The Cost of Progress: Failed Development and Community Response on Pulau Serangan

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### Introduction

In an age where the advantages of development are financially tangible, it is difficult to look at the less obvious costs of development, which can be far longer in the making than a new luxury resort. In Bali, the push for development is higher than in most places – just ask any teen studying tourism in high school, or take a look at any of the hundreds of signs for pre-fabricated villas on a highway. Bali, with its wealth of environment and almost total dependence on tourism, stands to lose a great deal.

No place on Bali illustrates the promise and heartbreak of development more clearly than the failed development project on Serangan Island, the location of a halted (if not completely aborted) development project in the 1990s that drastically changed the landscapes and livelihoods on the island in a relatively short span of time. Prior to the development project, most Serangan people made a living from fishing in the ocean surrounding the island, as well as from extracting coral and engaging in the turtle trade. These same people were promised jobs in the resorts that were to be built on the island. But, after development faltered in the 1998 Indonesian crisis, the promised jobs evaporated and the environment was so heavily damaged that people could no longer gain as much income from working with the island's natural resources, ultimately worsening the quality of life on the island. In my mind, this island does not stand alone in its experience. What happened in Serangan is a threatening prospect for many places in Bali (as well as Indonesia as a whole), and by examining the environmental issues on Serangan Island, it is possible to shed light on a variety of problems at the local and national levels – both political and environmental. While Serangan is special in that it is a place where so many detrimental environmental factors have collided simultaneously, it is by no means unique in the problems that it faces.

Unfortunately, I can't pretend to give these topics the full understanding and weight of knowledge they deserve. I am an Third-World-Studies major, who came to Bali with the intention of studying theater, not the environment. I have absolutely no prior involvement in environmental activism of any kind, and I am certainly not qualified for any sort of scientific analysis that might further benefit a study of this kind. However, the extreme loveliness of Bali's natural spaces and the threat of their destruction made me interested enough to pursue a new field.

When I first came to Bali, I was surprised at the pervasiveness of the tourist culture in Bali – the number of luxury hotels, the huge workforce in the tourist industry, and the ubiquitousness of the English language (up there with Japanese and Russian of course). Mind you, I was in for a shock because most of my prior knowledge of Bali was limited to a few old-school Geertz texts. I remember thinking (and asking, most likely, somewhat inappropriately) if people really LIKED having all of these tourists in Bali, and I often received answers along the lines of "well, they're good for the economy". In fact, after the Bali bombings in 2002 and 2005, many people were fearful that tourists would leave once again, and worked very hard to promote the tourist industry. Few people I met seemed fearful about the negative impacts of western influence, and even fewer seemed to think about the impacts of rapid growth on the environment. In a short time I learned that Balinese Hinduism was alive and well, but my romantic notions about living in balance with nature were rapidly shattered.

My surprise about the people's ostensible nonchalance about the negative aspects of development sparked my interest in studying local environmental rights issues. When my advisor, Ngurah, brought me to Serangan Island, I was shocked by the environmental devastation that had taken place, but also inspired by the community activists I met. The objectives of my study on Serangan were to examine the history of the island, and to study the community's response to the ecological damage that had taken place. How were people addressing the damage of local ecosystems? Were they organizing on a community level, and what were effective strategies for doing so? How is the current government reacting to environmental damage done during the New Order? These were the things I hoped to find out, which I believed would ultimately help me learn more about Indonesian attitudes (both legal and individual) towards conservation work, and the future of conservation projects in Indonesia.

During my Independent Study Period I lived on Serangan Island (which I will henceforth refer to as Pulau Serangan, the Indonesian translation). I did not work with any one organization or group whilst I was staying on the island, but lived with a home-stay family and conducted interviews and informal conversations with island residents, conservationists, NGO workers, and just about anyone who had something to say on the matter. I did not use the same questions in all of my interviews, but instead adapted questions based on situations and subject matter. The majority of my research comes from informal conversation, old newspaper articles, and day-to-day observations of my own.

While much of the information I received from talking to people was extremely useful, this methodology allowed for many discrepancies and frustrations. There is very little statistical and written data on the subject of Pulau Serangan, and instead much spoken speculation. It was extremely difficult to find out information about the plans or even the whereabouts of the developers working on the island. My limited language skills also proved to be a substantial barrier in doing interview-based research. I also sometimes found that people would try and paint a nice picture of circumstances, or were unwilling to express negative sentiments. I do not know if this is what people actually believed, or if it may have been an expression of a courtesy-bias due to my position as an outsider in the community. Additionally, in some interview situations I would receive contradictory information from different interviewees, so some of my information must be taken with a grain of salt, and I have done my best to explain discrepancies in information and opinions within my paper. And, finally, to issue a perennial complaint of SIT students, I could have used more time. I feel that I only began to scratch the surface of the environmental, political, and community dynamics at play.

What I found in Serangan was a place working to transform itself – although still seemingly in a place of nebulous developmental limbo (as people did not know if the company was going to resume construction at any time). I found many problems and a fair share of past disappointments. But what I also sensed was pragmatism, and hope for the future. The attitudes that I gathered from people were far less uniform than I expected, but helped me understand the existence of a variety of underlying and complex relationships shaping community response to the environmental damage (although I am still far from understand the complex relationships themselves).

As mentioned earlier, Serangan does not stand alone in its current problems.

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Many of the environmental issues the island faces are problems all over Indonesia, and perhaps the solutions and future that people on the island are working towards may be a shared as well.

