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Item 7 of the Provisional Agenda: State of conservation of properties inscribed on the World Heritage List and/or on the List of World Heritage in Danger.

Mission report:

MISSION REPORT / RAPPORT DE MISSION

Bam and its Cultural Landscape (Iran) (1208bis)
Bam et son paysage culturel (Iran) (1208bis)

16 - 22 October 2011
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This mission report should be read in conjunction with Document:
Ce rapport de mission doit être lu conjointement avec le document suivant:

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REPORT ON THE JOINT WORLD HERITAGE CENTRE / ICOMOS REACTIVE MONITORING MISSION

TO

THE WORLD HERITAGE PROPERTY OF BAM AND ITS CULTURAL LANDSCAPE (ISLAMIC REPUBLIC OF IRAN)

16 October - 22 October 2011

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REPORT ON THE MISSION TO BAM AND ITS CULTURAL LANDSCAPE  
(C1208, Islamic Republic of Iran)  
From 16 to 22 October 2011

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EXECUTIVE SUMMARY AND LIST OF RECOMMENDATIONS

The Desired State of Conservation for Bam and its Cultural Landscape has not been yet achieved. The Mission team does not recommend removing, at present, the property from the List of World Heritage in Danger. The mission team acknowledges and congratulates the Bam Base team, the local stakeholders and ICHHTO, for their significant effort towards Bam and its Cultural Landscape desired state of conservation. Nevertheless, the benchmarks defined by the State Party in 2007, have not yet been accomplished, in spite of the delay from the 2010 deadline established by the State Party to remove Bam from the List of World Heritage in Danger.

Following are exposed the principal milestones to be achieved for the removal of Bam and its Cultural Landscape from the List of World Heritage in Danger. Additionally, a list of subsequent and relevant recommendations is suggested.

A. Encroachment and existence of a gas station in the buffer zone

The mission team observed the existence of informal settlements and a gas station near Chahar Taqi (Chârtâq-e-Keleng-e-Hendusuz) (Comprehensive Management Plan reference nº11), which are within the property boundaries. Previous UNESCO missions addressed recommendations regarding the removal of these illegal settlements, as well as the gas station. The 2010 UNESCO mission revealed that some forbidden construction was dangerously built too close to Chahar Taqi. Police removed the illegal settlements, but encroachment always return back. Regarding the gas station, presently Bam’s Governor is awaiting for the court decision to remove the service station.

Recommendation 1

There is a need for security measures to be addressed monthly and systematically. Visits to the WH property components by municipal police cannot be irregular and occasional. They have to be constant and systematically, to avoid recurrent encroachment. If the land invasion continues, it must be foreseen, a permanent guard team, near the component.

Regarding the gas station, it is fundamental to definitely remove away the service, as it jeopardizes the WH property. This is one of the benchmarks (nº7) presented in 2007 for the eventual consideration of the removal of Bam and its landscape from the List of World Heritage in Danger.

B. Implementation of the Management Plan

Bam’s Comprehensive Management Plan was adopted in 2010, by the Higher Council for Architecture and Urban development, as an annex to the Special Structural Master Plan of Bam. The World Heritage Committee was informed by the State Party that the comprehensive plan for the conservation of Bam Citadel was updated and now includes precise actions for every sector of the Citadel; and has already been used to guide conservation actions throughout 2010. In addition, the comprehensive archaeological plan of the property, as well as the plan for the definition of its boundaries has been finalised (WD_WHC 2011_Bam and its Cultural Landscape).

The mission team confirmed that all the stakeholders received Bam’s Comprehensive Management Plan (CMP). However, the coordination and implementation of the Management Plan is not developed in a systematic way through Bam Architecture Consulting group, which holds the meetings, under the Governor’s supervision. Meetings are
addressed to coordinate and resolve encountered issues, but not to deal with the implementation of the MP.

Additionally, the mission team was informed that the comprehensive archaeological plan of the citadel is concluded, as well as the plan for the definition of the landscape boundaries. However, the comprehensive archaeological plan of the all property is not yet completed.

Recommendation 2
To implement the MP, an action plan was presented, as an annex of the Comprehensive Management Plan. In order to achieve a clear implementation of the MP, there are six major elements to define and address in the action plan: identification of priorities (achieved), definition of existent resources (missing), definition of activities (achieved), assignment of tasks (missing) and time-periods (missing), in order to achieve milestones, and efficiently implement the MP. Four of the six main issues were not addressed which is clearly a challenge for an efficient implementation of the MP.

C. Sustainability of the property

When referring to the importance of a long-term sustainable management plan, Arg-e Bam and its landscape should become more sustainable in terms of future financial resources. This demands for a short two to three years time period, to be less dependable on international assistance funding; and for a medium time period, to have more financial autonomy and be less dependable of national state funding.

A balanced medium term approach should be foreseen for the implementation of the Management Plan, less dependable on large allocation funds and with more involvement of the local community and stakeholders, as recommended by the Operational Guidelines.

There has been also a decrease on the number of workers at the property. In 2005, there was 1000 workers; in 2008, there was 490; in 2010, there 145 and in 2011 there is 25 workers. This brings difficulties to decentralise decision-making and to start implementing the Comprehensive Management Plan. It is also noticed that most of the efforts (conservation, protection, security, etc.) are concentrated in the citadel, which brings difficulties to address the other World Heritage property’s components that are missing conservation, as well as contributing for the components’ sustainability.

Recommendation 3
It is fundamental to address adequate resources in both human and financial contribution for the implementation of the Management Plan. Although the mission team has been assured by the Governor of Bam County of his will to respond to this matter, the mission team does not have further information on how this issue will be effectively addressed. Through time the CMP should gain autonomy and sustainability, but for now it is recommended that further resources be allocated to address the implementation of the Management Plan and support Bam’s Base Direction team.

