Social sustainability indicators in kampung; dialogue between Ibn Khaldun’s Tamadun concepts and sustainable developments approaches

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Abstract. Kampung, has judge to unsustain, and vulnerable settlement as it commonly inhabit by poor and disadvantage residents with lack of access to basic infrastructure. However, there is a considerable beliefs, that kampung in Indonesia settled by it’s community, who contribute important role substantially in the process of their residential development. Kampung known for a solid dwellers who are able to take control their environments, and engage in collective efforts or mutual assistances (gotong royong) to improve their lives. Local communities have their own social systems, social values, and kinship. in 841 the concepts of the social system calls “Tamadun” is generated by the muslim scholar ‘Ibn Khaldun that defining about certain values and kinship that more than blood. ‘Ibn Khaldun invention has a strong islamic background of the society. Indonesia which muslim majority embeded the kind of kinship in the urban settlements name Kampong. This characteristic calls social capital is oftenmore important than the quality of the surrounding environment since it gives dweller the power to sustain themselves. This paper aims to generate what kind of social indicators which can be measured while observing kampung sustainability and its dialogue with the ‘Ibn Khaldun perspectives.

1. Introduction
Kampung, is a term for a residential and settlement area in South East Asia which typically leads to negative guise to majority of urban society, in which kampung generally inhabit by poor and disadvantage residents with lack of access to basic infrastructure. However, kampung has a strong standing for being part of urban history and grows organically based on internal and external carrying capacity. Therefore, despite from it’s deficient quality of urban space but kampung also known with a vigorous relationship with Indonesian culture. Nowadays, kampung which physically becomes a multi dimension residential area where it covers not only physical term of settlement, but also social, economic, and cultural entities [1]. Regarding to that, kampung is seemly to become a place which people can descry an indigineous social-culture pattern ala Indonesia. The development of sporadic and organic urban hamlets makes the quality of the settlement environment declining and new problems in urban area arise.

Kampung, has judge to unsustain, and vulnerable settelement. Since 1969, the notion to conduct a quality improvement program has emerge, and finally manifested by the existence of Kampung
Improvement Program (KIP) begin in 2000, and still running until this moment [2]. The purpose of this program is to improve the quality of the village environment and improve the physical, social, and economic conditions of the population. However, according to Setiawan argue that KIP only alleviate the low physical living conditions of the kampungs, using a minimum of technical and administrative resources. Furthermore, KIP was only focused on an infrastructure upgrading program for kampungs based on the needs of installation and improvement for roads, pathways, water supplies, drainage, and sanitation. This statement implies that the program, in terms of place sustainability, is not a sustaining program [3].

Lack of comprehension in social and economic aspect has been neglected after all this time. In fact, there is a considerable beliefs, that kampung in Indonesia settled by it’s community, who contribute important role substantially in the process of their residential development. As Setiawan stated, kampung represents a dynamic process by which groups of people—mostly the poor—provide their own housing, control their environments, and engage in collective efforts or mutual assistances (gotong royong) to improve their lives [3]. Local communities have their own social systems, social values, and kinship. This characteristic. This social capital is oftenmore important than the quality of the surrounding environment since it gives dweller the power to sustain themselves [4]. The term “rukun” which means social harmony, concordance, or communality and gotong royong (cooperation or sharing burden) has enabled the dwellers to sustain amid the pressure of urbanization and difficulties of inequality of urban areas. Apparently, every neighbourhood, residential area, and district has its particular sense of place which results from its physical and sociological structure and experiential characteristic [5].

Same thing occur in urban kampung, which contains many kind of actions, liveliness and creativity of its occupant [6]. Sense of place is significantly important for every place since it gives identity and a distinctive character to the area. According to Altman & Low, sense of place is a symbolic relationship with the place which is formed by giving emotional or affective meaning to a particular place [7]. This provides the basis of individual’s and group’s understanding to place. The concept of sense place is composed of three components, namely activities, setting of place, and human experience [8]. These interplays is signified as the mutual relationship and harmony between inhabitant activity in a place that gives them the opportunity to experience the community [9]. Hence, gradually, it constructs the attachment to the place and to the community belong to them. This paper aims to proposing the indicator sustainability in the term of social indicator for “Kampung” as a one of unique form of housing and settlement in Indonesia which believe to be the places where inhabits by the people with strong attachment, forming a sustainability in social aspect to manage their environment, eventhough facts and data dominantly categorized kampung to be the residential area with poor environment and bad quality of life. The indicator suggest by this paper expected to be a next consideration in order to improve some action in KIP.

