# MANAGEMENT AND USE OF LAND AS A PUBLIC GOOD

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# PUBLIC LANDOWNERSHIP—WHAT IT IS IN A SYSTEM OF LAND TENURE

I begin with some definitions and descriptions to make clear what I am talking about when I refer to land, land tenure, public landownership, and land policy.

#### Land

By "land" I mean any desired but scarce attribute of nature (including any sunk alteration thereof effected by past actions of man) accessible to man's control and use. I mean by "land" much more than the layman's usual conception that it refers only to units of the earth's solid surface.

### **Land Tenure**

"Land tenure" refers to that institution (or system of institutions) by which control over land is vested in humans in order that its use may be managed. In general, it is synonymous with "property in land" or "landed property rights." Land tenure or property may be described as a "bundle of rights." Each "stick" in the bundle is tagged as one particular "right of action" in management and use pertaining to that land. Or it is tagged as one particular attribute of that land and one particular right of action in management and use pertaining to that attribute.

Because one of the attributes of land is its location, the total land and the entire bundle of rights pertaining to it are subdivided into defined locational units. For each defined locational unit of land there is a particular bundle of rights.

Each such bundle of rights may be (always is, in fact) broken open and its constituent sticks of attributes and action rights distributed among humans as individuals or collectives, private, quasi-public, or public. This distribution of the bundles of rights—both the method of their distribution and the resulting pattern of distribution—defines and describes the existing land tenure or property system and influences profoundly the behavior of humans toward the management and use of land and the distribution among them of the fruits of their actions.

When I speak of land tenure or property, I refer, then, to the content and distribution of the bundles of rights among humans who have direct or indirect interest in the management and use of units of land or in the fruits derived from the units.

# **Public Landownership**

"Public landownership" in the layman's view envisages holding of the "title" stick to a land unit by a public together with many or most of the other attribute-action sticks of the bundle that are implicitly linked to the title stick. But a public may hold attribute-action sticks of the bundle of rights to a land unit without holding the title stick which may be held by private individuals or another public. Furthermore, even if a public holds the title stick as well as other attribute-action sticks of a bundle of rights to a land unit, private individuals or other publics may hold other of the attribute-action sticks of the bundle. Thus, we may have private rights in public land, or public rights in private land, or rights by one or more other publics in some one public's land.

Public landownership therefore, as I use the term, includes any holding of attribute-action rights in a land unit by a public through its government.

Public Rights in Private Land. As a minimum, the public holds three rights in any unit of private land: (1) the right of eminent domain, (2) the right of police power, and (3) the right to a share in the products derived from it. "Eminent domain" is the right of a public to take over rights in private land so long as they are taken for a public purpose and fair compensation for their taking is paid their previous owner. "Police power" is the right of the public to enjoin any use of private land adjudged to be harmful to the public health, safety, morals, or welfare and to do so without payment of any compensation whatsoever to the previous owners of the enjoined use rights. The police power, as implied by the term "enjoined," is largely negative in character, preventing what the public views to be undesirable acts by the land's other (private) owners.

The right held by the public to share in the product of the private use of private land is, of course, the right of taxation which, as real estate taxes or as severance taxes, constitutes a direct sharing in the value product of the land's use. It is a sort of "public rent" paid by the land's private owner for his privilege to manage and use it granted to him by the public.

There is, of course, nothing in the property system to prevent a public if it so desires from using its general spending power to negotiate for and to buy in the market rights in the bundle of rights to a land unit. This differs from eminent domain in that taking of the rights cannot be forced by the public under its sovereign powers and the compensation paid is not subject to adjudication in the courts concerning its fairness (reasonableness or equity) but is presumed to result from free bargaining between a willing buyer and a willing seller.

Although the above three (or four) rights in private land are always held by the public, the public may of course hold any additional number of the other attribute-action sticks of the bundle of rights attaching to a unit of land the title to which is nominally private. In fact, the three (or four) minimum public action rights I have listed above need not be exercised by the public. If they are not, the bundle of attribute-action sticks held by the private owner may be wholly in the hands of the private owner. But through the public's exercise of its implicit rights, it may in fact possess any number of specific attribute-action sticks in the bundle although the ownership of the land unit in the sense of its title may remain private.

PRIVATE RIGHTS IN PUBLIC LAND. Although there are at least the three (or four) public rights in private land described above, there is no minimum number or kind of private rights in public land. I cannot, for example, hike on a military reservation on my own volition simply to enjoy the scenery—or anything else. The public may, as in this case, hold all the sticks in the rights bundle. Mere citizenship does not endow the private individual with any implicit right to use any attribute of a unit of public land.