D. Systematic Security in the World Heritage property

The World Heritage Committee was informed that a Safeguarding Unit and the Cultural Heritage Office of ICHHTO have been established and are now staffed and resourced to ensure full operation, including the monitoring of sites throughout the property and the buffer zone (WD_WHC 2011_Bam and its Cultural Landscape).
In spite of the assurance by ICHHTO regarding the creation of an ICHHTO on-site Unit, to monitor the property, among other tasks, the fact is that the few people that work for this Unit contribute as expert workers for the site, due to the overall very limited human resources available at the site. The Unit does not contribute for the resolution of security issues, neither, conservation concerns. Thus, there is a Security Unit created in 2007 that assures the security of the citadel. The remained 13 components do not receive a systematic and consistent security protection.

**Recommendation 4**
Bam World Heritage property is still not granted an adequate security system. Progress has been made in this regard, however achievements have not been fully accomplished, to address security through a *systematic approach*. Police and guards visits to the 13 components included on the WHP are sporadic and under inconstant surveillance. The involvement of *local population* can help guarantee after proper training, the human resources needed for consistent surveillance.

**E. Regulatory Measures and Conservation Guidelines**
Sometimes, the conservation proposal is not entirely consistent in terms of intervention (see Governor’s seat wall). Besides, in some structures, it is missing further uniformity between the design, and the conservation intervention project, which should be addressed in an adequate design scale.

**Recommendation 5**
Regulatory Measures and Guidelines should be developed and implemented in line with the Comprehensive Management Plan. Therefore, it is missing:
- Guidelines for physical stabilisation of structures in decay;
- Guidelines for criteria in conservation intervention;
- Conservation manual for the maintenance of earthen structures;

**F. Adequate and safe visit access and development of strategy for tourism pressure**
The 2010 State Party’s State of Conservation report indicates that the plan for promotion and for tourism improvement has yet to be completed. To support the communication of results, professional seminars as well as Steering Committee meetings have taken place, with pending meetings with the Ministry of Housing to control construction works in Bam. The adoption of rules and regulations for Bam and its Cultural Landscape is still reported as pending. No precise timeframe has been provided for the expected completion of work *(WD_WHCC 2011_Bam and its Cultural Landscape).*

Meetings took place between the mission team and representatives of the Ministry of Housing to clarify pending regulations and rules. The representatives of the Ministry of Housing informed the mission team that the Rules and Regulations are clear: in the buffer zone, construction is forbidden; in Bam, the highest point to build is 4.5 m and in the landscape is 10.5m.

The mission was also informed by Bam’s Base Director that the plan for tourism has yet to be completed. There is also lack of information regarding visitor’s facilities, visitor centre project, access and parking, etc. Foreseen activities for tourism should be carefully planned, in order not to change the natural balance of the site and its landscape.
Recommendation 6
Further effort, as to be made for the implementation of the tourism plan, the design of a visitor’s centre and parking balanced with the landscape, the implementation of safe site routes for tourists, as appropriate designed equipment (trash bins, toilets, site protective fences). It is also missing at the citadel’s entrance, a map of the landscape of WHP mentioning protected components, as well as more informative signage at the site.

More site information should be available in English; as well as site models that do not have translation to English; neither the site brochure. Arg-e Bam’s official website is also just presented in Farsi. It is also fundamental to address more effective promotion and dissemination of Arg-e Bam and its cultural landscape through national and international tourism offices.

G. Capacity building, research centre and international outreach
As for human resources, capacity building efforts, including training on interventions and archaeological works, have also continued to ensure the conservation of traditional know-how and therefore, the long-term maintenance of the property (WD_WHC 2011_Bam and its Cultural Landscape).

At present, capacity building is not formally established (it is addressed in an informal way), nor is concerted, as a common strategy, the opening of a research centre at the WH property.

International outreach was developed through several papers and conference participations until 2009. Following the change of Bam’s Base Direction, there has been a discontinuation of international publications as well as attendance to international earthen architecture and seismic resistant conferences.

Recommendation 7
As suggested by Bam’s Base Direction and Bam’s Steering Committee, a training research centre for seismic resistant earthen architecture could be considered, as a long-term research centre within the Citadel. For that to happen, capacity building, international and national publication of scientific research and the development of a strategy for research regarding the seismic resistance approach should be foreseen. This has to be coordinated and prepared by an interdisciplinary team and not just by Bam’s Base Director, as it happened until present.

H. Improved communication and cooperation between stakeholders and direction teams from different management periods
Several questions addressed by the mission team to ICHHTO representatives, the actual and previous Bam Site Director, and site consultants, indicate that site directors (present and past), Bam experts and professionals, stakeholders and consultants do not communicate among them, when there is a substitution of management team. It also indicates that the Steering Committee does not hold systematic meetings and its action is not effective.

The mission team also noticed that the Bam annual state report (e.g. January 2010 and 2011 reports) submitted by the state party to the World Heritage Committee are not communicated to the local team in Bam. There are inconsistencies regarding what is stated on the report and information acknowledged during the site visit.
Recommendation 8
Communication between the different management committees should improve, as well as between the consultant experts and Bam’s management team, from different time periods. It is crucial that when substitution of local professionals and experts occurs, to avoid disruption of common efforts and goals, the new teams have to be informed of all the previous strategies, methodologies, plans and projects. The team mission urges ICHHTO to play a key role by improving communication between the different parts, as well as sending all the state reports to the Director of Bam site, the Governor of Bam and the Mayor of Bam.

I. Possible date for the removal of Bam and its Cultural Landscape from the List of World Heritage in Danger

In line with the corrective measures defined by the World Heritage Committee in July 2007, the State Party defined 7 benchmarks as Desired State of Conservation to be achieved by until 2010, in order to remove the property from the List of World Heritage in Danger. As of 2011, there are still some missing milestones to be completed.

