ABSTRACT: Legal protection of traditional architectural design as a part of Indonesian traditional knowledge, without being realized, has become a great and complicated issue because recently it is being exploited by irresponsible parties. The Indonesian philosophy Bhinneka Tunggal Ika describes Indonesia which consists of many ethnic groups around every corner of archipelago in which they create their own culture area with different condition. Every ethnic has traditional architecture as the cultural manifestation which rests on the custom and belief. Traditional architectural design as a piece of traditional knowledge in Indonesia is considered as one of cultural conservation which is material that needs to be protected. One of the matters that attracts attention now is architectural design of indigenous village in Indonesia called Kampung Naga. Kampung Naga provides sample or design of energy-efficient building in which its design is later developed by the private parties in Indonesia. Traditional intellectual property specifically the local wisdom has proved to offer many contributions for the development of environmental insight by using the teachings from ancestors which have been inherited through generations for centuries. Therefore, this research focuses on legal protection of traditional architectural design as a cultural conservation of Kampung Naga society in Indonesia which needs to be protected from exploitation or piracy both from private companies in Indonesia and from another country.

Keyword: Traditional Knowledge; Traditional Architectural Design; Kampung Naga Indonesia; Legal protection.

INTRODUCTION

Architectural design in Indonesia is influenced by its traditional society behavior. Architecture is the oldest form of design activity along with the human civilization itself. It is embodiment or manifestation of human culture, so architecture is constantly influenced by its human culture, and the birth of the traditional architectural design is underlined by religion norm, tradition, local geographical condition, or part of the national culture itself. For Indonesians, traditional architectural design is community property, the ancestor's masterpiece, and inherited through generations for centuries, both in verbal and in non-verbal form. In traditional architectural design stores spiritual cultures, customs, values, and view of life for Indonesian society.
The famous traditional architectural design now is the architectural design from the Indigenous Villagers of Kampung Naga Indonesia, which is considered as an example of certification for the Indonesia energy-efficient and green architectural design. The certification is given by Green Building Council of Indonesia (GBCI). GBCI is the first institution in Indonesia who has authorization to conduct certification and rating on energy-efficient and green architectural building. This institution is under the patronage of a big network World Green Building Council supported by 21 big companies in Indonesia. The admiration on traditional house architecture in Kampung Naga represents people's love on the environment. The houses in Kampung Naga have palm leaf roof with bamboo in its building structure, its architectural design and interior are neat and organized so that air and light circulate very well.

The architecture building in Kampung Naga is going to be an example of house design without a need of electric supply. Furthermore, the most awesome part of this Kampung Naga traditional house is an earthquake-resistant system. One of the evidences is when a big earthquake came in Tasikmalaya, there was no damaged house. The houses in Kampung Naga are also green and energy-efficient architecture. The application of energy-efficient building in Kampung Naga can be applied as an instance in utilizing a roof garden design which can decrease room temperature into 8 (eight) degrees Celsius. This implicates on the efficiency of electric usage in air conditioner.

DISCUSSION

1. The Traditional Architectural Design of Indigenous Villagers in Kampung Naga
Kampung Naga is a village inhabited by a community group who holds strongly on its ancestor's tradition heritage. Kampung Naga's people live in a modesty system with a strong traditional wisdom. The village administratively is located in region of Neglasari Village, Salawu district, Tasikmalaya regency, West Java province. It is located in a fertile valley, bordered by villager's rice fields on the south, and bordered by river on the north.

Kampung Naga's people call their ancestry Sa-Naga. Some of them domicile in Kampung Naga, and the others live outside of Kampung Naga. They will come back to Kampung Naga for traditional ceremonies or kinship-related events. For their living prosperity, the villagers have source of live hood from the agriculture and cultivation, whether as farmer owners, farmer cultivators, or farm workers. As for the additional live hood source occupied by Kampung Naga's people, they make handy or webbing crafts from bamboo.

Kampung Naga's traditional houses must be built along from East to West, facing to North or South, and its door must face to the North and South. Besides, there is a regulation for the villagers to sleep with their legs facing either to the North or the South, clockwise. One
forbidden thing for Kampung Naga's people especially and Sundanese generally is when their houses use two or more doors, then all of the doors must be placed in the same direction. This custom is connected to a belief that when a door facing the South while the other door facing the North, it will make a fortune only pass by from one door to the other door.

