Rainbow after the storm
The tourism sector development and resilience toward the disasters

Erda Rindrasih, Patrick Witte, Thomas Hartmann, Tejo Spit, Annelies Zoomers

Background
Tourism is one of the largest industries in the world in terms of both number of employment and revenue. According to the United Nation World Tourism Organization (UNWTO), a total of USD 1,075 billion in international tourism receipts were generated by 1,035 million international tourism arrivals in 2012, the highest number ever recorded (UNWTO, 2013). The industry's direct contribution to global GDP is projected to grow by an average of 4.4% per annum over the next ten years, and to outpace growth in the wider economy and other industries such as retail and public services (WTTC, 2013). International arrivals are expected to reach nearly 1.8 billion by the year 2030 (UNWTO, 2013). Tourism offers great experiences for tourists and provides employment (albeit sometimes seasonal) and incomes for people. The travel and tourism industry is an increasingly significant part of the employment structures of advanced industrial nations and lesser-developed countries. The growth potential of tourism industry means open more opportunities for investment.

The tourism industry is vulnerable to natural and human induced incidents such as terrorist attacks, political instability, flood and earthquake. Indonesia faces a lot of challenges in conducting the safe and security for tourism industry to grow, as the nation experienced dark situation such as tsunami, volcano eruption, earthquake and terrorist attacks.

When the disaster happens, various aspects of international tourism demand can be affected negatively including reduced visitor arrivals, a fall in employment, declines in private sectors profits, a reduction in government revenues and eventually the cessation of further investment (Huang, et al, 2008). The aims of this study is to explore the impact of disasters events to the tourism industry, investigate the recovery process through its disaster management scheme evaluation both for tourists and for local residents.

Research Questions:
- What are the impact of disasters and crises to the tourism industry performance in Indonesia?
- What are the government policy, planning and program in crises management in order to prepare from disaster and crises?
- How does the tourist knowledge, perceived risk and perception of disaster preparedness in destinations?
- How does the tourists' response and behave to the possibility of natural disasters?
- How does the tourism sector recover and develop after disaster, case study in Aceh (tsunami as natural disaster)?

Methods
The research employs the mix method of qualitative and quantitative approaches

Research Locations:
The research is took place in three disaster impacted region in Indonesia: The Special Region of Yogyakarta, The Province of Bali and The Special Region of Nanggroe Aceh Darussalam

Figure 1. Number of international tourists visits during 1996 - 2014

Table 1. Major disasters event from 1997 to 2015

<table>
<thead>
<tr>
<th>Disaster/Crises Event</th>
<th>Time</th>
<th>Type</th>
<th>Human/Source</th>
<th>Impacted Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrorist Attack Bali</td>
<td>2002</td>
<td>Human</td>
<td>Bali</td>
<td>All over Indonesia</td>
</tr>
<tr>
<td>SARS Outbreak</td>
<td>2003</td>
<td>Natural</td>
<td>China</td>
<td>All over Indonesia</td>
</tr>
<tr>
<td>Tsunami</td>
<td>2004</td>
<td>Natural</td>
<td>Aceh</td>
<td>Province of Aceh, North Sumatera and other countries (Thailand, Malaysia, Sri Langkia, India)</td>
</tr>
<tr>
<td>Terrorist Attack</td>
<td>2005</td>
<td>Human</td>
<td>Bali</td>
<td>All over Indonesia</td>
</tr>
<tr>
<td>Earthquake</td>
<td>2006</td>
<td>Natural</td>
<td>Yogyakarta</td>
<td>Yogyakarta and Central Java</td>
</tr>
<tr>
<td>Merapi Volcano Eruption</td>
<td>2010</td>
<td>Natural</td>
<td>Yogyakarta</td>
<td>Yogyakarta and Central Java</td>
</tr>
<tr>
<td>Terrorist Attack</td>
<td>2015</td>
<td>Human</td>
<td>Jakarta</td>
<td>All over Indonesia</td>
</tr>
</tbody>
</table>

Preliminary Findings:

Regional Level
- Terrorist attack at Bali 2002 and 2005, volcano eruption in Yogyakarta and tsunami in Aceh was so serious that the routine operations of the tourism industry were not only disrupted, it also jeopardized the tourism industry.
- Disasters impacted the tourism industry performance in different forms, intensity and scale which then influence the recovery process of the region.
- The recovery of the tourism industry is attached to the other aspect, such as health, infrastructure and facilities.
- In the case of Aceh, the new form of tourism have been introduced called Halal Tourism as part of the development of atrocity/dark tourism where try to elaborate the local values and beliefs.

Management Level
- In the tourism industry's crisis management planning, the tourists' response to disaster risk is crucial to develop a strategy for their safety. The tourists' response can be understood using the rational theory group-grid theory. There are four types of responses, hierarchism, individualism, egalitarian and fatalism.
- The four types of responses require disaster management to incorporate approaches not only for hierarchism, but also individualism, egalitarianism and fatalism. This essentially requires rethinking contemporary approaches toward polynatorial disaster management.

Increasing number of tourists as the indication of growing tourism industry

According to the Indonesia Statistic Board, the number of visits fluctuated throughout the period of 2000 to 2014, as shown in Figure 1. However, the divergent figures were reported at two intervals: e.g. 2003 and 2005. The first drop in 2003 was closely related to the terrorist attack one year before and the impact of the SARS outbreak. The second drop in 2005 was associated with the impact of tsunami Aceh at December 2004. In terms of tourist’s origin country, the number of foreign tourists from Africa and Middle East declined faster rather than from European, American and the Asia Pacific. Three years after the tsunami, the number of tourists returned to normal and simultaneously increased. The data showed that the human induced disasters were more impacting to the tourism industry than natural disasters.