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Building a Land Policy

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MORE THAN A QUARTER-CENTURY AGO, PROFESsor B. H. Hibbard, the eminent land policies historian, summarized his views on our land policies in these words; "Thus far there has been no genuine land policy in and for the United States. True enough, there have been temporizing plans, some of them good for a time, and for certain sections. But a plan involving and comprehending the welfare of the whole nation, varied to fit the different parts of the country, we have not had."[1] The need for a genuine land policy comprehending the welfare of the whole nation varied to fit various sections has not diminished but has increased during the past twenty-five years. The enlarging scope of public policies over land use demands that serious study be given and appropriate action be taken toward the development of an integrated land policy whose

[1] Hibbard, B. H. History of Public Land Policies, Macmillan Co. 1924, p. 562.

unified objectives direct the various efforts concerned with the use of lands.

The need for building a land policy is emphasized by the conflicts and confusions characterizing current land programs and policies. A few illustrations may aid in underlining this need. For example, one agency of government, the Reclamation Service, is authorized to invest billions of dollars which will help bring more land into agricultural production while another agency, the Production and Marketing Administration, is spending billions of dollars to support prices and take "surplus" products off the market. There may be justification for bringing land into agricultural use to produce some of the same kinds of products that are piling up in warehouses and storage bins but most current programs have not been subjected to the tests that would reveal such justifications. Another example may be found in the use of historical bases for controlling acreages of tobacco, cotton, wheat, corn and other crops. The allowable production as indicated by a historical base may be completely in conflict with the best use of lands providing the land has not been used properly in the years making up the base. Another example is found in the so-called favorable "benefit-cost ratio" applied to projects entailing public investments. A favorable benefit-cost ratio of 1.1 to 1.0 is not wise use of public funds so long as other opportunities for greater returns on public investments are available. Very little is known about the relative benefit-cost ratios existing at the time funds are allocated to a particular type of land project.

Current land use and soil conservation programs need clarification of their objectives and principles for allocating public funds. For example, income support, production control and conservation objectives should be clearly separated from each other to permit a clear-cut accounting of costs and accomplishments of various objectives and policies. This cannot be done by jumbling many heterogeneous objectives into a single mammoth program. Neither can it be achieved by a number of separate programs and policies unrelated in both objectives and expected results. This does not mean that several programs or policies can not be used to re-enforce or supplement one another. An income support or credit program might well require cooperators to meet certain minimum conservation standards. A crop reduction program might well be adapted to land use and soil conservation standards. Since all land programs should converge toward over-all goals of public policy, there complementariness should be enhanced and their conflicts minimized in the process of achieving common objectives.[2]

Many more illustrations could be cited to show the need for building a land policy but let us now turn our attention to the objectives to guide and direct the land policy of the future.

NATURE AND OBJECTIVES OF LAND POLICIES

Land policies may be regarded as major lines of public action designed to improve the use of land resources and the conditions of property rights under which people work and live on the land. Objectives of land policy are governed by what people desire and what the functions of government are conceived to be in bringing about better land use and tenure—the twin aspects of land policies.

Changes in land use and tenure are desired when people (1) do not like existing conditions or (2) visualize better conditions than now exist. In developing a dislike for existing conditions or in visualizing better conditions than now exist, people have in mind some norm or goal by which they measure "dislikes" or "better conditions." These norms or goals grow out of individual value judgments and as used by Rainer Schickele constitute a group consensus held by sufficient people to exert an influence upon the actions of people through public laws and administrative rules.

Land policy goals must be geared to and subservient to broader goals of economic policy of which land policy is but one segment. The master goals of economic policy consist of (1) maximization of social product and (2) optimization of income distribution.

Land use goals fall largely within the broader economic goals of the maximization of the social product over time, while land tenure goals fall more within the broader economic goal of optimum income distribution.