The rooftop is made by Tepus leaf, reed, and covered by palm fiber with a thickness around 15–20 cm. Kampung Naga's houses must be stillt house with bamboo and wood as the house material. The rooftop must be made from nipah wood, palm fiber, or reed, and the floor must be made from bamboo or wooden board. The wall is made by bamboo screen or webbing with the shape of sasag-webbing. The prohibition or taboo is to use wood for kitchen door, so sometimes it is made by sasag-webbing and kepang-webbing (braid-webbing) for the wall. The house cannot be painted except by chalk paint or meni (red paint as a base). The material of house cannot use wall materials despite of the possibility to make a house from concrete wall or even a big building.

Furthermore, the house cannot be filled by furniture, for instance chair, table, and bed, and the door should not face on two different direction since it is against the villager's belief that the fortune will not come in the house, for it only passes from the front door through the back door. Because of this, they always avoid the door to be parallel or in line.

The house for Kampung Naga's people is considered as a family home where every single activity starts from. Based on the villagers, the function and role of the house is a place to keep away evil and disaster deeds to happen in the house through paying close attention to the prohibition, pamali, or taboo. Regarding to this matter, the house as a middle world for Kampung Naga's people must be based on certain conditions from the custom, either location, length-direction of house, or facing-direction. Every house in Kampung Naga is in the same shape and organized neatly. It is in rectangular shape with stilt-type. Here is the traditional house of Kampung Naga indigenous people:

a. Floor and Wall of the House
   The floor is made by a board, which is originally from a floor made by bamboo slab (pelupuh), with the floor height 0,50 meter from the land. The wall for the house is made by bamboo webbing called bilik. It is a main material for building the house in Kampung Naga and the design of bilik-webbing is various. For further reference, next section will explain parts of houses taken from a house with 4,80m x 7,30m. The parts are:

b. Roof
   The rooftop has a shape of julang ngapak (the Julang bird's position when spreading its wing). On the peak of roof, there is capiturang (the pubis bone) or cagak gunting (scissor bird) which functions technically to prevent water dripping through the roof and philosophically as the unity symbol between the house and universe from the villager's
belief. The roof cover is made by reed leaf (tepus) or sago palm (rumbia) and fiber palm tied by bamboo rope (apus bamboo) to the peak part of roof frame.

c. Door
The door is made by wood and the house should not have two doors with opposite direction due to the belief from Kampung Naga's people that the fortune will only come from front door and escape from the backdoor. In that case, the villagers always avoid putting their door linier in the same line.

d. Window
The window is placed on the front, side, or back with window size 1- meter x 0,58 meter. It is in rectangular shape with wood installed on certain range vertically which is called jalosi, and wooden window shutter and the shield. Glass is also used as the shield.

e. Room
One room has a function to welcome guests and located in the front part of the house. It is a closed room, but has wooden or glass window. This room is also left empty without any furniture such as table, chair, or bale bale (teak bench), so the owner usually gives pandanus mat for guests or even no mat at all. Beside of this room, there is a kitchen (pawon) separated by bamboo webbing wall (bilik). Both of rooms have same size which is 3,65 meters x 2,40 meters.

2. Legal Protection on Traditional Architectural Design of Kampung Naga as Traditional Knowledge in Indonesia
Architectural building design in Kampung Naga has been planned to be an example of energy-efficient house design. This proves that traditional architectural design has a high economic and is not impossible to attract foreigner who likes and possesses any interest in the traditional architectural design.

The Indonesian philosophy Bhinneka Tunggal Ika describes Indonesia which consists of many ethnic groups around every corner of archipelago in which they create their own culture area with different condition. Every ethnic has traditional architecture as the cultural manifestation which rests on the custom and belief. There is a strong connection between architecture and the community supporter's daily attitude which makes the history of a certain ethnic known by its architecture history. Compared to other arts, architecture is expression of reliable culture because ups and downs of a culture is followed by its architecture. Traditional architecture is cultural identity of its people due to its content which embodies the entire life of its traditional society that influences its architecture.\(^1\)

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\(^1\) Myrtha Soeroto, 2003, Dari Arsitektur Tradisional Menuju Arsitektur Indonesia, Ghalia Indonesia, Jakarta, page 11.
According to Dasum Muanas, traditional architecture is an element of culture grown and thrived along with the development and progress of certain ethnic or nation. Hence, it is one of identities from cultural advocates. Traditional architecture may be considered as a form of reflection of a certain era, carrying certain characteristic and originality from the local, custom, and environment which can only be achieved by a great support from the society.

Indonesia is known as a rich country for its product of forest, agriculture, and cultivation, so it is common to use material easily taken from the nature around it. The design of Indonesia traditional building, aside from the influence of the natural environment, is also influenced by the custom, religion, belief, and ornament usually used as a symbol of philosophy of life.