The public may, however, allot to private persons explicit attribute-action sticks of the bundle of rights—allotting them to particular persons, to persons in particular situations, or to all persons in general. Thus, private rights in public lands may emerge. For example, under the mining law of 1872, the federal public granted the right to any individual whatever of entering upon any of a vast acreage of public lands to prospect for, to develop, and to exploit metalliferous ores. The grant of a private right may be even more complex than this implies. The federal government in granting title to some of its public landholdings to private individuals frequently reserved the subsurface attributes of the land to itself. The private right of prospect in such cases entails a private right to enter upon another private owner's land surface holding to reach the public's subsurface holding.

At the end of this discussion of public landownership, perhaps I should repeat that public landownership, as I use the concept,

relates to any holding of attribute-action sticks by the public in any land unit whether or not the public also holds the title—or in the layman's sense, "owns" the surface attribute of the unit. The land tenure system, then, may be a complex and complicated hodge-podge of shared holdings of sticks from the bundles of rights pertaining to all lands by diverse private individuals, by private collectives, and by publics through their governments.

## **Land Policy**

"Land policy" consists of two parts: (1) an expression by the public (usually by its government, of course) regarding the goals of public well-being to be served by management and use of the attributes of nature by its members—individually and collectively, privately and publicly, and (2) a provided system of landed institutions (which are collective action to control or direct individual action) designed to effectuate those goals. As I will show below, the second part is far more important in policy than is the first part; in fact, it would not be wrong to say that the second part alone is sufficient to describe and define the land policy of a public.

The goals of a land policy are in fact only what the system of landed (together with other related) institutions says they may be. Furthermore, the land use and welfare goals actually reached by society (regardless of what society says they are) will be those whose realization is facilitated by the functional behavior of the system of landed (and related) institutions, which in turn is a consequence of the behavior of the human instruments who operate them. Thus, I could say simply that a public land policy is expressed in the structure and functional behavior of the provided system of landed institutions.

Such a system of landed institutions consists in turn of two broadly different elements. The first element is a system of land tenure or landed property institutions that defines how the bundle of rights attaching to society's matrix of nature shall be divided up, among whom, for what purposes, with what behavioral freedoms but subject to what restraints, and how and with what restraints they may be transferred among managers and users as well as how the very system of landed institutions itself may over time be modified and revised. The second element is a structure of public (government) organizations set up and "programmed" to operate or police the functional behavior (the operation) of these landed property institutions.

Thus, public ownership of title to land and of other attributeaction sticks in the bundle of rights to land requires governmental organizations: (1) to plan the application and use of ownership devices, (2) to manage them when applied, and (3) to alter their application and management as conditions change.

Furthermore, any land policy that goes beyond mere negation of public involvement and that calls for any degree of collective action to direct and control land management and use rests on a foundation of public landownership, ownership of title to the fee of some lands, or ownership of separable attribute-action sticks from the bundles of rights attaching to other lands, together with a structure of government organizations to plan and manage them. Public ownership is implicit in purposive, collective action to raise the level of aggregate welfare derived from the use and development of nature. Public ownership is not an incidental special case of ownership in modern land policy but permeates it—is, in fact, the core element in land policy.

# WHERE PUBLIC LANDOWNERSHIP FITS IN A SYSTEM OF LAND TENURE

Having explored what public landownership is and its relation to land policy in general, I will devote the rest of my discussion to considering those particular aspects of a land policy where public ownership is required if the land is to perform its greatest public service. I find five conditions of land use where public landownership is indicated.

First, if the public desires nonmarketable services from land, public ownership (of the title or of other attribute-action sticks in the bundle of rights) will be required. Nonmarketable services are those that cannot move in the conventional market through bargaining at a price because either: (1) if the service is produced at all, no one with access to it can be excluded from consuming it—frequently called "public goods," or (2) if the service, though of greater social welfare benefit than its cost, is produced and marketed privately, private gains do not cover private costs—frequently called "merit goods."

Examples of public goods are flood control, air pollution control, provision or protection of scenic attributes. All share the common character of nonexcludability of any person so situated as to enjoy the service. Examples of merit goods are public schools, public parks, fish and wildlife habitat and stocks, highways, disease and insect eradication from lands, etc. Such services of land, both public goods and merit goods, can be produced only by the public if produced at all. To produce such services the public must hold the attribute-action sticks in the bundle of

rights pertaining to lands from which such services are desired. All activities in both examples require public ownership in some guise.