Recommendation 9
The authorities and stakeholders should concert their efforts, to define a suitable date for the removal of Arg-e Bam and its Cultural Landscape from the List of World Heritage in Danger, which will be reached, when the above corrective measures and Desired State of Conservation is fully responded. The mission team suggests that the time of the Ten year anniversary of December 2003 earthquake could be considered. This may provide a sufficient time period to achieve the missing milestones. Nevertheless, the decision lies on the State Party’s commitment and determination to fully respond to the outlined benchmarks.
1. BACKGROUND TO THE MISSION

1.1. Description of the property

The property name is Bam Citadel (Arg-e Bam) and its Related Sites, Islamic Republic of Iran. Bam is situated in a desert environment on the southern edge of the Iranian high plateau. The origins of Bam can be detected to the Achaemenid period (6th and 4th cent. B.C.). Its heyday was from the 7th to the 11th centuries, being at crossroads of important trade routes and known for the production of silk and cotton garments. The existence of life in the oasis was based on the underground irrigation canals, the qanāts, of which Bam as preserved some of the earliest evidence in Iran. Arg-e Bam is the most representative example of a fortified medieval town built in a vernacular technique using mud layers (chineh), sun-dried mud bricks (khesht), and vaulted and domed structures. Outside the core area of Arg-e Bam, there are other protected historic structures which include Qal’eh Dokhtar (Maiden’s fortress, ca. 7th cent.), Emamzadeh Zeyd Mausoleum (11-12th cent.), and Emamzadeh Asiri Mausoleum (12th century and historic qanāt systems and cultivations southeast of the Arg.

Bam and its Cultural Landscape represents an outstanding example of an ancient fortified settlement that developed around the Iranian central plateau and is an exceptional testimony to the development of a trading settlement in the desert environment of the Central Asian region. This impressive construction undoubtedly represents the climax and is the most important achievement of its type not only in the area of Bam but also in a much wider cultural region of Western Asia. Bam is located in an oasis area, the existence of which has been based on the use of underground water canals, qanāts, and has preserved evidence of the technological development in the building and maintenance of the qanāts over more than two millennia. For centuries, Bam had a strategic location on the Silk Roads connecting it to Central Asia in the east, the Persian Gulf in the south, as well as Egypt in the west and it is an example of the interaction of the various influences.

The cultural landscape of the County of Bam is an important representation of the interaction between man and nature and retains a rich resource of ancient canalisations, settlements and forts as landmarks and as a tangible evidence of the evolution of the area.

1.2. Inscription history

On the instance of the International Day of Monuments and Sites (18 April), ICHHTO, UNESCO and ICOMOS organised an International Workshop for the Recovery of Bam’s Cultural Heritage (ICHHTO, 2009b, p.72). This workshop was organised under the importance of developing a Statement of Significance of Arg-e Bam site, integrated on its long-term viability approach. Thirty eight international experts, twenty three Iranian specialists and thirty one ICHO members (ibid., p.72) gathered to assess Arg-e Bam’s significance. As a result, the BAM Declaration and Recommendations (ICHHTO, 2009b, Appendix 1) was produced - a foundation work to conform within the World Heritage nomination. Six months after the earthquake, the UNESCO World Heritage Committee listed Bam and its Cultural Landscape as a World Heritage site (Correia, 2009, p.168).

The nomination for the Citadel of Bam and Related Sites was proposed to UNESCO by the Iranian authorities on the 11th of May 2004 and immediately transmitted to ICOMOS for its examination. In addition to the Citadel itself of 73.16 ha, the proposed property included multiple core and buffer zones with different levels of protection. Such a fast designation as a World Heritage Listed site was just possible due to Paragraphs 161 and 162, Nominations to be processed on an emergency basis, from the ‘Operational Guidelines for the Implementation of the World Heritage Convention’. In this case it was because Arg-e Bam
'unquestionably meet the criteria for inscription on the World Heritage List and (...) suffered damage or face serious and specific dangers from natural events (...)’ (World Heritage Centre, 2008, p.39-40). Bam was also inscribed on the List of World Heritage in Danger (UNESCO, 2004).

An updated Nomination report was submitted on 29 January 2010, requested by the World Heritage Committee to ensure completeness, following the inscription of the property in 2004 according to the emergency procedure. The text contained in the original file concerned only a small part of the current property - the Citadel. Following a recommendation by ICOMOS, the World Heritage Committee subsequently decided to inscribe a much larger area, including the wider cultural landscape of Bam. As a result, it was necessary to update and complete the Nomination documents with information regarding this larger extent, which has now been done by the State Party.
1.3. Inscription Criteria and World Heritage values

The property was inscribed on the UNESCO World Heritage List and on the World Heritage List in Danger, during the 28th Session of the World Heritage Committee, on the basis of criteria (ii), (iii), (iv) and (v). On the 7th of July 2004, date of Inscription based on ICOMOS recommendation, the property was inscribed taking into consideration:

**Criterion (ii):** Arg-e Bam developed at the crossroads of important trade routes at the southern side of the Iranian high plateau, and it became an outstanding example of the interaction of the various influences.

**Criterion (iii):** Arg-e Bam and its related sites represent a cultural landscape and an exceptional testimony to the development of a trading settlement in the desert environment of the Central Asian region.

**Criterion (iv):** Arg-e Bam represents an outstanding example of a fortified settlement and citadel in the Central Asian region, based on the use mud layer technique (Chineh) combined with mud bricks (Khesht).

**Criterion (v):** The cultural landscape of Bam is an outstanding representation of the interaction of man and nature in a desert environment, using the qanāts. The system is based on a strict social system with precise tasks and responsibilities, which have been maintained in use until the present, but has now become vulnerable to irreversible change.

The World Heritage values of Authenticity and Integrity were recognised in Arg-e Bam site and its cultural landscape on the time of its inscription in 2004.

