

1 INTRODUCTION

Many groups possess knowledge of a cultural, economic or scientific nature which could be of great value to the conservation and sustainable use of living resources. This may have been built up over many years or generations and represents a significant investment in terms of time, money and intellectual effort. The intellectual property resulting from this investment is often seen as an important asset, to be guarded from outsiders and made available only in exchange for other assets, for example money. It is not surprising, therefore, that the flow of information between different segments and levels in society is often frustrated by political, organisational or even personal barriers.

In general, there is a lack of awareness of the **benefits of information sharing**, allowing the potential disadvantages, including fears about loss of intellectual property, to dominate. This leads to the erection of unnecessary barriers to information sharing based, for example, on the belief that intellectual property will be diluted, misrepresented, or otherwise used to the detriment of its owner when shared. Sometimes such beliefs are well founded, for instance in the case of owners of indigenous knowledge who are fearful of exploitation by drug companies; owners of scientific knowledge, particularly those whose careers depend on publication, who fear plagiarism or lack of acknowledgement; and owners of technological knowledge who fear infringement of patents, copyright and other forms of know-how.

Owners of all types of information may feel uncomfortable about sharing their investment until they understand **why it is needed and how it will be used**. Given that access to information is a vital part of most people's everyday work (whether this is from different parts of the same organisation or from external individuals, organisations or sources), efficient procedures for information sharing are essential to productivity. For example, human population figures generated by a national census agency may be required by planners in the agricultural and health sectors; forestry department maps may be needed by an environmental lawyer assessing a claim on public forest land; and, calling on generations of experience, a village elder may need to advise his community on the best moment to harvest a wild crop. Such work can be delayed, devalued or prevented by lack of information sharing.

A special challenge arises when producing information to address environmental concerns. The information needed to support policy and practices in this area is multi-disciplinary in nature, even when confined to a single sector such as forestry or agriculture, and may be required on a diverse and variable set of topics. It is

inevitable, therefore, that the underlying datasets will be scattered amongst many organisations and sources, making the task of integration especially time-consuming. Furthermore, if some organisations are unable or unwilling to provide access to their data, there may be no option but to reproduce secondary copies at great expense. Even worse, decisions may be made in the absence of important data because the latter have not been accessible.

Box 1 presents a variety of constraints which can hinder the unrestricted exchange of data. In many cases, such constraints will be perfectly reasonable. Where unnecessary barriers are erected, there are powerful techniques for overcoming these based around the principle of **custodianship** (see Volume 5). A simple method for assessing which constraints may be the most plausible in any given situation is to consider what would happen if a request was made for one's own data. This helps to anticipate and appreciate the difficulties encountered by others.

Box 1 Common constraints on data access

- No established corporate policy or guidelines on data access.
- Not willing to release data (e.g. for reasons of copyright, confidentiality, security or institutional/personal rivalry).
- Physical procedures for retrieving data too complex (e.g. inefficient means of accessing/ compiling/editing/copying data).
- No funds to process the request (e.g. due to staff costs or costs of media).
- Request for data is not made clearly enough.
- Requested data are still under development.
- Requested data are not fit for release (e.g. not standardised or quality-assured).