enforcement will be collectively assured instead of privately required [Bromley, 1991]. After all, when individuals must enforce their own property rights, the concept of a property "right" becomes a contradiction in terms.

C. Ambiguous Rights Regimes Have Ambiguous Efficiency and Distributional Consequences.

The record of development projects around the world seems somewhat mixed with regard to the distributional implications of ambiguous property rights structures. In some places we know that the rich will exploit the institutional vacuum which characterizes open access resources and even some common property resources [Blaikie, Harriss, and Pain; Jodha]. Yet we also know that some ambiguity in property regimes can work to the advantage of those without control over private property resources where there is practically never any ambiguity. That is, some natural resources over which rights are ambiguous are available to individuals who—were the resources more valuable and therefore vulnerable to expropriation by the powerful elements in a community—would be excluded. The very meagerness of the bounty from such assets means that the better-off elements in society do not bother with them [Cordell and McKean].

However, when development projects are introduced that increase the income flow from these natural resources over which rights had previously been ambiguous, then we also know that powerful individuals at the local level will usually figure out a way to expropriate at least a part—if not the majority—of these new income streams. Hence, while ambiguity can often work to the advantage of the dispossessed, it is unlikely to do so when development projects are introduced into this kind of institutional environment.

Therefore, the third lesson suggests that development projects introduced into settings in which there is great ambiguity about property relations will most probably have economic and social impacts quite different from those postulated in the proposals and feasibility analyses that led to the project's acceptance and implementation in the first place.

D. Specify Property Relations Prior to the Implementation of Development Projects.

A development project is a "relational contract" involving three entities: (1) the donor agency; (2) the nation state (the co-sponsor) into which the project is to be placed; and (3) the local individuals whose life we hope will be altered for the better. We must recognize that each of these entities will always have its own agenda and that only in the rarest of circumstances will those various agendas be entirely coincident and mutually enforcing.⁴ But disparate agendas suggest disparate perceptions of ends and means—of objectives and of instruments.

While the authority structure of donors and nation states assures that the implementation of a project will appear to be unified and in harmony, we encounter no such hegemony at the local level. Indeed, we place projects in areas that—as a general rule—warrant outside assistance

⁴ This is offered not as an assertion of impropriety but as an empirical observation of great import to the ultimate success of development efforts.

precisely on account of the incoherence and contentious nature of local institutional arrangements—of which property relations are of paramount importance. Those conditions of institutional incoherence are, after all, usually not unrelated to situations of chronic poverty, of serious natural resource degradation, and of the inability of the local people to undertake and to sustain adequate material provisioning. That is the "development problem."

I have already suggested that institutional dissonance and ambiguous property relations almost certainly favor the already advantaged when the benefits of a development project begin to appear. And the record of development interventions over the past several decades would seem to suggest that new income streams arising from development projects have a difficult time finding their way into the hands and pockets of those most in need of help. The puzzlement about persistent poverty in the wake of decades (and billions of dollars) of "development" projects is really no puzzle at all. The poor remain poor because the institutional arrangements rendered them poor prior to the development intervention, and there are durable pressures—and non-trivial individuals—to make sure that the mere advent of a "development project" does not somehow upset the institutional arrangements that created the current structure of economic advantage in the first instance.

The fourth lesson, therefore, is that <u>every development intervention</u> must be preceded by a concerted effort to insure that the institutional arrangements have been modified so as to make sure the benefits go to the intended beneficiaries. This modification of the "working rules" of the local economy must occur <u>before</u> the new benefit stream begins to materialize.

This re-specification of the working rules (including property regimes) need not entail every possible detail of future circumstances associated with the development project. But if certain general principles are not spelled out, there will certainly be problems as the benefits of the development intervention begin to appear. To prevent this, it is good to think in terms of a general framework out of which greater detail will emerge. For instance, if a reforestation project is planned, it will be important to have in place a general program of protection and management before the trees are planted. Such a framework would need to specify who will be responsible for monitoring use of the new plantings, what uses are acceptable during which times of the year (and when they may start), and how breakdowns in compliance will be handled.

For a project to rehabilitate an abandoned irrigation system, it will be necessary to work out a "constitution" that specifies the order in which irrigators spread out along the major and minor distribution arteries shall receive water in any particular cycle of water availability. It will also be necessary to make sure that rules of maintenance are spelled out, in a general way, before the first water flows through the system.

