The Ex-Coal Mining City of Sawahlunto Revisited: Notions on Revitalization, Conservation and Urban Development

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ABSTRACT

The structural change of Sawahlunto, Indonesia from a mining-based to a tourism-based economy has triggered environmental problems and challenges. Revitalization combined with conservation efforts became a priority in order to maintain the cultural dynamics of the ex-coal mining city. Cultural heritage conservation utilizing the urban fabric and mining-related installations has been criticized due to its emphasis on beautification. This paper argues that historic urban fabric contributes significantly to place making but these endeavors need strong political leadership. The case of Sawahlunto reveals the important nexus between physical intervention, rehabilitation of socio-economic activities and the problem of institutional development, which is often neglected due to conflicting interests.

Keywords: Mining-based tourism, revitalization, conservation approach, Sawahlunto, Indonesia

1. HISTORICAL BACKGROUND OF SAWAHLUNTO

The long history of Sawahlunto began at the time when geologists came across a large number of coal deposit at the end of the 19-century. WH de Greve, a young Dutch geologist, was assigned by the Governor of the Netherlands Indie in 1867 to carry out an expedition in the countryside of the Minangkabau, West coast of Sumatera. De Greve’s finding was published in 1871 with the title Het Ombilien-kolenveild in de Padangsche Bovenlanden en het transportstelsel op Sumatra’s Westkust. After de Greve’s sudden death in 1872, the expedition was undertaken by RDM Verbeek in 1875. The results of the expedition indicated a coal underground mining reserve of 205 million tons in the areas of Sungai Durian, Sigakut, Lapangan Sugar, Tanah Hitam and Perambahan, including

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the surrounding areas of the Sawahlunto town, which could be utilized for the next 200 years (cf. Miko, 2006). Sawahlunto initially developed as a tiny settlement for coal mining staff and workers in 1887. Shortly thereafter, the town was settled in 1888, the year when 5.5 million Gulden was invested by the colonial government of the Netherlands for the Ombilin coal-mining infrastructure. By early 1894, the small town was connected to Emma Haven (now the Teluk Bayur seaport) via Padang by a railway network. After lasting for more than a century, the coal mining operation in Sawahlunto was finally closed in 1998. The railway, serving the route from and to Sawahlunto, stopped operation in 2002. See “Sawahlunto, Coal and Country Railroad”. http://m.kompasiana.com/?act=r&id=84953 (March 28, 2010). Accelerating the development of the tiny town. The Sawahlunto town is geographically located in a basin, about 250-260m above sea level, in the heart of Bukit Barisan Mountains, West Sumatera.

Exploration and mining reached its heyday in the 1930s when the city had 40,000 inhabitants, of which 550 were Europeans. (Asoka et al., 2005) Due to the vast coal mining operation, Sawahlunto was also known in the local language as Kota Arang (coal city). However, few recognize that the tiny town had abundant evidence of a long history (Figure 1). The history of its urban development cannot be separated from the mining activities in West Sumatera. The mining undertaking in Sawahlunto led also to the building of the first cement fabric in the Netherlands-Indie in the beginning of 20th century, Padang Portland Cement Maatschappij (cf. Zed, 2001. pp. 149) as a whole. Despite the relatively short period of mining activities, historical traces of the European industrial revolution can be recognized in Sawahlunto, especially through the mining artifacts and the spatial production of architecture and the urban fabric. After World War II, the mining operations were taken over by the new Indonesian government until the end of production in 2000.

At the end of 2002, PT BA-UPO (Perusahaan Tambang Bukit Asam – Unit Produksi Ombilin), a state-owned company, was in charge of management. After the end of production, a socio-economic development initiative was undertaken to sustain Sawahlunto. Ecological problems, conflicting political interests, and socio-cultural obstacles led to the introduction of an environmental-friendly city planning policy. All of these endeavors were institutionally based upon a new vision, which was the transformation from mining-based to tourism-based economy. This development shift and its association with the national decentralization policy was stipulated in the Local Regulation (Perda 6 tahun 2003). In accordance with the emphasis on decentralization, the political will to execute mining-based tourism for Sawahlunto became strong despite some persistent small scale, and mostly illegal mining activities, which are still in operation.

