

Stewardship, Accounting and Management

Kate Lancaster, Orfalea College of Business

Previous chapters have described the vast array of resources that Cal Poly's officials oversee. As students, educators and others in the surrounding community continue to use Cal Poly Land and surrounding areas, the ecological system and its capacity to recover become strained. In order to ensure that in 100 years students (and other Cal Poly stakeholders) will be able to have the same opportunities to benefit from the land resources, Cal Poly's stakeholders need to develop the mindset and tools to help us maintain and enhance these resources. This section describes several approaches available to help us.

It is difficult to place a value on something that has an intrinsic value to some yet is not considered valuable by others. For example, how are the benefits of having a healthy riparian and creek ecosystem quantified and how does the Cal Poly community agree on the steps necessary to accomplish this? Up till now, individuals whose activities harm the ecosystem have not had to consider any of the costs, so these costs have not been included in their decisions. In economic terms, such intrinsic things that have perceived value which is not factored in as part of the "true cost," are called externalities.

Three techniques are commonly used to ensure that organizations include externalities (and in particular, their impact on the environment) in their decision process. The first is to have environmental organizations provide oversight and guidance and act as a voice for concerned constituents. For example, the Land Conservancy has worked with Cal Poly to enhance the creek ecosystem and the Coastal Resources Institute has also been involved in monitoring and enhancing water quality. Another method is to impose governmental regulations that either tax or fine those that damage the environment. The Clean Water Act, with its focus on restoring and maintaining the integrity of the nation's waters, is one example of such a regulation. An economic approach is to encourage consumers to "vote" with their pocketbooks and support organizations that conserve, reduce toxic waste, and minimize their impact on natural resources.

A number of authors offer guidance on sustainable economics. These approaches may be loosely classified as sustainable development models. While not primarily used to measure environmental performance, in response to some inadequacies of traditional accounting methods, Robert

Kaplan and David Norton designed a Balanced Scorecard (BSC). The “triple bottom line” was developed by John Elkington as a way for organizations to communicate their economic, environmental, and social performance. Allan Savory, founder and director of the Center for Holistic Management and author of *Holistic Management: A New Framework for Decision Making* (1999) offers a decision model that captures many externalities. Paul Hawken, Amory Lovins, and L. Hunter Lovins illustrate how many organizations consider and minimize their environmental impact in their book *Natural Capitalism: Creating the Next Industrial Revolution* (1999).

A BSC is a metric of performance measures that support an organization’s strategy. In addition to financial measures, a BSC includes long-term, forward-looking perspectives (i.e. customer and business processes, employee learning and growth, and environmental protection) that are necessary to ensure a healthy and profitable future. Businesses use a BSC to evaluate their ability to provide quality output with fewer resources, eliminate non-value added efforts, align products or services provided with customer priorities and expectations, track progress, evaluate process changes, and continually improve accountability. Other entities or individuals can easily adapt the BSC concept. As an exercise, participants in the Cal Poly Land Seminar developed a BSC for the Cal Poly

Center for the Environment at Swanton Pacific Ranch. This BSC includes perspectives (educational, environmental, economical, and societal) that encourage Center planners to develop and then monitor holistic goals. The next step would be to develop targets and initiatives for each objective.

Allan Savory outlines the complexity of a decision model that considers environmental impact. Sam Bingham describes a ranch community’s effort to implement the Holistic Management Model in Colorado’s high deserts in his book, *The Last Ranch*. They employ six steps to validate any decision:

1. Honor the ecosystem as a whole
2. Strengthen the weak link in the operation
3. Address causes, not symptoms
4. Give the best marginal reaction per dollar
5. Represent a conscientious use of energy and nonrenewable wealth
6. Respect society and culture

The first step in the Holistic Management model is to identify the “whole” under management—those affected and the resources (both monetary and natural) involved. The second step is to develop a value-based holistic goal, which is used for the basis of all decisions. If we refer to our previ-

ous example, all parties that affect the health of the riparian ecosystem on Cal Poly Land and those that are working to restore that ecosystem would work together to identify what they value about a healthy ecosystem. Their holistic goals might be that native fish again migrate up the creeks, that the banks be restored with native plants, and that the surrounding lands serve as a water catchment. After considering all the ecosystem processes (in our example, the riparian ecosystem and the surrounding water catchment) and the tools that are available for managing the ecosystem (what we can do to restore the riparian ecosystem), each recommendation is evaluated using guidelines that consider economic, social, and ecological impacts, which reflect the emphasis of the “triple bottom line.” The feedback loop is an important component in that any implemented solution must be revisited to see if the anticipated results occur.

Hawken, Lovins, and Lovins describe many companies that have successfully integrated their economic, environmental, and social goals. They propose redesigning our production and consumption cycles so they are based on “a new perception of value, a shift from the acquisition of goods as a measure of affluence to an economy where the continuous receipt of quality, utility, and performance promotes well-being.”

Hawken, Lovins, and Lovins identify four types of capital that are interconnected in a properly functioning economy: human, financial, physical or manufactured, and natural. A company’s financial and physical capital is easy to quantify, but its human and natural capital—i.e. its “soft assets”—are harder to assign value and are therefore normally not included in financial statements. Hawken, Lovins, and Lovins conclude that “the true bottom line is this: a society that wastes its resources wastes its people and vice versa. And both kinds of waste are expensive.”

Visionaries like Savory and Hawken, Lovins, and Lovins offer tools to evaluate the impact of our decisions on the environment. Cal Poly’s substantial land holdings require the University to educate people who are conscious of holistic consequences. For example, the proposed business research park at Cal Poly should be designed as a closed-loop system in which all waste products are recycled. Any new buildings should be energy and resource efficient. Crop and livestock management classes should instruct students on ecologically sustainable methods. Business classes should incorporate holistic management tools into the curriculum. We have an opportunity to lead by example, and there are indications that our students, faculty, and administrators are beginning to do just that.