The Cultural Landscape of Maymand (Islamic Republic of Iran) No 1423rev

Official name as proposed by the State Party

The Cultural Landscape of Maymand

Location

Kermān Province, Shahr-e Bābak Township Islamic Republic of Iran

Brief description

Maymand is an isolated semi-desert area at the head of a valley in the southern end of Iran's central range of mountains. Surrounding the village on three sides are dramatic mountain peaks rising to around 2,000 metres.

The people of Maymand are semi-nomadic agropastoralists herding sheep and cattle on the mountain pastures where they have temporary spring, summer and autumn settlements. Around the summer houses are pistachio orchards and terraced arable fields for wheat and barley.

During the winter months they live lower down in troglodytic houses carved out of soft *kamar* rock. These are reputed to have been lived in continuously for thousands of years.

In this extremely arid area, water for crops and animals was traditionally harvested from multiple sources: springs, rainfall tanks, a network of seasonal rivers and subterranean pools channelled along 51 underground qanats. Many of these have now been supplanted by small reservoirs and pipes.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a site

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2013) paragraph 47, it is also a *cultural landscape*.

1 Basic data

Included in the Tentative List 9 August 2007

International Assistance from the World Heritage Fund for preparing the Nomination None

Date received by the World Heritage Centre

30 January 2012 29 January 2015

Background

This is a referred back nomination.

At its 37th session (Phnom Penh, 2013), the World Heritage Committee adopted the following decision:

Decision 37 COM 8B.27:

The World Heritage Committee,

- 1. Having examined Documents WHC-13/37.COM/8B, WHC-13/37.COM/INF.8B1 and WHC-13/37.COM/INF.8B4,
- 2. Recognizing the Outstanding Universal Value of the site, refers the nomination of the Cultural Landscape of Maymand, Iran (Islamic Republic of) back to the State Party, in order to allow it to set the property into its wider agro-pastoral context, and demonstrate in which way the site is an outstanding reflection of transhumance in its geo-cultural region;
- 3. Requests the State Party and the Advisory Bodies to continue to work closely on the nomination dossier as well as with the other States Parties, especially those in the region, to promote the concept of Desert Cultural Landscape;
- 4. Also requests the State Party to develop a land-use strategy that integrates traditional agro-pastoralism into an economic development strategy.

ICOMOS had a meeting with the State Party during the 37th World Heritage Committee session and a note was sent in August 2013 to the State Party on the nomination responding to the World Heritage Committee's decision 37 COM 8B.27. No further dialogue has had since that time.

In January 2015, the State Party submitted additional complementary information which included reports on nomadism in Maymand, description of Maymand's agropastoral lifestyle, and history and archaeology of Maymand.

Consultations

ICOMOS consulted its International Scientific Committees on Cultural Landscapes and Vernacular Architecture and several independent experts.

IUCN provided comments on this cultural landscape on 19 December 2012. The information was carefully considered by ICOMOS in reaching its final decision and recommendation in March 2013, and IUCN has also reviewed the presentation of its comments as included in the report by ICOMOS in 2013.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 5 to 11 November 2012. Since the 37th World Heritage Committee session, there have been no further missions.

Additional information requested and received from the State Party

The State Party submitted Additional Information on 29 January 2015 under the referral process.

This provided complementary information to the original nomination dossier on the following main aspects: Nomadism, Sustainable Management of the Maymand Landscape, History and Archaeology of Maymand, and Augmented Comparative Analysis.

These included much more specific details than in the original nomination dossier on the history of the area and on the socio-economic system of agro-pastoralism that shaped the landscape.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

Maymand is a south facing valley within the arid chain of Iran's central mountains.

The villagers are agro-pastoralists and practice a distinctive type of transhumance which involves moving with their animals to different pastures, traditionally four, and more recently three, times a year.

In the exceptionally arid climate, traditionally every drop of water needed to be collected from a variety of source to provide enough for the animals, orchards and small vegetable plots.

The community is said to have a strong bond with the natural environment that is expressed in social practices, cultural ceremonies and religious beliefs.

Although communities in other neighbouring valleys practice very similar livelihoods, in the Maymand valley there is one difference: the winter housing is troglodytic, carved out of a particular soft stone in one part of the mountain chain. These troglodytic houses are said to have been lived in for thousands of years.

In response to what are seen as deteriorating climatic conditions in the valley, which are impacting adversely on farming, the villagers have initiated creative strategies to improve their living standards. Among these are more modern methods of water storage using small dams, concrete pipes and tanks.

The strong social structures are also beginning to weaken as people move into the valley from other areas such as Kerman and Yazd and others move out to the nearby town. These changes are starting to impact on the pattern of seasonal movements which have in recent years been reduced from four to three a year and on the full time occupation of the valley. In winter although some people

stay in the troglodytic houses during the cold winter months, many others move to nearby towns.

The nominated property covers an area of 4,985.85 hectares and the buffer zone covers an area of 7,024.65 hectares.

The property consists of the following:

Houses and animal shelters

There are traditionally four types of houses that relate to the traditional four phase seasonal migrations. These are: Sar-e-Āghol, Eshām, Sar-e-Bāgh and the Kiches, the troglodyte houses of Maymand. Three of these are temporary houses, while the fourth, the troglodytic houses, are permanent. The second type, Eshām, is the one that now has very limited use.

Sar-e-Āghol are settlements used from the end of winter until late spring and are on the southern fields. They consist of houses and shelters for animals. The houses come in two different types. Markhāneh are circular houses, semi-underground to shelter them from the wind, with low dry stone wall and a roof covering of wood and thatch of wild thistles. Mashkdān houses are above ground and built with dry stone walls and a conical roof of branches.

Some of the buildings for cattle are much more substantial and have barrel vaulted brick or stone roofs. There are also stone lined $K\bar{u}z$ and $Dark\bar{u}z$, underground chambers for lambs, and enclosures for animals, that come in three types: Talgard, constructed of stones, wood and branches, and $Jirehd\bar{a}n$ and $Zend\bar{a}n$, both built with stone.

