

# Plastic Waste Management Challenges Paradise Island

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**B**ali described in fancy tourism brochures and travel guide books is such a beautiful tropical island fringed with wavy blue ocean waters with magnifi-

made vast green rice field crisscrossed by abundant ever-flowing rivers with the backdrops of towering bluish green volcanic peaks. What an ideal tropical destination.



*High school students participating at the regular plastic clean up take a break at the top of the Mt Mangu in Central Bali.*

cent surf waves as well as superb underwater wonder right before its white sandy beach. Such natural splendor is beautifully matched with skillfully man-

pictorial brochures is the fact that the island, in the past couple of decades, has been seriously challenged by the abundance plastic waste. From its under-



*Mangrove Forest down in Kuta and Sanur is always the end point of plastic waste flowing from the nearby rivers.*

Amazingly enough, this tiny island is occupied by 3 million Hindus known for their endless hospitality, warm gesture, everlasting smile and spectacular tradition, dance and culture. They are not the type on Hindu people you've ever seen. Their millennium-long historical formation during its inception in the neighboring land of Java had made their religion such a unique faith far different from where it was born, India. Indeed, such a description is very true. For almost a millennium now, Bali remains as beautiful as it ever during the era the Majapahit Empire took form in 1292.

It is such a complete tropical tourist destinations by any measure: from crawled beach life to tradition to unbeaten path of mountain track.

Going beyond the sight of the pictorial brochures is the fact that the island, in the past couple of decades, has been seriously challenged by the abundance plastic waste. From its underwater, coastal beach, mangrove area right to the top of the mountain. Top of the mountain? Well, it is indeed.

This tiny island of Bali is naturally and uniquely shaped like a pyramid, it is so small but also so tall, with its Mt Agung towering at 3,140m, believed by local as the navel of the universe, the center point of their legendary Hindu Dharma religion. Several other peaks, making a chain right from the very west to the very east, also are well about 2000-meter high range.

With water keep flowing from every peak to feed its ever flowing rivers across abundant rice-field, it means whatever people throw from

the top can quickly go down the river right to the sea.

Thus, Bali's plastic waste problem is a serious question challenging the island's premier position as the world's best tourist destination.

How serious is the challenge? Here is the example: When the ToptoTop Global Climate Expedition arrived on Bali in October 2009 and campaigned to clean one of the Mangrove site, helped by 218 stu-

dents from Senior High Schools from across Denpasar, it collected over 500kilograms of plastic in just 2 hours.

That half metric tone amount of plastic waste was collected only within less than half hectare (500 sq. meter) of the Mangrove forest. And the total mangrove forest within that small area is measuring more than 1,250 hectares. Everyone bets it is a massive, emergency task to do in the near future.



*Our clean up team come from various background ranging from casual hikers to serious mount climbers, schoolchildren, members of Bali International Women Association (BIWA) as well as teachers (top). Bali's coral garden, as it is the mangrove area, is seriously challenged by the overflowing plastic waste especially in the sites nearby river flowing from the urban area of Denpasar that regular clean up (below left).*



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**Every Balinese is a mount hiker, but it is where the problem is when it comes to an issue to keep the peak clean.**

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*Beyond this picturesque Kuta where many tens of thousands of travelers flock in its white sandy and magnificent waves every single day, laying behind the screen remains an island far-capable of coping with its plastic waste issue.*

As its Hinduism tradition teaches, every mountain peak is believed to be the seat of God, the place most considered sacred. Thus, there is always a temple at every summit honored to the almighty, where casual Balinese pay pilgrimage regularly for meditation or simply serve the food for the almighty.

Thus, we can assume one in every five Balinese must have ever climbed a mountain, for this religious reason. And many of them are such regular mountain temple-goers, ever since the city-life becoming more crowded that they need the calm mountain peak as their choice of religious retreat.

They visit the top to pray, and thus are not disturbed by environmental issue in their mind. They are not the type of mount-hikers who would say "Don't leave anything but footprints, don't take anything but photograph." They hike to pray, instead, and to offer gods with their best offering: various kind of food, flower and fruit.

Until three decades ago, such a tradition was not a problem. Their abundance of offering and food are wrapped with banana leaves, their drinking water was carried in ceramic container, their cakes were carried in cloth-made bag or sarong. Now with advance of bottled water, energy drink or whatever the industry advertise, such bottles are simply thrown away along the way. And this happens to many other kind plastic wraps for cakes, chocolate bar, bread,