Figure 1:
Settlement structure of Sawahlunto in 1921 (Source: Redrawn after Sawahlunto 2020 (Kuswartojo, 2001))
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CULTURAL HERITAGE
SAWAHLUNTO: AN ISSUE OF DYNAMIC CITY

Cultural layering is a common attribute of most Asian cities, and all of these layers are significant, since they reveal stories about stages in spatial production and societies. As Logan (2002) pointed out, in most countries of Asia, Western influence on built form came about directly through colonialization. In Sawahlunto the legacy of the past can still be recognized through the cultural layers of its urban fabric. Thus, the richness of Sawahlunto’s urban history, with its mix of local-indigenous cultures and foreign colonial influences, will contribute to the remaking of this city a tourist destination.

Conserving the legacy of the past may also seem a strange objective for a developing country, since cultural heritage conservation, at least in the sense of historic buildings and sites, may take lower priority than other social needs, such as poverty alleviation and the provision of new housing, transport and other infrastructure work. In recent years, though, the loss of cultural heritage as a result of uncritical revitalization or uncontrolled redevelopment of the urban fabric is becoming a serious concern to various developing cities in term of urban development (Tunbridge, 1984; Dix, 1990; Logan, 2002 and Stubbs, 2009).

Following directly from this realization, the vision and mission of Sawahlunto 2020 has partially implemented a new development policy based on heritage conservation and mining-based tourism. This change in development policy has triggered new environmental problems and social challenges as well. Since 2000, some noteworthy physical improvements to the historic urban fabric have been integrated into the revitalization programs, mainly the adaptive re-use of the historic urban fabric and mining-related installations. Only part of the industrial and mining heritage buildings and artifacts from the colonial period in the old city have been preserved while several buildings nearby Sawahlunto are
mostly deserted. Consequently, conservation activities have been criticized for their focus on the beautification of the city only. Elsewhere, the author (Martokusumo, 2008) has discussed that while conservation and revitalization have become important issues in Indonesian urban development politics, there is, not a readiness and acceptance in the society at large. Heritage conservation can be socially as well as politically vulnerable when the objects to be conserved were created during the colonial period, or if they are culturally related to certain non-indigenous ethnic groups. Moreover, there are still a lot of conflicting opinions or understanding among the actors with regard to what heritage conservation is all about.

Although, conservation efforts are generally associated with the introduction of new productive uses, this not been the case in Sawahlunto. Thus, recent physical developments have brought little improvement to the quality of urban life. This raises some questions regarding the Sawahlunto case such as: What kind of productive uses can be introduced? How can design and development control of new buildings and facilities be implemented? And ultimately, how can environmental awareness, public participation and sustainable development be stimulated and increased?

This paper argues that any city’s historic fabric contributes significantly to place making and plays a significant role in enriching the quality of a place. An in-depth insight into the conservation approach in revitalization is necessary in order to understand the complex relations between human beings and the process of spatial production in architecture and the urban fabric. In a broader sense, revitalization deals explicitly with physical interventions, rehabilitation of socio-economic activities and institutional development. Consequently, efforts at revitalization must also be supported by a strong political will in order to enhance the nexus between people as the inhabitants and their environment. In relation to such discussion, Saliya (2003) explained that there is a strong interdependent relationship between physical forms/urban fabric and human behavior. The Sawahlunto case reveals that this relationship, due to the conflicting interests, has often been simplified and ignored.

