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## **THE RISE AND FALL OF A FORMER MINING TOWN SAWAHLUNTO: REFLECTIONS ON AUTHENTICITY AND ARCHITECTURAL CONSERVATION**

*Sawahlunto, a former coal-mining town, established in the late 19<sup>th</sup> century, has undergone several structural changes since the introduction of urban development policy, from mining-based into tourism-based economic activity, in 2002. Along with the increasing environmental problems, such a newly defined urban vision resulted in some challenges on heritage conservation.*

*Revitalisation with conservation efforts has been a priority to maintain the dynamic of the ex-coal mining town. Cultural heritage conservation by utilising urban fabrics and mining-related installation, has been criticised due to its beautification process. The new insight about urban heritage has brought new approaches to urban conservation in recent decades. In fact, architectural conservation is not simply a matter of preserving and creating harmonious constellation between historic fabrics and new infill developments, but rather a continuing project in shaping the environment.*

*This paper discusses the latest practices of architectural conservation in Sawahlunto in relation to the efforts of promoting the ex-coal mining town as the oldest industrial site in Southeast Asia. It argues the importance of the making of interesting and liveable urban quarters that guarantee social, cultural and environmental sustainability. The case of Sawahlunto unveils also the relationships between physical intervention, rehabilitation of socio-economic activities and the problem of institutional development, which are often overlooked due to accompanying conflicting interests. Besides a strong political leadership, critically defined interventions on architectural conservation lead to an afterthought of the notions on fabric-based approach, which significantly influences the current conservation praxis especially on the concept of authenticity.*

## Introduction: Sawahlunto, Cultural Layers and Industrial Heritage

Sawahlunto, a former coal-mining town, was established in the late 19<sup>th</sup> century. As reported, exploration and mining reached its heyday in the 1930s when the city had 30,000 inhabitants, of which 550 were Europeans.<sup>1</sup> Due to the vast coal mining operation, Sawahlunto was also called in the local language as 'Kota Arang', which means coal town. Since then, Sawahlunto with its landscape has undergone structural changes since the introduction of urban development policy, from mining-based into tourism-based economic activity, in 2002.<sup>2</sup> The development shift was stipulated in the Local Regulation (*Perda 6 tahun 2003*). Soon after its last coal production, a socio-economic development initiative, as part of the new vision, was undertaken to sustain Sawahlunto during the ambitious awakening period of 2003-2013. The objective was the transformation from mining-based to tourism-based economic activity.

In accordance with the political course in executing a mining-based tourism for Sawahlunto, physical interventions had been developed and implemented, which were based upon the spirit of heritage protection. The newly defined urban vision led to some challenges, especially on heritage conservation efforts. Meanwhile the utilisation of historic structures has been triggered through the growing discussion on cultural heritage management and future urban development over the last three decades.<sup>3</sup> However, the upgrading and improvement scheme resulted in destruction of the historic urban assets. Buildings with strong influences of colonial or 'Indisch Architecture' have been poorly modified and added with banal artificial elements of local building attributes. Instead of having a more critical position on local issues, the new interventions had been dominated by the beautification motive, and were based neither on rational of locality nor environmental context.<sup>4</sup> Despite the loss of significance, these inappropriate developments resulted in visual distraction and disorder, in which the context and unity of the vital fabric were certainly in danger of destruction.<sup>5</sup> Moreover, this has addressed also the issue on authenticity of historic fabrics in the practices of architectural conservation. In many cases, the concept of authenticity has still been interpreted with fabric-based or stylistic approach, which is traditionally predicated on preserving the fabric rather than conserving the meanings and values associated with the object.<sup>6</sup>

As a matter of fact, Western influences on built forms in most countries of Asia, basically came about directly through the colonialisation.<sup>7</sup> Noting Logan, van Oers also argues that cultural layering is a common attribute of most Asian cities, and all of these layering are significant, since they reveal stories about stages in spatial production and societies.<sup>8</sup> Due to its distinct character, the mutual heritage of Sawahlunto has been set up by a mix of two different building traditions and regional context, i.e. European and regional imperatives. Undoubtedly, in Sawahlunto the legacy of the past -as mutual heritage- can still be recognised through its urban fabrics, including the coal mining sites, colliery and processing units, infrastructures, socio-cultural products and constructs of mining activities, and mining associated heritage from the colonial period.