More specifically, land use goals mean that degree of use intensity and that system of use practices which will maximize the long-run social product value derived from land resources. Land use goals should be drawn up with the end in view of economizing public funds which are scarce and of minimizing regulatory devices which hamper private use. Although the application of this goal varies somewhat with kinds of land resource, an illustration of arable farm lands should help explain its meaning. Arable farm lands are a complex combination of flow, renewable fund and non-renewable fund resources. Public long term interest is concerned

[3] The national resources task force of the Hoover Commission expressed general dissatisfaction with current land policies and programs and made a number of suggestions leading to an improvement in current conditions.

mainly with the nonrenewable sector. As long as utilization does not go beyond the renewable stage the management might well be left to a rather wide range of individual discretion since the resource's productivity may be renewed when desired. Consequently, the major objective of public conservation programs should be to control soil erosion and other forms of soil deterioration that dip into the nonrenewable section.

Investment and disinvestment in soil fertility so long as the nonrenewable resource is not affected—as carried out through rotations, fertilizer, green manure and similar practices—generally should not claim public funds. Instead, public funds should be used in those areas and in those instances where serious erosion is involved. Certainly, there is little or no justification from a public interest viewpoint of spending public funds merely to subsidize farmers to use efficient practices many of which would be carried out by farmers whether or not public grants were made. Such expenditure of public funds is a confusion of public interests with private interests. It is a misdirection of scarce public funds available for land improvement that should go to protect the nonrenewable soil resource where public and private interests may be in serious conflict. Land use policy objectives involve the establishment of critical limits of use to help determine specific conservation objectives and methods applicable to specific land class and type situations. Such limits would include: (1) levels of land productivity to be achieved or maintained and (2) permissible variations of disinvestment and investment which constitute the desirable zone of land use surrounding the level of land productivity to be achieved.

Land tenure policy goals fall within the broader economic goal of optimum distribution of income. Although land tenure arrangements exert important influences on land use, conservation of land resources and the productive process in general, tenure arrangements are primarily important because they determine how land income is to be distributed among various holders of property rights.

Within this framework of optimum distribution of income and the earlier discussed framework of maximization of value social product from land, Schickele gives three guiding principles for formulating objectives of land tenure. First, competent farmers on inadequate family farms should be aided in acquiring more land, capital, equipment and supplies not only to obtain better returns for them but also to encourage a fuller utilization of their own resources and thus enhance their contribution to public welfare. Second, farmers should be encouraged to expand their managerial freedom and

responsibility in line with their abilities and technological developments. They should receive income rewards commensurate with their contributions to production. Third, limit concentration of ownership and control of land resources beyond the needs of productive efficiency.

DEMAND FOR AND SUPPLY OF LAND

In a broader sense, the objective of land utilization begins and ends with the satisfaction of human wants. The demand for land and its products and services is conditioned by both number of people and levels of living. Warren S. Thompson estimates the current population of the world at the half-century mark as between 2,300 and 2,400 million people. Since 1800, the world's population has increased two and one-half times, a greater increase than in any similar period in human history. Slightly over one-half of the world's people now live in Asia, which is a decrease of twelve points from 1800. About 16 per cent are in Europe, a decrease of four points over the past one and one-half centuries. Africa, North and Central America have 9 per cent and South America almost 5 per cent of the world's people. The Americas have gained ten points in the proportion of world population over the past one and one-half centuries. The remaining 8 per cent of the world's people live in Russia.

Thompson views the population problem in terms of adjusting man's numbers to his resources in light of his ability to use these resources efficiently at a given time and place. He concludes that the time has come when a laissez-faire population policy cannot safely be followed much longer by any country. The nature of population policies will vary by countries according to population density and growth and access to resources. On the basis of population growth, Thompson divides world population into three groups of countries. Class One countries including primarily western Europe, North America, Australia and New Zealand are characterized by very low death and birth rates. Population in these countries will grow slowly during the next few decades and will probably begin to decline after a decade or two.

Class Two countries, chiefly in southern and eastern Europe, Japan, some countries in North Africa and some in South America, are characterized by medium death rates which have been brought under a certain degree of control. It is quite probable that for the next few decades Class Two populations will grow at a more rapid rate than any other class and they may even grow more than Class Three countries in absolute numbers.

Class Three countries including the remainder of the world are characterized by high death rates and high birth rates. These countries, containing almost 60 per cent of the world's population, have neither their death rates nor birth rates under reasonably secure control. The potentialities of growth in Class Three countries are enormous as witnessed by growth of India and Java during the past few decades.

