EDUCATION ON DISASTER RISK REDUCTION FOR HERITAGE CULTURAL LANDSCAPE (SAUJANA)

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ABSTRACT

Cultural landscape is a manifestation of the interaction between humans and the natural environment that is reflected in space and time (UNESCO, 1992). Started in the end of the 1980’s, this interaction has become a new perspective in global discourse of heritage conservation. Stated in the Charter of Indonesian Heritage Conservation 2003, the word saujana, meaning, “as far as you can see,” has been used in translating the term “cultural landscape”.

Many heritage saujana in Indonesia are located in the ring of fire and/or becoming tourism destinations, which makes them also vulnerable from the impact of mass tourism. Several evidences in the disaster affected areas have shown lesson learnt on the importance of safeguarding the integration of various heritage with the total involvement of community on the disaster risk mitigation.

This paper will highlight the Heritage Saujana Education on Disaster Risk Reduction based on the author's involvement as mediator and entrepreneur on conducting several programs post major disasters in heritage saujana in Java, Indonesia, such as 12 years Integration of Reviving Folk Batik Post-Earthquake; Saujana Conservation of Imogiri Heritage Village; Kotagede Crafts Revival Post-Earthquake; and Creating Artworks Post Merapi Mountain Eruptions.

Keywords: heritage saujana, Risk Disaster Reduction, community mediator, entrepreneur.

1. Introduction

Disaster is a catastrophe,
Disaster could be an opportunity,
Opportunity needs creativity,
Creativity needs collaborations
(Adishakti, 2006)

When a disaster destroys what we have, not only objects, the environment, the heritage saujana, tangible and intangible cultural heritage, even lives and the future of lives, it’s important to consider strategies on how, where, why, how, and what to do next. Any efforts should include emergency response to sustainable plan for social, cultural, economic, and living environments, from planning to implementation. Especially with Indonesia’s vulnerable location in the “Ring of Fire, comprehensive disaster preparedness and risk reductions are a must.

When planning for disaster preparedness and risk reduction, the challenge is to continue exploring and discovering opportunities. It requires creativity to take advantage of these opportunities. How can these creative efforts be implemented in a timely and sustainable way. When working with disaster affected areas in heritage saujana, it’s important to consider the condition, sensitivity to the local population, the environment, and carefully exploring its hidden potential. With these considerations, these efforts will require a long period of time from planning to implementation.

1 Center for Heritage Conservation, Department of Architecture and Planning, Faculty of Engineering, Universitas Gadjah Mada, Yogyakarta, Indonesia
2 The Charter of Indonesian Heritage Conservation 2003 stated that the heritage of Indonesia is the legacy of nature, culture, and saujana, the weave of the two.
Heritage saujana or cultural landscape, is the inextricable unity between nature and manmade heritage in space and time. It embraces a diversity of manifestations of the interaction between humankind and its natural environment (UNESCO, 1992). In which the social system and the way humans manage the space and express a complex phenomenon of tangible and intangible identities. The interaction of nature and culture has become a new perspective in global discourse of sciences especially those which concern with heritage conservation started in the end of the 1980’s. Previously, since the beginning of the Industrial Revolution in the first half of the nineteenth century, nature and culture have often been conceived of an extreme opposite in Western thought (Plachter & Rossler, 1995).

In 2003, the Indonesian heritage activists in the Indonesian Heritage Conservation Network (Jaringan Pelestarian Pusaka Indonesia) in collaboration with Indonesian ICOMOS and Ministry of Cultural and Tourism declared the first charter on heritage conservation Indonesia ever had, Indonesian Heritage Conservation Charter 2003. This charter stated that Indonesian heritage consists of natural, cultural and saujana heritage (cultural landscape, a mix of natural and cultural heritage). This charter has also highlighted the use of saujana in translated cultural landscape. The word "saujana", in Indonesian dictionary meaning “as far as the eye could see”.