2. Methods
This article is a theoritical review which used a literature review method. The preparation of the article begins by reviewing the literature globally either from books, journals, proceedings paper and other supporting resources, including case studies of social context in the place making process. The issue of generalization in this paper focus on kampung study case.

Conducting a literature review is a means of demonstrating an author’s knowledge about a particular field of study, as in this research author’s aims to generate what indicators can be measured to kampung sustainability in the context of their sociology. The paper analyses how the concept of sustainable development is defined, its principles and objectives, as well as the role and importance of the sociological dimension in creating a model of sustainable development. In order to comprehend those substance, the methods of this article encompass theories, and concept related to the topic to be well comprehend.
3. Discussion and Findings

3.1. Sociological Dimensions of Sustainable Development

Sustainable development is a complex concept that has started with the concern for the environment. In time, it has been enriched with an economic and a social dimension. In the beginning, sustainable development was meant to be the solution to the ecological crisis caused by heavy industrial exploitation of resources and continuous environmental deterioration. Its main goal was to preserve the quality of the environment. At present, the concept of sustainable development also embraces the quality of life both from the economical and the social perspective [7].

Failing to admit the chief role of the “social actors” has had a negative impact on many programmes aimed at sustainable development [10]. The concept of sustainable development in terms of sociology is highly relevant with quality of life. It may be argued that quality of life reflects the social dimension of sustainable development. This does not imply that quality of life is affected by social conditions only. But also quality of life may be affected by economic, social and environmental conditions. Since sustainability implies a balance between environmental, social and economic qualities, policies that seriously decrease an individual’s quality of life can hardly be called sustainable [10]. Sustainable development is linked with the concept of quality of life and pursues three objectives: economic welfare, social stability and environmental protection which explain below:

- Economic welfare aims at generating a maximum income flow through maintaining the capital that has brought benefits;
- Stability of social and cultural systems ensures the human capital that is necessary for any form of development, reducing destructive conflicts;
- Environmental protection – sustainable development aims at preserving the biological and physical stability of natural systems.

The sociologic perspective stresses the fact that the key actors are the human beings, whose social organisation patterns are crucial for the identification of viable solutions to sustainable development problems. The sociological dimension adds at least two sets of elements to sustainable development. In the first place, it provides a number of concepts that help explaining social actions, human relations, the complex forms of social organisation, institutionalised arrangements and culture, motivations, incentives and values that shape man’s attitude towards his fellow creatures and natural resources. In the second place, it provides social methods for the prompt coordination of social actions and acts as a barrier against harmful behaviour, stimulating association, alternative social arrangements and social capital development. Sustainable social development implies avoiding major problems:

- The tensions caused by the major discrepancies between the rich and the poor; a society that is divided after this criterion cannot be stable on the long run
- Forbidding a language or cultural community, an ethnic community or a nation to oppress other communities;
- Systematic inobservance of human rights; history has demonstrated that such cases cause violent political conflicts which are incompatible with sustainable development.

| Sustainable Developments Concepts | Interpretation | Spatial Consequences/ Embodied |
|----------------------------------|----------------|-------------------------------|
| Strong Economic Conditions       | Low disparity between rich and poor; | Viable access to the economic sources for all citizen/community |
|                                 | Low unemployment rate;               | Mixed community (high –middle and low income); |
|                                 | No economic segregation;            | Providing sustain infrastructure to support economic activities. |
|                                 | Income equality;                   |                                              |