Unlike the other historic sites in Indonesia, Sawahlunto represents a unique typology of cultural heritage, i.e. industrial heritage.<sup>9</sup> Industrial heritage is one of the least well-known forms of heritage because "its value is not based on its artistic importance, but rather on its value as a witness of an industrial process which has changed society".<sup>10</sup> Industrial heritage represents the continuing processes of change and expresses "the physical and symbolic effects of successive human actions on nature".<sup>11</sup> Thus, it deals with a less glorious, less glamorous version of the past, often belonging to workers rather than the rich and famous.<sup>12</sup> Thus, the richness of urban history of Sawahlunto with its local-indigenous cultures and foreign colonial influences, i.e. mutual heritage, will contribute not only to the remaking of Sawahlunto as a tourist destination, but also to foster the existence of industrial heritage in Indonesia.<sup>13</sup>

This paper will highlight the latest practices of architectural conservation in Sawahlunto in relation to the efforts of promoting the ex-coal mining city as an emerging industrial heritage site in Indonesia.<sup>14</sup> The discussion confirms that historic fabrics contribute considerably in place making, in enriching the quality of a place and offer opportunities for cultural appreciation due to the specific character of industrial heritage *per se*. Regardless of the architectural style

of the building, to establish a morphological connection between the new infill and the existing urban tissue without demolishing the existing old building/structure has been doubtful. Despite the lack of political will, integrating and adjusting the historic structure with new development needs must be regulated by sensitive urban development scheme. Moreover, the lack of planning/development tool, such as urban design guidelines, and attitude toward heritage had jeopardised the existing historic fabrics.

### **Sawahlunto: The ex-coal Mining Town and the Notions on Revitalisation**

Sawahlunto, known as *Kota Arang* (coal town), is geographically located in the heart of *Bukit Barisan* Mountains, in the province of West Sumatera, in a basin, about 250-260 metres above sea level. It is located 95 kilometres away or about three hours drive from Padang, the capital city of West Sumatera.<sup>15</sup> Undeniably, the structure of the Sawahlunto old town was typo-morphologically defined by its geographical condition. The surrounding landscape has shaped the specific character of Sawahlunto. In all, both the natural and man-made elements of Sawahlunto are historical, socio-cultural and ecological significance as cultural landscape. The ex-coal town has a population of 59,608 (2014) with population density 215.66 people/km<sup>2</sup> (2013) in an area of 273.45 km<sup>2</sup>.<sup>16</sup> Before the city expansion in 1990, the administrative boundary of Sawahlunto was merely 7.79 km<sup>2</sup>. Today, Sawahlunto consists of four administrative districts, i.e. Barangin, Lembah Segar, Talawi and Silungkang. (Fig. 1 and Fig. 2)

Historically, Sawahlunto's urban development has been inseparable with the whole coal mining and industrial associated activities in West Sumatera, which began in 1887. Despite the relatively short period of mining activities (industrial culture), the historical traces of industrial revolution in Europe can be recognised in Sawahlunto, especially through the mining artefacts, architecture and urban fabrics.<sup>17</sup> The mining undertakings in Sawahlunto led to the establishment of the first cement factory in the Netherland-Indie in the early of 20th century, i.e. "Padang Portland Cement Maatschappij" (now Padang Cement Industry "Indarung") and the well-known Teluk Bayur ("Emma Haven") seaport in Padang, including the establishment of railway network (connecting Padang-Sawahlunto and the seaport) in 1894.<sup>18</sup> Through the existence of mining activity, several noteworthy developments had been triggered, stimulated and established in the greater area of West Sumatera. Soon, after World War II was over, the mining operations were taken over by the national government (the young republic of Indonesian) until its final production in 2000.<sup>19</sup>

Since 2000, the new development policy has been partially implemented, as formulated in the vision and mission of Sawahlunto 2020. As stated, Sawahlunto had economically been dependent on mining since its early formation. After the decline of the mining, tourism had been considered as an important economic generator.<sup>20</sup> In its development strategy, the vision of mining-based tourism deals mainly with the efforts and innovations to foster tourism. In relation with that, some certain significance locus attempt to work against the effects of a process of industrial, demographic and social falling-off by taking advantage of their forgotten past and its potential as a tourist attraction in the face of widening cultural and recreational interests. In sum, all those attempts are basically to revitalize Sawahlunto. Thus, the municipality has initiated revitalisation as a priority to maintain the dynamic of the ex-coal mining town.<sup>21</sup> As part of the new policy, the revitalisation programmes, which their underlying concept are based upon conservation approach, deal with the utilisation of a number of urban fabrics and mining-related installations (adaptive re-use).