3. Analysis of traditional architectural design as cultural heritage on traditional knowledge in Indonesia.

Definition of traditional knowledge is promoted by The International Council for Science (ICSU) through developing the characteristics of traditional knowledge itself. The definition is:

“Traditional knowledge is a cumulative body of knowledge, know-how, practices and representations maintained and developed by peoples with extended histories of interaction with the natural environment. These sophisticated sets of understandings, interpretations and meanings are part and parcel of a cultural complex that encompasses language, naming and classification system, resource use practices and ritual, spiritually and worldview.”

Traditional architecture is a term given to anthropology on architectural works outside of Europe which has different knowledge system from the existing knowledge system in Europe. The use of term traditional architecture emerges because of European's habit to make a note and diary. European society is very interested in any report of their conquest area in Asia due to the difference in cultural background and way of thinking.

Furthermore, there are commonly five main reasons why traditional knowledge must be protected as follows: 1) equity, it is a fairness and justice for the owners of traditional knowledge in which their knowledge is utilized and commercialized to have the share or compensation from both monetary or non-monetary; 2) conservation, it is a protection of traditional knowledge, in the same sense of protection for environmental maintenance, biodiversity, and continuous agricultural activity; 3) Maintaining the traditional practices and cultures (preservation). It is a protection on traditional knowledge which can be used to increase society's value and belief of traditional knowledge values from the inside and the outside of community; 4) Preventing the abuse from unauthorized parties or avoiding bio-

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2 Dasum Muanas, 1998, Arsitektur Tradisional Daerah Jawa Barat, Departemen Pendidikan dan Kebudayaan, Proyek Inventarisasi dan Dokumentasi Kebudayaan Daerah, Jakarta, page 1.
3 Syafwandi, 1993, Arsitektur Tradisional Tanah Toraja, Departemen Pendidikan dan Kebudayaan, Direktorat Jenderal Kebudayaan, Direktorat Sejarah da nNilaiTradisional, Proyek Penelitian Pengkajian dan Pembinaan Nilai-Nilai Budaya, Jakarta, page 8.
4 Syafwandi, Ibid, page 9-10.
5 I Nyoman Gede Suardana, 2005, Arsitektur Bertutur, Yayasan Pustaka Bali, Bali, Page 16.
piracy. It is a protection of traditional knowledge as one way to decrease bio-piracy, as well as to guarantee equity and equality between the owner and the user of traditional knowledge.

In Moni Wekesa's account as cited from Muhammad Djumhana's book, to prevent the emergence of abuse action on traditional knowledge, there are three crucial points that need to have close attention: a) First: the documentation of traditional knowledge is conducted through a database establishment of traditional knowledge; b) Second: liability requirement to list the source of material will be requested to have its legal protection through regime of intellectual property; c) Third: for every party which is searching for the legal recognition of HKI regime (Intellectual Property Rights), they have to show an evidence of utilization admission, ownership share, and profit share from the owner of traditional knowledge.\(^6\)

As a promotion effort of utilization and the importance of developing the traditional knowledge (promotion of its use), besides the protection effort by limiting the access to traditional knowledge, the government must also have an objective to support the utilization of the knowledge itself, and develop any effort in order to prevent its abuse.\(^8\)

The effort to protect traditional knowledge is easier to said than done. One of the reasons is caused by protection perspective from developed countries which tend to be different from the perspective of developing country. In the viewpoint of developed countries, they think thoroughly on how to gain wider access in traditional knowledge for the sake of creating new products and gaining big profit from the commercialization of the products. On the other hand, in viewpoint of developing countries especially with a rich diversity, they tend to think about how to create a mechanism of fair and balance profit share for two parties who utilize it.

Beside of the different perspective between the developed and developing countries, there is a similarity to protect architectural design connecting to the traditional knowledge which is an important matter and must be done by both parties because the obliteration of them will cause an obliteration of global cultural diversity, and later will influence automatically on sustainability and diversity. Furthermore, another reason why traditional knowledge must be maintained, developed, and protected, for the traditional knowledge outside of developed countries (LDCs/least developed countries) is often used as the front gate of contemporary industries, such as pharmacy, agriculture, natural pesticides, and so on. In contrast for developing countries, the awareness on streamlining the utilization of biological wealth and traditional knowledge is able to make them into stimulating the economic growth.