Eshām houses were used for a short period in early spring at places were wild almonds could be collected. Traditionally the houses were tents of goat hair or shelters of brushwood. This is the second of the four stage transhumance that has almost disappeared.

Sar-e-Bāgh houses are used during summer and early autumn. The groups of houses are sited near seasonal rivers. When the weather is hot the structures are light. Dry stone walls support a roof structure of vertical and horizontal timbers covered with grass thatch. In inclement weather more substantial houses are constructed with taller stone walls and a conical roof. When the houses are un-occupied the roof covering is removed.

Cattle are collected in roofless stone enclosures.

Near seasonal rivers around these summer villages are terraces for growing wheat and barley, and the remains or now ruined water-mills (of which one has been restored). Pits for boiling and straining grape juice are still in use as are *Kel-e-Dūshāb* which are used to contain the resulting *Dūshāb* or syrup of grapes.

The troglodyte houses of Maymand are used during the late autumn and winter. Carved out of the soft rock on both sides of a shallow valley, they are constructed in layers of up to five houses in height. The houses are connected by very narrow paths, some with stone stairs.

Around 400 *Kiches* or houses have been identified. Each house has between one and seven rooms. Traditionally these were used for living, and storage. Most rooms have only one opening, the door, but a few have skylights. The entrance doorways were embellished with a variety of different types of carved arches.

123 units are intact but only around 40 still inhabited. Other *Kiches* are used as a management centre, guest house, restaurant, handicraft shop, workshops, child centre, etc.

In the centre of the village is an open central space used for ceremonies and meetings and now also for shopping. There is also a mosque, former bath house, former school (now a cultural centre) and a possible fire temple.

New buildings have also been built in the village such as a large laboratory, and an interpretation centre, both built in the 1960s. These are being remodelled, to allow them to fit in better with the traditional buildings.

The nomination dossier contains detailed photographs and survey drawings of all aspects of the various types of traditional dwellings.

Water collection

Traditionally water was gathered from all available sources such as rivers, springs and subterranean pools and collected in reservoirs or channelled through underground *qanats* to the fields and village.

Although no detailed information has been provided in the nomination dossier on the layout, or construction of the 51 *qanats* mentioned in the nomination dossier, a research project has identified the *qanats*, and well and set out remedial proposals for their problems. It is understood that currently only two are still working.

The village has now a public water system that has been built in recent years to assure a regular distribution of water for irrigation even in times of severe drought. Small dams have been constructed, and some water is also now provided by water tankers.

As a result stone reservoirs for drinking water have largely been abandoned.

Agro-pastoral systems

This nomination is based on the agro-pastoral transhumance system of moving flocks of sheep and herds of cattle to different pastures following the new grass and other plants as they emerge in the spring and summer months. Near the summer pastures, terraced fields grow crops of wheat and barley.

In its first evaluation, ICOMOS noted that although very detailed information is provided for the various types of houses, almost no information is given on the agropastoral system. Are the farmers self-sufficient or do they sell some of their animals for meat? How is the sheep wool used? Do the arable crops just feed the families? Have numbers of animals increased in recent years? How are grazing ground allocated? And who decides or how grazing lands are apportioned and when families will move from one grazing ground to the next? The supplementary information provided has begun to address these issues.

First it defines the agro-pastoral system as a special type of nomadism where there is an internal migration (i.e. within the territory of the community) performed three times a year, between three fixed settlement areas, and where it is the people who move rather than people and animals.

Rock Art and other archaeological sites

The nomination dossier refers to various rock art sites scattered across the area, and other evidence or pre-historic and early historic activities such as *Dezhs* (forts) and pre-Islamic graves. However few details are provided as to the location of these sites, or of research associated with them.

History and development

The additional information provided shows that although fragments of pottery attest to some sort of habitation in the Maymand area between 6th and 4th century BC and specifically in the Caste area around 2,000 years ago, there is no direct evidence of settlement in Maymand before the Islamic era. Before that time, the area could have been used for temporary, nomadic habitation as indicated by remains of stone for weighting tent structures.

The permanent settlements developed sometime before the 16th century. The cave houses together with the castle on the highest point provided defence for communities living in the valley. Two other villages in the vicinity also show evidence of defensive cave houses: LaKhorrin and Pish Esta, but these are now abandoned.

Maymand gained importance in the late 17th century when it became an economic and cultural centre. It was a source of livestock but also the target for invaders and refugees. Its trade brought prosperity and this led to an increase in population and the development of satellite villages in the hinterland where, although the houses were not rock cut, they followed a similar layout. Over the next century new land was cultivated as a result of agricultural prosperity, water mills increased, as did the construction of cemeteries.

By the late 18th century, the security of the area came with wider control and the castle was abandoned. By the mid-19th century, security had deteriorated and the area appears to have been subject to raids which had a

detrimental impact on agricultural production bringing about a gradual decline in the population of the area.

In modern times, during the 1950s, an increase in population led to the development of new houses in the village constructed out of bricks. Around 44 still exist. Even more recently, materials such as iron and glass have been use to a limited degree but are said to have impacted on the overall unity of the village.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The initial comparative analysis was divided into two parts. The first dealt with comparison of troglodyte rock cut dwellings while the second part considered sites reflecting transhumance.

For Troglodyte dwellings, comparisons were made with sites in Iran including the villages of Kandovān, Hīlehvar, Sevar, Qorveh, and Vīnd, the underground town of Nūsh Ābād, Karaftū Cave and the following sites: Chelleh Khāneh in Būshehr, Zoroastrian (Gabrī) grottoes in Khārk Island, Tamīn village in Sīstān and Balūchestān province, Zoroastrian (Gabrī) houses around Tabas, and similar sites near Ābesk

Some of these sites have much grander examples of troglodytic architecture, comparable to some extent to that of Cappadocia, particularly Kandovān. However, this village is said to be compromised by tourism and inappropriate conversions. Hīlehvar has been abandoned; Sevar could have been developed for animals rather than humans. While Qorveh village has similarities, it has been abandoned and new houses constructed. And none of these sites are said to be associated with three phase transhumance.