It was during the strong leadership of Amran Nur, the mayor of Sawahlunto in the period of 2003-2013, that socio-economic development had explicitly been one of the important undertakings.<sup>22</sup> Several important physical interventions for historic fabrics had been accomplished, which were mostly concentrated in objects and buildings in the old town. This is understandable, since the old town serves as a locus of valuable historic buildings and sites, which are considered as sufficient to increase its attractiveness and interests to visitors.

The existence of most significant urban assets and architectural establishments in Sawahlunto can still be experienced today. Besides the coal mining sites, colliery, the infrastructure for coal transportation, socio-cultural products and constructs of mining activities in Sawahlunto had been integrated into the revitalisation programmes to support mining-based tourism. Those programmes included transformation of a 70m old chimney of the former power house as a mosque minaret, rehabilitation of the back-to-back residential quarter, and houses for the higher rank employee with their unique architectural style, and other restoration of supporting facilities, such as public Kitchen (*Gudang Ransum*), *Societet* building (former cultural centre of Sawahlunto) etc.<sup>23</sup> In relation to vision of mining-based tourism, new buildings and facilities have also been built to accommodate new tourism-associated uses.

The socio-cultural products and constructs of mining activities had already been well established for decades. The socio-cultural product consists of physical evidences (building and constructions) and traditions in the form of arts and crafts. As one can recognise, the settlement pattern and architectural style of the buildings were designed after the western value and taste of the colonial coal mining company. Certain traditions were basically a mix of diverse cultural backgrounds in the East Indies (now Indonesia), introduced and developed by the coalmine workers and/or hard labour, which came from all parts of the archipelago.



FIGURE 1 Sawahlunto and Padang, the capital city of West Sumatera province. Source: After Martokusumo, 2010.

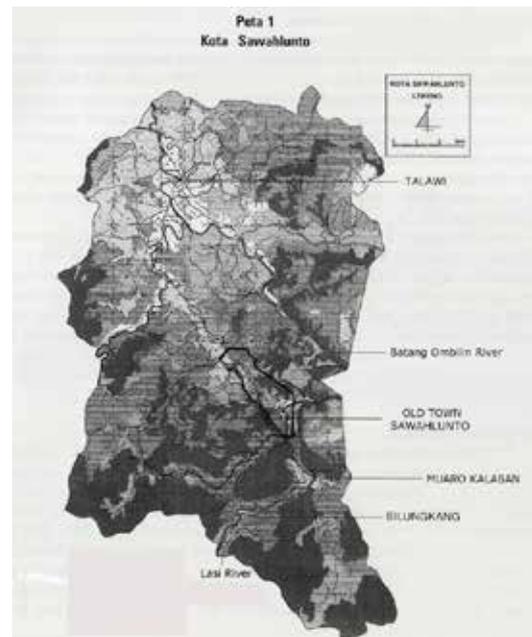


FIGURE 2 The old town Sawahlunto (779 ha) and the expansion of new administrative area in 1990 (27,344 ha). Source: Sawahlunto 2020 (Kuswartojo, 2001).



FIGURE 3 The proposal of conceptual development for the colonial ex-coal mining town Sawahlunto. Source: Redrawn after Sawahlunto 2020 (Kuswartojo, 2001).

Nevertheless, not all interventions had contributed to the improvement of urban physical quality. The interventions had been focused on single objects or structure; there has been no intervention that links the historic structures/buildings to its morphological context.

Due to the fact that not all strategic activities could be implemented, conservation activities have consequently been criticised for its focus on the beautification process. It is acknowledged that there has been a critical lack of understanding on design intervention in historic urban context. Furthermore, there is neither sufficient know-how nor concern for area-based conservation. Until today, conservation has remained focused on preserving certain individual building or structure.<sup>24</sup>

### **The Remnants of Industrial Heritage**

Industrial heritage consists of the remains of industrial culture, which are of historical, technological, social, architectural or scientific value. These remains consist of buildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouses and stores, places where energy is generated, transmitted and used, transport and all its infrastructure, as well as places used for social activities related to industry such as housing, religious worship or education.