On the basis of this analysis most Class One countries do not have very serious problems arising out of increasing numbers. Problems of Class Two countries will depend in part upon the extent and quality of land resources they possess and the manner in which their resources are used. Class Three countries present the most urgent population problems. Here the nature of the problem points to (1) developing land resources to support more people at higher levels of living and (2) bringing population growth into line with available land resources to which these countries have access both within their boundaries and through trade with other nations.

In analyzing the supply of land resources, Charles E. Kellogg and Carleton P. Barnes limit their study to the United States where available data permit greater refinement. On the basis of crop yields for the period 1941–1945, and 355 million acres in crops plus 140 million acres of cropland equivalent of feed from pasture, 167 million people could be supported with a moderate cost adequate diet. Under the same assumptions, 203 million people could be supported at a low cost adequate diet and 137 million at a high cost adequate diet.

It appears clear from these calculations that many more than our present population could be supported with an adequate diet without employing any more land resources and with no greater production from the use of our lands. In the process, however, there would need to be some shifts away from some products now preferred by American consumers, especially meat. But even with the 1943–1945 civilian diet, a population of around 161 million could be supported. The United States population for 1950 is estimated in the neighborhood of 150 million people.

To compensate for additional population increases and improvements in levels of living, future technological improvements and potential usable land appear to provide a reservoir of sufficient products. From available information a further 10 per cent increase in agricultural production over the next five or six years appears reasonable. This would enable the nation to support 184 million people with a moderate cost diet or 150 million with a high cost

diet on present farm land. The estimated population of the United States by 1955 is around 155 million people.

Kellogg and Barnes conclude that the United States is in a position to choose among several alternatives in using lands because of our relatively abundant soil resources. We do not need to cultivate every acre of plowable upland, drain every swamp or use every available drop of water for irrigation. With present prospects of population growth and continued technological development, we shall probably not need to draft all land resources into high use in the foreseeable future.

PRINCIPLES OF LAND UTILIZATION AND CONSERVATION

The science of economics provides a number of invaluable tools for analyzing the utilization of lands in the interest of maximizing the net value product from land over time. Sherman Johnson reviews the nature of these analytical tools and shows how they may be applied to land utilization. He points out the major economic principles governing the economic productivity of land, including the law of diminishing returns and the principles of specialization, location, and comparative advantage.

Land is characterized by special features which distinguish it from other capital goods and require different approaches to its efficient utilization. First, land is a natural resource in the sense that it cannot be reproduced as such. Second, land is distributed over space. Third, land is almost completely immobile; it must be used where it is found. The immobility and spatial factors give special importance to location factors in land use.

Land derives value from its economic productivity—that is, its current and expected value of its marginal productivity. The basis for its economic productivity is partly physical and partly economic with respect to its location in a given economic environment. Land of high natural fertility which is physically suitable for a number of crops may be located in an area relatively isolated from a market for its production potential. On the other hand, physically infertile land close to population centers may be used intensively at a profitable level of land use. Land must have capacity to use other resources in an efficient combination for a particular market situation.

The economics of soil conservation centers on the problem of maintaining the above concept of efficient land utilization over time. When efficient land utilization is considered currently and over some time period, the use of labor, capital and management resources

must be allocated in such a way that marginal returns are equalized among such alternatives as (1) current production in agriculture, and (2) current production in other lines as well as (3) future production in agriculture and (4) future production in other lines.

If returns from additional units of labor and capital invested in current agricultural production are lower than if invested in other lines or lower than if invested in future production either within or outside of agriculture, it is apparent that labor, capital and management should be shifted to the most remunerative investment alternative. This reasoning assumes that society is interested in employing all resources in their most productive uses which is the same as the objective of maximization of value product over time analyzed by Schickele.

Returns expected from investments over time in land use depend largely upon the following factors on the supply side; (1) land depreciation or improvement, (2) land development and (3) technological advances and trade policy. And on the demand side; (1) population growth, (2) per capita income and its distribution, (3) food habits and (4) international trade. From these factors may be prepared estimates of future demands and supplies of agricultural products along with relative costs and prices.