## "It used to be so beautiful" – The History and Development of Serangan

As few as 12 years ago, Pulau Serangan had many names – "the Golden Island" for its sandy beaches, "Turtle Island" for the turtles who bred on those golden beaches, and, as one person told me, even the name "the Island of [those] who [are] happy."<sup>1</sup> Occasionally, people still refer to the island as Turtle Island, but the turtles that ones flocked to the beaches are, for the most part, absent.

At the point when these names were still in circulation, the island had a drastically different landscape – a small island only reachable by boat, surrounded by mangroves and abundant coral reefs, all of which made it a suitable habitat for many species of wildlife. At this time there were no schools on the island, and "fishing and coral excavation were the main sources of income for the islanders,"<sup>2</sup> with as much as "70% of the community who were fishermen."<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Wayan Patut, personal communication, 25 November 2008, Serangan Island.

<sup>&</sup>lt;sup>2</sup> Wasti Atmodjo, "Coral Program Improves Livelihoods, Environment," *The Jakarta Post*, September 11, 2008.

<sup>&</sup>lt;sup>3</sup> Ashoka Foundation "Wayan Patut" *Leading Social Entrepreneurs*, 2008, 120.

What can be seen now upon coming to the island? First, when exiting the highway, there is a bridge connecting Serangan to mainland Bali. Close to the mouth of the bridge, a large garbage dump can be seen (or, alternatively, smelt) en route to the island. At the end of the bridge is a gate (which non-residents much pay 2,000 Rupiah to enter) followed by a fork in the road. To the left is another gate attached to a security booth, which is the entrance to a large, unpopulated stretch of land, sparsely dotted with shrubs and bits of young greenery. On closer inspection, the ground in this section of the island is sandy, and peppered with large chunks of embedded coral. Further along this direction leads to a reef-less, eroded beach dotted with tiny restaurants, which serves as a tourist attraction for a trickle of day-tripping surfers. In the opposite direction lies the village of Serangan. The road to the village passes by concrete-walled canals and harbors sparsely planted with young mangrove trees, as well as Pura Sakenan, one of the holiest temples in Bali. The village of Serangan, made up of seven banjars (traditional law jurisdictions), including a neighborhood of one of the oldest Muslim Bugis communities on the island. The village itself takes up a small percentage of the island, and is a fairly new development. Approximately 370 families<sup>4</sup> live in the combined neighborhoods.

As evinced by its old names, the village didn't always look like this. For one

<sup>&</sup>lt;sup>4</sup> Wayan Patut, personal communication, 11 November 2008, Serangan Island.

thing, the current village is poised on a small fragment of the island. The beaches were not always reef-less and jagged, and the mangroves were not sparse. There were no concrete canals separating different pieces of the island. There was always a garbage dump, but it was not connected to the island. So, how did the landscape become so drastically altered?

In the late 1980s, Serangan was a location with a reasonable tourist draw, and residents hoped to attract more. At this point, it was still unconnected from the mainland, and people took small fishing boats from Sanur to reach the island. "In 1990 the province issued a permit to promote tourism development on the island,"<sup>5</sup> which commenced the effort of a development agency to buy up land in the area. This development was spearheaded by Tommy Suharto, the son of the then-president of Indonesia, with support for the project from both foreign investors and Indonesian military alike (although they served considerably different support functions).

The land value of Serangan was assessed, and villagers were soon made offers for their land, yet many of the islanders refused to sell their land, describing it as the inheritance of future generations even as the price was raised incrementally. In response to this, local authorities set up a command post on the island and began a campaign,

<sup>&</sup>lt;sup>5</sup> John Ellis "Letter From Pulau Serangan", *The Jakarta Post*, January 4, 2007.

according to local conservationist I Wayan Patut "of intimidation and extortion in order to encourage islanders to sell...occasionally a community member would be defamed and denounced as a member of the banned Indonesian Communist Party (PKI) when he refused to sell."<sup>6</sup> By 1996, the development company – under the title of Turtle Island Development Project – had gained control of sufficient land to move forward with the next phase of the project. By this time, people already relocated their homes to a new section of the island. The next step was also the largest – the expansion of the island.

The reclamation plan was to dredge sand and coral from the bottom of the ocean in order to build a foundation for a new section of the island. This section was to be separated from the rest of the island by concrete-walled canals, developed as a tourist enclave (rumored to include a casino, hotel and possibly villas), and connected to the main land by a bridge. "In all, the reclamation enlarged the island from its original 112 hectares to 365 hectares,"<sup>7</sup> but the subsequent plans for building the resorts never came to fruition. In 1997-1998 the Indonesian financial crisis came into full swing, effectively wiping out the foreign interest in investment. Construction on the island came to an immediate standstill, and the job prospects for the villagers dried up along with the

<sup>&</sup>lt;sup>6</sup> Ellis, "Letter from Pulau Serangan."

<sup>&</sup>lt;sup>7</sup> Ellis, "Letter from Pulau Serangan."

construction plans.

There was dissent against the development plans in the community, but displays of community outrage were divisive within the community, and largely unsuccessful. Some members of the community were working for the development company while others remained unemployed, which was one source of community infighting.. Other sources of conflict resulted from community members butting heads with the military and from community clashes with the development company (particularly on issues related to religious observances, such as the desire to develop on cemetery ground). Community activist Pak Wayan Patut describes this as a period of high tension which was only relieved by the onslaught of the economic crisis and the pullout of investment. However, the pullout was a crushing blow in other ways – the jobs promised by the development company had not been created, and people were frustrated to realize that the company had only paid off in "lip-service."<sup>8</sup> Furthermore, the environmental destruction caused by the initial phases of development was so severe that it prevented people from resuming their prior way of life in the absence of the development company.

