

Holistic Management for Improving Biodiversity

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Holistic Management is a decision-making approach that guides resource management towards sustainable practices. It is a process of goal setting, decision testing and monitoring that incorporates social, economic and environmental factors. By providing a framework that embraces a wide range of practices and options, Holistic Management gives farmers and other land managers greater freedom to adapt to local social, economic and environmental conditions. Central to this approach is the notion that greater biodiversity leads to greater stability in ecosystem function.

The purpose of Holistic Management is to create a sustainable resource base while progressively improving the quality of life of people the resources will support. This future resource base is planned when setting the Holistic Management goal. The Holistic Management goal is a statement linking the quality of life sought by people managing the land, to what they must produce to sustain that quality of life, and a description of the future resource base as it must be to sustain what is produced. All major decisions are tested against this goal. This process provides a consistently objective method for improving resource use practices while developing the future resource base.

In linking quality of life to a sustainable future resource base, Holistic Management encourages an understanding of ecosystem processes. At the centre of the Holistic model are the four ecosystem foundation blocks: community dynamics, water cycle, nutrient cycle, and energy flow. Knowing how these processes work and relate to one another is critical for creating the future resource base. Understanding these relationships generates an awareness of how management decisions influence biodiversity and affect ecosystem function.

Biodiversity affects ecological processes on multiple levels. Cropping practices that increase natural enemies, for example, not only provide opportunities to recycle nutrients within a farming system, but can develop value added enterprises within a farm. Holistic Management practitioners understand that efficient nutrient and water cycling, energy flow and successional dynamics, combined with a strong biodiversity base above and below ground, buffers a managed ecosystem's responses to disturbances.

Holistic Management is a comprehensive framework to help people change from conventional management paradigms to a sustainable management paradigm. By learning to work with ecological processes, farmers and other land managers can often improve biodiversity and reduce external inputs while sustaining production. By emphasising biodiversity protection and enhancement, Holistic Management can induce species to reappear, raise falling water tables, and decrease soil erosion.

Holistic Management was developed in Zimbabwe and the western USA for pastoral farmers in arid and semi-arid areas, but is not restricted to any one form of farming or farming alone. While pastoralists remain the largest group of users of Holistic Management, potential users extend beyond farm families to other management structures. These include community, institutional, tribal, and commercial operations. Anyone seeking sustainable practices to manage resources can employ the approach. Holistic Management is currently practised

in Australia, United States, Canada, Mexico, South Africa, Namibia, Botswana, Zimbabwe, Zambia, and Burkina Faso.