**Statement of Authenticity identified in 2004**

The property maintains several attributes that substantiate its authenticity. In regard to the historic fabric, although some deterioration existed and partial restorations were carried out between 1976 and 2003, these used traditional techniques and materials. The 2003 earthquake caused the collapse of various sections of the Governor’s Quarters and the upper parts of the defence walls. Notwithstanding, much of the lost fabric was from modern restorations. The materials found at the older levels are well preserved and have now been revealed. The traditional culture for architecture and the city plan have also been preserved, including the continuity in workmanship and know-how for earthen architecture construction. To maintain the authenticity of the property, it will be important that interventions follow appropriate restoration principles and guidelines, in accordance to international charters, and in consideration to the original materials and techniques. The setting has also maintained many of the historical features that speak to the integration of man and environment and other symbolic associations with the natural landscape. To retain the authenticity of this relationship, the management of the buffer zone will play a critical role, as well as provisions made for the continuation of historic practices and rituals and the continuous function and use of the area.

**Statement of Integrity identified in 2004**

The nominated property of Bam and its Cultural Landscape forms an organically grown relict cultural landscape. The World Heritage property encompasses the central part of the oasis of Bam, including the Citadel of Bam and the area along the Bam Seismic Fault. This contains historical evidence of the evolution of qanāt construction from the first millennium till the present. The inscribed property and the buffer zone are of sufficient size and encompass the attributes that sustain the Outstanding Universal value of the property, including the elements that express the relationship between man and the environment.
In the Arg-e Bam, earthen structures have retained urban forms and type of construction, which in spite of requiring interventions as a result of the earthquake, have still retained a high degree of integrity. The new urban master plan for the modern city of Bam, largely affected by the 2003 earthquake, will follow the traditional street pattern and overall garden city approach to maintain the character of the property.

The living cultural landscape retains a high level of integrity with the continued use and maintenance of the historic hydraulic systems qanāts and continued territorial land use for agricultural activities. The traditional visual relationship of the fortified ensemble with its setting is still preserved. However, there are challenges relating to new developments in industrial and residential areas developing in the outskirts of Bam city, which will need to be properly regulated and managed to preserve this relationship.

1.4. Examination of the State of Conservation by the World Heritage Committee and its Bureau

In July 2004, following the devastating Earthquake to hit the citadel of Bam in December 2003, the World Heritage Committee, at its 28th session in Suzhou, China, inscribed the property on the World Heritage List under an “emergency nomination” as stipulated in paragraph 67 of the Operational Guidelines.

In order to gain a fully comprehensive overview of the current situation regarding this property, please refer to all the decisions taken by the World Heritage Committee listed below; all working documents and Committee decisions concerning the property from the following eight sessions can be accessed online at this address: http://whc.unesco.org/en/sessions/:

- 28th session of the WH committee, July 2004, Suzhou, China
- 29th session of the WH committee, July 2005, Durban, South Africa
- 30th session of the W committee, July 2006, Vilnius, Lithuania
- 31st session of the WH committee, July 2007, Christchurch, New Zealand
- 32nd session of the WH committee, July 2008, Quebec City Canada
- 33rd session of the WH committee, July 2009, Seville, Spain
- 34th session of the WH committee, July 2010, Brasilia, Brazil
- 35th session of the WH committee, July 2011, Paris, France

During its 28th session held in Suzhou, China in 2004 the World Heritage Committee inscribed the property on the World Heritage List and the List of World Heritage in Danger due under the following criterion: ii, iii, iv, v.

In 2005, the World Heritage Committee at its 29th session (Durban, 2005) reviewed the state of conservation of the property, noted the several UNESCO missions during 2004. In response to the need for functioning management, the International Steering Committee for the safeguarding of Bam (ISC) was established, including representatives from UNESCO, the Iranian Cultural Heritage and Tourism Organization (ICHTO), ICOMOS and ICCROM.

The World Heritage Committee requested that the State Party in collaboration with the Advisory Bodies and the World Heritage Centre, address several key areas; to develop a management plan, to prepare an updated version of the nomination file, to define criteria for the possible removal of the property from the List in Danger.
The Committee at its 30th session in 2006 recalled and adopted the decision of July 2005. All the missions during the preceding year were noted. The Committee examined the current situation and highlighted its awareness to the complexity and particular conditions of the property, the updated version of the nomination file and the benchmarks for the possible removal of the property from the List of World Heritage in Danger have not yet been elaborated and it therefore would have been premature to examine the benchmarks for the removal of the property from the List of the World Heritage in Danger before the updated nomination file was finalized. The State Party was urged to accelerate its efforts to clearly redefine the World Heritage protective zones, which fully reflect the Outstanding Universal Value of Bam and its cultural landscape.

In 2007, the World Heritage Committee at its 31st session noted the continuing progress at the property, while the main threats were highlighted a) Lack of comprehensive management plan, b) the boundaries of the property inscribed on an emergency basis were not aligned with the Outstanding Universal Value of the property, c) Development pressures related to the post-disaster reconstruction and rehabilitation process. The Committee adopted the following as the desired state of conservation for the property to be achieved by 2010, in view of its removal from the List of World Heritage in Danger:

a) Conservation of the Arg-e-Bam and other cultural heritage assets within the World Heritage property;

b) Completion of necessary scientific studies for the recognition, registration, and legal protection of properties with historical, cultural, and natural significance within the cultural landscape zone, as well as marking the protective boundaries around each property within this zone;

c) Implementation of Management Plan;

d) Precise understanding and definition of the outer boundaries of the heritage areas surrounding the property;

e) Adequate security of the heritage areas within the World Heritage property in addition to the Arg-e Bam.