The underground town of Nūsh Ābād was built below the existing town for defence purposes. Therefore it was never lived in full time except in times of siege. Karaftū Cave because of its pictographs and dated potsherds is important but not a residential unit.

Outside Iran, Maymand was compared with a selection of rock-cut structures in Cappadocia, Matera, Syracuse, Petra, Santorin, Greece, Bamiyan Valley, and Huang Ho (Yellow river) in China, with caves and grottoes in India, and with villages in Tunisia.

ICOMOS noted that these comparisons are interesting but rather too broad. Several millions of people live in rock cut and underground houses in China; and the ceremonial sites of Petra and India are hardly comparable in terms of function. The conclusion drawn is that the rock in Maymand is different from elsewhere in terms of geology, spatial organization, landscape and continuation of life. But what has not been demonstrated is that the troglodytic dwellings on their own are

exceptional for the way the ensemble has been created out of the soft rock.

For transhumance, Maymand is compared mainly with other societies in Iran. It is noted that there are broadly two types of nomadism, fully nomadic and partly nomadic. The Maymand community comes into the latter category, moving seasonally from a fixed base. It is further noted that no common view exists of the delineation and boundaries of nomadic groups of people in Iran. The comparison suggests that Maymand is the only place where three phase migrations take place in association with troglodytic dwellings.

The supplementary information provided on comparative analysis is based on a survey undertaken of the Maymand valley and its adjacent regions where there is a similar climate and similar cultural conditions. This survey considered the troglodytic settlements in their wider landscape context, lining them to their productive heartland. The survey included field visits, surveys and interviews as well as a literature search. This survey has provided much more details on the overall Maymand system and this is reflected in the description section.

Comparisons were also widened to consider the dry, desert agro-pastoral system with those of other similar dry desert areas.

What has not been considered in detail is the precise relationship to other areas in the wider region through collaboration with others countries, as suggested by the World Heritage Committee in its decision 37 COM 8B.27.

Nevertheless, based on the decision of the World Heritage Committee to acknowledge Outstanding Universal Value, it should be assumed that Maymand is considered exceptional as an agro-pastoral landscape in a dry desert environment that reflects a three phased approach involving the movement of people rather than animals.

ICOMOS considers that the comparative analysis, and the additional research undertaken by ICOMOS, have illustrated that the Outstanding Universal Value identified by the World Heritage Committee in its decision 37COM.8B.27, can best be related to the idea of Maymand as a very specific manifestation of a three phase agro-pastoral system of transhumance in a dry desert environment that involves the movement of people rather than animals to three defined settlement areas, one of which is cave dwellings.

Justification of Outstanding Universal Value

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Maymand is an outstanding example of a threephased transhumance system of agro-pastoralism that still continues to be practised.
- The landscape displays a great diversity of different types of shelter for both humans and animals and of water collection methods such as wells and ganats.
- The focal point of the landscape is the troglodytic village that provides winter accommodation.
- The various house forms are completely organic and vernacular in form and use virgin materials.
- The whole life cycle (including food and medicine as well as architecture) is guided by wisdom and knowledge of nature.

ICOMOS considers the additional information has shown that Maymand is not exceptional in global terms as an example of an agro-pastoral system or of an exceptional landscape that reflects an agro pastoral system.

It can however be seen as an important and very specific manifestation of a three phase agro-pastoral system of transhumance in a dry desert environment that involves the movement of people rather than animals to three defined settlement areas one of which is cave dwellings.

It is thus a specific regional variation of agro-pastoral transhumance that has persisted.

Maymand is not an extensive area, nor does its agro pastoral system appear to be of great antiquity; rather it is a small scale response to a harsh environment which, through adequate defence arrangements, allowed the community to flourish for several centuries.

Integrity and authenticity

Integrity

All the components of the landscape reflecting the agropastoral system and permanent and seasonal dwellings are within the boundaries as are various pre-historic elements such as rock art, and more recent historic structures such as forts.

The components are however vulnerable, in relation to the resilience of the transhumance systems. This continues for the present, with a decreasing population. Although the small irrigated fields survive in outline they no longer are used to grow staple crops for self-sufficient families.

Improved communications, such as with nearby towns means that people can look after their animals and vegetable plots in different ways than previously.

As a result far fewer people are over-wintering in the troglodytic villages than a generation ago and there are far fewer families using the seasonal settlements.

Only around 90 out of 400 of the troglodytic dwellings are inhabited during the winter. A few more of them are

inhabited only during weekends, when people return from the nearest town to where they have moved.

The number of $\bar{A}ghols$ has reduced in the last few years due to the decreasing numbers of pastoralists. In the nominated property there remain at least 8 $\bar{A}ghols$ that are still living and used by families who have sufficient cattle to ensure their survival. There are two others that are abandoned.

Most of the seasonal buildings are largely re-constructed each season and are therefore a reflection of a traditional practice that has persisted for generations. But this is a practice that could disappear within a generation if the pastoral way of life is not attractive to the younger generation.

Authenticity

There is little doubt of the authenticity of most of the components of the property, in terms of the landscape itself and the traditional practices that interact with it, as reflected in troglodytic houses, seasonal shelters and water structures. Some of the latter have been adapted in recent decades and only two of the *qanats* survive. The troglodytic structures have undergone extensive restoration over the past ten years and unfortunately ICOMOS notes that no details have been provided to set this work into context such as data on the village before work commenced, on the degree of intervention or on the conservation approach adopted.

Authenticity is also vulnerable to a weakening of traditional practices which could lead to a reduction in the size of the community that manages the landscape, to more families only living in the valley during the summer months, and to the impacts of tourism in particular on the troglodytic dwellings, as has happened in Kandovān.

As so little information is provided on the pastures, it is not clear how healthy these are.

