## CULTURAL LANDSCAPE OF BALI PROVINCE

INDONESIA

## WORLD HERITAGE NOMINATION - IUCN COMMENTS TO ICOMOS

## CULTURAL LANDSCAPE OF BALI PROVINCE, THE SUBAK SYSTEM AS A MANIFESTATION OF THE TRI HITA KARAN PHILOSOPHY (INDONESIA) ID No. 1194 Rev

IUCN undertook a desk review of this cultural landscape nomination to provide inputs to ICOMOS on the natural components of this property. IUCN considers that the nomination documents clearly demonstrate a rationale for considering the property a "combined work of man and nature". While the nomination includes areas with a high degree of intervention in the natural landscape, the natural and semi-natural systems of the hills and waters of the landscape, and wild species of fauna and flora that are integral components of it, provide the "canvas" on which has been superimposed the cultural landscape including elements such as the rice terraces, traditional irrigation systems, temples, and villages. IUCN notes the detailed documentation on the functional and spiritual aspects of this landscape, and the associated social and religious institutions, especially the system of cooperative resource management sustained by self-governing democratic institutions.

The natural aspect of the cultural landscape most critical for its protection and conservation relates to the management of water, which is the key environmental element of the Subak System of rice terrace management. It is also a critical element in maintaining the visual quality of the property. One significant challenge in this regard is the protection of water quality, and the maintenance of water flows. This is especially critical considering growing development pressures, fragmentation of the landscape and pollution from agricultural chemicals.

While effective watershed management is essential to the conservation of the Subak Systems, the nomination file does not clearly identify the geographical extent of the upper watersheds that feed the Subak Systems, nor indicate how they will be managed. The maps provided in the nomination documents make it difficult or impossible to work out the extent of the upper watersheds for each Subak System. Ideally, they should be clearly outlined on each of the maps and included within the boundaries either of the buffer zone of the property. If this is not possible, other effective conservation means should be put in place and be considered an integral part of the protection of the Subak water management system. These measures should be clearly set out in the nomination, tied to specific geographical areas on the maps, effectively implemented on the ground, and monitored on a regular basis. The most notable example is Lake Bakur. While the lake itself is included within the boundaries of the nominated area, the watersheds that feed the lake are not. It is not clear from the nomination how the quality, quantity, and flow rates of waters that feed Lake Bakur will be guaranteed.

Based on the considerations outlined above, IUCN recommends that the State Party be requested to submit clear maps of the upper watersheds of each Subak System, and provide an indication of how each will be protected and managed to guarantee the quality, quantity, and water flows required to maintain the health of these systems.