Table 1. The Indicator of Sustainable Developments in SDG’s
Sustainable Developments

| Concepts                                      | Interpretation                                      | Spatial Consequences/ Embodied                           |
|----------------------------------------------|-----------------------------------------------------|--------------------------------------------------------|
| Stability of Social and Cultural System      | Minimum of social segregation;                     | Racial/ social balance in geography areas to encouraging communications; |
|                                              | - Minimum of social                                 | Access to public and semi private space to conduct and encouraging communications; |
|                                              |  - Segregation;                                     | Access to working nearby;                              |
|                                              | - Sustaining high rate of literacy;                 | Creating sense of places or place attachments to ensure high social bonding/ value in community; |
|                                              | - Sustaining health among community;                | Providing social facilities and space to strengthening the organization in the communities. |
|                                              | - Work life balance;                                | Ensuring space for biodiversity and nature to grow and sustain, seperation and prioritization for ecological function; |
|                                              | - Rational dependency ratio;                       | Green infrastructure;                                  |
|                                              | - Bonding/same social value/kinship;                | Minimial standard for service in sanitation and drinking water (private or communal service). |
|                                              | - Good organization of people.                      |                                                        |
| Established Environmental that Sustaining Social Condition | Ensuring the environment in a good condition; fresh air, minimum polution, access to drinking water and sanitation; |                                                        |
|                                              | - Ensuring biodiversity and nature to grow and sustain. |                                                        |

3.2. Ibn Khaldun Dialogue in Social Sustainability

“Human social organization is something necessary. The philosophers expressed this fact by saying: "Man is ‘political’ by nature.” That is, he cannot do without the social organization for which the philosophers use the technical term “town” (polis) [11].”

Ibn Khaldun is explaining in the book “Prolegomena” that human is mostly will form of organization due to their natural instinct to their basic needs to food. Ibn Khaldun develop theory that every living creature developing aggression to fulfill their basic needs to food. On the other hand, God also give the power of the hands and building skill to human to fight that common aggression. One human may not producing many things to many human, but when it comes to social organization where everyone has particular job descriptions, like crafter and than baker or cooker than the sustainable of the human being will expectedly greater results comparing to the individual human job as Galen mentioned in Ibn Khaldun as “De usu partium” or everything has their own job/role. Futhermore, Khaldun explaining the needs for being a civilized also trigger by the origin of human role as representation of God in the world (Caliphate) as many lessons that gather by Khaldun in Qur’an (bee’s and ant’s) as organization that produce more goodness [11].

One of the Khaldun noted and then accused being racist when he has an proposition that the natural elements somehow has an impact to the determination of human physical, emotional and even character. Khaldun comparing “Arab” and some of the race (Caucasian, Chinese, Persian, african, etc) within the characthers than Khaldun deduced that some races are “choosen” due to their quality to be leader comparing to the other race, especially the one with the inspiration from God. The diagram of the civilization origin can be seen in Figure 1.
Figure 1. The Origin of Civilization in Khaldun Perspectives

Khaldun concepts about civilization hasn’t stop from the idea of the civilization but also continue to the idea of sustainability in term of social approach. The point of the sustainability is rely on the concepts of civilization that most know as “Tamadun” in Arabic that originally came from the arabic words: “maddana, mudun and also madain”. Khaldun mentioned in the book as a “umran”which has meaning part of earth that being live by humans and also “hadarah”that has meaning as “town”or village. There are some indicators that Khaldun deducted in the book, which are:

Table 2. Social Indicators Sustainability and its Interpretations

| Khaldun Concepts | Interpretation | Spatial Consequences/ Embodied |
|------------------|---------------|-------------------------------|
| **Strong Religion** | The religion fulliness of the community; | Equal access to mosque/ sentral of the religion building and knowledges; |
| | The bond of community with the Religion. | Public-private space embodied, to protect the privacy in the community (mahram concepts); |
| | There are organization that running the country/town matters, deciding the most effective forms for the sustainable of the city; | Governments place; |
| | There might be hierarchical organizations that supported government as an initiation | Providing social facilities and space to strengthening the organization in the communities. |
| **Organized State** | There are organization that running the country/town matters, deciding the most effective forms for the sustainable of the city; | Space/place to organizations to do the activities; |
| | The ease to collect the needs of the citizen; | Spatial form of the sustainable cities (function and development approaches considering ecology, economic and socio-cultural activities); |
| | Guarded place with a sense of protections and safe; | Governments place; |
| | Non primary economic activities/ secondary and tertiary activities; | Providing social facilities and space to strengthening the organization in the communities. |