<sup>&</sup>lt;sup>8</sup> Wayan Patut, pc, 25 November 2008.

#### The Aftermath – Environmental and Economic Impact

"We have in the past been concerned about the impacts of economic growth on the environment. We are now forced to concern ourselves with the impacts of ecological strain....upon our economic prospects."<sup>9</sup>

Once the land reclamation had occurred, environmental and economic change followed rapidly. During the process of island expansion various fish and turtle habitats were destroyed, which consequently had a negative impact upon the people who relied on fishing and other coastal resources for their livelihoods.

Eighteen hectares<sup>10</sup> of mangroves where destroyed in the construction process – mangroves that served as a lush habitat for fish, prawn, birds and other species of wildlife. Mangroves serve many other protective environmental purposes, and their loss can strip a landscape of certain ecological protections. Mangroves filter out pollutants that would otherwise enter the ocean, as well as protect coastal land from erosion. In the 2005 tsunami that greatly affected parts of South-East Asia, areas with dense mangroves were shielded from high damage that wracked other areas (including northern parts of Indonesia), with exponentially lower death rates and damage to property. While Bali was not included in the areas affected by the tsunami, the damage it caused in other parts of

<sup>&</sup>lt;sup>9</sup> 'The Ecologist,' ed. *Whose Common Future? Reclaiming the Commons* (London: Earthscan Publications Ltd, 1993), 89.

<sup>&</sup>lt;sup>10</sup> Wayan Patut, pc, 11 November 2008.

Indonesia should serve as striking example of the benefits of mangrove conservation.

More environmental damage to the island was caused by the extension of the coastline, which had the effect of destroying natural beaches and encouraging erosion. The new beaches, although created from natural materials, were comprised of rough sand and pieces of coral. These beaches used to serve as a turtle breeding ground, but now the sand is too harsh for the turtles to bury their eggs in. Although sea turtles have been protected under Indonesian law since 1978, many people in Serangan and the surrounding areas prior to the development project were making their livelihoods from the selling and trading of turtle meat, eggs and turtle-shell handicrafts. Abundant amounts of turtles also served as a tourist draw. The loss of the sea turtle habitat was both ecologically devastating for the already-endangered sea turtles, as well as for the people who relied on turtle products and tourism for a living.

The extension of the coastline, as well as the dredging of sand and coral from the bottom of the ocean, had the effect of destroying much of the coral in the surrounding areas, ruining yet another fish habitat. Ultimately, between the loss of fish habitats from destruction of mangrove areas as well as the loss of coral reef, fishermans' incomes drastically "decreased in average from US \$10 per day to US \$.50."<sup>11</sup> Many islanders

<sup>&</sup>lt;sup>11</sup> Ashoka Foundation, 120.

who had grown up before the development project would reminisce about when they were children and the reef was so abundant that they could catch fish in shallow waters and sell them for a profit with great ease. Now, many fishermen must travel farther away from the island in order to catch fish. Additionally, the loss of coral is damaging on a larger environmental scale because the presence of coral impedes global warming by absorbing carbon dioxide.

The bridge constructed to the island also had unintended ecological side-effects. In order to build a bridge to Serangan, the development company built a berm (a piling of earth underneath either side of the bridge) to decrease the above-water distance the bridge would have to span. By building the berm, the natural current of water surrounding the bridge was impeded, which has accelerated the process of beach erosion on the island and surrounding areas. The Indonesian government has sent ecological commissions that have noted the damage made by the bridge, and issued instructions for the changing of the bridge, but there has been little heed paid to these demands as a result of inadequate law enforcement.

In addition, the presence of the bridge allowed tourists to come in by car to the island, instead of by ferrying across the harbor in traditional boats, which in the past "would daily ferry up to several hundred foreigners across the strait separating Serangan

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and the neighboring coastal town of Sanur."<sup>12</sup> The bridge made these ferries unnecessary, which lost fishermen substantial amounts of side profits. Serangan still makes a profit from people entering the island through the gate (mentioned in the history section), but it is likely that this money goes to local government rather than to individual fishermen.

According to local islanders, the number of tourists visiting the island has decreased since the land reclamation project. Many people used to come to see the sea turtles, or were simply drawn to the island when more of its environment was intact. Now, most tourists come in order to surf on the artificial beaches. One person (a foreign, non-island resident) said that he believed the island was receiving a greater number of tourists since the construction of the bridge,<sup>13</sup> but there was no way to verify this information. People who work on the beaches claim that in the past there were more tourists and it was far easier to make money selling handicrafts.

The ecological impacts from the land reclamation project are not limited to Pulau Serangan alone, but in fact have affected the surrounding areas substantially. Ecological experts have criticized the abundance of construction projects in the Benoa harbor region because they believe "various factors, including the reclamation of

<sup>&</sup>lt;sup>12</sup> Ellis, "Letter from Pulau Serangan."

<sup>&</sup>lt;sup>13</sup> Paraphrased from Olivier Pouillion, personal communication, 26 November 2008, Jimbaran, Bali.