COMMON PROPERTY: A group of co-owners as a "corporate" entity has a *right* to exclude non-owners and that right is recognized by an authority system in which the common property regime is situated (say the nation state). Individual co-owners are bound by both *rights* and *duties* regarding behavior in respect of the asset.

Of course we know that this is easier said than done. Or, more correctly, it is more easily done than enforced. This brings us to the issue of the design and implementation of sustainable interventions (in contrast to sustainable development). Issues of sustainable interventions take us, inevitably, back to a discussion of the larger institutional context within which the need for development projects arises.

E. Resource Degradation is the Result of Problems That Precede Property Regimes.

There is a genre of literature that seeks to blame certain property regimes for widespread degradation of natural resources. Most often, resource degradation will be laid at the feet of so-called "common property." While there are indeed common property regimes in which resource degradation is prevalent, the more probable institutional setup is one of "open access" in which no property rights exist. But situations of open access—either in a narrow legalistic sense or in an

operational sense—are themselves manifestations of larger institutional problems. Hence, a more realistic assessment and diagnosis would indicate that resource degradation arises for many reasons—only one of which may relate to the particular property regime in place [Deacon, 1994, 1995]. If we consider soil erosion from agricultural lands, it is obvious that much of this erosion occurs on private land; this is as true in the developing world as it is in the Corn Belt of the United States. It is curious indeed that private property is not blamed for soil erosion in Nebraska, while common property is blamed for soil erosion in Namibia. When Nebraska farmers allow 15 tons per hectare of soil annually to wash into the Niobrara River, the blame will be said to lie with the wrong technology (moldboard ploughing), with a rate of time preference that is too high, or with ignorance of the future yield-reducing effects of such erosion over the long run. But when Namibian farmers allow 15 tons per hectare of soil annually to wash into the Konkiep River (or to blow into the South Atlantic), the blame will go to the fact that they are farming under a "primitive and quaint" common property regime. This obvious asymmetry reveals more about the ideological predisposition of the commentator or analyst than it does about the causal structure in each setting.

These particular resource management "outcomes" are largely explained by existing institutional structures, of which property regimes are but a part. The outcomes are explained, as well, by existing customs and norms—and economic imperatives—that are often much more important than the particular property regime in which both farmers operate.

The lesson we draw from this is that prior to the offering of development advice we must build structurally coherent models that gain their legitimacy by their capacity to <u>explain observed phenomena</u> as opposed to being <u>merely</u> <u>consistent with observed phenomena</u>. Any sophomore in economics can construct a simple model showing that "common property" will result in more erosion than "private property." Such toys in the hands of novices are merely consistent with received dogma; they <u>explain</u> nothing. More seriously, such models—when employed in the service of prediction—quickly become the basis for normative prescriptions without benefit of empirical evidence or conceptual logic. Once somone has built a model that "proves" common property is more conducive to erosion than

The nation state maintains control of the area and will usually manage it through the activities of a government agency—forestry service, parks service, etc. Individuals in the nation state may have the *right* to enter and use the resource, with a clear *duty* to observe certain strictures on use.

OPEN ACCESS:

An open-access resource is one in which there are no property rights for anyone. Under open-access resource settings, the first individual or group of individuals to appropriate resources becomes, by default, their "owner." But ownership under this situation arises from capture, not from a prior legitimation by the state. Under open-access, individuals are free to use a resource without regard for the implications accruing to others. We say that the individual in such settings has *privilege* to use the resource, but also has *no right* to prevent others from using it. An open-access resource is a free-for-all in which the rule of capture drives all users to take as much as possible, as quickly as possible. There are no property rights in openaccess regimes.

private property, it is not a long reach to predict that all common property regimes will have erosion in excess of that from ecologically comparable private property regimes. And from there, the normative element slips in to claim that all common property regimes <u>should</u> be converted to private property in order to reduce resource degradation in general, and soil erosion in particular. The lesson here is that we must be careful to avoid building flawed causal models that become the basis for suggesting false solutions to land management problems.