ICOMOS considers that the conditions of integrity and authenticity have been met. Overall both integrity and authenticity are highly vulnerable to socio-economic changes and to the pressures of tourism.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii), (iv) and (v).

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that Maymand bears an exceptional testimony to the evolution of a traditional way of life in close interaction with nature, reflecting significant social, economic and religious activities from ancient times. The landscape comprises a range of troglodyte villages,

mountain villages, gardens, and spring-time shelters on the plains ($Sar\text{-}e\text{-}\bar{A}ghol$) reflecting seasonal requirements.

ICOMOS considers that as a landscape that reflects transhumance Maymand is interesting for the way it is connected with troglodytic winter quarters. The overall system of transhumance and troglodytic structures is found in one small valley and is sustained by a very small community of some fifty families. It is difficult to say that this highly specialised adaptation to agropastoralism in a very small area can be considered as a reflection of a cultural tradition or civilisation.

ICOMOS considers that this criterion has not been justified.

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the State Party on the grounds that Maymand illustrates significant stages in the development of human habitat based on transhumance that dates back initially to the Parthian and early Sassanid periods, c 3rd century BC to AD 3rd century. The troglodyte residences of *Maymand* illustrate the evolution of such habitat from the use of natural caves to more elaborate spaces for a diversity of purposes, including residences, religious spaces, mosques, baths, and schools. The landscape also includes pools, water tanks, wells, and underground water canals (*Qanāts*), as well as graveyards (Pre-Islamic and Islamic), providing the framework for living in different seasons.

ICOMOS considers that the lack of available historical information on the development of the troglodytic dwellings in association with agro-pastoral traditions and water management systems, means that so far it has not been demonstrated how this small valley illustrates a significant stage in human history.

ICOMOS considers that this criterion has not been justified.

Criterion (v): be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

This criterion is justified by the State Party on the grounds that Maymand reflects transhumance that is the seasonal and daily movements of people with their livestock over relatively short distances, typically to higher pastures in summer and to lower valleys in winter, based on an excellent knowledge of nature and an

ingenious use of natural resources, scarce water and herbal plants and wild almond trees.

ICOMOS considers that Maymand reflects a traditional three phase transhumance system with unusual troglodytic winter housing in a dry desert environment. It is a small mainly self-sufficient community within one large valley. It is a good example of a system that appears to have been once more widespread and now only survives in small areas, and involves the movement of people rather than animals to three defined settlement areas one of which is cave dwellings.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that that the conditions of integrity and authenticity have been met, although both are highly vulnerable to socio-economic changes and to pressures of tourism, and that criterion (v) is best suited to justify the Outstanding Universal Value recognized by the World Heritage Committee in its decision 37COM.8B.27.

4 Factors affecting the property

The largest threat to the overall agro-pastoral landscape is its vulnerability as a result of decreasing population through migration to nearby towns.

In the past century the population has decreased from 3,000 inhabitants to the current 850. In the village, during the winter, the current population is 145 people in 58 families with the rest of the population living in the nearby town of Shar-e-Baback and some working in the nearby copper factory (see below). It is easy to understand the migration way from the area over winter, when temperatures fall to low levels and there are few modern amenities (only communal toilets for instance). Nevertheless, the population increases during the week ends, when many of the owners return from the nearby town. Also for the past three years the population has very slightly increased, possibly due to governmental initiatives such as tax exemptions, etc.

In the medium and longer term, sustainability of this overall landscape system – the troglodytic village as part of the agro-pastoral transhumance system – will only be possible if support, through grants and subsidies, is available to the farmers to allow them to earn a reasonable income when combined with benefits from tourism.

In other parts of the world support for marketing produce has proved beneficial when the food the farmers grow is in some ways special or scarce and can command a higher value than similar food from elsewhere. In the case of Maymand, that does not seem to be a possibility, as the flocks of sheep and herds of cattle are apparently not distinctive. And also the basic agro-pastoral system was geared toward self-sufficiency rather than producing

a surplus for trade as an increase in stock number could upset the balance with nature and lead to over-grazing.

An overall plan for the sustainability of Maymand would need to address the rising expectations of people living in the valley. Education and transport and electricity and water are already provided. How individual *Kiches* can be bought up to date in terms of services needs to be addressed – perhaps looking at what has been achieved in other troglodytic areas.

In the first evaluation, ICOMOS questioned whether their size would allow this, whether the size of the overall socio-economic unit – based on only 58 families – is adequate if in the future agro-pastoral activities in the neighbouring valleys do not survive, and whether this small island of traditional transhumance would be viable.

ICOMOS noted that the State Party was aware of this danger and has set forth a series of initiatives in order to attract the population back again to the site, with good results, as since 2005, the population has risen in the village from 114 to 154 inhabitants. This increase does not however seem to be reflected in a comparable increase in families involved in pastoral activities.

The additional information provided sets out the results of documentation of the agro-pastoral system, the results of a series of workshops to encourage communities to preserve their traditional lifestyle, and the activities that flowed from these.

Examples of supportive intervention include the dredging of existing *qanats*, encouragement for tree planting to reverse decline in grazing land, and the construction of dykes to prevent run off of water. This has had the effect of persuading young families to return.

Some of these have also branched out to develop traditional activities such as bee-keeping, and harvesting wild pistachio and almond. Support is being given to other activities such as a research project to explore the potential for oil extraction from local seeds, and encouragement to the growing of high value spices and herbs in fields previously used for staple food crops. This latter is leading to the development of a small museum of local herbs.

The troglodyte village is a main tourist attraction and on certain days in each of the past few years, the number of visitors has exceeded the appropriate limit. There is currently strong control of the number of visitors by special "ecological" police, who are being helped by the army in the task of visitor control and also by local guides and even the local community. Nevertheless there remain concerns over the negative impact of large numbers of visitors on these fragile buildings.

As well as the loss of vitality of the agro pastoral system, there is also the threat that the village could become a set piece for tourists, where activities such as weaving

and embroidery are demonstrated in a way that is unrelated to traditional activities.