In this regard, towards sustainable creation based on opportunities in the disaster affected heritage saujana requires collaboration with various parties, multi-disciplinary, across sectors, local and cross-continent networks. For this reason, the role of the facilitators, as well as the mediators, and entrepreneurs, to knit opportunities, creation, and collaboration are significant. The question than how to develop the heritage saujana education on Disaster Risk Reduction that will also encourage creativity on reviving the disaster affected intangible cultural heritage and further development for better livelihood and quality of life for the local population.

2. Case Study Location: Yogyakarta Indonesia

Yogyakarta, Indonesia after the independence of Indonesia in 1945 has become the Special Territory of Yogyakarta. The City of Yogyakarta is now known as the center of higher education, major tourist destination, the center for traditional and modern arts, as well as one of the best cultural centers in Indonesia. This province has experienced difficult times after the 5.9 Richter earthquake struck on May 27th, 2006. At least six thousand died, and many more people were injured and lost their homes. As a result of this terrible natural disaster, Jogja has lost its unique cultural heritage (both tangible and intangible ones). The tangible heritage such as the World Heritage Prambanan temple, Yogyakarta Palace area, the inside the Baluwerti fortress or nJeron Beteng area including Tamansari, and Kotagede Historical District. The earthquake had also seriously disrupted such core activities of local industries, such as batik craft, sterling silver, pottery, wood craft, ikat, and other traditional crafts practiced in the southern part of Yogyakarta City and Bantul District.

Another huge disaster occurred in Yogyakarta between October and November 2010. There were multiple eruptions period of Mount Merapi Yogyakarta, one of the world’ most active volcanoes. First eruption on 26 October 2010, and followed by huge eruption on the 3rd, 4th, 5th, 6th, and 7th November 2010. The hazards zone enlarged into 20 km, 140 million cubic volcanic materials, pyroclastic flow up to 17 km along Gendol river. 322 people reported killed, and an estimated 2,465 households became homeless, and 29 villages were destroyed/disappeared. The Borobudur World Culture Heritage Temple was totally covered mostly by ash containing sulfur and acid which can decay the stones.
3. Post-disaster Action Programs

In response to those catastrophes, the author was involved in the three post-disaster programs:
- Reviving Folk Batik Post-Earthquake, in Imogiri Batik Village;
- Kotagede Heritage District Crafts Revival Post-Earthquake; and
- Creating Art Works Post Merapi Mountain Eruption.

3.1. Reviving Folk Batik Post-Earthquake, in Imogiri Batik Village

3.1.1. The Setting and Its Historical Background

Imogiri batik village in Bantul Regency, 12 kilometres south of Yogyakarta City is an important heritage saujana where the Royal Cemetery Complex located the hill, many traditional houses, and the home of the batik craft small scale industry. In the year 1632-1640, during the Mataram Moslem Era, the 3rd King of Mataram Kingdom, Sultan Agung ordered to build the Mataram’s Royal cemetery in Imogiri. He was buried there in 1645. There are 410 stairs to reach the cemetery. Due to the needs of batik for funeral ceremony and other types of ceremonies have created batik villages surrounding Imogiri Royal Cemetery. In the year 1755, Mataram Kingdom divided into Surakarta and Yogyakarta Rulers. Imogiri Royal Cemetery was also divided to Surakarta and Yogyakarta Kingdoms. Each Kingdom has each own batik pattern and styles. As Yogyakarta formerly was part of the Hindu-Mataram, there is the Old Javanese Ramayana Kakawin which show the origin of the word batik: tika. “sacred drawing, scared painting (Padmadipura-Wangsawikrama, 2016)

Traditional batik painting Bantulan is one of the biggest potential of the Imogiri district in Bantul, Yogyakarta. Most of the crafters inherited the skills from their family for hundreds of years. There were about 900 groups of batik crafters in Imogiri, consist of both old and young people organized in groups of crafters, overall there were 4,500 crafters in Imogiri. For hundreds of years, the Bantulan batik from Imogiri had influenced many parts of Central Java region such as Tegal, Bayat, and Semarang.