2. CONSERVATION AND REVITALIZATION

As Tiesdell et al. (1996) have pointed out, in its early phase, historic conservation dealt simply with the protection of individual buildings, structures and other artifacts, while in the second phase concern expanded into area-based policies. Thus, reflection on the functional characteristics of areas and the active economic use of protected buildings was set up as a conservation concern in addition to the visual, architectural and historical qualities of buildings. The preservation of form has implications for urban function, and conservation therefore has turned into an apparatus of urban management. Accordingly, conservation is about the inexorable change and the management of change per se (Tiesdell et al., 1996). Conservation concerns both the physical and natural environment. It does not merely worship shrines of the past, but makes them more relevant to community needs (cf. Martokusumo, 2008). While conservation was at one time ruled more by a sense of history; it is now ruled by a sense of use, which includes community needs and ecological concerns. The heritage conservation movement has expanded its interests into areas where environmental concerns - i.e. natural or cultural landscape, topography, social and cultural traditions, and other environmental objects - are more dominant than historical associations of a place. With such an expanded concept of heritage conservation, potential objects for heritage conservation are increasing. Conservation deals not only with the physical dimensions, but it should ultimately be seen as a thorough effort to interpret and to appreciate important architectural and spatial forms. In essence, the objective of the conservation movement leads to a cultural appreciation and broadens intellectual understanding. The utilization of architectural and urban fabric in accommodating new functional needs can be conceived as an attempt to appreciate and understand our cultural heritage (see Martokusumo, 2008).

Inevitably, historic urban quarters have to deal with the dynamics of change and economic opportunity; on the other hand physical change is restricted and controlled in the interest of conservation. In such quarters, the necessity of integrating the various requirements of conservation and revitalization, and of balancing economic progress with environmental quality is particularly challenging. The paradigm of sustainability promotes sensitive utilization of existing urban fabrics - building and sites - and as a result will have significant contributions in minimizing the environmental burdens (Eichstaedt, 1996).

Revitalization can be understood as efforts to increase the vitality of certain neglected urban quarters through physical interventions with careful considerations of social, cultural, economic and physical characteristics. Revitalization focuses on generating economic development while
3. TRANSFORMATION AND DEVELOPMENT POLICY

Since the decline of coal production in Sawahlunto, there have been major changes in development policy, as follows:

First, due to declining coal-mining operation in Ombilin, coal processing and transportation became more expensive. According to a field survey, there is still a coal deposit of 100 million tons. Nevertheless, future coal exploration and management has not been decided, since the whole scheme depends heavily on massive financial support. According to the municipality’s website, within 100 years of coal mining activities, only 30 million tons of coal has been explored, while the underground coal mining of 100 tons have not been excavated due to high operational cost. Coal mining production began declining in the period of 1940-1970. With the support of modern equipment, mining activities re-optimized in the 1980s, and coal mining production reached one million ton per annum. For “Situs Sawahlunto,” see http://www.sawahlunto.go.id/index.php (28 March, 2010). Ongoing illegal coal mining activities in the surroundings of Sawahlunto have increased ecological problems. Several ecological problems arose when surface coal reserves in Sawahlunto decreased. The ecological impacts due to unorganized mining activities can be seen in the last few years. Such condition is exacerbated by growing activities of clandestine (illegal) coal mining excavation, especially in the last few years, where deserted and neglected coal tunnels and mining shafts are vulnerable to collapse (Asoka et al., 2005 and Miko, 2006).

Second, the historic fabric in Sawahlunto is in a mediocre state of repair; a few artifacts are in decay, such as the processing plant and other former industrial installations in the surrounding area of Sawahlunto. Only a small number of buildings of historical significance within the old city are preserved as objects of tourist attractions, such as the old coal mine tunnel Mbah Suro, the former Societet building (now GPK), the Chinese shop house Pek Sin Kek, and the former public kitchen (now Museum Goedang Ransoem) to name a few. Certainly, some new urban facilities and services have been developed, but they can only meet limited local needs. Apart from some limited physical interventions in the last five years, the old urban quarters of Sawahlunto are in general neglect. The old city is designated as a quasi museum of former Ombilin coal mining activities in a very limited sense. Standard facilities for a coal mining-based tourism city can hardly be found. Moreover, there are no adequate supporting modern amenities, and most of the existing infrastructure does not support contemporary needs. To some extent, the improvements of some significant buildings have led to a beautification process. Another important feature in Sawahlunto is the Sungai River Batang Ombilin. The river is now threatened by on-going clandestine deforestation and inundation through the unchecked expansion of local settlements on valley slopes and the ridges of surrounding mountain.