The City Way of Life

| The system of | The spreading of the | The proximity to public access; |
|---------------|---------------------|--------------------------------|
| | | Proximity between house; |
| | | Communal space; |
| | | Creating sense of places “city” to comfortability of its inhabitant; |
| | | Access to knowledge and every education provider; |
Khaldun Concepts | Interpretation | Spatial Consequences/ Embodied
---|---|---
**High Writing** | knowledge; - High expertise in literature and sciences. | Access to library and the knowledge; - Structured regulation.
**The Expertise in The Arts** | - When every primary needs already fulfilled it is normal to have a need in a beauty or aesthetics; - Beautiful ornaments, painting, arts projects/ works in calligraphy or others permissible in Islam. | - High art value corridor; - Creative space; - Efficient and effective space.

3.3. **Social Indicators for Kampung Sustainability Based On Dialogues of Ibn Khaldun and Sustainable Developments Indicator**
This section will flatten what is the social indicators matter to measure a places sustainability, but in the case of kampung in Indonesia. From the previous section we can conclude that kampung inhabitants is very depend on the social and physical assets of an urban kampung for satisfying inhabitant’s daily needs. There are at least 6 (six) criteria to measure whether urban kampung is sustainable or not based on synthesis on the Khaldun and sustainable developments indicators, which are: 1). social cohesion, 2). Social/economic facilities, 3). people activity feature, 4). equity to public space, 5). organization and institution existances and 6). art, knowledges and creative environment as a feature in space as explained in Table 3.

**Table 3. Social Indicators for Social Sustainability**

| Concepts | Description | Indicators |
|---|---|---|
| Social Cohesion | Social cohesion related to human capital, which maintain among people interaction. The strong relation and attachment in kampung inhabitants will automatically forms an emotional connection and sense of belonging that will encourage people’s behaviours to protect their place. | - Racial/ social balance in geography areas to encouraging communications; - Access to public and semi private space to conduct and encouraging communications; - Creating sense of places or place attachments to ensure high social bonding/ value in community; Mixed community (high –middle and low income); - Providing social facilities and space to strengthening the organization in the communities. |
| Facilities of Social/ Economic Space | Social space takes role in providing kampung inhabitants an area where they can engage a social relation. In other words, the existence of social space facilities intercourse with the community social cohesion firmity. The facilities including the religion facilities. | - Equal access to mosque/ sentral of the religion building and knowledges; - Public-private space embodied, to protect the privacy in the community; - Viable access to the economic sources for all citizen/ community; - Providing sustain infrastructure to support economic activities; - Safe/ special place to woman/ particular citizen to have an |
In this regards, which the correlation between the placemaking and social indicators for social sustainability, it is important to explore the unique characteristic of the urban kampung in the context of sense of place is important for both, the well being of inhabitants and the environmental quality of the settlement. The literature review point it out about significant role of physical details their residential, which give an resident’s perception of aesthetic and public spaces in fulling residents need of social interaction. Moreover, appropriate design attributes of neighbourhood open space promotes frequent social interaction, hence signifies the sense of belonging. As the implication for that statement, then a lack of sense of place in neighbourhoods can lead to the formation of identity crisis which could deteriorate the quality of human capital which can affect their quality of environment and economic, or on the other word is their sustainability.