Electricity poles in the village impact on the overall visual integrity of the open almost treeless landscape. The State Party has already implemented initiatives to bury more than 3m of electrical infrastructure.

It is crucial that the excavation work that this will require should be subject to adequate research and analysis before it commences and during the work.

Another threat to visual integrity is the large communications antenna. Although there have been some attempts to hide it, there is still no solution.

The tarmac road to the village passes over the old village baths, and this presents a threat to its structure. To counteract major damages caused by entry of heavy machinery or intense traffic on certain days, a guardsman has been appointed to control the situation.

The Khatun Abad Copper factory, located to the south, outside the buffer zone, was a menace in the past due to the air pollution and soil and water contamination. Filters have now been installed to minimize the problem. Currently, the Managers of the Copper Factory are funding some of the projects carried out in Maymand. The factory attracts the young population and is also seen as an important part of the strategy to revitalise the region. It is a satellite of a huge mining complex located some 150 km away, being one of the main resources for development in the whole Kerman province.

Another kind of pollution is related to the seasonal migrations. When the seasonal $\bar{A}b\bar{a}d\bar{s}$ are abandoned at the end of summer, much waste is left behind. 'Traditional' waste was biodegradable, but current waste includes plastic bottles, tires, etc. ICOMOS considers that this issue needs to be addressed in the Management Plan.

The decrease in rainfall and in water levels of seasonal rivers is resulting in changes to crops. Also the increasing desertification threatens the overall pastures.

Humidity has affected some of the *Kiches*, but ceilings have been rebuilt and dehumidifiers have been used experimentally. A new mason (traditional master) has also carried out some experiments in the last year, using traditional materials (calk and mortars) that seem to have had good results.

ICOMOS considers that there are two main threats to the property. The first is the vulnerability of the transhumance system related to the small size of the socioeconomic unit which supports it, which means that overall the property has weak resilience. The second threat relates to the troglodytic village becoming a museum where the spirit and feeling of a living settlement – that is part of the agro-pastoral system – no longer exists.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

All elements necessary to express the values of the property are included within the boundaries of the nominated area

The buffer zone is merely a protection area that does not apparently include any important elements relating to the overall value.

ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate.

Ownership

The ownership varies for different areas. The pasture lands are in public ownership but traditional local ownership that allocates pastures to different families according to customary practices is respected in Iranian law

Ābādīs, Āghols, arable areas, water mills, and village qanats are privately owned and managed traditionally. Some of the qanats and springs are also public property.

The trodglodyte village houses are all in private ownership of different families. Other elements such as local toilets, parking, archaeological remains, pre-Islamic graves and petroglyphs are considered public property. The only state ownership in the village is the new school, post office and health centre. The authorities have preferred not to purchase any property in the village, so as to not alter the prices; places such as the project headquarters, the documentation centre, etc. are leased on a long-term basis.

Protection

The troglodyte village is registered in the National Heritage List, and is protected under the Historical Monument's Protection and Conservation Law. However the overall landscape is not protected, nor does the buffer zone have any protection.

It would be appropriate for the whole nominated area to be registered and protected by the same Law. It was suggested to the ICOMOS mission that if the site is inscribed, the whole property will becomes immediately registered, as happened with all other Iranian World Heritage inscriptions.

Currently the site is protected by other cultural and natural Iranian laws, such as the Iranian Civil Law that forbids transferring the ownership of public monuments and prohibits private ownership of significant cultural property.

The Islamic Penal Law also protects the site, as no restoration, repair, renovation, transfer, or change of functions, etc. of registered monuments can be done

without the approval of the Iranian Cultural Heritage and Tourism Organisation (ICHHTO).

The area is also under regulation concerning natural heritage protecting the natural environment.

The Management Plan includes regulations for the nominated area and buffer zone but does not specify under which laws they are established. Furthermore it is not clear what function the buffer zone might provide as it is stated that there is no presumption within it against large scale development. It is stated that such large scale plans that may include industrial complexes and development projects such as highways, etc. in the buffer zone must be agreed by ICHHTO.

ICOMOS considers that the legal protection in place needs to be extended to cover the landscape, as is envisaged if the property is inscribed on the World Heritage List.

Conservation

For some elements of the property a great deal of inventory and research work has been carried out while for others there is still much to do.

The first nomination stated that the troglodyte village has been the focus of much of the attention and all the *Kiches* are inventoried with exhaustive documents and plans. The different architectural typologies, in the village, *Āghols* and *Ābādīs*, have been researched and there are detailed descriptions, including location, number, state of conservation, building techniques, etc. in the archives at the Maymand Cultural Heritage Base (MCHB).

The village has also been the subject of much restoration work which led to it being awarded the Melina Mercury Prize in 2005. The additional information reports that out of the total of 115 houses, 75 have been restored with active participation of Maymand Heritage Base, 25 by the owners and residents and 15 have been repaired by local craftsmen for non-resident owners.

Similarly, local flora and fauna have also been studied and researched quite exhaustively as have local handicrafts, language and traditional medicinal knowledge.

Petroglyphs have not been fully recorded and studied and neither have archaeological remains. Such work could enrich the understanding of the site, especially in relation to its history and origins that are still subject to discussion. The MCHB is currently developing new studies in this direction that are included in the Management Plan.

Furthermore, an overall landscape study that mapped all the evidence in spatial terms would be very helpful in implementing new protective or development initiatives. The landscape appears to be in good heart although over-stocking is an issue that is being addressed.

The traditional infrastructures are kept in a good state, except for the water mills, old stone reservoirs and *qanats* that have been abandoned as they are no longer used.

The conservation of the temporary settlements can be considered good only insofar that many of these constructions are constantly renewed due to the decay of the materials with which they are built (bushes, wood, thistles, etc.).

It is impossible to know if the troglodyte village has been very much altered as there is a lack of any graphic documentation before the 60s. During the 60s some new buildings and facilities were built in the village. Some of these have been demolished or re-structured during recent years, including the Telecommunication building that was located in the entrance of the village.