Third, since the city was established, urbanization had not proceeded in an orderly manner. Sawahlunto was a quasi “company town”, which did not have any other resources except mining. Every single facility and need was adequately supported during the productive period of the mining activities, but this has unfortunately not
been the case after the mine closure. Efforts to gain new resources were undertaken by expanding the administrative city boundary from 779 ha to 27,344 ha in 1990, which was followed by population increase. (Figure 2a and Figure 2b) Based on the 1995 national population census, the population of the new Sawahlunto was approximately 55,000 people. Due to its geographical conditions, the Sawahlunto extension led to a proliferation of tiny communities and small hamlets. According to the 2000 national census, there were 50,688 people registered in Sawahlunto; this is a population decrease in comparison to the last five years. One of the reasons is the partial resettlement of coal mining workers and the company staff of PT BA-UPO and reveals that the urban dynamic of Sawahlunto was solely dependent on mining activities.

Fourth, the urban vision of the city Sawahlunto tahun 2020 menjadi Kota Wisata Tambang yang Berbudaya (English translation: Sawahlunto 2020: A cultural Mining-based Tourism City.) emphasizes the principal development of Sawahlunto city. As written in the 2001 Master Plan, improvements will initially focus on the historic urban quarters of Sawahlunto. The old town serves as a locus of important historic buildings and sites, which are considered sufficiently significant to increase its attractiveness and interest to visitors. Although some physical interventions of important objects in Sawahlunto have altered important buildings, others have retained the Indo-European architectural style, such as the coal processing plant, silos, railway station and a number of historic colonial buildings. Other facilities, such as the railway station building of Sawahlunto (presently turned into a museum), the former public kitchen Goedang Ransoem, the Societet Building, the PT BA-UPO office building, the worker and staff housing, are, to some extent, still intact. The critical re-use of such buildings will be part of the main development strategy for a heritage trail and cultural tourism.

4. SAWAHLUNTO: THE CULTURAL MINING-BASED TOURISM CITY

As previously mentioned, tourism and the conservation of mining related artefacts have been chosen as the main socio-cultural attraction for Sawahlunto town, an approach has been taken by many urban authorities particularly in the region of West Sumatera, (Tiesdell et al., 1996; Logan, 2002 & Stubbs, 2009). The choice by Sawahlunto authorities is based on several facts and concerns. Laporan Rencana Kota Wisata Tambang Sawahlunto, 2001.

First, The Ombilin coal mining operation survived for more than 100 years, comprising a very long history of social, cultural and political events. It is the oldest coal mining operation in the colonial Netherlands-Indies, and reveals a sordid past of human tragedy of hard labor in exploitation of the area in the beginning of 1892. The settlement of mine workers had been developed after the model of the European industrial city, so that in its early development Sawahlunto became an urbanized colonial settlement nestled among the traditional hamlets and villages in the countryside of Minangkabau.

Second, the former coal mining operation contains special facilities and installations, and as tourism objects, they can still be used for supporting facilities in the mining-based tourism activities. Other interesting facilities, such as the road and railway network, railway station, hospital, and freshwater infrastructure can be adapted to be re-used and developed for tourism activities.

Third, the long history of the coal mining operation can be one of the reasons to establish a training center for coal mining research and exploration. This can be implemented through re-utilization of existing colonial buildings and historic sites within and in the surrounding areas of Sawahlunto.

Fourth, certain socio-historical events with international implications also took place in Sawahlunto. Several prominent reformers and politicians in the Indonesian independent movement came from Sawahlunto and its surrounding area, such as M.Yamin, Adinegoro, Soedjatmoko and others. Apart from the history of the coal mining operation itself, the origin of these national heroes also contributes to the importance of Sawahlunto (Asoka et al., 2005).