Since 1970s Bantulan batik was declined. Most crafters have shifted batik painting as their second jobs instead of their main occupations. There were only several active batik crafters groups. The declining batik market had slowed the crafters down, as well as the skills. The younger generation had lost their interest in batik craft.

The condition slightly changed when Mrs. Jogopertiwi kept trying to develop the existence of Imogiri batik in 1990s. Young generation interests were increased. She received an Upakarti Award from the President of Indonesia for her efforts. Unfortunately, she passed away in 2002. In the year 2005, the Friends of Indonesian Batik “Sekar Jagad” established the Imogiri Eco-museum Batik “Joglo Ciptowening” dedicated to Mrs. Jogopertiwi. The museum was opened by Sri Sultan Hamengkubuwono X, and has exhibited various types of batik patterns from Imogiri and its surrounding areas since then.

The May 27/2016 earthquake had shaken Bantul district as well as Bantulan batik crafters’ life. Imogiri and Bantul were among the hardest hit region where the city literally lost its capacity to function. Most of the residents were mourning from losing their family members and their houses. Imogiri Eco-museum Batik was also collapsed.
3.1.2. The Actions

Jogja Heritage Society in collaboration with the Sekar Jagad Batik Lovers have initiated to revive the Imogiri folk batik craft. The other collaborators are Department of Architecture and Planning of Universitas Gadjah Mada, Indonesian Heritage Trust, Losari Foundation, Mayasari Indonesia, Community Service of Yogyakarta Agricultural Institute, and individual donors. This program was supported by Culture Emergency Response from Prince Claus Fund, Netherlands, 2006 – 2007. The objective of this program is to help rebuilding the heritage saujana of Imogiri and residents based on their most potential, the intangible heritage.

This activity is also part of the program called “Give Back Jogja Folk Heritage”, an integrated conservation effort of tangible and intangible heritage by rebuilding the economy through utilizing their potential assets. This program is aimed to assist the crafters to be financially independent in the future.

Figure 1. Imogiri batik crafters participated in the daily workshop post-earthquake
(Source: Adishakti, 2006)

The Reviving Imogiri Folk Batik actions consist of:
1) Group Batik painting activities: Organize batik painting activities in local residents’ front yard as a workshop area in Pajimatan village, Girirejo. The target of the first activity is to get about 50 women crafters involved.
2) Site Preparation and Maintenance
3) Public batik painting workshop: organize workshops and trainings for interested public by recruiting local batik crafters.
4) Batik Crafts Flea Markets (Pasar Tiban Batik): Organize Batik Crafts Flea Markets every day at workshop sites
5) Natural dye of batik processing
6) Establish Temporary Imogiri Batik Eco-museum in the workshop site

The overall activities were held in Pajimatan village, Girirejo, Imogiri District in Bantul, Yogyakarta. The key important activity was to get the local community involved as much as
possible by utilizing “what they can do” or their most potential assets to help them get back on their own while simultaneously revitalizing the culture and the economy.

The following program, Jogja Heritage Society in collaboration with Australia-Indonesia Partnership (AIP) conducted the Yogyakarta – Central Java Assistance Program (YCAP) in 2008-2009 (Handayani, 2009):
- Target of this program: There were 100 skillful and experienced traditional women artisans of batik Imogiri, who need help to sustain their livelihood
- Focus: women's empowerment, batik conservation, and improving family welfare.
- Organizer: provided shelter, equipment and raw materials such as white cloth and wax, and helped for marketing and promotion.
- Objective: to shift the mindset of the people into a more dynamic, creative, and productive
- Training programs
  • to improve their skill in batik design, batik techniques, and colouring.
  • to improve productivity, quality control, marketing, and sustainability of the business.
  • to learn environmental control and waste management. Some people got training to guide local heritage trails activity.
- Action 1: Batik training
- Action 2: Colouring training
- Action 3: Dress making training
- Action 4: Construction of batik dyeing place
- Action 5: Construction of batik dyeing and drainage
- Action 6: Construction batik workshop
- Action 7: Marketing through series of exhibitions

The achievement indicators of the development are:
- improvement of the quality of life,
- strengthening of communication and networking,
- empowered community
- 12 batik community co-operations established
- construction a batik complex called Gazebo, which later on becoming the center of batik excellent.