If such analyses point toward an increasing demand and higher prices, there is indication that investments in future land productivity sufficient to meet the increased demand would be likely to prove profitable to the public. If, on the other hand, land investments result in a large increase in output which cannot be absorbed by consumers, such investment may well be postponed until market demand has increased to the point where the investment is justified.

The critical point is that capital investment is potentially productive—either present or future. If returns on investments which yield an income only in future years are to be equal to returns on investments that yield current income, their net value returns must be enough higher at some stage in the production cycle to equalize returns between current and future production for the entire period under comparison. This is essential for sound land conservation policy.

POLICY ADAPTATIONS TO KINDS OF LAND USE

Numerous uses compete with each other on their respective margins for the use of land. The limit or margin of one major use is determined by the net value product of a competing use. Of course the inter-relationships between uses may be complementary as well as

competitive. At any given time land is usually in one particular use. However, over a period of time, use of the same land shifts from one use to another from grazing to wheat and perhaps back to grazing, from farms to urban uses, from farms to wild life preserves, from grazing to forestry and recreational uses, etc. One of the most difficult as well as most important problems of land policy is to determine which uses to encourage or discourage over time. This is particularly important since current investments made within expectations of future returns from a particular use tend to freeze land in that use for long periods of time. Principles of land utilization with regard to present and future uses discussed by Sherman Johnson aid in making these kinds of use decisions.

Factors to be considered for each particular use vary considerably with regard to the demand and supply, both present and potential, for the products and services yielded by a particular use. Also, use practices and policies vary with different land uses.

About three-fifths of all land in the United States is used in farms. H. H. Bennett discusses the use and conservation of these lands. He defines soil conservation as the treatment of land with all proven appropriate measures that are needed to keep it permanently productive while in use. He also includes all technological improvements that enhance the efficiency of land use.

Bennett traces the nature and development of soil conservation as practiced by the Soil Conservation Service and soil conservation districts. Around 2,100 districts including 1,152 million acres have been organized. Approximately 683 thousand conservation farm plans have been drawn covering 187 million acres, 93 million of which have been treated with conservation measures. Bennett points out the remaining needs to meet his conservation objectives and sets 1970 as the goal for completing the job.

R. R. Renne in his analysis of range land problems and policies states that two-fifths of the United States is devoted largely to the production of livestock through grazing of natural vegetation. Renne reiterates the need for analyzing the factors affecting the demand for livestock produced on rangelands as the key for determining the kind and extent of range land improvements. He emphasizes the characteristics of ranching which demand special consideration in land policies. Included among these characteristics are; (1) large size of holdings needed to form an economic unit, (2) relatively slow turnover of investment, (3) high fixed charges, (4) high degree of commercialization and (5) elasticity of demand for range land products.

The necessity of collective tenure devices for working out solutions to range land use problems is emphasized. Renne concludes that the solution of western range tenure and utilization problems is not private ownership except in a few and limited instances. The record of state and county land management does not provide much encouragement for proponents of state or county ownership either. Of all public agencies, the federal government is in a position to do the most effective job of public range land management.

Water resources are assuming an increasingly important role in land utilization as the demands on water increase and as the supply of water becomes more and more limited in light of increasing demands. Marion Clawson emphasizes the growing importance of water utilization and the problems growing out of the numerous conflicting uses of water.

Clawson outlines the growth of large scale water programs during the past two decades including irrigation, hydro-electric power, navigation and flood control. He believes these programs will increase in relative importance in the future. Clawson points out that the Bureau of Reclamation has provided full water supplies to two and one-half million acres and a full or supplemental water supply for two and three-fourths millions additional acres. Long range programs provide for ultimate irrigation of between ten and twenty million acres. However, these plans need to be re-examined constantly in light of changing demand and supply conditions affecting the products to be produced.

