

The Role of Yadnya in the Conservation of Plant Diversity in the Yard Spatial Pattern in Bali

by

Suryadarma, IGP

*Institute of Teacher Training and Education
Yogyakarta, Indonesia*

Introduction

Implementation of biotic resource conservation requires different levels of societal support, in order to be of good quality.

Preventing plant diversity degradation requires a holistic ecosystem approach, since it is a multidisciplinary and cross sectoral problem. The rural ecosystem consists of four subsystems, i.e. the village, the farm-field, the river and the forest. The four subsystems continuously interact with each other. (Soemarwoto, 1990). Consequently, in any effort to conserve plant diversity these interactions should be kept in mind. Formerly, the idea of conservation covered only the management of the natural environment in such a way as to ensure adequate supplies of natural resources for future generations.

The Balinese have many traditions to regulate the arrangement of plants in the yard and to support plant diversity conservation which is based on cultural symbolic values.

The Urgent Need of Biodiversity Conservation

It is universally agreed that "every community needs a symbols of its "existence" (Walker, 1961, in Budihardjo, 1989). Tradition grows from an evolutionary process, where new customs and ideas and skills are grafted onto historic practices. On the island of Bali, the peoples' unique traditional way of life and their strong philosophical concepts still guide them in structuring their environment.

Conservation is a dynamic and creative approach which aims at enhancing the life of the community (Geoffry, in Budihardjo, 1989). The latest definition of conservation includes "all the processes of looking after a place so as to retain its cultural significance. It includes maintenance and may, according to circumstances, include preservation (Burra, 1981, in Budihardjo, 1989).

The natural resources of the earth including the air, water, land, flora and fauna and especially representative samples of natural ecosystems must be safeguarded for the benefit of present and future generations through careful planning. Nature conservation must therefore receive importance in planning for economic development. (Lovejoy, D. 1973).

One of the most satisfactory methods of conservation is the recycling of materials. Recycling will not only reduce waste disposal. The characteristic traditional yard pattern in Bali supports this concept.

Basic Concept of Yadnya in Bali

Yadnya or offerings, as sacred sacrificial creations can not be separated from the social life of the Balinese community. The main purpose of the Yadnya is to pay the inam (debts) incurred since they have been born as human beings. Those debts include the debts of livelihood, birth and knowledge. There are five kinds of offerings, which are known as Panca Yadnya: (a) Dewa Yadnya; offering to Sang Hyang Widhi (God); (b) Rsi Yadnya, offering to priests and religious teachers; (c) Manusa Yadnya, offerings and ceremonies at different stages of life, such as birth and marriage; (d) Pitra Yadnya, offerings to ancestors and parents; and (e) Bhuta Yadnya, offering to deities or supernatural powers. They include taking care of plants and animals and giving food to domestic animals and wild animals.

The sesaji offering is most commonly conducted and is the real materialization of Yadnya. The main materials of sesaji are leaves, flowers, fruits, water and fire which are given by a sincere heart. People believe Yadnya has good virtue when those materials are obtained the right way.

The offering of sesaji as a sacred sacrifice is a prime argument for the preservation of biodiversity in the traditionally planned spatial yard pattern. Turk and Turk (1984) said there are several reasons. In some ways the most compelling are the aesthetic and religious arguments along with the developments in medical and biological sciences, which have always been dependent on various plants and animals as experimental subjects.

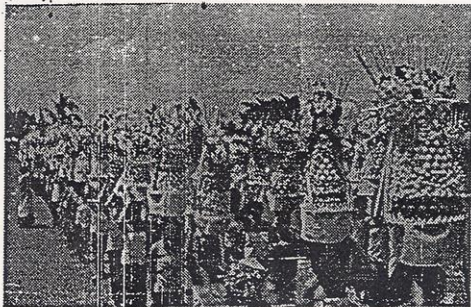


Figure 1. An Offering of Sesaji is the Real Materialization of Yadnya Consisting of Leaves, Flowers, Fruits, Water and Fire.

For this reason, the agrarian community is responsible for conserving their environment. The land which must be conserved are yards belonging to the household. The traditional yard must be divided

Gunung Agung (10,473 feet), the highest mountain on Bali, regarded as the Navel of the World, is the most sacred place of the whole island. It is the most important element in the Balinese cosmology, considered as the Cosmic Mountain and the Father of All Humanity. The Balinese live in an orderly society in which everything is secure and predetermined. The collective and cooperative spirit is so ingrained that group membership is an essential element in every aspect of Balinese life.

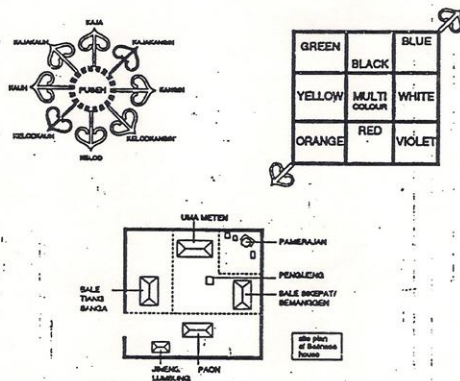


Figure 3. Tri Hita Karana and Tri Angga Dictate the Plan of a Balinese House (Yard Pattern)

The great majority of Balinese live in village communities which are called *desa*.

A Balinese house consists of inter-related open spaces surrounded by a wall and four or more open pavilions built surrounding an inner court. Space, masses, landscape, resting places and the need for metaphysical security are here made one.

Normally the yard pattern must be managed according to space hierarchy concepts. These are: (1) *Parhyanganat* the mountain, being the area for deity; (2) *Pawongan* the land, being an area for mankind; and (3) *Palemahan* the sea being the area for evil spirits. This concept is an integration of God, men and evil spirits. The Balinese say that a house including the yard pattern can be viewed as a living organism with *Parhyangan* as *atma* (soul), *Pawongan* as *prana* (ability, power), and *Palemahan* as the body (Figure 4).

No yard	Plant Diversity	
	Agrarian	Tourism
1	30	42
2	54	31
3	34	42
4	35	52
5	45	46
6	33	47
7	45	30
8	47	31
9	40	42
10	22	31
11	42	31
12	45	62
13	40	30
14	37	30
15	61	35
16	49	21
17	53	32
18	48	29
19	39	22
20	33	27
21	35	29
22	58	41
23	53	33
24	40	39
25	51	31
26	25	34
27	51	47
28	33	34
29	33	31
30	43	38

The activities that maintain this plant diversity come from their ancestors. It is clear that the concepts of conservation here are not only concerned with just physical objects, whatever their value, but also with socio, economic, cultural and religious phenomena as well.

The challenge is now to explain it, based on a scientific approach, to the people, particularly, in Bali as education will play a key to role in any efforts that are undertaken for biodiversity conservation.