(The International Committee for the Conservation of the Industrial Heritage  
- TICCIH, 2003 The Nizhny Tagil Charter for the industrial heritage)

Industrial heritage is not so popular compared to other forms of heritage, and it addresses a less glorious, less glamorous version of the past, often belonging to workers rather than the rich and famous. As one can argue, industrial heritage and its traces on the territory have become new cultural assets and could play an important role in terms of an active resource in fostering sustainable development programs on a local and regional scale. These cultural assets are usually embedded in a particular landscape that makes it gradually essential to interpret heritage not as an isolated element but within its territorial context. Industrial heritage, with vulnerable and fragile elements, should be viewed as a new cultural asset represented and interpreted through an updated, integrated and scientific reading. As declared, the value of industrial heritage resides not so much in its economic, technical, social or aesthetic values but in the fact that it is history and space, history and society, history and technique; ultimately a social space plus territory.

Having laid out the context in which heritage conservation gained prominence in recent debates on urban development, this paper highlights the case that Sawahlunto also divulges conservation practices and perspectives for industrial heritage in Indonesia, which have so far received less attention in heritage management and national development policy. Obviously, Sawahlunto was transformed into a mining town during the 19th century by the influence of global industrial revolution development. As the earliest colliery site in Southeast Asia, Sawahlunto represents a stage in the evolution of world collieries, particularly the expansion of the European colliery industry to the eastern part of the world.<sup>25</sup>

### **The Infill of Info Box and Old Tunnel *Mbah Suro***

Following the formulation of tourism-based economy, the municipality of Sawahlunto has correspondingly built several tourism-associated facilities, including the Info Box. The temporary and moveable red building of Berlin's Info Box, which was designed by Schumacher and Schneider Architects, conceptually inspired the building of Info Box in Sawahlunto.<sup>26</sup> This Tourist Information Centre (TIC) in Sawahlunto - after the case of Berlin's Info Box - shall also provide information about the ex-coal mining town. Inside the two-storey building there are some facilities, such as a gallery, displaying all the historical development of the mining exploration in Sawahlunto and its surrounding areas, and an information centre for visitors. Besides, near to this TIC building, there is a memorial sculpture of the mining activities in the past and an original old tunnel (*Lubang Mbah Suro*), which serves as the main attraction of the area.

With a different context and purpose the new building mass was banally built after Berlin's Info Box. Moreover, it replaced the existing historic gathering house for the workers' association, which once had the associational link with the social life of the mining's worker. Regardless of the kitsch architecture style of the T.I.C., the demolition of the old fabric was then considered as inappropriate and insensitive towards the socio-cultural legacy. Inappropriate implementation of new architecture into the well-contested old structure has been considered as one of the problems in regard to architectural conservation. (Figure 4a and Figure 4b) Until today, the engagement with protected historic buildings, especially the integration of historic fabric into a new development scheme, has often led to vehement debate. As elsewhere the author has argued, this will be politically sensitive, if the object is related to the colonial legacy and associated with a certain ethnic minority group.<sup>27</sup> Moreover, it is to confirm that - despite the architectural expression and/or style of the new building - to establish a morphological connection between the new infill and urban tissue without demolishing one of the important existing mining-associated facilities has been dubious. To some extent, this demonstrates also the need to critically understand the nexus between new building and its morphological context.



FIGURE 4a The former gathering house for the workers’ association, due to its historical criterion could be valued socially and culturally of significance (left). It was demolished in 2007 to give space for the new Tourist Information Office with its kitsch architecture (right). Source: Martokusumo, 2007 (left) and Martokusumo, 2012 (right)



FIGURE 4b The gate of the rehabilitated old tunnel Mbah Suro (left) and the memorial sculpture of mining activity in Sawahlunto (right). Source: Martokusumo 2012, (Left) and Martokusumo, 2009 (right)

**The Morphological Change: Back-to-Back Detached Worker’s Housing**

In general, the typology of the back-to-back housing reminds us to the history of the housing in England during the period of industrial revolution. Houses of this type became common in inner city areas of Victorian England, especially in Birmingham, Bradford, Leeds, Liverpool, Manchester, and Nottingham. Usually of low quality (sometimes with only two rooms, one on each floor) and high density, the back-to-back house were built for working class people and because three of the four walls of the house were shared with other buildings and therefore contained no doors or windows, back-to-back houses were notoriously ill-lit and poorly ventilated and sanitation was of a low standard.