3.2. Kotagede Heritage District Crafts Revival Post-Earthquake

3.2.1. The Historical Background

Kotagede is located about 6 km to the south east of Yogyakarta City, Indonesia. Yogyakarta is a palace city built in 1755. The rulers in this Muslim Mataram Kingdom were succession in various courts since 15th century. There were Pajang, Kotagede, Kerto, Plered, Kartosuro, Surakarta and the devised of Mataram as Surakarta and Yogyakarta. Formerly, in the 8th-10th C, this region had known as Mataram, but as the site of the First Great Central Javanese Empire whose fundamentally followed the Buddhist and later Hindus principles. There were the succession of Indian kings such as the builders of the magnificent Buddhist temple Bodobudur, and the Hindus temple Prambanan.

Kotagede, the former capital of Islamic Mataram Kingdom in 16C, means a “big city”. It represents the Javanese ideal site and its unique characteristics. As a typical city of Java, urban structure of Kotagede formerly based on the concept called Catur Gatra Tunggal (four components
in one). It means that the center of a Javanese city consists of 4 components. There are palace, mosque, market and square (alun-alun). The palace was surrounded by the wall and the inner moat (Jagang Jero). In the 16th Century, Kotagede functioned as a busy and lively center of trade.

In this century, the two components of Javanese city remain are the Grand Mosque of Mataram (Masjid Agung Mataram) and the market that is still busy. Several other physical assets existed are Mataram Royal Cemetery, Seliran Ancient Pool, Monuments (Clock of Hamengku Buwono VII and Fort Baluwerti), Kalang houses, traditional houses and its townscape (historical buildings, small alleys, and rukunan streets). In the case of biotic assets, Kotagede has various types of historic flora and fauna, for instance banyan trees, mentaok, kenanga, and other rare trees. The site of palace and the square are occupied by settlements known as Kampung Alun-alun and Kampung Dalem. Although the remains of the palace and parts of the royal features have been long ago disappeared, the residential structure still exhibits the Javanese significant culture. Those current settlements and urban spaces that are mostly now utilized by present society form a living cultural asset & famous for its silverworks.

Administratively, Kotagede is part of two districts (Yogyakarta Municipality and Bantul Regency). It consists of five urban villages: Kalurahan Prenggan, Kalurahan Purbayan, Kalurahan Basen, Desa Jagalan and Singosaren. As a religious compound, Kotagede invented the fast-learning method of reading the Koran, especially for children. Beyond the well-known image of silver crafts, Kotagede is also a center of Javanese crafts and arts (gold, silver, copper, leather, etc.), and traditional food (kipo, legomoro, etc.). Performing arts such as gamelan music group (karawitan), religious music group (syalawatan), Javanese poetry reading (mocopat), kercong music, tingklung wayang puppet as well as offering ceremonies on special days (caos) and leading an ascetic religious life (tirakatan).

Due to the 2006 Java Earthquake, this heritage district that well-known for its traditional houses and unique Kalang houses and kampong of sterling silver crafters is seriously endangered. Many traditional houses - embodiment of folk heritage – have been destroyed by the earthquake. Their owners deprived of necessary means resources might not be able to restore them in their traditional forms. Most of silver crafters have lost the necessary resources to continue their work. Therefore, urgent actions are needed in order to safeguard these precious assets (tangible and intangible cultural heritage). Afterwards they could become an important potential for the local economy and an attractive tourist destination.