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\(^6\) Muhammad Djumhana, R. Djubaedillah, Hak Milik Intelektual Sejarah, teori, dan Praktiknya di Indonesia, (Bandung: PT. Citra Aditya, 2014), Page 12.

\(^7\) Muhammad Djumhana, R. Djubaedillah, Ibid, Page 8.

\(^8\) Carlos M Correa, Protection and Promotion of Traditional Medicine Implications for Public Health in Developing Countries (2002), page 5, http://apps.who.int/medicine/docs/pdf/s4917e/s4917e.pdf (accessed on 3 May 2013).
According to Law of Republic of Indonesia Number 11 of 2010 concerning Cultural Conservation, it is explained that the definition of protection is to prevent and overcome damage, destruction, or obliteration through Salvation, Safeguarding, Zoning, Maintenance, Restoration. In Article 1, it is explained that Cultural Conservation is immaterial such as Cultural Conservation Object, Cultural Conservation Building, Cultural Conservation Structure, Cultural Conservation Site, and Cultural Conservation Area on land and/or water that their existence should be preserved since they have significant value for the history, science, education, religion, and/or culture through the stipulation process.

As one of the cultural property in the form of architecture, traditional architecture is in need to preserve. Based on Law of Republic Indonesia Number 11 of 2010 about Cultural Conservation, preservation is dynamic program to maintain the existence of Cultural Conservation and its value by protecting, developing, and utilizing it. In addition, it is explained that Cultural Conservation Preservation has purpose at: (1) preserving the national heritage and human being heritage; (2) improving the nation dignity through Cultural Conservation; (3) strengthening the national identity; (4) improving the people's welfare; and (5) promoting the nation's cultural heritage to the international community.

Based on previous explanation, preserving the traditional architecture is the crucial point to do to protection and preservation attempt on cultural property in order to passed on through generations in a good condition and without a decrease of its value, even there is a need to improve its function to become a relic for the future. One thing to be noticed and reviewed further is strategy of protection on traditional architecture along with its artifacts as a part of protection attempt of world-wide cultural conservation. The protection strategy shall not only be oriented to hold onto past time, but it must be insightful and is destined for present and future behalf. Therefore, there is a need for the studies of protection strategy and objects of cultural conservation preservation for maintaining the element of integrity, authenticity, and use value to be able to become the part of world-wide cultural conservation attempt. The result of this strategy is expected to effectively give benefit that could be experienced by present generation and useful for society in science, history, religion, identity, culture, and economy.

Referring to Government Regulation of Republic of Indonesia Number 10 of 1993 about the implementation Act Number 5 of 1992 about Cultural Property in Article 23, it is stated that protection and maintenance of cultural property applied by salvation, safeguarding, maintenance, and restoration. In the latest version published by World Heritage Centre

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*Keith E. Markus, Intellectual Property Rights in The Global Economy, (Washington, USA: Institute for International Economics, 2000, hlm. 27.*
"Cultural Heritage" shall be considered as the following: 1. monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science; 2. groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science; 3. sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view. "Natural Heritage" shall be considered as the following: 4. natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view; 5. geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; 6. natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty”.

Furthermore, on The Operational Guidelines for the Implementation of the World Heritage Convention, WHC. 1/12 July 2012 by World Heritage Centre UNESCO, it is also stated that cultural objects could be in the form of cultural landscape i.e. cultural property, and represent “the combined work of nature and human”. This cultural landscape is the illustration of evolution in human society and their progress from time to time, under the influence of physical obstacle and/or a chance given by natural environment and balance social, economic, and cultural forces, both externally and internally.

According to The Operational Guidelines for the Implementation of the World Heritage Convention WHC. 1/12 July 2012 by World Heritage Centre UNESCO, areas which can be suggested as the object of cultural heritage are: 1. Cities and historical cities, inhabited and uninhabited. They are particular cities with certain period or culture; cities evolution in line with their characteristics; “historical center” includes area delineation similar to ancient cities and currently isolated from contemporary cities; and isolated district or sector where its part that is left behinds evidence of existence of a safe country, or even the ones who give the coherent evidence about character of the historical city, all are gone. 2. Heritage canal, canal could be built to serve some purposes; irrigation, navigation, defense, hydro power, flood mitigation, drainage, and water supply. Canal contributes for economy in every factor, for instance in the economical architects and transportation for goods and humans. This canal continuously becomes the main key to economy development through the utilization of
irrigation. 3. Heritage routes, they are real elements signifying a certain culture originated from the exchange and multi-dimension dialogue in countries or districts, and describe movement interaction along the route in certain place and time. 10