There is also a shortage of information on the more recent conservation work that has been carried out.

Since the establishment in 2001 of the Maymand Cultural Heritage Base (MCHB), there has been an increase in conservation measures with the aim to protect both the physical and spiritual aspects of the property and its local sustainable development.

This work has been carried out with the benefits of sponsorship from a variety of organisations and with the support of the local community.

There has been demolition of non-adequate structures, modification of existing infrastructures (water, sewage), restoration of village's main pathways, development of necessary restrooms, cleaning, 1st phase of electricity networking, buffer zone marking, and construction of parking and a children playground. Ceilings have been restored, metallic doors replaced, $\bar{A}ghols$ and $\bar{A}b\bar{a}d\bar{i}s$ reorganized, a watermill restored, etc.

In summary, the general state of conservation of the built heritage is good.

ICOMOS considers that the overall state of conservation is adequate.

Management

Management structures and processes, Including traditional management processes

The customary laws and traditional management are the most important management measures. The transmission of expertise and knowledge about cattle breeding, agricultural practices, the management of the hydraulic system, house building, etc. is still being practiced.

These traditional measures do however need to have a supportive framework at regional and national level.

In Iran it is necessary to have a Master Plan for the development of cities. Maymand was included in the Master Plan of Shahr-e Baback, the nearest town and in this plan it was considered as a tourist destination. The consequences of this definition are not explained in the dossier and need clarification.

The property is under the supervision of diverse organizations: Environment and Natural Resources, Police Forces, Government Office, Roads and Communication Authority, Water and Sewage, Electricity, Public Health, Communication and Education agencies and ministries.

These are drawn together through a management system that is based on the role of a "mayor" of the whole area. He is elected by the inhabitants and is the link with the regional government. He is a respected native of the village who studied away from his region and has returned to manage the site, in collaboration with the MCHB and the regional government. He maintains the traditional system of sharing the land for the grazing of the cattle, and all the hydraulic systems.

Policy framework: management plans and arrangements, including visitor management and presentation

In the first evaluation, ICOMOS noted that the property had an adequate Management plan. However as IUCN noted, the main emphasis seemed to be on restoration, construction of tourist facilities, education and regulation of traditional styles. It was not clear how land use would be regulated, how much intervention into and regulation of economic activities would occur and, therefore, how much impact regulation would have on the incomes of local people. The long-term plans include "Economic development considering a home-oriented outlook" (p 520). It is not clear what this means, but it does sound as if objectives will be set by the MCHB.

The additional information submitted includes the structure of a Management Plan to achieve Sustainable Development of the property that was developed from a series of workshops involving local communities and experts in landscapes and land management. It is based on an understanding of both human and natural resources.

The Plan aims to encourage population growth and on the basis of awareness raising and recognition of the value of traditional processes and their outcomes for the landscape, encouragement to develop new sources of income based on traditional practices and some official support such as dredging *qanats* and vaccinating livestock.

Three other plans have also been developed by University Departments. These are: Evaluation of

Ecological Capabilities, Agro-Pastoral lifestyle description and comparative study, and Research project on the impact of Water Sources and Farming. In addition a local team is engaged in mapping the activities of the farming year.

There are currently adequate local resources for administration. Since 2001 the Iranian Cultural Heritage, Handicrafts and Tourism Organization (ICCHTO) has assumed responsibility for the site and a Maymand Cultural Heritage Base (MCHB) has been established, with close links to the Maymand village council and the Maymand village administration office. The staff includes a traditional master mason. The local council manages the day-to-day affairs in collaboration with the MCHB.

Although funds spent on conservation and other actions have been set out in some details, there is no detailed plan for future funds or any commitment for them. The authorities indicated that future funds would depend on the success of the nomination. A strong commitment on this issue is needed.

Involvement of the local communities

Although the nomination is in one sense celebrating the interaction of the local community with the Maymand landscape over time, ICOMOS noted in its first evaluation that it provided very little information as to how the community was involved in management. IUCN observed that the extent of consultation with the population is barely mentioned except in the most general terms and the extent of representation and influence on decision-making and objective setting is not at all clear. All this is potentially a matter of great concern as the impacts of regulations on dwellings buildings and (especially) land use are likely to be very significant, as are the likely numbers of tourists.

The additional information provided demonstrates that consultation with the local community is now actively taking place: workshops have been held at there is a sense of engagement over a vision for the valley.

ICOMOS considers that the management system for the property is adequate. ICOMOS recommends that further work be undertaken to develop the sustainable development framework and integrate it into the Management Plan through an agreed Action Plan with necessary resources.

6 Monitoring

A detailed system of monitoring has been put in place that addresses the static heritage, the agro-pastoral system and the people who maintain that system.

ICOMOS considers that the monitoring system is adequate.

7 Conclusions

The World Heritage Committee recognized the Outstanding Universal Value of the Cultural Landscape of Maymand in its decision 37COM.8B.27, although it did not articulate precisely what that Outstanding Universal was in relation to the criteria.

Maymand is an unusual property where an agro-pastoral system, based on a three stage system of transhumance is linked to a troglodytic village that traditionally provided the winter housing for the famers.

The nominated property forms a discrete valley within which a small community of farmers still practice most aspects of the traditional agro-pastoral system, moving to different settlements three times a year to graze their animals, and growing wheat and barley on terraces near seasonal rivers at the summer settlements. The once crucial methods of harvesting and storing water have mostly been replaced by modern dams and water distribution systems. And in the winter some farmers no longer stay in the troglodytic village and live instead in the nearby town.

However, this tiny community is strongly committed to its traditions and is supported in its efforts by the local, regional and national authorities.

In the first evaluation ICOMOS considered that the key issues were how far this one variant of an agro-pastoral system can be seen as exceptional, secondly how far the local farmers will be prepared to continue their harsh and not particularly profitable lifestyle in the face of more lucrative opportunities in the towns, or nearby mines, and thirdly how tourism can be prevented from museumifying the village.