### 3.2.2. The Actions

Post-earthquake in 2006, a revitalization program of Kotagede Heritage District has been initiated by “Pusaka Jogja Bangkit! (Jogja Heritage Revival!) “, a collaborative parties consist of Jogja Heritage Society; Center for Heritage Conservation, Department of Architecture and Planning of Universitas Gadjah Mada; Indonesian Heritage Trust; ICOMOS Indonesia, and other supportive institutions including local community. This program focuses on building the local economy through building both tangible and intangible heritage as invaluable potential for economic and sustainable development.

One program focusing on the reviving of the intangible cultural heritage is Kotagede Heritage District Crafts Revival Post-Earthquake, organized by Department of Architecture and Planning of Universitas Gadjah Mada supported by Exxon Mobile Oil, 2007-2008. The action programs are:

- Revitalize the economy of the crafters post-earthquake through:
.. small scale crafts empowerment under the Kotagede outstanding craft order program
.. develop catalogue of Kotagede small scale craft
- Marketing of Kotagede crafts
  .. build showroom for all
  .. promotion through exhibition
- Revitalize Kotagede Culture focusing on crafts and tourism
  .. develop center for Kotagede conservation and revitalization post-earthquake
  .. strengthen the movement on Kotagede conservation and revitalization post-earthquake

Figure 2. Catalogue 2008 of Kotagede Crafts post-earthquake (Source: Omah UGM, 2008)

3.3. Creating Artworks Post Merapi Mountain Eruption

3.3.1. The Historical Background

Mount Merapi is the generator of civilization around Yogyakarta. As one of the world’s most active volcanoes have been erupted for centuries. The volcano eruption is a natural phenomenon that has and will continue to happen. Therefore, risk evaluation and preparedness are needed, based on the previous experience from generation to generation. About 6,410 hectares of this mountain has been declared as Mount Merapi National Park. When the huge multiple eruptions happened in the period of October – November 2010, and 2,465 households became homeless and 29 villages destroyed/disappeared. Many of them have lived in the temporary house called HUNTARA.

3.3.2. The Actions

The Social & Economy Recovery Project of the Residents of Merapi Slopes was conducted by Faculty of Economics and Business Universitas Gadjah Mada in collaboration with Australia-Indonesia Facility for Disaster Reduction, 2011-2012. The author was involved in some part of this project that focused on the increasing livelihoods in the Kuwang and Gondang Temporary Houses in the Merapi Slopes. The opportunity to work towards increasing livelihood can be carried
out by utilizing various networks owned by the team that gave promising socio-economically and sustainably programs. This process of increasing livelihood was the object of this action research, and it is expected to be a reference for various similar cases in Indonesia in particular, and various parts of the world in general.

One of the development of new activities for the residents to meet opportunity, creativity and collaboration post-disaster was producing new artworks based on traditional Merapi handicrafts that’s called Merapi Crafts. The program began with training for women who live in the 6 x 6 m² temporary house (Huntara) in Kuwang and Gondang villages. The practical method of training was to create the denim wallet with recycle of natural indigo batik and embroidery design that illustrated the image of erupted mountain and surrounded area of Kuwang and Gondang temporary houses post-eruptions. Galeri Batik Jawa freely supplied the scrap materials of natural indigo batik and has given assistance on product marketing. The program brought creative products meets the objectives of generating income, building confidence of the community, and creating future intangible cultural heritage.

![Figure 3. The process of producing the new Merapi Crafts post-eruption](Source: Adishakti, 2012)

### 4. The Sustainable Program and Comprehensive Conservation of Heritage Saujana

Heritage itself is a sustainable concept where our common responsibility to future generations in the time of globalization is to develop the local identity (Mimura, 2003). The sense of continuity of heritage becomes more important than ever. Heritage, tangible or intangible culture, not just about the past. Continuity amid change is the central concept of conservation, a notion that differs from preservation (Adishakti, 1997). Heritage conservation is management of change (Asworth, 1991). However, changes which have taken place are not drastic in nature, it consistently preserves the outstanding value and through selectively choice of changing. The sustainability of heritage is related with the efforts of the community in managing those heritages. It is, therefore, a duty for everyone to be the heritage agent of change in this century to maintain and pass along to the future generations and at the same time it is a right to create, develop and contemplate the future heritage as well as managing heritage as creative industry.
Heritage communities at the local level of disaster affected areas need support. Their enthusiasm in participating within tangible and intangible cultural heritage conservation need support from the global community. The community mediators as well as entrepreneurs are needed to motivate, empower, and foster community movement.