Mining-based tourism is an endeavor to investigate and reconstruct past mining activities; the imagination of the past provides inspiration for the future. All the mining artifacts are significant tools in the education process that will give meaning to the past and enrich the present and future life. However, mining tourism in Indonesia is a new activity; it is unlike recreational tourism influenced and dominated by consumerism and attracting a large flow of visitors. Mining-based tourism has a more specific characteristic. It focuses on education and broadening knowledge, which presently does not attract large audiences or interested parties and in Indonesia is quite unknown and unpopular. In the Sawahlunto 2020 development strategy, the vision of mining-based tourism deals mainly with the efforts and innovations to enrich
the realm of tourism activities in Indonesia. Several important buildings and sites within the Sawahlunto old city will be integrated into the revitalization scheme to support mining-based tourism:

a. Coal mining sites, including the open pit / surface and underground mining. The former underground mining tunnel installation has been improved. Open pit or coal surface mining (mostly around Sawahlunto), including the old tunnels and shafts, will be designed either as artificial lakes or mining landscape parks for future supporting recreational activities in the long term.

b. The coal processing plant where previously coal was selected, washed and processed.

c. The infrastructure for coal transportation, such as the historic railway station of Sawahlunto, an 835m railway tunnel. The Dutch built a 155.5km long railroad network passing through Padang Pariaman, Padang Panjang, and Solok, the 3 cities in Anai Valley (Lembah Anai). This railroad was the main connecting system from Sawahlunto to Emma Haven, presently Teluk Bayur Seaport. Cf. Zed, 2001, pp. 56ff and see also “Sawahlunto, Coal and Country Railroad”. http://m.kompasiana.com/?act=r&id=84953 (March 28, 2010), connecting Sawahlunto to a nearby small village, and the loading/ unloading site.

d. Socio-cultural products of mining activities, such as tools, machineries, buildings and other supporting facilities (Goedang Ransoem), labor lodgings, Société building etc. The socio-cultural products consists of physical evidences (building and constructions) and traditions in the form of arts and crafts. As one can recognize, the settlement pattern and architectural style of the buildings were designed with the finer Western values and tastes of the colonial coal mining company. Certain traditions were basically a mixed of diverse cultural backgrounds in from the East Netherlands Indies, introduced and developed by the coal mine workers and/ or hard labour, which came from all parts of the archipelago. The political struggle by of coal miners against the colonial power was also a part of the socio-political dynamics within the context of the historical development of Sawahlunto.

Endeavors to introduce tourism activities and conservation can be conceived as a mechanism to appreciate the uniqueness and particularities of coal mining activities in Sawahlunto. In general, every town reveals its specific characteristics, natural or man-made. Askew and Logan (Logan, 2002) emphasized that urban history should reveal the interplay and relationship between local and foreign cultures, which was intertwined and contested overtime. The ritual relations between people and their natural environment will reveal particular structures or patterns. In human civilization, the term “environment” includes norms, values, regulatory aspects, and everything that has been self-organized. This is popularly called “tradition” and refers to the ability of self-organization and self-authority. However, the current situation in urban Indonesia reveals that there is still a lack of administrative “tradition” and institutional development. In order to reach tourism development goals in Sawahlunto, empowering local institutional to self-organize is imperative.

5.1 Conservation of Buildings and Sites

The typo-morphological structure of the Sawahlunto old town was undeniably defined by its geographical situation, yet current conservation has remained focused on preserving certain individual buildings or structures. In the course of conservation efforts, an inventory of significant buildings was accomplished in 2002. The local municipality was also granted by the Ministry of Public Works in Jakarta, a 2 year-programme on revitalization i.e. Technical Advices on Revitalization Programme 2005 and 2006 (see report on Revitalisasi Kota Lama Sawahlunto, Ditjen Kotdes Wilayah Barat, Departemen Kimpraswil, July 2005). Historic buildings and sites in Sawahlunto can be classified into groups of buildings and ensembles as well as individual buildings or structures. However, there is neither sufficient know-how nor concern for area-based conservation. Most significant urban assets and architectural ensembles. Among them are the Sociëteit building (cultural centre of Sawahlunto), the museum of Goedang Ransoem, the 70m old chimney of the former power house (centraal electric), which had been transformed into a mosque minaret, the workers’ housing, and houses for the higher rank dutch employee, which have unique architectural style. In Sawahlunto can still be experienced today, including mining and industrial installations, such as the sizing plant, power plant, mining tunnels to name a few - examples of the heyday of the coal mining activities (Figure 3). However, they have not been integrated into the revitalization scheme due to limited finances. The local municipality has given
financial support for rehabilitation work on building facades, a respectable start. To some extent, it could encourage public awareness and interest in further conservation activities.

