

Resource Use Decisions: Private vs. Public Valuation

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Communities try to maintain or increase the well being of their members. As communities make decisions about how to use their resources, profits may seem more important because some other things, such as safety or happiness, are harder to measure. Understanding the relationships between resource use and well being will help communities make better decisions. This publication examines how private and public viewpoints differ when considering resource use decisions. A better understanding of this difference should benefit those involved in the decision-making process or affected by its outcome.

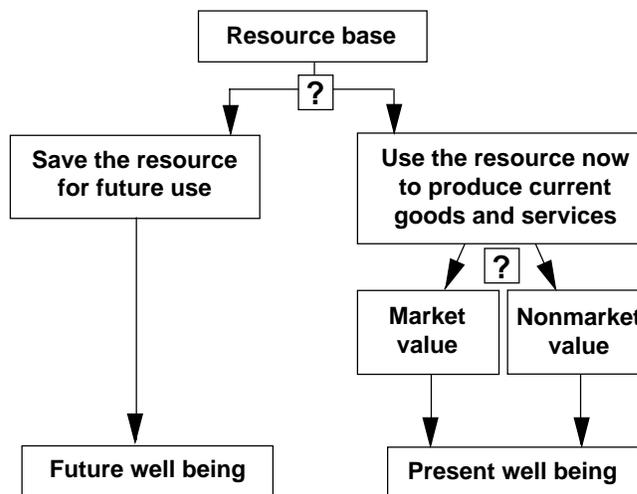
The well being of any group depends on how its resource base is used. A community's *resource base* consists of all assets—things with value—available for its use, including both natural and human resources. Decisions made on how best to use (“allocate”) the resource base can create well being both now and in the future.

In considering the use of a resource, two types of decisions must be made, as shown in the diagram at right. One is whether to use the resource to affect well being now or to wait and use it in the future. The decision to save the resource for investment in the future is not discussed here. The other decision is to identify and evaluate the types and amounts of current goods and services that will be obtained from using the resource. Those goods and services have either a market value or a nonmarket value, or sometimes both. Below, we explain how the process of evaluating current goods and services differs between private and public decision-making.

Private resource use valuation

When a resource base is managed for private benefit, the decision process is relatively straightforward, because private resource use decisions are generally based on *market goods and services*—

Creating well being from a resource base



things that can be sold to consumers for a money price. *Money price* is usually assumed to measure the value of a market good or service to people. For example, if you go into a store and buy a soda for \$1, then the soda is worth at least \$1. If you decide not pay \$1 for the soda, then it is worth less than \$1 to you. The contribution of market goods and services to well being is the total amount of market goods and services times their respective money prices.

Businesses in the private sector generally make choices using “formal rationality”—the one that gives the largest *money profit* is chosen. Money profits (money receipts minus money costs), are calculated for each choice. *Money receipts* are the amounts of market goods and services produced times their respective market prices. *Money costs* are the amounts of inputs needed for the

For example . . .

Your neighbor may want to start a bed-and-breakfast to earn extra cash. You may not want outsiders visiting your neighborhood because the traffic will make it less safe for kids. Allowing a bed-and-breakfast may increase income but decrease safety. Not allowing it will keep things the same. As the community makes this decision, the effects of income *and* safety on well being should be considered.

production of the goods and services times their respective money prices. When choices are based on profit the decision process is simple, because only market goods and services are included in the process.

Care must be taken in equating money price with *value*. Money prices can be based on forces other than demand and supply. In such cases, the money price is not the market price and may not provide a measure of value. For example, public utilities providing goods and services such as electricity, telephone, and water have an overseeing authority to set money prices based on costs rather than value.

Public resource use valuation

When a resource base is managed for the benefit of the public, the decision process is more complex. “Substantive rationality” is used to make choices. While money profit may still be a motivating factor in the decision, it may no longer be the most important outcome. This type of rationality looks instead at what is most important to the public. The provision of one or more *nonmarket* goods and services may become the primary motivating factor.

Nonmarket goods and services may provide as much value as market goods and services, but it is usually not possible to make the consumer pay for nonmarket goods and services. Thus, money price is not available to measure their value. Users of nonmarket goods and services cannot be made to pay a money price for one or more reasons, such as:

- Use rights for a resource may not be clear. For example, the right of smokers to exhale tobacco smoke into the air of public places is now being discussed.
- The resource owner or user may not have full information about the situation. For example, your neighbor may not realize that not maintaining his yard causes weeds to spread to yours.
- The cost of negotiating an agreement between the resource owner and user may be too high. For example, people often tolerate a neighbor’s dog who messes yards all around the community, because confronting the problem might be unpleasant.
- The resource owner may not be able to stop nonpayers from using the good or service. For example, charging hikers for the right to walk to a scenic view may be difficult because it is hard to force them to pay.

Making the best choice is difficult because it is hard to get agreement on what is most important. A second problem arises if the nonmarket goods and services are important to the public. The values of these types of goods and services to public well being are hard to measure because the users do not pay for them. The amount of money given up in exchange for the good or service cannot be used to represent its value. However, methods do exist that provide an objective measure for the value of nonmarket goods and services. Proper application of these methods allows a money value to be placed on nonmarket types of goods and services. However, they are not often used because the services of a trained professional are required, which makes them costly to carry out.

Combining private and public valuation

Money profits—market factors—often take precedence over nonmarket factors in decision-making because the contributions of nonmarket factors to well being are harder to measure than market factors. Objective measurement of nonmarket goods and services is often not done because it is costly. However, objective measurement may be worth the cost, in order to support better public resource use decisions. Not getting good measures of the values of all goods and services may be more costly in the long run, because some resource use decisions affect us forever. A complete analysis of both market and nonmarket benefits and costs is a crucial step in the public decision-making process, especially when resource use decisions are irreversible.

Research we have done on the nonmarket value of agricultural land can be used as an example of the difference between market and nonmarket values. In 1994, the average market value per acre of land on Oahu was estimated to be \$443,980 for urban land and \$2075 for agricultural land. These market values seem to indicate that urban land is worth much more than agricultural land and that consumers desire a shift to more urban land. However, agricultural land provides a nonmarket open-space benefit, and using market value to determine how much agricultural land is worth ignores its open-space value. Our study estimated the nonmarket value of agricultural land to Oahu’s residents and visitors to be \$159,575 per acre. The nonmarket value of agricultural land is greater than its market value. This may explain why a large amount of agricultural land is unused but some object to switching the land to urban uses.