Serangan, the change of land use, and the destruction of mangroves have made Benoa's waters shallow."<sup>14</sup> In addition, the "project on Serangan island...has also resulted in a change of wave patterns and caused further erosion to Sanur beach."<sup>15</sup>

However, it is important to note that not all aspects of development have impacted the island adversely. One major advantage to the bridge is that it now allows children from the island to attend high-school (unavailable on the island) in nearby Denpasar, without the aid of boats. People within the community also acknowledge that the development has "also diversified the people of Serangan...everyone [was] a fisherman here. But because of the project younger people are now more in touch with the modern world. They go to school and study in order to get jobs."<sup>16</sup>

# The Face of Development – Sinar Mas and the Legacy of the Suharto Era

The land for the Turtle Island Development Company is currently being held by the corporation Sinar Mas, a major development firm based in Java, headed by Eka Tjipta Widjaya. Sinar Mas owns a number of subsidiaries, many of which are involved in development, logging and other activities related to the use of natural resources. Sinar Mas has been brought to court under many circumstances throughout Indonesia,

<sup>&</sup>lt;sup>14</sup> Rita A. Widiana, "Experts Slam Bali Harbor Expansion Plan," *The Jakarta Post*, April 22, 2002.

<sup>&</sup>lt;sup>15</sup> Prudita Sabarini, "Mass Tourism Threatens Beaches, Coasts," *The Jakarta Post*, July 13, 2007.

<sup>&</sup>lt;sup>16</sup> Ellis, "Letter from Pulau Serangan."

including cases of illegal logging in Riau, for alleged "concealing the land status"<sup>17</sup> from local business owners in a mall. Sinar Mas, among other companies, has also received complaints from Kalimantan residents as "abettors of natural disasters as a result of environmental damage"<sup>18</sup> resulting in heavy flooding in the region. However, despite many allegations and complaints, the government has done little to impede the activities of Sinar Mas.

It is unclear whether or not Sinar Mas was originally involved in the Tommy Suharto project, or whether it was acquired post-Indonesian crisis, but the company's previous involvement with the Suharto family does not rule out the possibility of Sinar Mas' involvement from the beginning of the project. In 1999, Sinar Mas was one company that received a revocation of forest concessions for logging that "were allegedly granted through corruption, nepotism and collusion"<sup>19</sup> with the Suharto family.

Much land acquired by the Suhartos, including Seranagan, was not returned to prior ownership because "all the concession and licenses obtained by the Suhartos and their business associates appeared to be technically legal because regulations during the

<sup>&</sup>lt;sup>17</sup> Agnes Winarti, "Tenants to Appeal Their Lost Case," *The Jakarta Post*, September 10, 2008.

<sup>&</sup>lt;sup>18</sup> Nurni Sulaiman, "Dozens of Companies in Kalimantan Blamed for Natural Disasters," *The Jakarta Post*, November 10, 2008.

<sup>&</sup>lt;sup>19</sup> Unknown, "Government revokes vast forest concessions," *The Jakarta Post*, July 9, 1999.

Suharto regime were designed to legalize such practices."<sup>20</sup>

Land concessions are not the only lingering remains of the Suharto regime that plague conservation efforts in the country. During the New Order, Indonesian development could be characterized by a live-for-the-moment attitude. People did not know what the coming days and years would bring in relation to the government, and companies developed a tendency to think in terms of immediate payoffs rather than later consequences. This is certainly an attitude that contributed to the development of Serangan. Although the Suharto regime has lost power, this attitude has persisted and remains a problem.

Additionally, many business relationships that were forged during the Suharto era have yet to be untangled from the current Indonesian government. Big businesses, including Sinar Mas, that were previously involved with the Suharto regime still enjoy the benefits of government support. Sinar Mas, as well as the business owned by Aburizal Bakrie (a close associate of Suharto), both enjoyed a bailout from the Indonesian government in 2001 after the catastrophic Indonesian financial crisis.<sup>21</sup> These relationships may change during the current financial crisis, as the government has

<sup>&</sup>lt;sup>20</sup> Unknown, "Government revokes Vast Forest Concessions."

<sup>&</sup>lt;sup>21</sup> Unknown, "Plan to Swap Sinar Mas Debt with Government Bonds Approved," *The Jakarta Post*, September 7, 2007.

declined to bail out Suharto-linked companies again (such as the one owned by Bakrie), which analysts describe as "a clash between two titans, one representing the Suharto era and its economic patronage system, and the other representing a new era of free-market reforms."<sup>22</sup>

#### **Speculations on the Future of Development**

Currently, the development project on Pulau Serangan shows little signs of pushing forward any time soon, although rumors on the subject abound. General public consensus concludes that the project is still searching for more investors, and many people make reference to Javanese investors. Others speculate about the future of the garbage dump, named Suwung (which lies now in close proximity to the island after the land reclamation), alleging that if the development chooses to push forward Sinar Mas will attempt to strike a deal with the company that currently manages the dump (PT NOEI) in order to somehow conceal the dump so that it is not such an eyesore to tourists. Another speculation on the subject of development concerns the plants that have been planted on the unpopulated portion of the island. These plants are supposedly planted by the development agency to give it the air of sustainable development; however, those

<sup>&</sup>lt;sup>22</sup> Peter Gelling, "Global Credit Crisis Squeezes International Tycoon," *International Herald Tribune*, December 5, 2008.

who expounded on the subject were skeptical and generally dismissed the effort as an attempt to reassure possible investors on the prospects of an environmentally unfriendly development. It must be said that the majority of this information is unconfirmed and potentially specious, but is only included because there is a dearth of factual public information on the subject.

Whatever the case, it is clear that there is little (if any) communication between developers and the community. For now, the project's presence on the island is limited to security guards, gates and signs denoting land-ownership. The dust has settled somewhat, and there are few signs of outward indignation on the part of island residents. This, although perhaps unintentional, may play to the advantage of developers – as perhaps enough time has passed for people to not feel outraged anymore.