It is these three issues that the State Party has addressed in the additional information that has been provided.

The comparative analysis has shown that this small and relatively self-contained valley of Maymand provides a highly specific regional variation of agro-pastoralism that reflects a dry desert environment, and a three phase transhumance with farmers moving to three defined settlement areas that included fortified cave dwellings. ICOMOS considers that this should form the basis of the identified Outstanding Universal value.

The work done since the property was referred has opened up engagement between national and regional agencies and the local community to raise awareness of the legacy that they sustain and to begin to put in place a sustainable development framework based on support and encouragement for innovative ways to add value to local produce.

Although together these initiatives are a major step forward in engaging the local community in a dialogue on how to sustain the dynamic landscape practices, there is nevertheless still concern that such a small community of some 70 families can form a sustainable and resilient unit that will keep this agro-pastoral system alive, even if in the future it does not survive in neighbouring valleys.

The additional information identified the various assets of the valley landscape in terms of its potential to offer tourist activities and attractions. However, no detailed plan or approach was drawn from the material to suggest how tourism might be managed in such a way that it supports rather than subtracts from local traditions and agro-pastoral activities.

8 Recommendations

Recommendations with respect to inscription

Recalling decision 37COM.8B.27 of the World Heritage Committee at its 37th session which 'Recognizing the Outstanding Universal Value of the site, refers the nomination of the Cultural Landscape of Maymand, Iran (Islamic Republic of) back to the State Party, in order to allow it to set the property into its wider agro-pastoral context, and demonstrate in which way the site is an outstanding reflection of transhumance in its geo-cultural region;',

and as the World Heritage Committee has already determined that the property has Outstanding Universal Value, it is the considered view of ICOMOS that this could now be justified only in relation to criterion (v).

Under these circumstances, ICOMOS recommends that the Cultural Landscape of Maymand, Islamic Republic of Iran, be inscribed on the World Heritage List as a cultural landscape on the basis of **criterion** (v).

Recommended Statement of Outstanding Universal Value

Brief Synthesis

Maymand is a small and relatively self-contained south facing valley within the arid chain of Iran's central mountains.

The villagers are agro-pastoralists who practice a highly specific thee phase regional variation of transhumance that reflects the dry desert environment. The year, farmers move with their animals to defined settlements, traditionally four, and more recently three, that include fortified cave dwellings for the winter months. In three of these settlements the houses are temporary, while in the fourth, the troglodytic houses are permanent.

Sar-e-Āghol are the settlements on the southern fields used from the end of winter until late spring. The houses come in two different types. Markhāneh are circular houses, semi-underground to shelter them from the wind, with low dry stone wall and a roof covering of wood and thatch of wild thistles. Mashkdān houses are above

ground and built with dry stone walls and a conical roof of branches. Some of the buildings for cattle are much more substantial and have barrel vaulted brick or stone roofs.

Sar-e-Bāgh houses are sited near seasonal rivers and used during summer and early autumn. When the weather is hot the structures are light: dry stone walls support a roof structure of vertical and horizontal timbers covered with grass thatch. In inclement weather more substantial houses are constructed with taller stone walls and a conical roof. Cattle are collected in roofless stone enclosures. Around these summer villages are the remains of terraces for growing wheat and barley, and the remains of mostly now ruined water-mills. Pits for boiling and straining grape juice are still in use as are Kel-e-Dūshāb which are used to contain the resulting Dūshāb or syrup of grapes.

The winter troglodytic houses are carved out of the soft rock, in layers of up to five houses in height. Around 400 *Kiches* or houses have been identified and 123 units are intact. Each house has between one and seven rooms, traditionally used for living, and storage.

In the exceptionally arid climate, traditionally every drop of water needed to be collected from a variety of sources such as rivers, springs and subterranean pools and collected in reservoirs or channelled through underground *qanats* to be used for animals, orchards and small vegetable plots.

The community has a strong bond with the natural environment that is expressed in social practices, cultural ceremonies and religious beliefs.

Criterion (v): The Cultural Landscape of Maymand, a small mainly self-sufficient community within one large valley, reflects a traditional three phase transhumance system with unusual troglodytic winter housing in a dry desert environment. It is a good example of a system that appears to have been once more widespread, and involves the movement of people rather than animals to three defined settlement areas, one of which is cave dwellings.

Integrity

All the components of the landscape reflecting the agropastoral system and permanent and seasonal dwellings are within the boundaries.

The components are however vulnerable, in relation to the resilience of the transhumance systems. This continues for the present, with a decreasing population. Although the small irrigated fields survive in outline they no longer are used to grow staple crops for self-sufficient families.

Improved communications, such as with nearby towns means that people can look after their animals and vegetable plots in different ways than previously. As a

result far fewer people are over-wintering in the troglodytic villages than a generation ago and there are far fewer families using the seasonal settlements.

Only around 90 out of 400 of the troglodytic dwellings are inhabited during the winter. A few more of them are inhabited only during weekends, when people return from the nearest town to where they have moved.

The number of $\bar{A}ghols$ has reduced in the last few years due to the decreasing numbers of pastoralists. In the nominated property there remain at least 8 $\bar{A}ghols$ that are still living and used by families who have sufficient cattle to ensure their survival. There are two others that are abandoned.

Most of the seasonal buildings are largely re-constructed each season and are therefore a reflection of a traditional practice that has persisted for generations. But this is a practice that is highly vulnerable and could disappear within a generation, if the pastoral way of life is not attractive or sufficiently viable for the younger generation.

Authenticity

There is little doubt of the authenticity of most of the components of the property, in terms of the landscape itself and the traditional practices that interact with it, as reflected in troglodytic houses, seasonal shelters and water structures. Some of the latter have been adapted in recent decades and only two of the *qanats* survive. The troglodytic structures have undergone extensive restoration over the past ten years.