Near to the Info Box/T.I.C., there is a residential quarter, which was dedicated to the middle rank mining staff. The staff’s residential quarter consists of seven rows of detached back-to-back houses, and therefore each couple of houses has no rear yard. According to the socio-cultural and historical aspects, this kind of residential quarter is considered unique, since it is a representative of a house typology in the period of the mining activities. In each row there are terraced houses, each of which consists of two units, and between each terraced house there was an open space, i.e. a set back. (Figure 5a and Figure 5b)

During the revitalisation programme, there had been financial support from the municipality to upgrade and rehabilitate the residential quarter. Thus, the intervention, which had been top-down regulated, dealt with the old historic terraced houses and the improvement of the street within the residential quarter. Nevertheless, the repairs were neither based

upon any architectural guidelines nor any heritage sensitive design directives. The original architectural style of the terraced house was not restored. It was no wonder, since the repair was mostly handed to the individuals/house owners, which in many cases do not possess sufficient know-how. As the most basic and important principle, authenticity, which is the “real history” of a place, was not taken into account in informing the aesthetic decisions in such revitalisation programme.<sup>28</sup> Moreover, authenticity is still traditionally based on preserving the fabric rather than conserving the meanings and values associated with the object.

Eventually, the upgrading was mainly focused on beautification; a more comprehensive intervention in term of increasing the quality as specific residential quarter with socio-cultural of significance had still left many questions. Despite the endeavours to protect this unique typology of such class-based residential, uncontrolled modifications and improvements has led to destruction of the significance value. Meanwhile, due to the increasing demand of housing stock, the open space was eventually built up. A great number of the existing old terraced house has respectively undergone major physical changes, and only a few of them are still in original condition. Furthermore, a significant change in the morphological structure of the residential area cannot be overlooked.



FIGURE 5a The aerial view of the ex-coal mining town Sawahlunto (left), the residential quarter, in which the white parts indicate new infill between existing terraced houses. A change in morphological structure has taken place, from the detached house/open building type to a linear housing/closed building type (right). Source: Martokusumo, 2012.



FIGURE 5b The original house with some minor changes, the arch at the façade indicates the opening to the units (left). The open space between the terraced houses has recently been filled up by new structure (right). Obviously, this has resulted in a new morphological structure, which affected the context of the original morphology. Source: Martokusumo, 2012.

**The Gudang Ransum Museum**

The *Gudang Ransum* Museum was an example of an adaptive use project, which had been initiated and carried out by the municipality in the initial years of the implementation of the new urban vision and mission. In the colonial period, as part of mining supporting facilities, the museum building was functionally used as a public kitchen that provided meals for the mining workers and patients of the hospital of Sawahlunto.

After the Indonesian independence in 1945, the main building, which was built in 1918, had been once used as office of the mining company. From 1960-70 the former public kitchen was then utilised as a junior high school. The same building was partly used until 1980 as worker residential of the Ombilin state-owned Mining Company, and then was squatted by the locals until 2004. Shortly before the closure of the mining activities, the area of *Gudang Ransum* had already been squatted, and some facilities were even misused as a temporary housing due to lack of regulation and control. Again, due to decades of negligence, some of the historic facilities of *Gudang Ransum* were in a great number derelict and deteriorated. This is understandable, since the facilities were used to be under the authority of mining company. As the transition took place, such facilities were not immediately taken over to the municipality of Sawahlunto. (Figure 6a and Figure 6b)

Through intensive negotiations, the squatters could be relocated. The complex of the public kitchen was cleared up, and also the other supporting facilities were rehabilitated in the period of 2004-5. The main building/the former kitchen was restored to its original condition and through an adaptive-reuse scheme was eventually transformed to accommodate new uses as a museum that was inaugurated as a *Gudang Ransum* Museum in 2005.

After the completion of the revitalisation programme, the museum became one of the most interesting spots in Sawahlunto, and together with other facilities, such as the old chimney, steam generator, warehouses etc., the museum serves as the main attraction in the complex. In conjunction with the theme of the facility food supply mechanism, services/support for mining activities and mining-associated tools and appliances are displayed. Other facilities, such as former warehouses with their unique architectural styles are used as exhibition venues, auditorium, museum office, interactive science gallery, and services/supporting uses. Meanwhile, the open space between buildings in the complex of *Gudang Ransum* is used for cultural activities.