#### **Community Opinions on Future Development**

Community responses to the project relating to future development are somewhat unclear. This may be attributed to a reluctance of people to honestly speak their minds on volatile subject matters (as referenced in the introduction), or a split in public opinion. In general, island residents interviewed acknowledged that their lives had changed significantly after the development project, often for the worse. People never openly expressed bitterness, however. Some people, while dissatisfied with the results of development, also expressed a desire for development to go forward, because it would bring much needed jobs to the area. One activist thought that development might benefit the community, but also acknowledged that foreign investors would reap most of the profit from the resorts, going so far as to claim "all the Bali people get is the rubbish from hotels."<sup>23</sup> Most people, however, were not inclined to state such strong opinions.

### **Ecological Damage from the Inside**

It would be incorrect to assume that the entirety of ecological damage in Pulau Serangan is the work of outsiders alone. Prior to the land reclamation project, substantial, unchecked use of resources was occurring at an alarming rate. As previously mentioned, a large number of people on the island were relying on coral extraction, and (illegal) turtle trading on the island long before the land reclamation project was ever an issue.

Coral extraction was highly prevalent on the island, and had many functions. First of all, it is a strong building material, and was used as the foundation for many homes on the island. It is still possible to see chunks of coral embedded in walls and fences around the island. Furthermore, the coral could be sold to other locations for a profit to use as building material. Many hotels in Bali have coral in their foundations. Coral was also extracted to make handicrafts, such as jewelry and home decorations.

<sup>&</sup>lt;sup>23</sup> Wayan Patut, pc, 11 November 2008.

The name Turtle Island was not only fitting for Serangan because of its abundance of turtles, but also because "the island, along with Tanjun Benoa village in south Bali, [had] for decades been the largest black markets for sea turtle meat and products. They have also served as the home base for hundreds of poacher ships that sail as far as Derawin in the North, and Papua in the south... in its heyday in the 1980s and 1990s, the massive business could ship over 20,000 turtles per year onto the island."<sup>24</sup> There are far fewer turtle traders on the island at present, but trading has yet to be completely eradicated. As a foreigner walking around the island, it is not uncommon to be offered a live sea turtle for purchase, and it is easy to buy many turtle-shell products at many locations around the island.

Resistance to ending the turtle trade on the island has been difficult to overcome, because "various elements of Balinese society, particularly turtle poachers and traders in the island's main turtle ports of Serangan and Tanjung Benoa, have justified, and thus perpetuated, the trade by claiming that turtle meat is an essential part of Balinese Hindu sacrifice rituals. According to those involved in the turtle trade, those who sought to protect and conserve turtles were, in fact, trying to destroy the island's culture and

<sup>&</sup>lt;sup>24</sup> I Wayan Juniartha, "Tackling the Illegal Trade in Turtles at Serangan Island," *The Jakarta Post*, March 24, 2005.

religious heritage. Such arguments have placed local conservation NGOs and law enforcement agencies on a perpetually frustrating defensive footing for years."<sup>25</sup> However, as will be discussed at further length in the next section, conservationists have had some degree of success dispelling these attitudes by working closely with local priests.

Because the environmental damage Serangan has suffered have not been limited to the development project on the island, but rather embedded in the traditional livelihoods and culture of the island, conservationists have a large task: not only to restore the environment to its prior ecological stability, but to change deeply-rooted attitudes and interactions between islanders and the island's natural resources to prevent further damage in the future.

### **Conservation Efforts in Serangan**

In response to the environmental destruction that has taken place in Serangan (both before and after the land reclamation project), various community organizations and NGOs have started doing conservation work to address different areas of concern. In particular, the Turtle Conservation and Education Center (TCEC) and a coral rehabilitation group have met with good results. However, despite these success stories,

<sup>&</sup>lt;sup>25</sup> I Wayan Juniarta, "Priests Call for a Halt to Sea Turtle Slaughter," *The Jakarta Post*, January 27, 2005.

there have been a number of projects, initiated both by community members and foreign NGOs, that have not shared in those results. By comparing these projects, characteristics of what make a project succeed become more apparent – but with the caveat that some community organizing efforts fall apart even if they seem to have all the elements of other, more effective, community organizing strategies.

### The Turtle Conservation and Education Center

The TCEC first started as the Turtle Center Working Group (TCWG), which received its first support from World Wildlife Foundation (WWF) Indonesia in the form of a 100 million Rupiah grant, as well as a budget of 149 million from the Indonesian government.<sup>26</sup> The TCWG pursued one of its first projects in the form of working grants given to community members in 2005. The turtle center working group identified the last eight turtle-satay merchants on the island prior to the festival of Kuningan (which was supposed to take place in the Pura Sakenan), and provided them with grants of 600 thousand Rupiah each. These grants were to serve as an incentive for terminating their selling activities before the festival of Kuningan at which there would be a large pool of potential buyers of turtle meat. The recipients accepted the money and signed a pledge to stop selling turtle meat. However, at the temple ceremony, it was discovered that people

<sup>&</sup>lt;sup>26</sup> I Wayan Juniartha, "Tackling the Illegal Trade."

from outside the community had come into the community to sell turtle meat, as well as three of the pledge-makers from inside the community had broken their oaths.<sup>27</sup>

Despite this initial setback, the TCWG moved forward to open the TCEC in 2006. It has since pursued several objectives; first, they have built a facility that "comprises several saltwater ponds that have hundreds of baby turtles and are used to treat sick or injured turtles."<sup>28</sup> Through findings of their own and an incentive program that offers compensation to local fisherman for turtle eggs, the turtle center collects turtle eggs and hatches them at the center. The eggs usually take about two months to hatch, and they try to keep the turtles in the center for as long as they can, in order to build up their strength, before releasing them into the ocean. Sometimes they are not able to keep all the turtles because there "just isn't enough space"<sup>29</sup> for all of the turtles.