Forestry is another major use of land and, as defined by J. D. B. Harrison, is the deliberate management of existing forests and the establishment of new forests when necessary, to insure that people shall receive in perpetuity the greatest benefit from all forest lands at their disposal. Estimates of potential future demand in the United States require the provision for domestic consumption of 14.6 billion cubic feet annually. This represents a 20 per cent increase in total growth including an increase of 80 per cent in growth of saw timber. Worldwide, the consumption is around 53 billion cubic feet of roundwood. The problem is to determine whether productive forests now in existance could, if properly managed, provide that amount of wood or more in perpetuity.

Although forest conditions vary considerably among nations, prospects for the future are encouraging in the opinion of Harrison. National forest policies are still lacking in many countries and are far from adequate in others. For example, the United States and Canada

have only progressed to a stage of transition from uncontrolled exploitation to forestry. Regional and international policies, particularly necessary where forestry of different countries are naturally complementary, have never been formulated. However, an encouraging change is currently taking place in the adoption of an international approach of major forestry problems. Although the world still experiences many forest shortages, Harrison believes the forests are inherently capable of producing far more wood annually than has ever been taken from them in a year. Improved management and international cooperation in forest use are the keys to sufficient forest products.

Recreation is rapidly taking its place as a major land use throughout the United States according to Ernest S. Griffith. Increasing leisure time and the need for relaxation from stress and strain of today's hustling civilization are reasons behind the increasing demand for recreational land use developments.

Griffith recommends recreation planning on a national scale commensurate with planning for irrigation, flood control, power and other land resource developments. He emphasizes balanced planning in the interest of adequate recreational land use developments. Reference is made to the report of the Natural Resources Task Force of the Hoover Commission which proposed a Board of Review be established in the Office of the President on which a representative of recreation would sit with the representatives of agriculture, power, forestry, mineral resources and all other elements involved in the planning of river basins and other related land resource developments.

Ira N. Gabrielson calls attention to the necessity of integrating wildlife use with other competing uses of land. He points out how the draining of swamps for farming purposes curtails or even extinguishes wildlife in certain areas. Likewise, multiple purpose projects generally exclude wildlife from multiple use objectives. Certainly the importance of wildlife for recreation, food and clothing demands that it be properly considered in analyses of alternative uses of land. Fortunately, however, wildlife is a renewable resource up to the point of extinction. The future of wildlife is contingent upon adequate planning and management. Even intensive agriculture, if properly planned, means change rather than extirpation for wild creatures. For example, the state of Iowa with over 96 per cent of its total land area in farms has realized a steady increase in pheasant population with all sections of the state enjoying a generous open season and plentiful shooting opportunities.

PROGRAMS AND POLICY

As pointed out by O. B. Jesness, numerous individual land programs have sprung up from time to time in an effort to achieve particular objectives. These programs have not been guided by sufficient foresight nor over-all objectives to make them fit together into a comprehensive public land policy. Without such a guide it would be a miracle if some of the programs did not conflict. Unless specific programs are tied together in a framework of policy with common objecives to be attained, it is difficult if not impossible to make programs into the means of carrying out the desired ends of land policy.

Jesness reiterates the viewpoints of Schickele and Sherman Johnson that the objectives of land policy involve achieving the most efficient use of resources and the optimum distribution of production to the end that mankind may experience ever-increasing levels of living. Viewed in this perspective the best use of land cannot escape giving consideration to fitting that use to existing and prospective conditions of the market, because the economic use of land is for the purpose of meeting requirements which are reflected in the market place by consumer wants. This involves consideration of the use of land not only today, this year, and the next but also over the longer run. Such a generalization at least provides a backdrop against which we may test specific programs and proposals. Unless they fit this aim, there is reason to question their advisability.

PUBLIC INTERESTS IN PRIVATE LANDS

After pointing out that the entire nation is dependent upon food and other products and services coming directly from land, most of which is in private ownership, Raymond J. Penn concludes that the real problem is not whether the public has an interest in land but rather one of how to go about determining the nature and extent of public interest and how to protect it. This is not a new viewpoint, since private rights in land in this country have never been absolute—only exclusive. State powers of eminent domain, taxation and police have always stood between the private owner and user of land and absolute control over land. Although the public has always held these powers to protect and carry out their interests in land, there have been few clear-cut principles developed for using them.