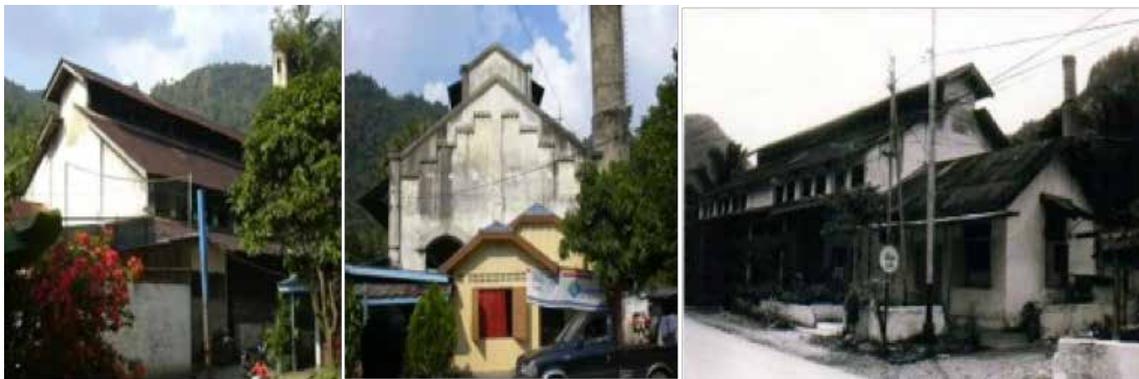


FIGURE 6a The area *Gudang Ransum* before intervention/revitalisation programme. Source: Planning Authority Board (Bappeda) Sawahlunto, April 2015.



FIGURE 6b The area *Gudang Ransum* after the intervention/revitalisation programme. Source: Planning Authority Board (Bappeda) Sawahlunto, 2015 (far left), and Martokusumo, 2012 (middle and right).

### **Urban Heritage: Between Architectural Conservation and Modernisation**

Architectural conservation will always be challenging and very specific according to the fabric and its time. As the history of conservation provides an array of certain patterns of solution, in which such variety ultimately emphasises that there is no single one can claim to have the sole validity. Each problem and place might be specific, and thus the case of Sawahlunto through its findings will confirm several notions as follows: First, the practice of conservation has been characterised by the understanding of heritage's notions. Within the cases of Sawahlunto, this deals with the questions; why and how a new structure should be inserted into the existing of fabric? And furthermore, this highlights the question to what extent existing buildings should or could be utilised, for the sake of conservation? Is there any relationship between the morphological structure with the architectural style or expression of the new infill, as exposed in Sawahlunto. All of these have put forward a further contention on how new (infill) building will be determined by specific localities, such as regional imperatives. If modernisation is merely perceived as a novelty in material fabric, as often would be the rule in the fabric-based approach (Western tradition), thus one can argue, that circumstance is revealed by the case of the Info Box/Lubang *Mbah Suro*.

Secondly, it is part of the current realities that due to poverty alleviation and the provision of new housing, transport, other infrastructure works and other social needs, conserving the legacy of the past may consequently seem a strange objective for a developing country. Following this, cultural heritage conservation, in the sense of historic structures/buildings, sites and ruins, may still take lower priority. A comprehensive understanding of an area-based conservation has not been implemented, and this highlights an essential absent of nexus between the fabrics and its surrounding structure. Thus, the case of the back-to-back residential quarter of Sawahlunto demonstrates such reality.

Thirdly, in recent years, despite the loss of cultural heritage as a result of uncritical revitalisation or uncontrolled redevelopment of the urban fabric is becoming a serious concern to various fast growing cities in term of sustainable development.<sup>29</sup> As mentioned, cultural heritage is also part of the regional resources that must be taken into account in the framework of sustainable development.<sup>30</sup> Albeit industrial heritage is to some extent considered as less glorious, and tends to be part of a certain working class of a certain periods of time, the significance of such fabric could not only be scientific, technological, but also social, cultural and political of importance. Industrial heritage in forms of factories, collieries and mining-associated facilities will surely contribute values of importance in the historical development of the ex-coal mining town Sawahlunto.<sup>31</sup>

### **Concluding Remarks**

The case of Sawahlunto unveils the relationships between physical intervention, rehabilitation of socio-economic activities and the problem of institutional development, which are often overlooked due to accompanying conflicting interests. Besides a strong political leadership, critical defined interventions on architectural conservation lead to an afterthought of the notions on fabric-based approach, which significantly influences the current conservation praxis especially on the concept of authenticity.