From 3 (three) cases of actions post-disaster observed that the case of Imogiri, Reviving Folk Batik Post-Earthquake, has exhibited fast recovery and development. Instead of a long term collaboration among local crafters and outsider supports from community mediators, entrepreneurs and donors, the world recognition for batik and strong market demands have also given much positive impact on this sustainable program. Consequently, the reviving of batik and conservation of its heritage saujana should be comprehensively handled by care, yet innovative to meet the world class demands.

4.1. The Outsider Supports and Market of Intangible Culture Heritage Post-disaster.

Following is a comparison of case studies experiences in conducting the actions post-disaster: reaching the opportunities, creating innovative products and develop markets, and supporting mostly by other collaborators. As previously mentioned, the case of Imogiri, Reviving Folk Batik Post-Earthquake, has exhibited fast recovery and development.

Table 1. Post-disasters Actions and Sustainable Programs

<table>
<thead>
<tr>
<th>Condition &amp; efforts</th>
<th>Imogiri case (1)</th>
<th>Kotagede case (2)</th>
<th>Mount Merapi case (3)</th>
</tr>
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<tbody>
<tr>
<td>Disaster</td>
<td>- Earthquake</td>
<td>- Earthquake</td>
<td>- Regular eruption</td>
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<tr>
<td></td>
<td>- Printed textile with batik pattern</td>
<td>- The price of silver unstable</td>
<td>- Homeless</td>
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<td></td>
<td>- Decreasing of batik small scale industry</td>
<td>- Decreasing of silver small scale industry</td>
<td>- Loss of income</td>
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<tr>
<td>Opportunities</td>
<td>- Generation transfer of batik making process in community level</td>
<td>- Generation transfer of silver crafters in community level</td>
<td>- Public &amp; academician concerned (mediator)</td>
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<tr>
<td></td>
<td>- Concerned public &amp; academician (community mediators)</td>
<td>- Concerned public &amp; academician (community mediators)</td>
<td>- Concerned entrepreneurs</td>
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<td></td>
<td>- Concerned entrepreneurs</td>
<td>- World recognition</td>
<td>- Income generated from creative products</td>
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<td></td>
<td>- World recognition</td>
<td>- International market trends in sustainable handmade products</td>
<td>- Women spirit of working</td>
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<td></td>
<td>- International market trends in sustainable handmade products</td>
<td>- Agricultural opportunities from growing natural dye plants.</td>
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<td>- Agricultural opportunities from growing natural dye plants.</td>
<td>- Sustainable economic generation from the above opportunities</td>
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<td></td>
<td>- More classical patterns have emerged by the batik crafters</td>
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<tr>
<td>Creativities</td>
<td>- Daily workshop and strengthened the batik making process</td>
<td>- Developed many new designs and new packaging</td>
<td>- New artworks by the women in the temporary houses namely Merapi Crafts</td>
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<td>- Product demands from entrepreneurs</td>
<td>- Product demands from entrepreneurs</td>
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4.2. Toward Comprehensive Conservation and Achieving SDG’s in the Imogiri Case

The needs of comprehensive conservation and toward for achieving Sustainable Development Goals (SDG’s) in Imogiri heritage saujana the path for further sustainable development should be, therefore, categorized into:

1) World class recognitions and supports
2) Building world class market
3) Building world class people centered management
4) Building world class Imogiri batik heritage saujana

4.2.1. World class recognitions and supports
The first mitigation actions post-earthquake on the Reviving of Folk Batik Imogiri, it was supported by world class organization Prince Claus Fund, Netherlands through the Culture Emergency Response (CER) program in 2006-2007. The CER stated that “Culture connects individuals to our communities and their history. Safeguarding cultural heritage can contribute to better understanding and social acceptance of community. It can strengthen communities’ sense of identity and give us the resilience to recover from conflict or natural disaster”.