The related issue on damages caused by new “uncontrolled” development refers to buildings and/or sites. Those due to inappropriate development are often in danger of destruction. This discussion is relevant to the idea of area-based conservation policies. The urban setting has a strong coherence and maintains and enhances the unique character of a place. The old town quarter of Sawahlunto underwent significant changes in the beginning of 1980s when the mining facilities were improved. Several new public facilities and physical improvements in the town were constructed, such as a new bus terminal, a market building, and shop houses. The new facilities were erected without ecological concern or consideration for urban context. Shop houses were erected partly above the river-bed, not only unfitnessingly placed, but blocking the view to the river (Figure 4). As previously mentioned, the river Batang Ombilin is one of the most important urban elements in the Sawahlunto old town. In the past, the river was used for rice field irrigation and to produce electricity for the mining industry. Environmental degradation and deforestation in the surrounding hills of Sawahlunto has excessively increased the water debit overtime. Furthermore, some historically valuable buildings with strong influences of Indisch Architecture have been poorly modified and suffer from informal additions. The new buildings were superficially designed and constructed in a more regional architectural spirit. In short, instead of having a more critical position on local issues, the new infill was not sensitive to local environmental context. These inappropriate developments resulted in visual distraction and disorder, in which the context and unity of the historic fabric were put in danger of destruction (Figure 5). A more careful examination on development activities, including new productive uses, development impact assessment, building control, conservation guidelines and other guidelines are necessary. Moreover, the conservation of buildings and sites must be integrated into a broadened revitalization scheme, which must also be in the interest of Sawahlunto’s development policy as a unique mining-based tourism destination in Indonesia.

Figure 3: The worker settlement (left) and the old mining tunnel Mbah Suro (right) (Source: Martokusumo, August-December 2007)
5.2 Greenery and Public Open Space

The critical issue of green open space has been raised in recent years. According to the National Regulation (UU Tata Ruang 26/2007), the ideal green open space in urban areas should meet the minimum requirement of 30% of the respective areas. In Sawahlunto the greenery in the surrounding areas has considerably decreased during the last few decades due to deforestation and expansion of new settlements. Another striking problem is illegal coal mining activities, which are a serious threat to the surrounding landscape. Illegal activities have caused many accidents and environmental damage. Additionally, the old historic town of Sawahlunto is surrounded by extremely steep hills, which recently have been vulnerable to landslides. The surrounding landscape has shaped the specific character of Sawahlunto, however, due to a lack of comprehensive understanding and development control, attempts to protect the beautiful landscape have been in vain. A more realistic and integrated action in landscape protection will have to be a common interest of the inhabitants of Sawahlunto. Both the natural and man-made elements of Sawahlunto are of historical, socio-cultural and ecological significance as cultural landscapes.

Public space improvements, such as the pedestrian path in the old city of Sawahlunto (cf. Rencana Kota Wisata Tambang Sawahlunto, 2001.), address the concern for creating lively urban spaces and are included in the Tourism Plan Sawahlunto. An urban plaza formerly owned by the mining company PT. BA-UPO has recently been transformed into a public space, and this is the most successful place in the town for social gathering and public events during the weekends (Figure 6). Some sidewalk repairs have been completed connecting major historic buildings and sites in the old town. However, the pedestrian sidewalk does not meet the requirements

Figure 4: The shop houses above the river (Source: Martokusumo, August 2007)

Figure 5: Tourist information office, kitsch architecture in Sawahlunto (Source: Martokusumo, July 2009)