As a unique industrial site in Southeast Asia, Sawahlunto offers different perspectives in cultural heritage conservation, especially in the increasing topic of industrial heritage. Improvements have been carried out in Sawahlunto, in terms of preservation of a number of important key buildings/structures. On the other hand, unfortunately, a loss of certain architectural features and historic structures has also been indicated. It will have always be a challenge that future urban developments will bring improvement in terms of the quality of urban life. The quality of urban life is considered as one of the important sustainable development dimensions. At least, the practices of architectural conservation in Sawahlunto have raised significant discourses and public awareness, including endeavours to set up a proposal for the first Indonesian coal mining town as World Heritage City.<sup>32</sup>

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## Endnotes

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- 19 After lasting for more than a century, the coal mining operation in Sawahlunto was officially closed in 1998. The railway, serving the route from and to Sawahlunto, stopped its operation in 2002 too. See "Sawahlunto, Coal and Country Railroad". [http://www.kompasiana.com/rob/sawahlunto-coal-and-country-railroad\\_54ff8667a333115050510093](http://www.kompasiana.com/rob/sawahlunto-coal-and-country-railroad_54ff8667a333115050510093) (February 29, 2016).
- 20 Tjuk Kuswantojo, *Sawahlunto 2020, Agenda mewujudkan Kota Wisata Tambang yang Berbudaya*. Bandung: Pemerintah Kota Sawahlunto-L.P.M. I.T.B., 2001.
- 21 Amran Nur. *Managing Sawahlunto as a Cultural and Heritage City*, 2015, [http://www.iora.net/media/160338/3.b\\_indonesiapart2.pdf](http://www.iora.net/media/160338/3.b_indonesiapart2.pdf) (visited 29 February, 2016).
- 22 Nur. *Managing Sawahlunto as a Cultural and Heritage City*, 2015 (visited 29 February, 2016).
- 23 Asoka et al. *Sawahlunto, Dulu, Kini dan Esok*, 166.
- 24 In regard to 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 two year-programme on revitalisation i.e. Technical Advices on Revitalisation Programme 2005 and 2006 (see report on *Revitalisasi Kota Lama Sawahlunto, Ditjen Kotdes Wilayah Barat, Departemen Kimpraswil, July 2005*).

- 25 For further discussion c.f. <http://whc.unesco.org/en/tentativelists/6057> (visited 15 February 2016).
- 26 That red pavilion was built in ca.1998-9 as a temporary structure to provide information about and a viewing station for the construction around Potsdamer Platz, Berlin. Inside the building there are a number of exhibition spaces, a gift and bookstore, and a number of large windows which frame views toward the construction site as the Potsdamer Platz. Today the Info Box is no longer in place, since the pavilion was merely intended to remain until 2005.
- 27 Widjaja Martokusumo. "Urban Heritage and The Modern Project: Critical Notions on Conservation and Heritage Management. A Brief Look at the Case of Jakarta's Kota Tua." *Journal of Southeast Asia Architecture*, 11 (2008): 51-62
- 28 Philip Feifan Xie. *Industrial Heritage Tourism* (Bristol: Channel View Publications, 2016), 89-93.
- 29 Logan, ed., *The Disappearing "Asia" City: Protecting Asia's Urban Heritage in a Globalizing World*, xx-xxi and Subbs, *Time Honoured*, 262-5.
- 30 For further discussion see Widjaja Martokusumo and Denny Zulkaidi. "Some Notes on Area-based Conservation. Lesson Learned from Bandung." In *International Journal of Built Environment and Sustainability I.J.B.E.S.*, 2, no. 2 (2015): 125-30.
- 31 Martokusumo, "Sawahlunto, Perspectives on Industrial Heritage in Indonesia": 3-5.
- 32 Since January 2015 Sawahlunto is already registered on the tentative list of U.N.E.S.C.O. for World Heritage City. Cf. <http://whc.unesco.org/en/tentativelists/6057> (visited 15 February 2016).