Second among the conditions where public landownership is indicated are those where benefits or damages experienced in space or over time by landholders of tracts external to those whose management or use generates the benefits or damages are of significant magnitude—significant enough to warrant direct governmental action relative to them. Examples of this category of public interest in land are natural resource depletion or quality degradation over time, downwind odors and chemical irritants, dumping into lakes and rivers of poisons or materials detrimental to humans or to fish and wildlife, or building of unsightly view-blocking structures. Solutions to problems of this type are usually referred to as "internalizing the externalities," meaning to cause what are external effects to impinge on their producer by making them internal to his decision system. One way of solving problems of this kind is through public ownership of land or of attribute-action interests in land. For example, the public might acquire, through police power, eminent domain, or market purchase, exclusive rights to use air or water or land surface for disposal of wastes. It would thus be in a position through charges, restraints, or granting of privileges to impose upon waste producers the social costs of their production.

Third among the circumstances favoring public landownership are those where a particular mix of outputs (goods and services) from a land area maximizes production efficiency from that land but the range of products in the mix is such that it rarely if ever characterizes the output mix of any single firm. If these goods and services are pretty well distributed over the area and generally intermingled, then it is highly unlikely that any single firm or group of firms could produce all these goods and services if the area were owned by it or them, and the area's output mix likely would not be optimal. An obvious solution is public ownership of the land area with leased or permitted use rights extended to multiple firms whose uses may intermingle on the same area under direction of the public owner functioning as landlord. An example is the intermingled use of some national forest areas by cattlemen, sheepmen, timber harvesters, mineral exploiters, and recreators. It would be a rare single private firm that would incorporate all these products in its output mix. In such cases, public landownership and landlordism may be the most effective means to get reasonably adequate marginal social value comparisons among the outputs, the basis for joint product output efficiency.

The fourth circumstance favoring public landownership is where privately owned assets are fixed (sunk) in the land and are a deterrent to change in land use because a change requires abandonment of the existing sunk investments and the sinking of other investments in their place. Now, if the public gain from such change is greater than the private loss from abandonment of existing sunk investments, it will be to the public net benefit to engineer the change (with or without compensation to the private investment losers though generally such compensation will be required). Probably the most feasible way to engineer such land use changes would be through: (1) public purchase of the land together with the sunk investment with public reorganization and redevelopment or (2) purchase by the public of only the sunk investment values with an agreement that the private seller will be responsible for reinvestment for changed use of the land.

The fifth and last circumstance that occurs to me in which public landownership is warranted is for public capture of the unearned increments in (capital) value of land or for the public capture of rent generated by private exploitation of scarce land attributes. The annual property tax, severance taxes, and capital gains tax are all moves in this direction; but they are only partial moves because each of them is gauged only to raise the funds required to pay the costs of government rather than being gauged to divert unearned increments in values and unearned incomes from the individual private benefit to the general public benefit.

The argument for the public capture of unearned increments and income (rents) has a long history. John Stuart Mill carried the Ricardian logic in classical economics to its implicit logical conclusion when he argued for the public ownership of all land. Building on the same argument, Marx developed the socialist doctrine of public ownership of capital and land, and Henry George, the theory of public capture through the "single tax" of all rent from land.

Two other arguments arising in different contexts and phrased in different concepts also are used in support of public ownership of land.

1. Land rents as well as their capitalized value counterpart intrinsically and inherently derive always and only from monopoly or monopolistic power vested in their owner(s) by property rights, which is to say that rent is always a monopoly return or income. Land as nature is fixed in location and, at any point in time, in supply at each location. Its known attributes are fixed in quantity and spatial distribution. This, of course, is what economic analysts

for generations have referred to as "natural monopoly." The social problem here turns not on the fact of monopoly, which is inherent in nature and unavoidable, but on why private individuals should be given grants of exclusive access, through private property rights, to these inherently monopolistic points to garner for their individual purposes the inherently monopolistic returns (which are rents) from their use.

