

Identification

<i>Nomination</i>	Sangiran Early Man Site
<i>Location</i>	Districts of Kalijambe, Gemolong, and Plupuh, Sragen Regency; District of Gondangrejo, Karanganyar Regency
<i>State Party</i>	Indonesia
<i>Date</i>	26 September 1995

Justification by State Party

The Sangiran Early Man Site is a cultural property of outstanding universal value, as it is considered to be a complete field ecosystem laboratory, comprised of geological, palaeontological, palaeobotanical, and archaeological aspects.

It is nominated to the World Heritage List under **criteria ii, iii, iv, and v** for the following reasons. The data collected in Sangiran from chance finds by local people, by survey, and by excavation reveal an interaction between nature, man, and his culture during the Plio-Pleistocene period (\pm 2 million years ago). This interaction is clearly illustrated in the Sangiran site through abundant vertebrate fossils found in the same layers as early human fossils. Field observation has revealed a close relationship between the early human and animal populations, indicating that human subsistence during the Pleistocene period was based on hunting and food gathering. In the process of adaptation, the *Homo erectus* of Sangiran produced several Palaeolithic tools, in bone as well as stone.

Category of property

In terms of the categories of property set out in Article 1 of the 1972 World Heritage Convention, the Sangiran Early Man Site is a *site*.

History and Description*History*

The geological stratigraphy of the Sangiran area covers two million years, from the Late Pliocene to the Recent periods. The Lower and Middle Pleistocene levels have produced considerable fossil and artefactual material. Fifty early human fossils (*Meganthropus palaeo* and *Pithecanthropus erectus/Homo erectus*) have been found (representing 50% of all the known hominid fossils in the world), together with numerous animal and floral fossils. Palaeolithic stone tools ("Sangiran flakes") found at Ngebung include flakes, choppers, and cleavers in chalcedony and jasper and, more recently, bone tools. The site has also produced Neolithic axes.

This evidence indicates that hominids have inhabited the area for at least 1.5 million years. The palaeolithic tools can be dated to *c* 800,000 BP, and the sequence of cultural material from this period through to the Neolithic illustrates continuous evolution of man in relation to the ecosystem over a long period.

Description

The geology of the Sangiran Early Man Site is sedimentary in origin, beginning with the Late Pliocene. It was deformed into a domed anticline by diaper intrusion. The summit was subsequently eroded by river action, turning it into a recessed, reversed dome. Early hominid fossils occur in successive formations, starting with the Pucangang (0.5-1.5 million years BP), but more particularly in the Kabuh (0.25-0.5 million years BP) and Notopuro (11,000-250,000 years BP).

The region is now entirely devoted to peasant agriculture.

Management and Protection

Legal status

The Sangiran Early Man Site was declared a protected archaeological reserve, as prescribed in Monument Ordinance Staatsblad 238/1931 by means of a decree issued by the Ministry of Education and Culture in 1977.

Under the provisions of Law No 5/1992 concerning cultural property (which replaced Monument Ordinance Stb. 238/1931), no exploration, excavation, or other form of digging is permitted in the area without authorization; penalties for transgression are fines and/or imprisonment.

The Directorate General for Culture of the Ministry of Education and Culture is responsible for administering this statutory protection, operating through the Directorate of Protection and Development of Historical and Archaeological Heritage, the National Archaeological Research Institute, and the Directorate of Museums. In the event of inscription on the World Heritage List, the National Committee for World Heritage, Coordinating Ministry of Welfare, will also be associated with this activity.

Management

Most of the area covered by the nomination is privately owned. However, the Government has eminent domain over all early hominid and other fossils and artefacts. It also has eminent domain over private property for public use. At the present time it is not considered necessary to acquire privately owned property.

There is no development plan for the Sragen Regency beyond the provisions of the decree creating the protected archaeological reserve. The planned industrial estate, to create alternative employment for the local population, is located outside the protected area. Proposal by the Karanganyar Regency to develop an industrial estate at Gondangrejo, within the protected area, together with a ring-road for the town of Solo, have been withdrawn.