In the year 2009, Batik Indonesia was inscribed by UNESCO as Masterpieces of Oral and Intangible Heritage of Humanity. And in the year 2014, Yogyakarta is designated by World Craft Council as World Batik City.

4.2.2. Building world class market

At the same time, the marketing from Galeri Batik Jawa, an entrepreneur who has business on natural indigo batik in collaborate with many Imogiri batik crafters have reached better world market, such as in Asia, Europe and the US through exhibitions, bazars, workshops, lectures and fashion shows in the prominent venues. While on site marketing conducted by the local step by step has increased and receiving more buyers. Many new batik galleries have developed.

4.2.3. Building world class people centered management

Due to the many opportunities and challenges for further development, Imogiri batik as well as its heritage saujana need more environmental friendly programs as well as world class spatial planning and design development. Several programs from Universitas Gadjah Mada lead by author have been conducted since 2016, there are:

- International Summer Course on Imogiri Saujana Heritage: Participatory Planning and Design for Batik Eco-Museum, Universitas Gadjah Mada, 2016. This program organized in Yogyakarta and Imogiri heritage village, 6 – 19 October 2016. There are 9 (nine) facilitators from Indonesia, Japan, India, Taiwan, French, and Malaysia, and 22 (twenty-two) participants from Malaysia, Nepal, Myanmar and Indonesia.
- Architectural Thematic Studio, Department of Architecture and Planning, UGM, 2016. The assignment in one semester was designing Batik Eco-museum in Imogiri Heritage Village. Participated by 8 (eight) students.
- Universitas Gadjah Mada Community Service program, 2017, focuses on the “Community Empowerment on the Batik Display and Interior of Shop/Gallery and Homestay, Sekar Arum Group, Giriloyo Wukirsari, Imogiri, DIY”. One of the achievements is the local community have committed to utilize and/or design the Limasan type of traditional house for homestay or batik gallery.
- Universitas Gadjah Mada Community Service program, 2018, focuses on the “Community Empowerment on the Hospitality Design, Wukirsari, Imogiri, DIY”. Some achievements are the establishment of 2 (two) community culinary markets that opened every Legi\(^3\) Sunday (Sor Jati Market) and every Kliwon Sunday (Jolontoro Market).

Several world class programs have also been organized in the Gazebo Batik Complex, Imogiri Batik Village which have given more world recognitions, there are:

\(^3\) In the Javanese calendar, there are 5 pasaran days: Kliwon, Legi, Paing, Pon and Wage
- Jogja International Batik Biennale (JIBB) 2016 and 2018. This JIBB organized once in two years is a responsibility program after Yogyakarta designated as Jogja World Batik City in 2014. JIBB biennially programs are batik exhibition, international symposium, public lectures, and batik – natural dye workshop. This batik – natural dye workshop has always been organized in the Gazebo Batik Complex and its surrounding areas.

- Traditional Textile ASEAN Symposium 2019. Part of this international symposium was batik workshop organized in the Gazebo Batik Complex, Imogiri Batik Village.

The Imogiri batik crafters currently have already performed their professionalism in managing batik events, workshops and courses in the Gazebo Batik Complex. For example, batik courses for individuals until hundreds students including food and beverage preparation. Their local batik instructors have also been invited to teach batik in many parts of Indonesia.