2. Nature, the natural environment, natural resources, or land (whatever one calls it) is the "home," the "matrix," the "necessary fundament" for human existence. As such, land is the proper concern of the dependent social group concerned not only with the group's survival but with improving or maximizing its welfare over time. It may be argued that as such, the land must and, in fact, does belong to the dependent society, that collective ownership of the land is a survival and welfare imperative. In a fundamental sense, land is already owned collectively in that private, individualistic property rights in land are a bestowal of such rights on individuals by society and such bestowal is inherently and always subject to change at the volition of society.

In my earlier discussion of the bundle of rights analogy of property, I pointed out that the public implicitly and always holds the attribute-action sticks of eminent domain, police power, sharing in the rents from land, and the use of its spending power, all of them being powers to change the distribution of the sticks in the bundle as between individuals and between individuals and the public. Argument for public ownership of land does not then argue so much for a drastic change in what is as it argues for alteration in the distribution as between individuals and between individuals and the public of the attribute-action sticks of the rights bundle in ways to enhance the probabilities of society's long-run survival and to enhance the aggregate level of social welfare over time.

#### LAND MANAGEMENT UNDER PUBLIC OWNERSHIP

Management, development, and use of land by the public are not a necessary, may not even be a likely, consequence of public landownership. Privately owned land is not necessarily managed, developed, and used by its owner, the tenure institutions of land-lordism and tenancy in numerous forms being well developed over a long history. Similarly, management, development, and use of publicly owned land and land rights may be transferred to subordinate publics or to private collectives and individuals under similar institutions of public landlordism and public or private tenancy or permit arrangements. It is probable that private opera-

tion of the public's land would be preferable from the standpoint of management and firm efficiency though this is a matter to be determined on its merits in each particular case or class of circumstances.

Neither does public landownership imply necessary holding by the public of the title or fee to the land. For reasons amply discussed earlier, the public may own only particular attribute-action sticks in the bundle of property rights attaching to many land sites. leaving to private individuals the holding of the title or fee. For example, title to or ownership of land clearly usable primarily for agricultural purposes might be left to private farm owners or operators with the public owning a few or many of the other sticks in the property bundle. Examples would be public ownership of the common property resources of water used for irrigation or air and water used for waste disposal, or the right to protect the land against deterioration and depletion, or the right to transfer the land to nonagricultural development and uses, or to manage and develop nonagricultural uses jointly with agricultural uses on the land (such as fish and wildlife production and their harvest, providing other forms of public recreation or other amenities of social living, or preserving the scenic attributes).

Neither does public landownership imply permanent (in time) or even long-run holding either of title to the fee or of nontitle attribute-action sticks in the bundle of rights on all land sites. Public landownership may, depending on the circumstances, be short run only where public ownership is used as a device to effect transition in land development and use.

#### CONCLUSION

Thus, I come to the end of my discussion. What do I feel are the key points or issues in my discussion of public landownership in a land policy?

- 1. Public landownership is but one element in a system of land tenure and a system of land tenure is the core of, or the controlling element in a public land policy.
- 2. As compared to land policies of previous eras, public landownership should today be given a greatly expanded role and should be granted greatly expanded attention in public policy discussion and public policy education.
- 3. Public landownership and private landownership are not clear-cut, separate categories. Public landownership encompasses public holding of selected attribute-action sticks in the bundle

of rights that is property in land, with title and many other sticks belonging to private landowners, together with the converse wherein private parties hold selected attribute-action sticks in the property bundle, with title and other sticks belonging to the public.

- 4. Public landownership is indicated in circumstances where public goods and merit goods are significant in the product mix of land use and where externalities stemming from private land uses are of significant magnitude.
- 5. Public landownership together with public capture of land rents (unearned increments and income) generates, in addition to enhanced social efficiency in production from land, also enhanced distributional equity in the sense not only of abstract philosophical fairness but also of what I have called "distributional efficiency" for enhanced social welfare.
- 6. Public landownership should be considered in land policy as a means: (a) to capture for general public benefit the unearned incomes and capital gains (rent) otherwise accruing to particular private individuals from their private exploitation of land, (b) to eliminate property rights as a means whereby private parties may appropriate the gains from the natural monopoly powers inherent in land, and (c) to invest the public with the property powers to protect nature, the environment, the land, which is the very fundament for its long-run survival and short-run welfare enhancement.
- 7. Though public landownership is a highly controversial issue, the rapidly growing importance of public values in land management, development, and use makes public discussion of public landownership imperative. Only by increasing public awareness and understanding will it be possible to reduce the degree to which public reaction to public landownership derives from emotional rather than from cognitive responses to the concept. I urge upon you public policy educators—don't shun this task longer!