

Tourism industry responsible for water crisis in Bali: Expert

As tourism in Bali enjoys a robust period, the island is struggling to cope with diminishing water resources that have been overexploited to meet the increasing demand for clean water for tourist-related facilities, while the industry has done little to solve the problem, a study concluded. Prominent British academic Dr. Stroma Cole, a senior lecturer in tourism geography at the University of the West of England, conducted months of research on the causes and the consequences of the scarcity of water in Bali, which are already causing serious social conflicts and burgeoning environmental problems. Cole presented the results of her comprehensive study in a book entitled *A Political Ecology of Water Equity and Tourism — A Case Study from Bali*. She shared parts of the study with *Bali Daily*. Cole is the former chair of Tourism Concern, a London-based non-profit organization, which is actively promoting ethical tourism worldwide. "Bali is an important case study because 80 percent of its economy depends on tourism and tourism depends on a healthy water supply," the academic said.

Tourism in Bali provides 481,000 direct jobs, directly employing 25 percent of the workforce and supporting more than 50 percent of its gross domestic product (GDP), according to the Bali Statistics Agency. Bali, she wrote, was also important as it could be considered as a laboratory example of the world's best tourism. Water, she said, was recognized as one of the most critical and scarce resources for tourism, an industry renowned for its overuse of water. In Bali, she said, tourism absorbed 65 percent of the island's total water supply. "In many tourist destinations, including Bali, the availability of water is reaching the crisis point and the impact of tourism on hydro-ecology is high," said Cole. Bali's water crisis results from a number of interconnected factors — environmental and political factors that intersect and affect different social actors in different ways. "The current situation results in the distribution of water being skewed away from agriculture to tourism; inequitable shares between tourists and locals. Moreover, the mobilization of water in Bali for different uses by different groups is indeed a conflict-ridden process." Unfortunately, most tourism stakeholders were unaware of the need to conserve water, she regretted. "The impact of overuse of ground water by tourism is being felt all over Bali; a falling water table, salt water intrusion, land subsidence and deteriorating water quality," she stated.

The competition for water is felt the greatest in agriculture. This causes a variety of conflicts for rice farmers. There is conflict between those who manage the water, the Pekaseh (head of the subak organization), and the village that allows tourism development or sells water to the bottled water refill operators. According to Cole's analysis, another significant impact of the water crisis is its effect on the poorest and most marginalized members of society. It was these people whose hand-dug wells ran dry, but could not afford to be connected to the city tap-water supply (PDAM). The latest data shows that 1.7 million out of Bali's 3.9 million population have inadequate access to a supply of clean water.

Previously, Djinaldi Gosana, executive director of the Bali Hotel Association, explained that four- and five-star hotels operating on the island needed at least 50,000 liters of clean water every day, not to mention the usage of water by non-starred hotels, villas and new types of accommodation, including apartments and condotel (condominium hotels). "Additional pressure comes from the increasingly diverse and sophisticated requirements for water to service tourist facilities for more affluent and demanding clients, such as the increasing number of high-end spas, and villas with their own pools and Jacuzzi," added Cole. Mass tourism, she added, was a water-intensive industry, and the level and pace of continued development in Bali could not be sustained. Since it opened for mass tourism in the New Order regime of president Soeharto in the early 1970s, the number of hotels and tourist facilities has rapidly increased. In 1987, there were only 5,000 hotel rooms in Bali, while by July 2012 the number of rooms had surged to 90,000 rooms, according to the Bali tourism agency. "Water scarcity in Bali is a sociopolitical phenomenon and the solutions lie in policy and management change," Cole concluded. Bali shouldn't wait until 2015 to deal with its water woes. "The water crisis is already on your doorstep," she warned.