The World Heritage Committee encouraged the State Party to implement corrective measures for:

a) Stabilisation and protection of the Arg-e-Bam and other significant cultural heritage assets within the World Heritage property by:
   (i) Stabilisation of both the lower and upper parts of the citadel;
   (ii) Removal and documentation of debris;

b) Completion of necessary scientific studies for the recognition, registration, and legal protection of properties with historical, cultural and natural significance within the cultural landscape zone, as well as marking the protective boundaries around each property within this zone;

c) Management Plan implemented by:
   (i) Approval at final stakeholders meeting;
   (ii) Legal Adoption by late 2007;

(d) Precise definition of the outer boundaries of the heritage areas surrounding the property by completing the mapping of the archaeology and geomorphology of Bam and its Cultural Landscape;

e) Adequate security of the heritage areas within the World Heritage property in addition to the Arg-e Bam by increased number of guards and vehicles;

In 2008, the World Heritage Committee at its 32nd session, noted commitment of the State Party
and the international community to the safeguarding of the property and the progress made towards achieving the desired state of conservation and urged the State Party to continue its work on the corrective measures adopted by its 31st session (Christchurch, 2007). The committee noted with satisfaction the continued emergency conservation carried focused mainly on the removal of debris, consolidation and documentation of Arg-e-Bam.

The World Heritage Committee in 2009 at its 33rd session acknowledges the commitment made to achieve the Desired state of Conservation, while the Committee continues to request the State Party to clarify the status of the legal adoption of the Comprehensive Management Plan (CMP). The Committee also requested that State Party to submit an up-dated nomination file based on the property boundaries and a report of the corrective measures being implemented in view of the removal of the property from the List of World Heritage in Danger at its 34th session in 2010.

In 2010, at its 34th session the World Heritage Committee, requested a Reactive Monitoring mission to be undertaken by the World Heritage Centre and the Advisory Bodies to review the current state of conversation, include sites demolitions and encroachment within the property, as well to verify, if the adopted Desired state of Conservation has been achieved.

The World Heritage Committee, at its 35th session (Paris, June 2011), adopted the following:

**Decision: 35 COM 7A.26**

1. Having examined Document WHC-11/35.COM/7A.Add,
2. Recalling Decision 34 COM 7A.24, adopted at its 34th session (Brasilia, 2010),
3. Takes note of the State Party’s sustained commitment to the conservation and protection of the property and encourages it to continue its efforts, particularly in regard to the control of construction and protection of the landscape;
4. Also encourages the international community to continue supporting conservation works with the required technical expertise and funding;
5. Reiterates its request to invite a joint World Heritage Centre/ICOMOS reactive monitoring mission to the property to review the current state of conservation and to evaluate whether the Desired state of conservation has been achieved;
6. Also requests the State Party to submit to the World Heritage Centre a progress report on the implementation of the correctives measures by 1 February 2012 for examination by the World Heritage Committee at its 36th session in 2012;
7. Decides to retain Bam and its Cultural Landscape (Islamic Republic of Iran) on the List of World Heritage in Danger.
1.5. Justification of the mission

A mission to Kerman and Bam was undertaken by the UNESCO Tehran Cluster Office between the 16-18 of February 2010, to analyse the authorities response to the benchmarks and evaluate the progress regarding the desire state of conservation of the site. The mission team drew attention to some demolitions and encroachments developed within the property that appear not to be in line with planning controls and might have an impact on the Outstanding Universal Value of the property.

Following the mission report and recommendations, it was decided during the 34th session of the World Heritage Committee that a joint UNESCO/ICOMOS Reactive Monitoring Mission to the property should take place in late 2010, to evaluate Terms of Reference as well as to verify whether the Desired State of Conservation has been achieved. In the affirmative, the World Heritage Committee might consider removing the property from the List of World Heritage in Danger in 2011.

The joint UNESCO/ICOMOS Mission should had been carried out in November 2010, following the decision of the World Heritage Committee (Decision 34 COM 7A.24) adopted at its 34th session (Brasilia, 2010). Due to unexpected last minute commitments by the State Party, the mission was cancelled. During the 35th session of the World Heritage Committee, the mission was rescheduled to October 2011.

The mission took place from 16 to 21 October 2011. The UNESCO World Heritage Centre was represented by Mr Feng JING, Chief of Asia and the Pacific Section and ICOMOS International was represented by Mrs Mariana CORREIA, international expert from ICOMOS-ISCEAH and ICOMOS-CIAV. Both UNESCO Tehran Cluster Office and ICOMOS Iran were requested by the World Heritage Centre and ICOMOS International to fully support the two mission members. UNESCO Tehran Cluster Office also provided in 2010, valuable information regarding the response to the benchmarks, as well as the increasing of informal settlements taking place within the World Heritage boundary. Detailed information on the actions taken by the Central Government authorities and local municipal and government authorities were also compiled, analysed and considered during the mission.

The mission aim was to examine the State of Conservation of Bam and its Cultural Landscape including the demolitions and encroachment within the property, which requires the adoption and enforcement of regulatory measures for the property to ensure that construction works at Bam do not jeopardize the attributes of the World Heritage property, as well as other threats that might have an impact on the World Heritage property’s Outstanding Universal Value.

Meanwhile the progress made in relation to the previous Decisions by the World Heritage Committee and in implementing recommendations put forward by other monitoring missions to the property will also be assessed, through a participatory approach that will include of course, consultations with the relevant national and local authorities, as well as other stakeholders, including the Ministry of Housing.
2. NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

2.1. Heritage legislation

In the Islamic Republic of Iran, in accordance with the National Heritage Protection Law of November 1930, the central government is responsible for the registration, protection, conservation, and management of nationally important cultural heritage properties. After the Islamic Revolution in 1979, the central government authority responsible for the implementation of the 1930 Law became the Iranian Cultural Heritage Organization [ICHO]. The 1930 Law was updated in 1998, which described the functions of ICHO, provided new definitions for cultural heritage, and listed the principles for cultural heritage protection. ICHO was merged in 2004 with the Iranian Travel and Tourism Organization, becoming the Iranian Cultural Heritage and Tourism Organization [ICHTO], headed by a Fourth Vice President of the I.R. of Iran. In 2006, ICHHTO was merged with the Handicraft Department of the Ministry of Industry and Mines, and became the Iranian Cultural Heritage, Handicraft and Tourism Organization [ICHHTO].