The three agencies of the Directorate General for Culture listed above have a long-term plan for the integrated management of preservation, research, and use of the site, described in the report of the ICOMOS expert mission as "thoughtful and constructive ... [and] a model that others could usefully learn from." The tourism development aspects will be the responsibility of the Directorate General of Tourism. The relevant local government bodies will be responsible for physical development and for coordinating the participation of local inhabitants in ensuring preservation.

The ICOMOS mission report also comments that the plan "considers very sympathetically the life and future of its inhabitants, both locally and nationally." In its opinion, "the boundaries proposed are sensible in terms of long-term management."

Conservation and Authenticity

Conservation history

The significance of Sangiran first came to the notice of scholars in 1934 when chalcedony flakes were found in the village of Ngebung. There followed an intensive research campaign between 1936 and 1941 by G H R von Königswald which led to the discovery of the first hominid fossil. Palaeoanthropological and geological research began again in the 1960s and the Gadjah Mada University in Yogyakarta set up a palaeoanthropological laboratory in 1977.

The Indonesian National Research Centre for Archaeology, in collaboration with the French Musée de l'Homme, carried out an excavation in 1989, when a number of important hominid fossils were discovered. Palaeoecological research has been carried out by A M Samah since 1982. Dating research using fission-track and palaeomagnetic techniques took place in 1982-86. A local site museum and conservation laboratory was set up in 1988.

Finds from excavations form only a minor part of the total fossil and archaeological material from the Sangiran Early Man Site: most come from chance finds by local people, who are conscientious over handing these to the appropriate authorities. There has never been any attempt at clandestine digging on their part.

In its report, the ICOMOS expert mission comments that "in an important sense lack of conservation is what will continue to make the site scientifically relevant."

Authenticity

The concept of authenticity has no relevance to this site, which is essentially a series of buried and largely untouched geological strata.

Evaluation

Action by ICOMOS

An ICOMOS expert mission visited Sangiran in February 1996. ICOMOS also consulted a world expert on human palaeontology and palaeolithic archaeology on the cultural significance of the site.

Qualities

To quote the expert consulted by ICOMOS, the Sangiran Early Man Site is "globally significant, displaying many aspects of very long-term human physical and cultural evolution in an environmental context. It will continue to be so and remain dynamically informative." It is an extensive, well defined, properly protected, and competently managed cultural property.

Comparative analysis

Sangiran is recognized by scientists to be one of the most important sites in the world for studying fossil man, ranking alongside Zhoukoudian (China), Willandra Lakes (Australia), Olduvai Gorge (Tanzania), and Sterkfontein (South Africa), and more fruitful in finds than any of these.

ICOMOS observations

The area covered by the nomination is very large, covering some 56 km². It is recognized that it is made up of geological strata bearing early hominid fossils, and excavations and chance finds suggest that these cover most of the area within the protected archaeological reserve. Because of this scientific potential it is logical to propose the entire area for inscription on the World Heritage List. This fact, coupled with the nature of the present occupation of the land and the management policies, make the definition of a buffer zone superfluous and, indeed, even undesirable.

Recommendation

That this property be inscribed on the World Heritage List on the basis of *criteria iii and vi*:

The Sangiran area is one of the key sites for the understanding of human evolution and admirably illustrates the development of *Homo sapiens sapiens* from the Middle Pleistocene to the present through the outstanding fossil and artefactual material that it has produced.

ICOMOS, October 1996

TOPOGRAPHICAL MAP OF SANGIRAN EARLY MAN SITE

SHEET 49/XLI-e (87-e)



SCALE 1:25 000.



ARCHAEOLOGICAL RESERVE AREA OF THE SANGIRAN EARLY MAN SITE AFTER THE MINISTER'S DECREE NO.070/O/1977

Sangiran : carte topographique du site

Sangiran : topographical map of the site