Secondly, the TCEC has worked in conjunction with local priests to change the previously mentioned attitudes about sea turtle sacrifice in Hindu religious ritual. In January 2005, a meeting 29 influential Hindu priests was organized in conjunction with the TCEC and WWF to discuss the issue.<sup>30</sup> The priests agreed that the usage of sea turtles

<sup>&</sup>lt;sup>27</sup> I Wayan Juniartha, "Tackling the Illegal Trade."

<sup>&</sup>lt;sup>28</sup> Luh De Suriyani, "Turtle Adoption Scheme Brings Hope to Conservation Program," *The Jakarta Post*, October 3, 2008.

<sup>&</sup>lt;sup>29</sup> Wayan Sukara, personal communication, 18 Nov 2008, Serangan Island.

<sup>&</sup>lt;sup>30</sup> I Wayan Juniarta, "Priests Call for a Halt."

ought to be limited to major cleansing ceremonies alone, and avoided if at all possible (some priests even favored using pictures of turtles, or using live turtles to be released at the end of ceremonies). Eventually, the priests from the meeting worked together to pass a *Bhisama* (religious law) under the Hindu Dharma, which states that it is forbidden to take sea turtles from the wild.

The TCEC has since performed a "holy duty"<sup>31</sup> to provide worshippers with sea turtles for ceremonies – under several conditions. Worshippers must receive a dispensation from the Forestry Department, and in order to do so must have a letter from a priest verifying the necessity of a turtle for the ceremony. The Turtle Center will then provide the worshippers with a young sea turtle smaller than 40 centimeters in length, because it takes a long time for the sea turtles to reach sexual maturity, so "to kill an older sea turtle would be kill future generations of sea turtles."<sup>32</sup> The TCEC has received complaints on the size of the turtles, because people would like to feed worshippers afterwards on the flesh of the turtles, but as one priest said "it is simply a matter of educating the Hindu faithful to stop using religious pretexts for non-religious purposes. If they use turtle meat for meals during traditional parties, then they should be honest and

<sup>&</sup>lt;sup>31</sup> Wayan Geriya, personal communication, 18 November 2008, Serangan Island.

<sup>&</sup>lt;sup>32</sup> Wayan Sukara, pc, 18 November 2008.

admit that they need the turtles for personal consumption."<sup>33</sup> The TCEC reports that there are on average 80-120 requests for ceremonial turtles from the center each year.<sup>34</sup>

The TCEC is also striving to become a center of education and information. "People know our island for killing turtles...we'd like to change that image,"<sup>35</sup> said one community organizer on the subject. They would like to become known as an information center in Indonesia on sea turtles and the turtle trade, and have already began to build up a reputation by working with other centers in places such as Lombok and East Java. The TCEC has already built up enough of a reputation for being in the know that they have been asked by police from Lombok for assistance on identifying a turtle trader.

Additionally, the TCEC runs a number of education programs. Before giving turtles to worshippers for ceremonies the TCEC educates the recipients, and it runs a number of classes with local schools on the subject. The TCEC also recently organized a "foster-turtle" program, in which schoolchildren, for a small fee, were able to act as siblings for the sea turtles and watch their growth after hatching. The students were educated about their new siblings, and then were able to release the turtles into the ocean once the latter had become strong enough to survive on their own.

<sup>&</sup>lt;sup>33</sup> I Wayan Juniarta, "Priests Call for a Halt."

<sup>&</sup>lt;sup>34</sup> Wayan Sukara, pc, 18 November 2008.

<sup>&</sup>lt;sup>35</sup> Wayan Sukara, pc, 18 November 2008.

The TCEC hopes that it will benefit the local economy as well as conservation efforts. "We hope we can use the TCEC as a tourism object," one conservationist said, "not just to make money here, but as an attraction to the community to spend money, maybe at the market, maybe at a *warung* (small restaurant). People also have to pay to enter the island. Step by step, added good... We believe that our center will grow bigger and become famous."<sup>36</sup>

Lastly, TCEC has worked within the *banjar* systems to pass *awig-awig* (traditional laws) on the subject of turtle trading. While the Turtle Center has only been able to pass general laws on the turtle trade, and has not had the capacity to enforce these laws, they nonetheless feel it is an important distinction because they view themselves as an organization operating "under Desa Adat, not under WWF or the Indonesian government,"<sup>37</sup> and they feel that community involvement is key to the success of their organization. As will be demonstrated with other community organizing efforts, it is usually groups with community-centered mindsets that have been able to do effective conservation work.

Despite the continued presence of a few turtle traders on Serangan, the people at

<sup>&</sup>lt;sup>36</sup> Wayan Sukara, pc, 18 November 2008.

<sup>&</sup>lt;sup>37</sup> Wayan Geriya, pc, 18 November 2008.

the turtle center report that they are staying positive and feel that they have made a substantial impact.

#### **Coral Reef Rehabilitation Programs**

There are two coral reef programs on the island that share some membership, but serve two different purposes – one for commercial benefit and one for conservation efforts.

The commercial group is named Karya Segara, and was initiated by local activist Pak Patut. This program was started approximately ten years ago, but is now under different leadership. It received grant money to breed soft-coral for aquariums as well as tropical fish to start a business. The group is still active, but it relies on receiving orders for soft-coral and tropical fish and cannot continue with work unless orders have been placed. Some people in the community seemed to be under the impression that the group had been initiated to provide economic incentives for conservation work, while others believed that it was purely an economic venture from the outside. Whatever the starting intentions, the group is currently geared toward commercialism rather than conservationism.