In addition to the 1930 Law (updated in 1998), the following legal laws or regulations complement the legal grounds upon which World Heritage is conserved in the I.R. of Iran:

- Principle 83 of the Islamic Republic of Iran Constitution
- 1974 Law of accession of the Islamic Republic of Iran to the Convention Concerning the Protection of the World Cultural and Natural Heritage
- Law on the Statute of Iranian Cultural Heritage Organization
- 1980 Legal bill on preventing clandestine diggings and illegal excavations intended to obtain antiquities and historical relics which are, according to international regulations, 100 years in age or more

The process for legal protection for a cultural heritage property, be it tangible or intangible, entails documentation of a property prepared at local level, submitted to ICHHTO Provincial Office, and thereafter to ICHHTO’s Headquarters. Upon receipt at ICHHTO Headquarters, the Cultural Heritage Registration Office takes a decision as to whether a property is to be national heritage or not. The documentation required includes measured drawings of the property if it is tangible cultural heritage, detailed descriptions of the property, as well as description of the artistic, architectural, and/or structural features. Once registered as national heritage, damage, demolition, vandalism or theft is deemed illegal, and ICHHTO can take legal measures to counteract such actions within the judiciary system of the I.R. of Iran.

The inscribed property of Bam and its cultural landscape is protected since 1945, under Iranian national legislation (Law of Conservation of National Monuments, 3 November 1930), and other instruments of legal control and norms of protection related to architecture and land use control. Illegal excavations are prohibited in Iran.

In 1953, the citadel was declared a national monument by the Iranian authorities. This milestone was fundamental to start the first repairs in 1958 and in 1973, the beginning of a comprehensive restoration of the citadel ‘with a different emphasis on conservation measures ranging from preservation to reconstruction’ (Mokhtari et al., 2008, p.163). The original fabric was respected and conservation intervention comprised the use of adobe and earthen mortars and plasters (Correia, 2009, p.168).

The significance of the citadel also relates to the ancient planning of the historical urban settlement. Arg-e Bam managed to retain its characteristics and became an excellent paradigm of ancient Iranian town. As mentioned by Vatandoust and Mokhtari ‘the sheer extent of scientific information and data collected (…) after the earthquake have resulted in
the unearthing of a number of new archaeological sites (…)’ (2004, p.221, 223) throughout Bam region. The earthquake further exposed archaeological remains ‘by the revealing of ancient sections of the fortifications with the sudden removal of some’ parts (Bumbaru, 2004, p.1). Archaeological remains were exposed through excavations taking place at the northwest of the citadel, which also emphasises the archaeological significance of the citadel (Correia, 2009, p.167).

Nationally registered tangible cultural heritage does not automatically benefit from a minimum protective zone. At the time of registration by ICHHTO, the minimum and feasible protective zone is considered on a case by case basis, and decided upon by ICHHTO. Thus, on one hand, there are properties with no protective zoning beyond the exterior walls of the registered property, while on the other hand, there are properties with some protective zones registered with the properties themselves. In recent years, faced with the difficulties of controlling development in the minimum protective zones immediately surrounding cultural heritage, ICHHTO has resolved to either procure the land in the immediate surrounds of a property, or not designate protective zones anticipating the difficult task of regulating development activities within such protective zones.

For Bam and its Cultural Landscape, the buffer zone one covers the urban area next to the citadel: any construction activity or alteration here is forbidden without the permission and supervision of the ICHHTO. An extended landscape protection zone is provided, covering the entire town, the irrigation areas and cultivations in Bam and Baravat this allows for land use control. The skyline and views of the Arg will be protected as long as the building height is limited to 10m (which is higher than the allowed by ICHHTO). Agricultural activity is allowed so far this will not require constructions disturbing the landscape. Any mining or quarrying is forbidden if it affects the sight of the mountains visible from Bam. The balance between palm groves and built areas is retained the same as before the earthquake.’ (SOUV, p.3)

During the November 2011 monitoring mission, the team was informed by the representative of the Ministry of Housing that: there is a Comprehensive Plan (descriptive) and a Master plan. Each month there are coordination meetings. In the buffer zone, construction is forbidden. The height of construction is 4.5m. In the landscape, the highest point for building is 10.5m.

2.2. Institutional framework and management structure

The main management authority is the Iranian Cultural Heritage, Handicraft and Tourism Organization (ICHHTO), an independent directorate who collaborates with other national and local authorities and follows a programme that is regularly updated. Some of the listed buildings outside the Arg are the property of other government institutions but changes are subject to permission by ICHHTO. Management involves collaboration particularly with the Religious Endowment Organization (Sazeman-e Owqaf), Ministry of Housing and Town Planning (Vezarat-e Maskan va Shahrsazi), and the Municipalities (Shahrdari) of Bam and Baravat. ICHHTO has two offices in the region, the regional office of Kerman, and the Task Force office in Bam.

While the World Heritage property is generally an archaeological area, the buffer zone consists of two towns, Bam and Baravat, and related palm groves. The buffer zone one covers the urban area next to the citadel: any construction activity or alteration here is forbidden without the permission and supervision of the ICHHTO. An extended landscape protection zone is provided, covering the entire town, the irrigation areas and cultivations in Bam and Baravat this allows for land use control. The skyline and views of the Arg will be protected as long as the building height is limited to 10m. Agricultural activity is allowed so far this will not require constructions disturbing the landscape. Any mining or quarrying is
forbidden if it affects the sight of the mountains visible from Bam. The balance between palm groves and built areas is retained the same as before the earthquake.