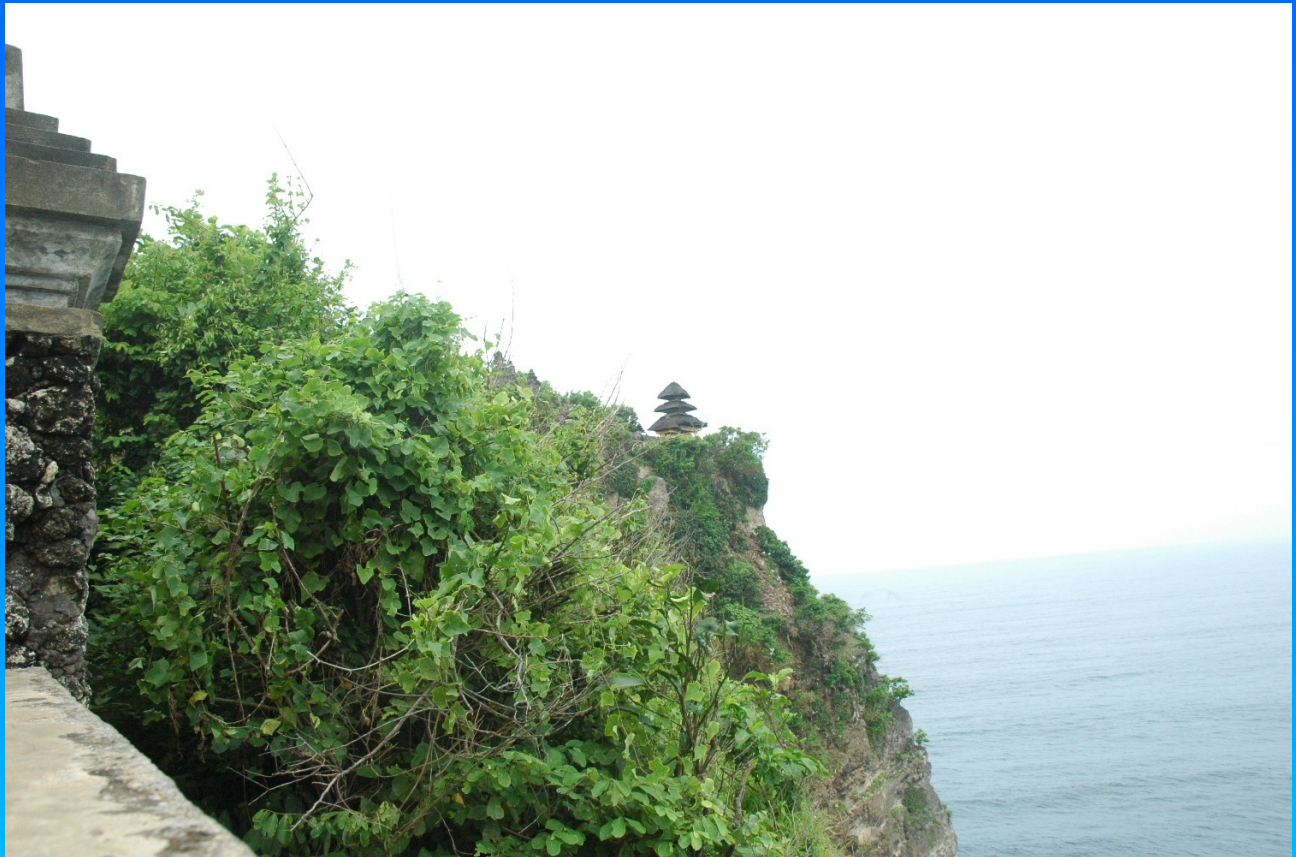
butter, peanut, sweets, and so much more.

Since there are many hundred of pilgrims every week to just every peak, keeping the area green is really a big question.

Worse, since every mountain access always on the edge of a hill, many pilgrims simply throw such waste on the side of the edge. Often the trail is clean enough, but when one explores either side of the track s/he will discover the plastic rubbish scattered across the gorge.



*Regular underwater Clean Up held along Samur Beach, the island's premier beach famous for its former coral garden, now seriously disturbed by the plastic waste issue.*



*From top of mountain to nearby beach or ocean cliff, Bali's temples always attract religious pilgrimages. Last year in our effort to clean this temple cliff (above), professional climbing equipment was all needed by our colleagues to ensure safety (below).*

## What we can do?

We, an enthusiast group of young mount climbers, some are divers, are disturbed with this situation. Since 2002, we set a mission to start cleaning plastic waste up all the way we go. From top of the mountain till deep of its underwater wonder, and the area in between such as rice-field, temple and especially mangrove forest area.

The mangrove forest has become our recent concern for it is located nearby tourist resorts of Kuta, Nusa Dua and Sanur, the island's foremost tourist destination that it attracts visitors for its unique features and yet it easily trap plastic rubbish for its meters long web-like branches and roots.

As some of us are keen divers as well as mount climbers, we've been campaigning this movement ever since. Yet it is true our group is way behind the challenge. We are too much smaller compared to the challenge we have.

Bali has no modern technology to convert plastic rubbish into useful stuff, and there has not been such approach which could turn plastic into financially viable industry. It badly requires international aid or solution to help manage it clean.

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