

## DEVELOPING COMMUNITIES AND VALUE'S CONSERVATION IN SANGIRAN WORLD HERITAGE, INDONESIA

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### Abstrak

Situs Sangiran adalah Situs Warisan Dunia UNESCO yang memiliki nilai penting sebagai laboratorium alam yang merekam dengan jelas lingkungan alam purba, kehidupan manusia, dan perkembangan teknologi sejak lebih dari 1 juta tahun. Untuk kelangsungan konservasinya diperlukan kerjasama antar stakeholder sebagaimana disebutkan oleh World Heritage Centre. PREHsea sebagai hasil kolaborasi antara BPSMP Sangiran, Museum Nasional Philippina, dan MNHN Paris mengimplementasikan beberapa program terutama dalam aspek ilmiah untuk pelestarian situs dan cagar budaya yang berada di dalamnya. Sejak tahun 2012 kolaborasi ini telah melakukan aktivitas seperti dialog dengan beberapa komunitas local, Case study, pelatihan, kunjungan studi, dan workshop baik di Sangiran dan Philippina dengan harapan agar kepedulian komunitas local terhadap keberadaan World Heritage di daerahnya dapat ditingkatkan.

**Kata kunci:** Situs Warisan Dunia, stakeholder, PREHsea, kepedulian

### Abstract

Sangiran is the UNESCO's World Heritage Site possessing outstanding value as a natural laboratory that has contributed records of the paleoenvironment, life of human, development of technology since more than 1 mya. Cooperation among stakeholders is needed to maintain a sustainable conservation as mention by the World Heritage Centre. PREHsea, that provides an umbrella for the collaboration among Sangiran Conservation Office, NNational Museum of Philippine, and MNHN Paris implements programs particularly in scientific aspect to conserve the site and property. Since 2012 they have conducted activities like dialogue with the local community, case study, training, study visit, and workshop both in Sangiran and Philippine. It is aimed to raise the local community awareness toward the existence of World Heritage in their area.

**Key words:** World heritage Site, stakeholder, PREHsea, awareness

### I. The Sangiran Dome

The Sangiran Dome in Central Java, Indonesia is one of the most well-known hominid fossil-bearing sites which reflect the earliest history of humankind within the insular area as demonstrated with the archaic *Homo erectus* who, more than 1.5 million years ago, crossed southwards the equatorial belt to reach the Sunda Islands (fig.1).

The glaciation during the Quaternary Period resulted thesevere lowering of thesea-level and subsequently expanded the Sunda Shelf and thus bridged the Java Island and the Asian continent. The animals and humans could reach Java Island and developed unique endemism during the interglacial ("isolated") periods.



Fig.1. The Sangiran Dome  
(Photo, courtesy of IMQP-MNHN)

Since 1996, Sangiran has become a UNESCO's world heritage property whose Outstanding Universal Value (OUV) is grounded on the fact that it represents a unique natural laboratory in Island Southeast Asia documenting the antiquity of the dynamics of paleoenvironment, human migrations and adaptation, cultural and technological development of prehistoric human groups spanning more than 1 million years ago.

## II. The stakeholders

Some categories can be defined and considered as main actors related to the Sangiran site management and development. A sustainable and fruitful synergy between multiple sectors must be developed in order to harmonize the conservation with UNESCO's World Heritage Centre recommendations (the strategic objectives "5C": Credibility, Communication, Capacity Building, Community and Conservation). As mentioned in the framework of the PREHsea European project ([www.prehsea.eu](http://www.prehsea.eu)), these are:

### - Institutions and central government

They are in charge of the governance of the cultural sector, both at the central and local scales, whose needs are to develop competencies in the very specific field of prehistoric sites like Sangiran, and to carry out tighter contacts with research teams.

### - Local communities and organizations

Their main focus is basically related to subsistence/economic activities. But in many cases, they often developed

a valuable -though specific- traditional approach of the heritage. Frequently under-represented in any dialogue regarding the properties, they need to be reassured by enhancing their participation and can play a critical part in the conservation of sites.

- Local/national organization dealing with cultural matters

As well as tourism professionals, they often lack of qualified contacts and may develop unorganized initiatives. Though, they play a critical role to disseminate information about the outstanding value of the property, hence contributing to itsr conservation.

- Local government

They are responsible of socio-economic development and social welfare. They need to adapt their diverse projects in the area, to enhance their concern for investing in cultural matters, and also to be fully aware of the sector's socio-economic potential feedback.

- Local Entrepreneurs

They are either hired by government for various projects or developing locally specific business. They need to be aware of the overall cultural governance of the property in order to develop a "culture friendly" approach of the area, including a material/financial contribution to cultural development activities which actually can, on the long term, benefit to them.

