

Abstracts

Traditional Knowledge in the Defence of the Cultural Landscape of Tlajomulco, Mexico **María de la Luz Ayala, Edith R. Jiménez Huerta**

Like other people who live in the older settlements around the city of Guadalajara, the inhabitants of Tlajomulco have a comprehensive vision of their villages and surroundings. They have been living on the land and off the land for centuries. At the end of the 20th century, the cultural landscape of Tlajomulco began its latest transformation. The formerly fertile flatlands gave way to large-scale sterile real estate developments. In the rainy season the waters of the water basin, once used to irrigate crop fields, now flood the houses and roads created by this new urbanization. As the city expands, the forests that supplied timber, charcoal and wood, as well as other goods obtained by hunting and gathering, are diminishing and their biodiversity is threatened. At the dawn of the 21st century, the cultural and environmental diversity that has characterized these villages for centuries is thus in danger of being lost to unplanned urban sprawl. The aim of this paper is to encourage conservation and prevent further deterioration by making more widely known the rich cultural landscape of the traditional villages of Tlajomulco and the know-how of the inhabitants that has contributed to its conservation.

Private Investment in Biodiversity Conservation. A Growing Trend in the Western World? **Max Bourke**

The paper examines the increasing trend of philanthropic bodies and private individuals to invest in the conservation of Australia's biodiversity. This is seen as part of a more general Western trend in which Australian organizations are linked to bodies such as the large US-based Nature Conservancy. It is part of a response to the need to integrate conservation measures on public land with those on private land. The paper reviews two cases of private conservation reserves being created in the 1930s and 1940s. Private conservation through covenants on relatively small parcels of land was facilitated by the Victorian State Government in the 1970s. In the 1990s, the Australian Wildlife Conservancy and the Bush Heritage Trust were

formed as charitable trusts which now own and manage 2.6 million ha of land in 55 reserves. The case study of the Thomas Foundation and its relationship with the Nature Conservancy is presented. The Nature Conservancy's model of corporate fund-raising use was found to be successful in Australia for purchasing land and conserving it to preserve biodiversity. By 2010, private philanthropy and corporate sponsorship had almost 4 million ha of land under protection and managed for conservation. The paper ends by considering four issues that may influence the future of private investment in Australian conservation. One concerns the effect of the Global Financial Crisis on the flow of investment funds for conservation. A particular concern is whether governments might transfer their funding for conservation as private support increases. Private support depends on favorable tax treatment for charitable giving. It is hoped that the greater transparency now being required will maintain community support for tax arrangements. A fourth concern which is now starting to be addressed is the relations between the bodies managing private conservation reserves and the traditional Aboriginal owners of the land.

Colonial Famine Relief and Development Policies: Towards an Environmental History of Northern Ghana **Jeff Grischow, Holger Weiss**

Since the 1980s, scientific experts have made a number of recommendations for averting food insecurity and famine in Northern Ghana and other dryland areas of West Africa. These studies are based on regional meteorological data, and their suggestions include early warning systems, smallholder agricultural development, and the depopulation of densely settled regions. Much of this literature posits two main hypotheses: that regional data can provide a reliable indicator of the potential for harvest failure, and that the recommended policy actions can work because they are new and innovative, without historical precedent. This article delves into the colonial past to challenge both of these hypotheses. Using Northern Ghana as a case study, we question the usefulness of regional data for understanding food insecurity, and we show that the supposedly novel ideas of the present in fact have a strong colonial lineage.