Penn believes that public interest in land is a matter of valuation and judgment. Public interest in a particular piece of land cannot be established by formula. Arriving at public interest is a continuous

process of public policy and program formulation. The process is extremely important. If the means are faulty the objective will not be satisfactory even if reached. While technicians and specialists are necessary in formulating alternatives of land use in line with expected consequences, the people concerned must participate and make the decisions. People will accept and put into effect their own decisions much more readily than decisions made for them. This viewpoint emphasizes the importance of the role of people and local governments in the policy making process. Penn uses the Wisconsin experience with rural zoning to illustrate how public interest in land use was determined and how people worked out the means to carry out this interest in the use of land.

LAND PLANNING PROCESSES

The development of a satisfactory land policy depends largely upon the quality and extent of planning of the use of land resources. Since land policies involve current action with expected future benefit, the necessity for foresight exercised today in behalf of increasing the certainty of expected benefits in the future becomes obvious. V. Webster Johnson outlines the land planning process in four steps; (1) establishment of policy objectives or ends sought, (2) determination of current situation with respect to these objectives, (3) delimitation of the gap between the present situation and the desired objectives and (4) working out ways and means of bridging the gap between the present situation and the desired objectives. This process of steps demands imagination and ingenuity and a keen sense of the institutional framework within which suggested programs of action must operate.

Johnson outlines six ways by which government—local, state and federal—may bring about changes in the use of land. These are; (1) direct administration of land through public ownership, (2) public regulation of privately held land through the use of the police power, (3) agreements made with special districts, (4) taxation, particularly yield and severance taxes, (5) regulations induced by or incident to conservation payments and aids and educational activities and programs.

The nature and form of organization required to deal with land resource planning is far from settled. Experiences with organizational arrangements have been limited. This does not mean that a number of other proposals have not been made. But we have not succeeded in studying, evaluating and comparing various experiences and proposals.

The Hoover Commission dealt at length with the organization for land resource planning and programs. One suggestion dealt with the creation of a Board of Impartial Analyses (1) to report to the President on the public economic value of water development projects, (2) to review authorized projects and (3) to recommend to the President discontinuance of those projects deemed undesirable.

Looking ahead, the federal government and states, either directly or indirectly, must assume an increasing degree of responsibility in planning the use of land resources. Planning of land resource use—by agencies, departments, states, regional organizations and other groups—is emerging slowly, painfully but surely; and as it develops piecemeal and fragmentarily, land planning requires increased integration and a progressive approach to a comprehensive public point of view for the wise use of land resources.

DECLARATION OF LAND POLICY

A first step in building a sound land policy is the declaration of objectives and principles by federal and state governments. Such a declaration might well chart the direction of future land policy and land programs. It could provide the basis for testing particular land measures for consistency and furtherance of the stated objectives and principles. This declaration of policy should find expression in legislative enactments, in administrative programs, in research, educational and planning activities and in the lives of people using land and depending upon land resources for a livelihood.

If the type of organic land policy which is needed is to be developed, the first and basic steps shoud be taken by the President and the Congress of the United States. Such action at the federal level is needed to bring into national focus all major land problems and alternatives of action.

The President of the United States might appoint a National Land Policy Commission to analyze existing land laws and the programs of the executive branch of government directly concerned with land problems, with the view toward formulating recommendations for action that will help achieve a sound, long term and well integrated organic land policy.

The Governors of the several states, likewise, might appoint State Land Policy Commissions (1) to analyze existing state land laws and land programs within their respective states and (2) to recommend improvements in these laws and programs. This action at the state level is particularly important because (1) most land laws

dealing with rights and responsibilities of private users of land, in relation to public welfare, are within the domain of state legislation, and (2) state analysis of land laws and land programs would help insure analysis of various land problems and solutions peculiar to particular sections of the country. The analyses and recommendations of the state land policy commissions should be incorporated into the work of the National Land Policy Commission. There should be close working relationships between the state and national groups. Many of the land problems and some of the solutions which the commissions would want to consider are discussed throughout this volume.