### III. Local needs regarding "Know How" in conservation issues

The Indonesian government (Central and Local) maintains the efforts to develop the site. Recently, the authorities have not only invested in infrastructures and museums, but also paid attention to collaborations between local / regional / international stakeholders using a participatory process. In such a perspective, efforts are made in order to address the lack of qualified human resources or to reach a balance among various levels of qualifications, and to answer the needs in transfer of knowledge and technology.

Another important issue is the quality of the dialogue with local communities, organizations and private entrepreneurs. In extreme cases, conflicts may occur (enforcement of conservation regulations vs. locally developed traditional or private sector activities which might endanger the properties, or even illegal trade of valuable heritage objects). Moreover, it is often difficult to deal with good-willing but uncoordinated initiatives from organizations dealing with culture, tourism professionals or even with scientific teams.

### IV. A priority basic step

The Sangiran Dome (and related moveable heritage presented in its museums) historically very often has a special situation relate to their land ownership and discoveries. Collecting fossils since colonial periods and agriculture's activities have becomesignificant factors in site development.

For long time, collecting fossil have been considered as a legal activity by the locales. That situation already became illegal and strictly prohibited at these days (fig. 2). This dynamicof regulation on fossilsseems still

need to be efficiently implemented and adapted by sangiran's inhabitants through a certain education's systems grounded on scientific aspects relate to human's evolution.

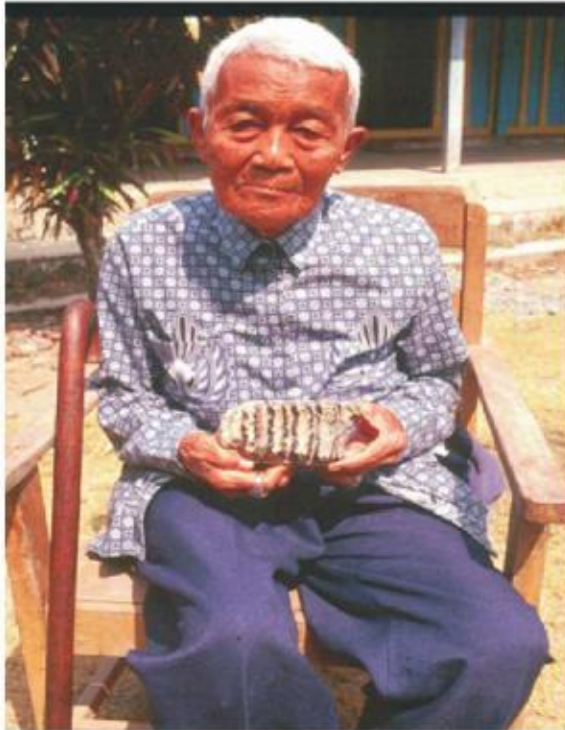


Fig. 2. Mbah Toto (RIP)  
Former Chief of Krikilan's Community at the period of von Koenigswald's research in Dome of Sangiran.  
(Photo, courtesy of IMQP-MNH)

As a World Heritage site, Sangiran Dome continues to attract the investigation towards answering where the exact locations of the prehistoric human occupation layers. This question is hotly-debated among archaeologists. However, as scientists are progressively resolving this question they are also racing against time to the pressing threat of the site's preservation due to the rapid population growth demanding housing programs and other related socio-economic development.

Grounding on the collaborative experience between Sangiran Conservation Office, National Museum of The Philippines and Muséum National d'Histoire Naturelle de Paris, the PREHsea project implemented several important activities mostly focused on the scientific aspects of the Sangiran dome, both regarding the site and the moveable heritage.

With respect to the above-mentioned, these activities may be considered as a basic step for the development of other 'OUV friendly' initiatives.

- Dialogue with local communities

This dialogue intends to build an open atmosphere for dissemination of information, appraisal and update of the stakeholders' needs. It is partly carried out on a regional scale (Filipino and Indonesian communities) in order to improve the motivation and exchanges regarding the faced challenges in terms of development.

**- Case Studies**

This activity is implemented by means of field schools organized by national and international scholars. It involves different stakeholders: local communities, local government, cultural organizations, universities and central/local institutions/authorities, and also local entrepreneurs. The aim is to disseminate knowledge and know-how, and deepen OUV awareness. Sub thematic activities are also implemented during the fieldschools, e.g.: monitoring/training local guides, local/traditional publications, local study of biodiversity etc.