The other coral reef group in Pulau Serangan currently does not have a name, so I will refer to it as the coral reef conservation group. It was also initiated by local activist Pak Patut, who started the group in 2003 because he wished to be in a group that was geared more toward coral conservation and less toward profit. The split between these two groups gives the impression of being contentious, but the reasons for which are not entirely clear (especially from an outside perspective).

Pak Patut first started the program as an educational initiative, with an after-school program for the children of local coral miners focused on education about coral-reef. It subsequently reached the coral-miners themselves and encouraged them to work on conservation rather than mining. The group expanded in purpose and now works in coral-reef rehabilitation. They received an eight million Rupiah grant from Bapedalda Bali in order to pursue their work, as well as a donation of 2,000 reef seeds from the Governor of Bali. They have since expanded this collection to 15,000 seeds.

The conservation group uses a transplantation method in which a small piece of coral is taken and glued to a stand made of styrofoam and sand, and then placed on a concrete structure in a conservation zone in the ocean. The reef is subsequently checked on a weekly basis. Once coral has grown for three months, the group checks on it monthly. The reef must grow in an appropriate temperature, in between 33-36°. It must also grow in fast-flowing water, which is why it cannot grow in a tank. During the rainy season the conservation group does not do transplantation because they are concerned

both about the dropping temperature of the water surrounding the reef, and the influx of water flowing out of the rivers of Bali more rapidly after the rain, bringing pollution. (Rivers tend to be highly polluted because "people believe if they throw garbage into the rivers that it will be taken out to sea and purified.")<sup>38</sup>

The group works when it has the money – which it needs in order to build underwater structures for coral planting, and for boat and scuba gear rental ( the group does not own boats – the upkeep is too expensive). It also needs funds to pay conservationists for their work diving, planting and building the underwater structures. In Serangan, the community has set up a "three-hectare conservation zone…out of an area of 100 square meters of intact coral reefs. Only 15 percent are allowed to be farmed for seeds. Moreover, after the seeds are taken the team is prohibited from taking another batch of 'seeds' from that source area for another one year period…These methods and guidelines have one objective: ensuring the transplantation effort doesn't cause damage to the existing coral reef."<sup>39</sup>

The group also now works in many other areas all over Bali and throughout Indonesia. It does so in order to give instruction on how to transplant coral. It has

<sup>&</sup>lt;sup>38</sup> Wasti Atmodjo, "Coral Program Improves Livelihoods."

<sup>&</sup>lt;sup>39</sup> Wasti Atmodjo, "Coral Program Improves Livelihoods."

participated in major projects in Kuta, Tuban, Singaraja, Lombok and many other locations.

While the economic benefit of this conservation work is not as clear cut as the commercial transactions that take place in Karya Segara's work, Pak Patut believes people understand that there is both an economic as well as an environmental benefit to it. With the education programs, and the devastation that has already occurred on Serangan, people are aware that fewer reefs mean less lucrative careers for fishermen.

The conservation group stresses its involvement with the community at large. For instance, the conservation zone initiative was agreed upon communally, not just by the group of conservationists. Pak Patut also stresses that when money is received from a grant, there is community discussion as to how that money ought to be spent appropriately.

### Mangrove Conservation Efforts

Several mangrove reclamation projects work on Pulau Serangan, albeit sporadically. One volunteer group, VIA, has volunteers stay in the village for four-month periods in order to work on various projects, one of which is the planting of new mangroves. The government also organizes projects for Indonesian students to plant mangroves as a volunteer activity. However, there is some criticism of these programs, one reason being that the involvement of these programs is short-term, and so there is nobody to look after the well-being of the mangroves after their initial planting. Another criticism, specifically pertaining to the government program, is that students are used because they are a source of unpaid labor.

#### **Trust Issues – NGOs, Projects and Reactions**

"Externally developed solutions are less likely to be trusted and accepted by the local communities. Unless both the livelihood and the environmental issues are addressed, the people will continue to suffer from poverty and the marine environment will never recover."<sup>40</sup>

One NGO worker summed up her experience with Balinese communities concisely – "you are not Balinese, so you don't know. Why do you tell us what to do with our beach?"<sup>41</sup>

Indeed, this attitude presents a dilemma to any outside NGO group (even a group from elsewhere in Indonesia) that seeks to work in Bali, no matter how well-intentioned. People have made reference to at least three NGO projects in Serangan in the last ten years that have either failed from lack of funding or from lack of community cooperation.

People on the other side of the spectrum, who have been successful in getting support from the community for their work, attributed their success to several things:

<sup>&</sup>lt;sup>40</sup> Ashoka Foundation, 120.

<sup>&</sup>lt;sup>41</sup> Yuyun Ismawati, personal communication, 20 November 2008, Sesetan, Bali.

- 1. High community involvement people who ran successful programs, or who at least were able to be trusted by community members, believed that the trust they earned was from either having previously lived with other Balinese people and showing awareness of social customs, or better still, having lived on Pulau Serangan for an extended period of time, rather than coming into the community at sporadic intervals.
- 2. Long-term commitment One common dislike expressed was of "the NGO *project*," which to most people denoted an only temporary presence of an NGO within the community, to be terminated as soon as the money ran out, at which point the NGO would cease to be involved and/or concerned with issues in the village. This was an expectation that people had of NGOs, which was sometimes the cause of projects' failures, but also based on prior bad experiences with NGOs working in the community.
- 3. Balance of community profit with NGO profit Ngurah Karyadi, an activist with experience working with various projects in Bali, attributed his success with projects to the fact that he does not do his

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work for profit.<sup>42</sup> If community members believe that organizers are looking to make money as their primary reason for involvement, they are less likely to trust NGO workers. Agung Dalem, a professor at Udayana and an ecotourism expert, stressed the need for a balance between the benefit to the NGO and the benefit to the community. If the organizer is profiting from working on the issues while the community still struggles, then people will of course suspect the project.