Authenticity is also vulnerable to a weakening of traditional practices which could lead to a reduction in the size of the community that manages the landscape, to more families only living in the valley during the summer months, and to the impacts of tourism in particular on the troglodytic dwellings.

Requirements for Protection and Management

The troglodyte village is registered in the National Heritage List, and is protected under the Historical Monument's Protection and Conservation Law. It is understood that the whole property will be legally protected upon inscription in line with other inscribed properties in Iran.

The property is also protected by other cultural and natural Iranian laws, such as the Iranian Civil Law that forbids transferring the ownership of public monuments and prohibits private ownership of significant cultural property. The Islamic Penal Law also protects the property, as no restoration, repair, renovation, transfer, or change of functions, etc. of registered monuments can be done without the ICHHTO approval. The area is also under regulation concerning natural heritage protecting the natural environment.

Since 2001 the Iranian Cultural Heritage, Handicrafts and Tourism Organization (ICCHTO) has assumed responsibility for the property and a Maymand Cultural Heritage Base (MCHB) has been established, with close links to the Maymand village council and the Maymand village administration office. The local council manages the day-to-day affairs in collaboration with the MCHB. There are currently adequate local resources for administration

A Management Plan in the initial nomination set out regulations for the property area. For the buffer zone, large scale plans that may include industrial complexes and development projects such as highways, etc. must be agreed by the Iranian Cultural Heritage and Tourism Organisation (ICHHTO).

Details of an augmented plan, arising from a workshop that aimed to encourage sustainable development for the local communities by opening up engagement between them and national and regional agencies, have been provided. This will focus on raising awareness of the legacy that the communities sustain, and put in place a sustainable development framework based on support and encouragement for innovative ways to add value to local produce, as well as some official support such as for dredging *qanats* and vaccinating livestock. This sustainable development plan has only recently been framed and clearly more work will be needed to translate it into an action plan with an agreed timescale and necessary resources.

Three other plans have also been developed by University Departments. These are: Evaluation of Ecological Capabilities, Agro-Pastoral lifestyle description and comparative study, and Research project on the impact of Water Sources and Farming. In addition a local team is engaged in mapping the activities of the farming year.

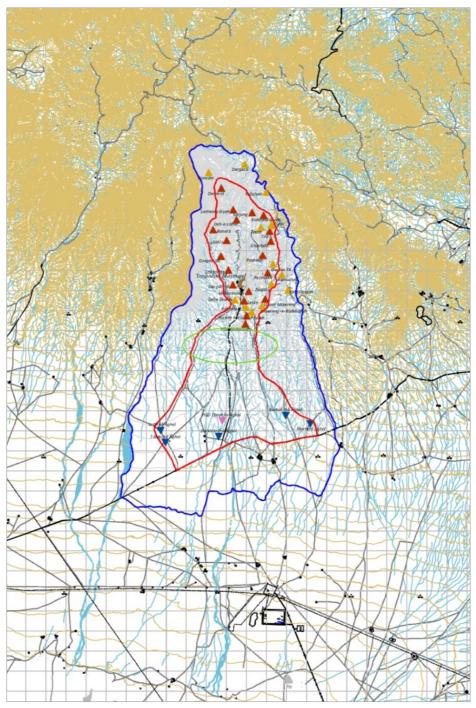
In spite of these initiatives and the engagement of the local community in a dialogue on how to sustain the dynamic landscape practices, there is nevertheless still concern that such a small community of some 70 families can form a sustainable and resilient unit that will keep the Maymand agro-pastoral system alive, even if in the future it does not survive in neighbouring valleys. Authenticity and integrity are thus vulnerable to a weakening of traditional practices.

Sustainable development will undoubtedly need to harness appropriate tourism opportunities. A plan is needed to set out how tourism might be managed in such a way that it supports rather than subtracts from local traditions and avoids museumifying the village and contributing to the demise of agro-pastoral traditions.

Additional recommendations

ICOMOS recommends that the State Party give consideration to the following:

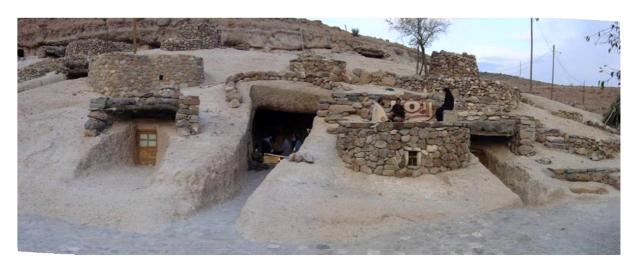
- Confirming that legal protection has been put in place for the whole property, in line with other inscribed properties in Iran;
- Undertaking further work to develop the sustainable development framework and integrate it into the Management Plan through an agreed Action Plan with necessary resources;
- Developing and implementing a cultural tourism plan that sets out parameters to ensure that tourism is managed to support rather than subtract from local traditions and agro-pastoral activities, and avoids museumifying the troglodytic village;
- Making available the outcomes of the specialised reports and research that have been undertaken into the Maymand landscape;
- Working closely with other States Parties, especially those in the region, to promote the concept of Desert Cultural Landscapes.



Map showing the boundaries of the nominated property



General view of the nominated property



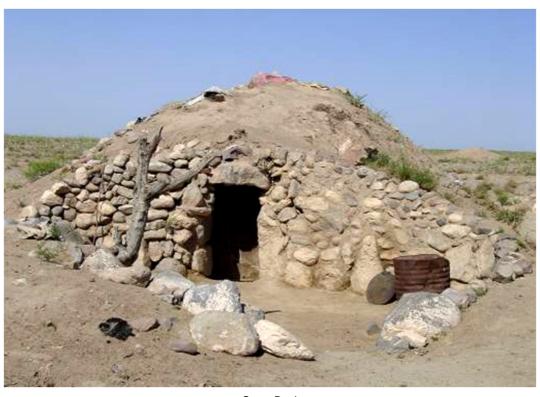
Kiches



The former bath house



Sar-e-Āghol



Sar-e-Bāgh