

Economics as a Tool for Natural Rangeland Managers

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Introduction

The successful rangeland manager must be able to recognize the need for information of various kinds and make provisions for obtaining it in a timely manner. With range management problems becoming more complex, the requirements for information are growing in both amount and type.

Economic information should be considered in all rangeland planning and management actions because the economic impacts of the rangeland manager's actions will be felt regardless of whether economics was considered prior to taking the action. Managers of public rangeland are being held more accountable for their decisions.

If better decisions are to be made, it would seem desirable to consider the economic impacts of decisions before the actions take place. This would allow for choosing the alternative which would either enhance an outcome—say profits—or minimize adverse impacts.

The underlying concerns about rangeland economics can be stated in general terms through the concepts of supply and demand. We are all aware of the limited supply of rangelands and also of the increased requirements being placed upon them. Certainly no one would argue that our rangeland base is unlimited or is of low value. We can expect more debate about the allocation of our public rangelands among various uses.

We must also be alert to changes in technology that might expand our production capability and any changes that would affect demand for various uses. This classic economics situation leads to changes in value due to changes of supply or demand, or both. For example, the expected population growth in the West and Southwest will increase demand for recreational uses of public rangelands. The important point is that beyond certain levels not all uses can be accommodated simultaneously. Something must change. Either the resource must be made more productive (supply increased), allocation of uses changed, or demand decreased (permit or quota imposed).

Production Economics

All managers must be concerned with production economics. Owner-managers are concerned with costs of production, sale prices, cash flows, net returns, debt servicing, and other financial factors. Public rangeland managers need also be concerned with production costs and economics of the firms they deal with.

Public resource managers are often given goals or objectives in the form of laws or regulations. They need to be concerned with how they can achieve these targets at minimum cost.

An example of why we need to be concerned about economic impacts of our decisions on the budgets of others comes from the typical public rangeland improvement project. Ranchers involved in this type of program need to make improvements on private lands to provide forage during the time their stock are off public lands. The improvements cost money, and we all know that borrowed money today is very expensive. Even if money is not borrowed, the alternative investment opportunity of treasury certificates, for example, offers high interest yields that should be equaled by investments in rangeland improvements.

Ranchers and agencies should coordinate their development plans to minimize impacts on total livestock grazing; but, if either the agency or the rancher cannot provide his share of the funding, the project gets out of synchronization. This means that nonuse required after a public rangeland seeding may mean actual herd reductions or expensive forage replacement, both of which will reduce ranch income. We must be aware of these impacts on others or we may find our efforts hurt rather than help.

All public rangeland managers, as well as private ones, are concerned about operating budgets. It would be rare today to hear of a program or project being funded without some type of formal economic analysis. Bankers are not widely known to lend money without collateral and an analysis of revenue that shows repayment capability. Increasingly, these same principles are being applied to public budgets for natural resources. Program planning and budgeting are now major functions of public land management agencies. The Office of Management and Budget, the agency which implements the President's budget decisions, is requiring more justification and special studies to support agency budget requests.

A case in point is the new study of grazing fees on public lands initiated because of the Administration's concern with the level of returns to the Federal Treasury from grazing in light of apparent significant resource values. Many in the Reagan administration believe that grazing fees are too low. This promises to be a long and difficult study with highly significant economic implications to agencies, the livestock industry, and public land states. This entire study will be dealing with economic issues from the ranch to the national level.

Critical issues in the grazing fee study are the rancher's ability to pay and value of the forage to the stockman in his operation. The basic economic issue underlying the entire grazing fee study is the value of public range forage. The value of forage should reflect a value or price at which supply and demand would be in balance.

Welfare Economics

Welfare economics is a fancy term for public economics or public concerns with economic effects. In welfare economics, the main concern is the impact on a group or society rather than the individual or business firm. This field of economics deals with two primary areas: 1) economic impacts of actions on people—jobs, personal income taxes, infrastructure costs, etc.; and 2) economic impacts of people on resources. This area of economics translates legislation, regulations, and other group actions into what the impacts on resources might be. For example, our societal decisions on family size, home ownership, life style, etc., easily translate into demands for beef, minerals, water, and other materials. In our society, we are greatly concerned with questions of equity and protection of individual rights and life style. Many things we do as resource managers are for social or cultural reasons. We must be certain that our actions are having the intended impact upon the target group.

Examples of programs or policies designed for specific groups are the small operator set-aside program of public timber and upper limits on national forest grazing permits. Our involvement in some other programs such as the Civilian Conservation Corps and, more recently, the Young Adult Conservation Corps and Job Corps programs has been primarily to change the economic status of a target group.

There has been considerable discussion by agencies about including secondary benefits (those which accrue to the general public) in project analysis. Most agencies now include these benefits as a matter of policy, and we find many range projects being partly justified on the basis of these local economic impacts. If other things remain equal, we can predict the outcome of such projects and see the impacts on the local economy. A major problem occurs when other things do not remain static.

A prime example is the Intermountain Power Project in Millard County in western Utah, currently under construction. This project will have tremendous impacts on the local area. The impacts on the lifestyle and economic structure of

the area will be great. This country will move from being a rural agrarian-based economy to an industrial economy in just a few years. The cultural and economic shock to the residents is bound to be large.

Rangeland managers in the area will be faced with increased demands for new uses of public lands formerly used for grazing. There will also be pressure to use the public lands to maintain stability of the local economy. In fact, such a major change will force managers to redefine what is normal, desirable, or possible.

Current agency policy allows agencies to undertake economically marginal projects (where direct user benefits do not equal project costs) that meet some social or economic stability goal. Nevertheless, this is uncommon. Typically, agencies will be concerned about whether a proposed project is the least costly or most effective way of achieving an objective.

Summary

Economics, as a discipline, uses structured, objective-oriented thought processes that formalize the analytic process. This formal structuring of the problem or objective and the formal analysis leads to formulation and consideration of alternatives which otherwise may be overlooked. The field of economics deals with people: their wants, desires, and how they get what they want. The use of economic analysis will help the resource manager determine how the public wants their resources to be used. The most successful manager is the one who can foresee what is needed and can most efficiently meet the needs of the public.

We can all see the increasing pressures to make more goods and services available from our forests and rangelands. To do so, we must find efficient means of bringing our resources into full productivity. Since there will be more people wanting more things from our resources, we must have a means of weighing or comparing the various alternatives. But, this does not mean monetary benefit will be the only deciding factor.

It does not take much imagination to see the resource manager of today and tomorrow being faced with more difficult and complex decisions. We must manage physical resources within the total social and economic context. Accommodating more uses on a fixed land basis is a real challenge which necessitates using new knowledge and techniques.

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