**Table 4. Dialogue Between Social Sustainability Indicator With Social Spaces Embodied in Kampung**

| Social space in kampung | Character | Remark/description | Social Sustainability Indicator Fulfillment |
|-------------------------|-----------|--------------------|-------------------------------------------|
| Pathways/alleys         | Organic and spontaneous, street width are varies from wide to narrow | In a typical kampung, pathway are directly connected with the house terrace. This space is common for dwellers conducting spontaneous activities. | Access to public and semi private space to conduct and encouraging communications; |
| Social space in kampung | Character                          | Remark/description                                                                 | Social Sustainability Indicator Fulfillment                                                                 |
|-------------------------|-----------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Local shops (warung)    | Semi permanent construction       | Warung not only supply the basic need of dwellers but also serve as social hub. This particular places are recognized to convey longer social interacton and building symbolic identity to the neighborhood. | - Viable access to the economic sources for all citizen/community;                                           |
|                         |                                   |                                                                                    | - Providing sustainable infrastructure to support economic activities;                                        |
| Public bath, toilet     | Communal use, mostly spotted in un-exposed space | Sanitary facilities such public bathroom and toilets are unique properties of high density kampung, such as they stimulate social relation at particular times of the day. | - Access to public and semi private space to conduct and encouraging communications;                        |
|                         |                                   |                                                                                    | - The proximity to public access;                                                                             |
| Social facilities       | Communal use symbolic representation of the community | Social facilities in kampung play obviously an important role to accommodate social interaction as well as preserve the social system that binds the community. | - Creating sense of places or place attachments to ensure high social bonding/value in community; Mixed community (high-middle and low income); |
|                         |                                   |                                                                                    | - Providing social facilities and space to strengthening the organization in the communities;               |
|                         |                                   |                                                                                    | - Equal access to mosque/sentral of the religion building and knowledges;                                   |
|                         |                                   |                                                                                    | - The proximity to public access;                                                                             |
|                         |                                   |                                                                                    | - Providing social facilities and space to strengthening the organization in the communities;               |
|                         |                                   |                                                                                    | - Governments place.                                                                                         |
| Field and open space    | Limited in size, part of residual space and heterogeneous form | The atmosphere in open spaces varies in time, resulting in different intensity of activities. Open space are used by dwellers for diverse activities such as cooking, selling, and especially social interaction. | - Communal space;                                                                                           |
|                         |                                   |                                                                                    | - Creating sense of places “city” to comfortability of its inhabitant;                                       |
|                         |                                   |                                                                                    | - The proximity to public access;                                                                             |
|                         |                                   |                                                                                    | - Providing social facilities and space to strengthening the organization in the communities;               |

Table 4 explaining there are some activities that indicating social sustainability in Kampung, but there are some indicators that not exist in Kampung. The indicators are:
- Public-private space embodied, to protect the privacy in the community;
- Safe/special place to woman/particular citizen to have an activities.
- Spatial form of the sustainable cities (function and development approaches considering ecology, economic and socio-cultural activities);
- Access to knowledge and every education provider;
- High art value corridor;
- Creative space;
- Efficient and effective space;
- Access to library and the knowledge;

The indicators that unavailable in the Kampungs area indicating that there are low levels of ‘sense of place’ in the area. Furthermore, factors in forming sense of place is related to social sustainability in kampung. In fact, sense of place is created from at least three different entities, setting of space, activity and interaction, and experience or emotion of individuals as a result of interacting with the surrounding environment, so it is obvious that social relations is crucial.

Sense of place means valuable and meaningful place where people are physically and socially engaged to that place. The important point to build the sense of place is physical and emotional connection, sense of belonging that will encourage people’s behaviours to protect their place [12]. The concept sense of place is also closely related to psychological and physical concepts [13]. According to Altman & Low, the sentiment toward place were created based on three types of relationship: cognitive, behavioral, and emotional dimension [7]. By encouraging and providing the unavailable feature hopefully there are some increasing in ‘sense of place’ and furthermore the social sustainability in that area.

4. Conclusion
As what this paper discussed, the true meaning of sustainability which familiarly known to encompass three major aspect; Environment, economy and society-culture, in the practical action oftentimes neglected the social aspect of residential dwellers. To be fair, the medium and long-term fair assessment of human capital and the evolution tendencies are crucial for the realistic perspectives of a sustainable development model in all its fundamental components: economy, society-culture, and environment. Finally, towards the case of society-culture in kampung in the context of the sense of placemaking this paper resulting indicators proffering to be analyze while observing kampung sustainability. The indicators are Social Cohesion, Facilities of Social Space, People activity features, Equity to public access facilities, and Organizational and Institutional.

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