4. Common interest - finally, the most cited reason for success among projects in the community was instilling in people the belief that the community struggle and the struggle of the project were the same. This is the primary reason that solutions that come from within and are organized by community members receive more support. Of course, there is no formulaic way to ensure that people believe in the common interest of all parties involved – it just comes down to trust.

<sup>&</sup>lt;sup>42</sup> Paraphrased from Ngurah Karyadi, personal communication, 11 November 2008, Serangan Island.

### Sources of Underlying Tension in Community Organizing

As previously mentioned, the sources (and even presence) of community tension are difficult to perceive from an outside perspective. However, one American who had spent an extended period of time in the community noted that a key difference held the answer to tension within the community – "the nail that sticks out gets hammered down."<sup>43</sup> In a society that is largely based on the community rather than the individual, to be a leader may to be antagonizing the rest of the community, even when attempting to help.

### **Conclusion: Pulau Serangan and Beyond**

"Today economic and political power is entrenched in a network of interest groups, whose influence on policy lies in the scope and intricacy of mutually beneficial, though often uneasy, alliances that hold them together. Such alliances now bind industrialists to government officials, politicians to industrial companies, companies to the military, the military to the state...the result is a web of interlocking interests deemed 'good' for society at large."<sup>44</sup>

Indonesia, the world's fourth most populous nation, is blessed with a wealth of

natural resources. It is a host to one-fourth of the world's total mangroves, and "Indonesia's coral reef constitutes 18 percent of the world's total coral reefs."<sup>45</sup> And yet, much of these natural resources are being exploited for short-term payoffs – through

<sup>&</sup>lt;sup>43</sup> John Ellis, personal communication, 3 December 2008, telephone call.

<sup>&</sup>lt;sup>44</sup> 'The Ecologist', ed. Whose Common Future?

<sup>&</sup>lt;sup>45</sup> Ni Komang Erviani, "Bali's Coral Reef Severely Damaged," *The Jakarta Post*, August 1, 2008.

destruction of forests for palm oil, overdevelopment of beaches, and many other exploitations of land for the profit of big businesses, often at the expense of local communities. Other times, the exploitation of resources is caused by local communities themselves. In most cases, conservation efforts don't begin until it is already too late. Pulau Serangan is an excellent example of these circumstances, and many other places in Indonesia face the exact same issues; currently, in Jakarta, local fishermen are struggling against land reclamation scheduled to take place, fearing flooding and destruction of their livelihoods.

Although there are many environmental protection laws passed by the government, including wildlife conservation laws, protected areas, and laws about waste management, few are heeded in reality. Every level of the Indonesian government is flooded with corruption, and has not fully escaped the legacy of the Suharto period. At the grassroots level, police enforcement is lax, and police are prone to accepting bribes in order to ignore environmental (and other) crimes. Higher up, Indonesian politicians, while demanding an end to corruption, are still in bed with Suharto-era business strongmen, accepting campaign contributions and looking the other way as natural disasters pile up as a result of poor planning. "The fight against corruption has become a political show...if everybody is against corruption, it means that nobody is against

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corruption. Then you can use fighting corruption for your own political purposes."46

Pulau Serangan is now in a process of recovery from past environmental damage, but it is too soon to tell what will happen. Perhaps development will move forward, and perhaps the community will work hard to restore the environment to its prior condition. Maybe, the island will flourish again and pull itself out of poverty, but at this point it is likely that this will not happen for a long time. When asked about the future, local activist Pak Patut says "I am afraid for the future. Right now, many people do not have enough money to send their children to school. It's very expensive. If they don't go to school, how can they be skilled laborers?"<sup>47</sup>

Nonetheless, Pulau Serangan is headed in the right direction. One of the greatest issues facing Indonesian conservation at this point is local, individual understandings of the environment – the consequences of environmental damage, and the things that cannot be purified through prayer alone. In this respect, Serangan is succeeding – community members had an understanding of the situation on the island. Hopefully, education efforts in other parts of Bali and Indonesia will start as well, before it is too late. However, as previous conservation efforts have shown, it usually is necessary to link environmental

<sup>&</sup>lt;sup>46</sup> Doreen Carvajal "Small Voices in Bulgaria Rise Against Vast Corruption," *International Herald Tribune*, November 13, 2008.

<sup>&</sup>lt;sup>47</sup> Wayan Patut, personal communication, 26 November 2008, Serangan Island.

issues with economic ones – otherwise there are few tangible incentives for local peoples

to heed the limitations of their environments.

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## **Recommendations for Further Study**

If interested in pursuing further study on the subjects of conservation, waste management, corruption, community activism or Serangan island, there is a wealth of issues that need more in-depth research. One study interesting to undertake would be to examine various environmental departments in the government and analyze how (and if) legislation becomes put into affect. If interested in pursuing any of these topics, here are some useful contacts:

Coral Reef Rehabilitation Pak Wayan Patut 081338675298

Lestari (waste management NGO) Olivier Pouillon 08123885852

Activism/Environmentalism/Political Issues in Bali Ngurah Karyadi 0811388853

BaliFokus (another waste management NGO) Yuyun Ismawati 08123819665