**- Training and Expertise**

It addresses important needs expressed by the stake holders in terms of human resources, in order to improve their awareness/responsibility in conservation and development. At the academic level, it pays special attention to help young scientists to complete a fruitful relevant curriculum. Besides, it identifies qualifications needs for dissemination events, museography, fossil restoration and reconstruction, excavation management, cultural tourism etc.

**- Study Visit**

This activity is aimed to open an integrated policy (locally or regionally) in terms of site protection, study and management, associated with a museum. That even could help to develop a dynamic policy of touristic exploitation and well-documentation on socio-economic impact of the related cultural sector (including dynamic public-private partnerships).

**- Specialized Workshop**

Principally, this specialized workshop should deal with dissemination, didactics and temporary events. It can be associated with temporary exhibitions focusing on integrated management of relations between open site and museum (including socio-economic local aspects) and could be combined with special attention to the local communities subsistence activities and their relation with the heritage; material heritage management, circulation and access. Those workshops should cover the entire stakeholders.

**V. Impact and sustainability**

The development of Sangiran World Heritage site is strongly linked with the local communities as the inhabitants are major actors of the landscape conservation and the fossil collection. Experience through the ongoing PREHsea program can potentially impact communities' awareness. Local involvement in scientific activities carried out during this time has trained several local conservation agents with scientific and technical skills who were subsequently recruited by the government for the Sangiran site and museums. Publication about Sangiran history was implemented by a senior villager. A discussion about delivering local knowledge and experiences about Sangiran fossil-bearing deposits has developed in order to ensure the transmission of knowledge from experienced locals to the younger ones. At the scale of the local government, activities have developed in order to organize a comprehensive approach of the fossil-bearing sites disseminated in the Sragen Regency. On a larger scale, the central government is implementing an integrated management of prehistoric

sites grounded on the activities in Sangiran area, in collaboration with regional and international communities and with UNESCO (Fig 3).



Fig 3. Local involvement in Scientific Activities; (left) meeting and discussion by PREHsea, (middle) local publication published by local, (right) discussion led by local's about sangiran's deposits.

(Photo, courtesy of PREHsea )

Beyond scientific activities, a sustainable regulation's system on the development of the area, could give an important stimulation on developing and conserving the values of Sangiran's Dome, with respect to a balance situations at the crossroad of site conservation and inhabitant's interests and natural risk factors related to volcanic activities and tropical environment.

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## REFERENCES

- Albert, M.-T, M., Richon, M.J. Vifals and A.Witcomb (2012). Community Development Through World Heritage. UNESCO.
- Brasseur B. (2009). d'occupation à Homo erectus, Thèse de Doctorat, Histoire Naturelle Dynamique et Histoire des dépôts du Pléistocène inférieur et moyen ancien du dôme de Sangiran (Java central, Indonésie). Caractérisation des surfaces de l'Homme Préhistorique , Muséum National d'Histoire Naturelle de Paris.
- Falguères C. (2001). "Dating layers and fossils in Sangiran Dome: methods and results", in : Simanjuntak H.T., Prasetyo B. et Handini R., eds., Sangiran: Man, Culture and Environment in Pleistocene Times, Yayasan Obor Indonesia, Jakarta, pp. 309-319.
- Moigne A.M., R. Due Awe, Sémah F., et Sémah A.M. (2004). "The cervids from Ngebung site (Kabuh series, Sangiran dome, Central Java) and their biostratigraphical significance", Modern Quaternary

Research in Southeast Asia, 18, pp. 31–44.

Purnomo, Andri. (2013). Stratigraphie et Sédimentation au Sud Est de Dôme de Sangiran : l'environnement des Homo erectus au début de Pléistocène Moyen, Dottorato Di Ricerca In Scienze E Technologie Per L'archeologia E I Beni Culturali, Università Degli Studi di Ferrara.

Sémah F., Falguères C., Sémah A.-M., Purnomo A., Djubiantono T., Saleki H., Brasseur B. et Moigne A.-M., (2011). Multi-proxy chronological approach of Homo erectus bearing sites in Indonesia: the Ngebung example. Poster, 1st ESHE meeting, Leipzig, September.

Simanjuntak H.T. et Budiman. 2011. Kehidupan Purba Sangiran, Pusat Penelitian dan Pengembangan Arkeologi Nasional, Badan Pengembangan Sumberdaya Kebudayaan dan Pariwisata, Kementerian Kebudayaan dan Pariwisata, Jakarta, 147 p.

Widianto H. et Simanjuntak H.T. 2011. Sangiran Menjawab Dunia. Sragen: Balai Pelestarian Situs Manusia Purba Sangiran, Sragen, 142p.

[www.prehsea.mnhn.fr](http://www.prehsea.mnhn.fr)