The Congress of the United States might enact a Joint (Senate and House) Resolution embodying broad declarations of land policy and directing executive agencies to bring their respective land programs into conformity with this declaration of policy. Such a congressional declaration might await the report of the National Land Policy Commission or it might come first and provide an operational basis for the work of the national commission. In any event, a congressional declaration of land policy objectives and principles is highly desirable in the interest of integrating and directing the various land programs toward common objectives.

A NATURAL RESOURCES COUNCIL IS NEEDED

While the proposed national and state commissions and congressional declarations are needed (1) to create public interest in land policy, (2) to establish broad participation in formulating a land policy national in scope yet modified to fit the various sections of the nation and (3) to formulate the objectives and principles for land policy to follow, there remains the need for a continuing agency to integrate, study, plan, evaluate, and recommend proposals and programs concerned with land use and control. In fact, it is difficult to see how a well defined and integrated land policy can be fully developed, kept up to date, and carried out without such an integrating agency. This agency, which we shall name the Natural Resources Council, might well be in the Office of the President. Although the Natural Resources Council should be separate from land resource action programs, its personnel should work closely with those in the agencies administering land programs. In addition to a small core staff, the Natural Resources Council could draw collaborators and consultants from the land grant colleges, private foundations and state and federal land agencies. Through these collaborators and consultants the Natural Resources Council could tap the large reservoirs of

knowledge of land problems and land policy research and experience which has evolved and is continually developing.

One important function to be served by the Natural Resources Council is to bring together in one place all pertinent facts relevant to land resource supplies, conditions, use, and probable demands. At the present time this information is piecemeal and scattered among a number of different agencies. It needs to be brought together and kept up-to-date by the Natural Resources Council.

Another function would be the preparation and publication of periodic reports on the status of the Nation's land resources, the problems and possible solutions. Such reports would help materially in keeping the general public, as well as legislators and administrators, informed on land resources. This is a needed complement to the President's Economic Council's annual report on prices, production and employment.

A third function of the Natural Resources Council would be to evaluate alternative proposals for land resource conservation and development and to make appropriate recommendations.

A fourth function would consist of initiating proposals for the utilization, conservation and development of land for appropriate action by the Congress or the administrative agencies.

A fifth function would involve integration of current and evolving land programs of the various agencies in the interest of implementing the land policy as declared by the Congress.

The first and second functions are concerned largely with keeping up-to-date inventories of our land resources and analyzing factors affecting their supply, demand and utilization. The third, fourth and fifth functions involve the integration of programs and the allocation of public funds among those public resource investments which are most necessary in the public interest and which promise the greatest returns on funds expended. Since available public funds for land resource investments will probably continue to fall far short of the needs, it is important that available funds be used where expected returns to the public will be greatest. This involves analyses of land investments by kind and by area. It involves working out recommendations to questions of the following order. Should available public funds go to irrigation of new land or conservation of old lands? What about drainage or clearing? How much should go to forest? How much to recreation? How much to grazing lands? To flood control? How much funds should go to the Missouri Basin? The Columbia Basin? The Tennessee Valley? Where swamps are

drained for agriculture, what is the effect on wild life and recreation? Where dams are built for flood control or power, what is the resulting loss to agriculture in the reservoir area?

At this level of questions, the proposed Natural Resources Council could make a real contribution by ranking various kinds of proposed projects by regions, in terms of prospective benefits for each dollar of public funds to be expended. However, the function of the council should not stop with the screening and ranking of proposals submitted to Congress but should include initiating proposals of its own based upon analyses of what regions and which types of land investments offer the best use of public funds.

Even after appropriations have been made for a given purpose—say flood control—or for a given area—for example, the Little Sioux Watershed—proposed construction units within the area should be reappraised and ranked according to priorities as determined by relative returns to the public for each dollar invested.

We are not without valuable experiences in going forward with a Natural Resources Council. Experiences and information obtained in the operation of the former Natural Resources Planning Board should be helpful as would experiences gained from Land Resource Boards and Land Policy Commissions in a number of states in recent years. For example, the 1949 Legislature of the State of Iowa enacted legislation setting up a State Natural Resources Council. This council has been organized and is at work on numerous land and water problems within the state pressing for solutions. All these experiences should be studied carefully in developing the proposed Natural Resources Council for the United States.