Environmental Experiences of Chinese People in the Mid-Nineteenth Century Australian Gold Rushes **Fei Sheng**

The migration of Chinese people to Australia was part of a global migration that occurred around 1850, stimulated by gold discoveries around the Pacific Rim. The research analyzes the deep ecological factors in China that spurred the migration at a time when the discovery of gold as a natural resource in Australia made the country an ideal migration destination. The author shows how the Chinese

migrants applied their native environmental experience in a white settler colony. Through unique mining methods and market gardening, the Chinese transformed the indigenous landscape and shaped their “New Gold Mountain” in Australia. Although the Chinese environmental experience benefited both themselves and other migrants, there were also negative effects. Environmental cooperation was eclipsed by environmental conflicts between Chinese and white miners. Both cultural and natural factors limited the spread of Chinese environmental experiences in the Australian gold rushes. The Chinese environmental experience in the Australian context was also a result of existing racist policies. Within a broader perspective, the paper demonstrates how different migrants interacted with the indigenous environment and with each other.

The Origins and Purpose of Eco-Innovation

Mario Pansera

Nowadays, eco-friendly technologies are considered a strategic objective in industrialised countries. Rising demand for more sustainable products and services from civil society has become a major challenge for policy makers. The present article aims to provide a historical perspective on the concept of eco-innovation, its different meanings and its position in the modern debate around sustainability. The first part of the article explores the origins of the notion of eco-innovation, drawing on the Sustainable Development debate. The second part attempts to shed light on the purpose of eco-innovation and its implications for a desirable sustainable transition in modern industrial societies. This part illustrates the essential differences between mainstream economics and the School of Ecological Economics. Finally, the third part attempts to describe the social and institutional changes necessary to foster eco-innovation.

World Water Day 2012. “Water and Food Security: The World is Thirsty Because We are Hungry”

Desiree A.L. Quagliarotti

The World Water Day held in 2012 focused on the link between water use and food production. Today the challenge is to meet the nutritional needs of a growing world population in a context of natural resource scarcity. The world population is predicted to grow from 7 billion in 2011 to 8.3 billion in 2030 and 9.1 billion in 2050. Consequently, by 2030 food demand is predicted to increase by 50 percent. In this context, water is a strategic variable since it is an increasingly scarce resource and one of the fundamental input factors in food production. For example, the average person drinks about 2.5 litres of water a day, about 1500 litres of water are required to produce 1 kilogram of wheat, and 10 times more to produce 1 kilogram of beef. Producing feed crops for livestock, slaughtering and

meat processing, and extracting and producing milk and other dairy products require large quantities of water. The booming demand for livestock products is increasing the demand for water at every stage along the livestock value chain. The aim of this year's World Water Day was thus to open an international debate in order to identify strategic choices capable of combining, globally and locally, the objective of food security with that of water resource protection.

Agriculture, Health, Environment

Idamaria Fusco

This interview with Piero Bevilacqua, professor of contemporary history at “La Sapienza” University in Rome and a scholar with multiple interests, focuses on agriculture, health and the environment: three aspects which today, even more than in the past, are closely intertwined, since improper farming methods can seriously damage our environment and, hence, our health. The interview touches on a broad range of subjects: from the use of pesticides, which poison the soil and pollute underground water, to the “Green Revolution”, that is, technical innovation based on so-called “improved” seeds, and on chemical fertilizing, weed killers, and a very high consumption of water and energy; from GMOs to biodynamic and biological agriculture, and the respect of biodiversity; from modern farming's wasteful use of water, a scarce resource today, to Common Agricultural Policy, which is presently striving to limit food overproduction and, hence, non-sustainable exploitation of farmland.

Bevilacqua looks at these themes in a long-term perspective, since the present deterioration of world agriculture, and of the environment with it, is a process whose roots reach far back into time. In this interview, the scholar auspicates restoring old farming wisdom, setting back in motion the “virtuous circle” on which agriculture was formerly based, which reused all production waste, and giving up on the notion of agriculture as just any branch of capitalist production—an activity, that is aimed at meeting a commercial demand rather than actual needs.

The conclusions we can draw from Bevilacqua's words are, all in all, positive. All this deterioration around us, he assures us, is not irreversible, and in the Western world there is an increasingly strong drive towards quality, towards an agriculture making the most of typical products, biodiversity, and the old traditions of places and landscapes. A drive, that is, towards an agriculture where true wealth resides in the diversity and different identities of peoples.