Following the 2003 earthquake, a team of experts coordinated by the UNESCO Tehran Cluster Office and ICHHTO prepared a Comprehensive Management Plan, 2008-2017, which covers the World Heritage property and was developed through a process involving the local authorities of the County, the five Districts and the municipalities of Bam and Baravat. The new urban master plan for the reconstruction of the City of Bam, prepared in 2004, respects the original street pattern. Conservation and management actions at the property need to guarantee the preservation and presentation all the key characteristics of the Citadel and the other architectural remains in the inscribed property.

The restoration and partial reconstruction of selected elements needs to be based on a critical assessment of the reliability of documentary and field evidence, and taking care that the impact on the archaeological and natural setting will not alter the existing balance of the site. The re-establishment of some of the pre-earthquake conditions will need to be in concurrence with international conventions and charters to ensure that the conditions of authenticity and integrity continue to be met. At the same time, conservation and protection of the World Heritage property requires a balanced approach to confer the site its place in the living culture and its contribution to the specific identity of Bam, as well as the values associated with the long and complex history of the city and its associated landscape.

The State Party informed the mission that, on 25 January 2010, the Higher Council for Architecture and Urban Development of Iran adopted the Comprehensive Management Plan as an annex to the Special Structural Master Plan of Bam. The comprehensive plan for the conservation of Bam Citadel was also updated and now includes precise actions for every sector of the Citadel, and has already been used to guide conservation actions throughout 2010. In addition, the comprehensive archaeological plans, as well as the plan for the definition of its boundaries have been finalised. The State Party report indicates that the plan for promotion and for tourism improvement has yet to be completed. Also informs that to support the communication of results, professional seminars as well as Steering Committee meetings have taken place, with pending meetings with the Ministry of Housing to control construction works in Bam. The adoption of rules and regulations for Bam and its Cultural Landscape is still reported as pending. No precise timeframe has been provided for the expected completion of work.

In terms of implementation of the Comprehensive Management Plan, the State Party reports that the Bam Base has been established by ICHHTO to increase its efficiency of operations. Below diagram illustrates the position of Bam within the organizational structure of ICHHTO (page 56 of CMP).
Diagram of Bam Base within the organizational chart of ICCHHTO
3. IDENTIFICATION AND ASSESSMENT OF ISSUES

3.1. Desired State of Conservation for Bam and its Cultural Landscape in view of removing the property from the List of World Heritage in Danger:

3.1.1. Conservation of the Arg-e-Bam and other cultural heritage components within the World Heritage property

The citadel of Bam conservation and restoration intervention is advancing in good progress. However, the Desired State of Conservation was still not accomplished. Regarding the 15 components referenced in the Comprehensive Management Plan (p.14), as well as the qanâts located within the cultural heritage, just some of the components have been under intervention. There are still 11 components that need full or partial conservation works.

4 of the 15 components just had topographic record addressed and documentation of data collection. Archaeological and architectural record is still not concluded on the components external to the citadel. Missing to start the site recording, analysis and interpretation, definition of conservation project and conservation works. These are the cases of Chehel Cheraq (MP reference nº12); Centre Fault Fort Hasht Borj (MP reference nº13); South Fault Fort Khargushan (MP reference nº14); and Fault Qanât (MP reference nº15).

5 of 15 components were partially addressed through urgent structural consolidation, archaeological, historical and architectural data documentation and site recording. However, it is still missing stratigraphy recording, physical assessment, interpretation, final definition of conservation project and conservation works. This is the case of Kush-e-Rahimabad (MP reference nº9); Kot-e-Kerm (MP reference nº4); Qal'eh-Dokhtar (MP reference nº5); Gazarshu Pool (MP reference nº10); and Chahar Taqi (Chârtâq-e-Keleng-e-Hendusuz) (MP reference nº11).

2 of 15 components are under present restoration and conservation works. Documentation and record were accomplished. Partial interpretation and partial definition of specific conservation projects are under development. This is the case of Arg-e Bam (MP reference nº1) and the Icehouse (MP reference nº3).

4 of 15 components had documentation, record, studies and conservation works concluded recently. Just maintenance work should be addressed. These are the cases of Shahrbast Fortifications (MP reference nº2); Rasul Mosque (MP reference nº6); Khajeh Afagh Shrine (MP reference nº7); Mirza Ebrahim Shrine (MP reference nº8).

a) Arg-e Bam (MP reference nº1) – Two field visits were done to the citadel. Several observations and questions were addressed during the visits. Details addressing the Desired State of Conservation of the site should be checked under chapter 4 (Authenticity and Integrity Values).

The conservation of Bam’s citadel, the removal of the debris, the emergency stabilization and the restoration mainly focused on public areas has continued. In 2008, 70% of the debris had been removed; in 2009, 80%; in 2010, 95%. The remained 5% of debris, were located in the east side of the Arg-e Bam had not been examined and removed (photos 12, 13 and 14). In 2011, 97% of debris had been removed.

Bam Base Director questioned if there was a need to remove the 3% of debris remained at the site. The mission team informed that unless the debris are related with a documental state from 2003 Earthquake (as it is the case of some debris exposed at Bam large mosque),
debris should be removed especially due to safety reasons, but also because its existence at the site affects other works (i.e. architectural registration).

In what concerns emergency stabilization, the previous and present teams of management at Bam have addressed a truthful effort throughout the all site. However, the mission team shares concern with the heavy steel structure at the Governor’s Seat, which was not previously approved by the World Heritage Committee. The mission team was informed that since one year, it is used as scaffolding for wall stratigraphy registration. However in 2007, a simple structure was already in place to provide safety and for documentation registration (see Fig.6 at Vatandoust, Mokhtari and Nejati, 2008, p.316).