F. Ecological Variability Demands Flexible Institutions and Actions.

The instrumental nature of institutional arrangements, including property regimes, is best demonstrated when we think about the intersection of the realms of ecological variability and the holding of social and economic capital. In temperate climates, fixed assets such as land hold great economic potential and social status. Small wonder that we find in such places elaborate institutional and technological structures to define and control access to, and control over, land. Most residents of temperate climates regard it as quite normal to view a fixed land base as both an economic asset and as a source of social status. These same individuals have been known to offer a bemused smile when told that African pastoralists gain social status from holding not land but cattle. But of course this quaint practice is a product of their "primitive stage of development" it will be said.

However, the fact that cattle are privately owned and land is not says less about stages of "development" than it does about the ecological reality within which Africans must make a living. This institutional structure reflects an adaptive response to the reality of provisioning where soils are poor, rainfall is fickle, and irrigation is not in the feasible set. Pastoralism is a response to these circumstances, and the institutions of resource management are a constructed overlay that allows herding to function in such settings. It is not surprising that this structure of flexibility will, at times, bump up against an alternative property rights structure—private property—constructed for rigidity. But institutional flexibility is a necessary attribute of certain economic systems [Cousins; Behnke; Behnke and Scoones].

Conflicts between pastoralists and sedentary agriculture in the arid climes must be understood as a conflict over property regimes. In agriculture as well as livestock production, property rights emerge to secure income streams generated by production activities. The nature of the income stream, then, may affect the type of property right that is likely to be established. The crucial difference between sedentary farming and nomadic livestock production is that they differ in their ability to react ex post to temporal uncertainty; in other words, they differ in flexibility [van den Brink, Bromley, and Chavas, p. 374].

Unfortunately, property rights essential for livestock production in the Sahel have been eroded by a long history of conflicts. More recently, a number of state interventions that expropriated pastoralist property rights crucial to their economic systems have clearly favored farmers over pastoralists in the allocation of private property rights. These changes have created general uncertainty over property rights to natural resources, thereby inducing a de facto open access situation. The resulting tragedy of open access, induced by public policy, has substantially increased the (transaction) costs of running the pastoralist economy and adversely affected the pastoralists' ability to overcome periods of drought [van den Brink, Bromley, and Chavas].

The obvious lesson for sustainable resource management is that ecological settings that exhibit great variability require property regimes that allow quick and low-cost adaptations to these new circumstances. Livestock as an asset, because of their mobility, provide this flexibility in a way that the immobility of land cannot possibly equal. Small wonder that the institutions over livestock and land differ so profoundly between the temperate climates of the middle latitudes, and the arid and semi-arid reaches of Africa and Asia.

G. Resource Degradation is Contextual

Once we recognize that the social and economic meaning of various assets will differ across ecological and social circumstance, then it follows automatically that the social and economic meaning of what is a "resource" will differ. The social and economic meaning of a resource is something that brings value; a resources is an "input" into something from which benefits flow. But this means that "resource degradation" cannot be understood without reference to the prior notion of what, exactly, is the set of resources to which a particular society is predisposed to pay close attention.

It should be clear that "overgrazing" is a term that derives its operational content from a larger social and economic context. Unless one treasures particular desert plants for their own sake, their relative paucity in particular locations is without normative significance in a development context. Of course more and better plants would allow more and better livestock, that would then allow—and the chain is getting more tenuous as we proceed—more and richer herders, that would allow more economic surplus flowing to urban areas, that would allow "lift-off" to some state defined as "development." Absent that teleological sequence, more or fewer plants in some corner of the Sahel, or robust as opposed to scrawny plants, carry no policy message whatsoever.

The general "condition" of a specific natural resource in a particular place is a socially constructed concept. The policy relevance enters when different constructions become associated with the same ecological reality.

But the lesson we have learned over the past several decades of development interventions in the domain of land and related natural resources is that the only coherent social construction is that which derives from those whose existence is most directly connected to those resources. Of course technical experts can help to make sure that local people grasp the prevailing scientific explanations (or conjectures) for particular ecological outcomes. But given the large number of scientific "truths" that no longer command even minimal assent, such "technology transfer" must be quite cautious and circumspect.