4.2.4. Building World Class Imogiri Heritage Saujana

Since the establishment of Mataram’s Royal Cemetery in 16 C up to 2019, the brief layering of space and activities development are consisted of royal cemetery, heritage saujana with 3 (three) UNESCO world masterpieces (batik, wayang and keris), Java earthquake, reviving folk batik, batik & saujana development, hospitality design development, edu-tourism development, local entrepreneur development, and toward the quality of life which can achieving the Sustainable Development Goals. This last point will be focused for further action research and sustainable programs. One important issue is how Imogiri batik could focus on reviving the Imogiri ancient blue-dye tradition as indigo is part of the fabric of everyday lives (Legrand, 2013) and environmentally friendly.

![Figure 4. The Development of Imogiri Batik Village Post-Earthquake, 2006 – 2019](Source: Adishakti, 2019)
5. Lesson Learnt for Education on Disaster Risk Reduction (DRR) for Heritage Saujana

The experience of reviving local intangible cultural heritage as well as creating artworks post-disaster has proven that sustainable creation-based opportunities in the disaster affected heritage saujana requires the development of skills and creativity of the local community, including the crafters, and increasing their capacity to collaborate with various parties, multidisciplinary sectors both local and global networks. However, the role of the facilitators as well as the mediators and entrepreneurs who can support the transformation from idea into reality is very important. In the case of Imogiri, in addition to many world recognitions and supports, it has also exhibited the advanced collaboration with professional entrepreneur in the success of global marketing of Imogiri batik. In this regard, education for competent community mediators and entrepreneurs who are creative and innovative to work with the local community of heritage saujana should be holistically prepared.

Following is the suggestion in developing education on Disaster Risk Reduction for heritage saujana.

5.1. Goals:
- Encouraging the creativity on reviving the disaster affected natural and cultural heritage – tangible and intangible, and further development for better livelihood, development quality and business of those heritage and other artworks, environment friendly, quality of life and utilize as the bridge in achieving Sustainable Development Goals.
- Going beyond the effort of Disaster Risk Reduction to creating sustainable effort to conserve the heritage saujana as a basic need for better livelihood and quality of life post-disaster;
- Increase public awareness of the importance of intangible cultural heritage in their community, appreciate and further able to develop the quality of those heritage and creating artworks based on local resources;
- Develop promotion for intangible cultural heritage that have high opportunity in the national and global market

5.2. Method and target Education on DRR for Heritage Saujana:
- Training for local community, local crafters, and local entrepreneurs
- Training for trainer for community mediators, academician, and heritage activists
- Special trainings for folk art designers
- Field/summer school for students and scholars
- Capacity building for government agencies and specialists
- Various activities for public awareness campaigns

5.3. Subjects:
- Basic Disaster Risk Reduction
- Sustainable Development Goals
- Heritage Saujana Conservation
- Reviving Intangible Culture Heritage and Creating New Artworks post-disaster
  .. Strengthen the skill of craft making process
  .. Action research on exploration of business opportunity
  .. Enhance the creativity
.. Understanding the partnership and finding collaborators
- Heritage economy and marketing development

5.4. Supporting system:
- Preparation of curriculum and training materials
- Produced manual for education
- Organize exhibition and workshop for campaign activity

6. Concluding Remarks

- Reviving intangible cultural heritage in the heritage saujana is about livelihood development and related to the quality of the whole aspects of environment, that is the saujana conservation itself;
- Promote the implementation of the Gianyar Declaration 2017 on Culture Sustainability & Climate Change: Strategy 13 – The duty to promote creative industries based on the conservation of nature and culture. The global heritage community has a duty to promote responsible creative industries based on the conservation of nature and culture to provide job creation, including post disasters, to generate locally based economic activity and to enhance the innovation of folk art and heritage design
- For further action researches and sustainable programs in Imogiri should focus on:
  .. Develop more natural indigo batik of Imogiri and cultivate various plant-dyes on site
  .. Conservation of tangible and intangible cultural heritage products is about professional market. Explore more heritage economy in Imogiri.
  .. Achieving the Sustainable Development Goals through Imogiri heritage saujana conservation
- Revisited the cases of Kotagede Heritage District Crafts Revival Post-Earthquake and Creating Artworks Post Merapi Mountain Eruption.

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