Figure 6: The urban plaza in front of the former head office of the mining company (Source: Martokusumo, August 2007)
5.3 Tourism Development Strategy

Recent trends in tourism have indicated a need for a more comprehensive heritage management in Sawahlunto. In tourism, competitiveness of a place can be determined by the uniqueness of the locality, (See Gunawan, 2004, pp. 15-16) such as historical buildings and sites, socio-cultural associated activities, and the beauty of the natural landscape. In general, the success in establishing and promoting tourism business will be based on the sensitive utilization of cultural products and their associated attributes. Sawahlunto, with its unique socio-cultural development and its long historical background, has the possibility to take a further step in the development of cultural associated tourism as a critical reconsideration of the trend in mass-consumption tourism, such as the Water Boom project in Muaro Kalaban. The city of Sawahlunto must first be attractive to its inhabitants, then offered for visitors to experience the distinctiveness of the town. Urban development should accommodate tourism while meeting the requirements of a vibrant living environment for Sawahlunto inhabitants.

Another relevant fact is that people stay in Sawahlunto only during working days, and on weekends the town is left idle as most of the civil servants spend the weekends with their families in Bukittinggi, Padang, Solok and in the surrounding small towns. To increase place attachment, Sawahlunto must be first provided with basic urban amenities for its inhabitants, so that in the near future the town will be ready to receive domestic and international tourists and visitors. The development policy must improve the urban quality of Sawahlunto and surroundings. The quality of urban Sawahlunto together with its attractiveness and charms are designated to be the major point of interest and object for the coming “Sawahlunto 2020: A cultural Mining-based Tourism City”.

Basically, urban quality improvements and tourism promotional efforts are inter-connected. Better standard tourism business facilities such as hotels, home-stays, restaurants and recreational spots, together with high quality management of tourism activities, such as programs, destinations and events are necessary. An interesting urban area is always a good, lively and well-animated place; it is imperative to create a more vibrant living environment rather than just a beautiful space (Figure 7). A self-sustaining city is more important than projects that would not be long lasting. Again, the short-term strategy in physical improvement is only the first step in a revitalization scheme and should be followed by a long-term strategy based on economic and social rehabilitation. To summarize, the municipality of Sawahlunto now faces the larger challenge of heritage management.

6. CONCLUSION

This paper discussed the conservation approach in relation to the revitalization of Sawahlunto, a former coal-mining city in West Sumatera. With its unique socio-cultural development and long historical background, driven by mining explorations from the 19th century until the 2000s, Sawahlunto made significant contributions to the development of a railway network connecting Padang-Sawahlunto and the seaport, Emma Haven, now Teluk Bayur, and the first cement factory in the Netherlands-Indies - Padang Cement Industry Indarung. The latest development policy has designated Sawahlunto as a coal mining-based Tourism City in West Sumatra. The utilization of urban fabric includes colonial architecture, mining artifacts with their special installations and specific local urban landscape elements and all socio-cultural associated traditions and events, which shaped the distinct character of Sawahlunto. Urban history should be promoted in such a way that all of the layers of foreign, colonial influences are revealed. Endeavors to introduce mining-associated tourism activities are supported by a conservation approach; it could be conceived as the mechanism to interpret the uniqueness and particularities of the past coal mining activities in Sawahlunto. Nonetheless, the conservation approach in the revitalization scheme has been criticized. The on-going practice of preserving individual buildings and structures is limited to the beautification of building facades. A more sensitive understanding of the structure of the city is still needed, and the physical improvements must take the urban context and ecological concerns into account. Hence, a more critical look on aesthetics, functionality, future needs and economic viability is a necessity in developing a future development policy.
Furthermore, improvement activities should increase the quality of urban space in order to create a vibrant environment. In addition to creating a place, comfortable and favorable for visitors, a home for the inhabitants of Sawahlunto must be made as well. Thus, architecture, with its embedded cultural meanings, should enrich a more conscious human civilization for the present and future by conserving not only the urban fabric, but also the relationship between people and their living environment.

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