H. Land Titles Are Not Necessary for Efficient Investments in Productivity

I now wish to discuss the apparently self-evident proposition that a "secure title" to land is a necessary condition for investment in, or the "wise" management of, land and related natural resources [Feder and Noronha; Mendelsohn; Southgate]. Interestingly, this "truth" is less true than many might like to imagine [Place and Hazell]. In fact, the contrary proposition—that investment in land is a necessary condition to secure "title" in that land—is equally probable. Rather than investment requiring security, security requires investment [Sjaastad and Bromley].

The confusion in this domain has to do with the precise meaning of "security" and "title." It seems to be the experience in some parts of the world that the titling and registration of land was the immediate precursor to the dispossession of those who imagined that this step would ensure their longevity on said land. Instead, such title became a means whereby money lenders and others with some measure of political influence were able to acquire what the poor once thought was "their" land. Rather than title enhancing security, it had quite the opposite effect. But of course title served to establish security for those who managed, by whatever means, to gain control of land that had heretofore been controlled by chiefs and other local notables. So the issue is not one of mere "title and security" but of <u>security for whom</u>.

To those trained in the modern scheme of things it seems quite self-evident that individuals will only invest in some asset if their control over that asset is recognized and secure. However, to return to my very first point about property regimes being part of a larger institutional structure, it seems important to recall that in some settings, Alpha may wish to invest in land for the benefit of Beta. When this is the case, it is not Alpha's future that must be secured, but Beta's.

The lesson here is that we must be careful about the direction of causality when discussing fundamental economic behavior among disparate peoples in widely scattered corners of the developing world. To suppose that investment is stifled because bankers cannot see a clear title against which a loan might be offered is to impose a particular constellation of assumptions on a setting that has an entirely different structural makeup.

I. Mobilizing Local Interests Can Improve the

Chances of Program Success

The importance of "ownership" was suggested at the outset. Many development programs and projects require that established patterns of human interaction—and traditional resource uses—be modified. We know that PRIVATE PROPERTY: Individuals (or groups) have a *right* to undertake socially acceptable uses, and have a *duty* to refrain from socially unacceptable uses. All others, ("non-owners") have a *duty* to respect the boundaries of the property regime, and have a *right* to expect that only socially acceptable uses will occur.

efforts to impose such changes from outside are not sustainable, and this means that the intended benefit streams from such interventions will not materialize over the long term.

In natural resource projects, there is growing recognition that "community based conservation" is an important innovation in creating the conditions for sustaining both natural resources, and the local commitment to that sustainability [Western, Wright, and Strum]. The essence of community-based conservation is to reconstitute the incentives at the local level so that those closest to the resource are given a greater stake in its long-run viability [Bromley, 1994]. In effect, those closest to the resource are given an "ownership" interest in its future value. That approach will generally get the incentives right.

Of course, this is necessary but not sufficient to insure improved behaviors with respect to resources. For instance, it is possible that an ownership interest in the future viability of particular natural resources simply allows for its more efficient degradation. After all, we have seen above that an ownership interest in top soil is no guarantee that it will not be washed away. So while creating a sense of ownership by locals in particular resources can accomplish much in solving the incentive problem, such arrangements may still require an oversight role for some higher authority if there is a national or international interest in the particular resource [Arya and Samra].

Still, as a general proposition, we can say that an important lesson learned over the years is that the success of development interventions in natural resource projects and programs is that the chances of sustainability are enhanced as a direct function of the extent to which local people acquire "ownership" in the future benefit stream associated with a particular natural resources.

III. IMPLICATIONS FOR DEVELOPMENT POLICY

I have spelled out nine lessons for those working in the general area of land rights and resource management. In essence these lessons pertain to: (1) the social embeddedness of property regimes; (2) the concept of a "resource" and resource "degradation"; (3) the social instrumentality of institutions such as property; and (4) those institutional arrangements that seem to enhance the success and sustainability of development interventions.

We must keep in mind that development endeavors are both threatening to certain interests, and also very rewarding to other interests. Property regimes play the central role in directing benefits and costs to different groups at the local level. This means that the outcomes of development activities are fundamentally dependent upon the institutional arrangements in general, and property relations in particular.

This should not be surprising. After all, it is the institutional structure that is largely responsible for those conditions that lead to the need for development assistance in the first instance. Ameliorative activities in the way of development programs and projects cannot possibly succeed without a careful analysis of these institutional precursors of current problems, and without a clear program of correction as a precursor to project implementation.

18

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