Property suggested as the object of cultural heritage, in The Operational Guidelines for the Implementation of the World Heritage Convention WHC. 1/12 July 2012 by World Heritage Centre UNESCO, must contain integrity and/or authenticity, and also sustainability use. Property condition is considered to have authenticity, if the cultural values contained in it are fit as the communities acknowledge, and truthfully and credibility expressed through various attributes such as: shape and design; material and substance; function and usage; tradition, technique and management system; location and setting; language, and other forms of cultural property non-object; spirit and feeling, and other internal and external factors. 11

The next integrity element is the measurement of all properties and the unity of natural and/or cultural heritage along with its attributes. To research the integrity condition, we need some assertion: 1. All needed elements to express Universal Value of the property; 2. Adequate skill to ensure the full representation of feature off cultural property and the process which is able to deliver the important value of the property; 3. The ability of cultural property to survive from the side effect of architects and/or ignoring the architects.

Property supported to be cultural heritage must have sustainability use. It must be supported by various uses ecologically and culturally as the sustainability element and can contribute on the life quality of society in the related community. The country and its partners must ensure that the sustainability use or any other change does not have a negative impact on universal values of the property. Legislation, policy and strategy influencing World Cultural Heritage must ensure protection of the universal value. Wider sustainability use is expected to be capable to support the attempt of cultural and natural conservation, and promote active participation from society and the stakeholder related to the property. This condition is also needed to protect sustainability of cultural heritage as well as doing conservation, management, and presentation attempt. 12

10 Gazalba Saleh, Upaya Perlindungan Hukum Bagi Pengetahuan Tradisional di Negaranegara Berkembar Khususnya Indonesia, dalam Jurnal Supremasi Hukum, Volume III No. 1 (Jakarta: FH Univ. Sahid, 2010), hlm. 2.
11 Rabodo Andriantsiferana, Traditional Knowledge: What is it and How (if at All) is it to be Protected? Traditional Knowledge Protection in the African Region, Conference on Biodiversity, Biotechnology and the Protection of Traditional Knowledge (Saint Louis: USA, April 4th - 6th, 2003), hlm. 3.
12 Joseph M Wekundah, Why Protect Traditional Knowledge?, dalam African Technology Policy Studies Network, Special Paper Series No. 44 (2012), hlm. 8.
Continuously on Law number 11 of 2010 Article 42-46, it is stated that Cultural Conservation may be stipulated as national-ranking cultural heritage, if fulfilling the requirements as: a. materialization of nation unity and integrity; b. valuable work reflecting the Indonesian culture uniqueness; c. Cultural conservation with very rare species, unique design, and few in number in Indonesia; d. Evidence of civilization evolution and cross countries and cross regions cultural exchange, both those already extinct and still living in the community; and/or e. important examples of the traditional settlement area, cultural landscape, and/or typical space utilization that are endangered.

Based on the explanation given by the researcher, Kampung Naga can be categorized as National Cultural Heritage as regulated in Law of Republic of Indonesia Number 11 of 2010 concerning Cultural Conservation and will automatically obtain legal protection by the Indonesian government. In addition, the distinctive feature of Kampung Naga itself is the architectural design (energy-efficient houses) which should be protected as traditional knowledge of Kampung Naga community. As the International Convention organized by UNESCO, the architectural design of Kampung Naga must get recognition by other countries as green buildings which later can be registered as a world heritage and used by other countries as a leading model in making energy-efficient buildings while still listing Kampung Naga as the owner copyright and architectural design.

The inclusion of copyright / architectural design license of Kampung Naga will be very beneficial for Indonesia both economically and socially. By the inclusion of the license, Indonesia is expected to be better known and able to bring more foreign tourists only to sightsee and visit or do the research in Kampung Naga.

**CONCLUSION**

Architectural Design of Kampung Naga is a part of traditional knowledge in Indonesia that must be protected. Base on the discussion concerning protection for traditional knowledge, there are reasons underlining developing countries and its agents of development who demand the international involvement in the attempt of maintenance, development, and protection of traditional knowledge such as: First, traditional knowledge has crucial role in economy and social life of a country. By recognizing and increasing the values contained in traditional knowledge, it may help strengthening the identity and increasing its utilization to achieve social and growth purpose. In short, traditional knowledge has potential to create balanced economy development in many countries especially in Indonesia. Second; developing and developed countries make an international agreement influencing on how the traditional knowledge is tied together with traditional architecture that can be protected and disseminated based on a clear law policy and does not harm the country.
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