For the mission team it was not clear if the retaining structure is already being used or not as scaffolding for the stratigraphic archaeological study, as there was no evidence of this study, neither of the conservation expert team responsible for conducting it. It is also not clear, the specific time period for the structure to be removed, as there were different responses (one month, two months, one year) on different questioned times, regarding this matter. Following the conclusion of the stratigraphic study how is the expert team addressing the structural intervention of the Governor’s Seat tower? If the local Bam management team plans to hold a design competition, the Steering Committee should be consulted and contribute for the selection of the best design response.

Milestones and precise aims need to be planned for the use of the steel structure, in order to define a specific timeframe to remove it. If continued the structure can affect the authenticity and integrity of the World Heritage property.

b) Shahrbast Fortifications (MP reference nº2) – Fort located in Bam’s city near the Arg. This site was identified has being from the Persian period, 200 years ago. The conservation intervention is over designed. There is an adobe masonry wall, with 1.00m thickness approximately (photo 8). The adobe masonry is consolidating and covering most of the chineh original wall (photo 34). There is an overdesign consolidation with the nearly disappearance of the original chineh wall. The window components are not original and were introduced to present evidence of the original wall. The conservation project is not concluded (photo 8).

c) Icehouse (MP reference nº3) – The Icehouse was used until 80 years ago. At present, a structural consolidation is being completed through grouting, to integrate two layers of the dome. It is missing the stabilization of the top ring of the dome. For now analysis and minimum repair are being addressed, later on a decision will be taken to reconstruct or not the top of the dome.

d) Kot-e-Kerm (MP reference nº4) – Also known as the Rabaz towers. The fortresses were built on the top of bedrock, to prevent the towers to be destroyed during the earthquake. The site had structural urgent repairs done, but needs to be further conserved. Information gathered and produced is incomplete.

e) Qaleh-Dokhtar (MP reference nº5) – Also known as Daughter Fortress, the monument dates from the Sassanian period. Some structural consolidation work in adobe masonry was addressed on the outer wall. The Director of Bam Base makes reference to the existence of wasps’ nests on the inner domes, which might preserve the walls from deterioration. The mission teams recommends that a deep assessment of pathologies should be addressed
The architectural survey drawings should also have more detailed information considering the entailed scale.

Near the site, there are protective walls built in cob (chineh) on the top of cement block foundations (photo 33). This confirms that cob construction is still an active building culture in the surroundings of Bam.

f) Rasul Mosque (MP reference nº6) – Located in the Citadel, it was the first religious building visited during the site visit. It was rebuilt and had tapestry in the floor for praying.

g) Khajeh Afagh Shrine (MP reference nº7) – Located in the buffer zone of the Arg, this tomb has no roof, just exterior walls. The roof fell with the earthquake. Walls have been structural consolidated with the injection of a mix of water with gypsum. There are different types of gypsum used depending of the historical period. The component is in moderate condition. An identification post is located near the Shrine, however it is missing to include, the UNESCO logo.

h) Mirza Ebrahim Shrine (MP reference nº8) – Located in the buffer zone of the Arg, it was built 180 to 200 years ago. This is the tomb of the ancestor of Mirza Ebrahim School located in the Citadel. The component is in fairly good condition. An identification post is situated near the Shrine, however it is missing to include in the post, the UNESCO logo.

i) Kushk-e-Rahim abad (MP reference nº9) – (known as the site of the 4 directions) (photo 56). The site dates from the 10th to 11th century A.D. Structural consolidation in adobe masonry is addressed on the first encountered walls, but not on the inside walls. Md Ebrahimii mentions that the next step for restoration is to add on the top of the earthen walls, a type of palm tree mesh and then to unite all with an earthen plaster. However, the Mission team questions this conservation approach, which had also been followed in Gazarshu Pool (MP reference nº10). The intervention makes all the components of the architectural site look as one single element, which makes imperceptible the understanding of the architecture of the structure. The conservation approach proposal presented by the Base Director had been already carried out on Gazarshu Pool (MP reference nº10).

j) Gazarshu Pool (MP reference nº10) – A special plaster is inserted on the top of the first encountered walls to protect from erosion. The problem is that this special plaster makes the structure loose the perception of the different architectural components, creating a united mass without architectural lecture (photo 55). This site had the function of access and management of the qanat system. The conservation approach followed the same principle of intervention encountered at Haft Tepe site, near Zhoga Zambil, located in west of Iran. Visitors do not have the perception of the different elements that compose the architectural site, as there is a common plaster that passes a united image with no perception for the composition of the different elements.

k) Chahar Taqi (Chârtâq-e-Keleng-e-Hendusuz) (MP reference nº11) – 1.3km distant from the citadel. The component is from the Sassadian period. Structural consolidation was addressed and a reinforced adobe masonry wall was started under the previous Bam Base Director. This intervention was not concluded, when the Base Director team was substituted. At present, there is not yet a conservation development project for this component.
This entails an inconsistent overall conservation strategy, when the management team is substituted, which affects the overall unity conservation intervention of the component. A complete conservation plan has to be addressed on all the 15 components, in spite of the change of Base Directors team.

There is a gas station (now closed) located 800m from this site. Presently, the Governor of Bam County is waiting for judicial rule to remove it. It is also observed, systematic encroachment near the site, from populations that are not originated from Bam.

l) Chehel Cheraq (Chelache-Rajh) (MP reference nº12) – The component did not receive yet proper archaeological and geo-morphological survey drawings. Just 20% of the topographic map in the fault is concluded. It has no security and no WHP signpost with UNESCO logo. The component from the Islamic period did not receive yet a minimum structural intervention. At the component’s core, there is an adobe structure very damaged by the earthquake. Surrounding it, there is a cheneh wall in a square plan (photo 54). At this component, it is mentioned by Bam’s Base Director that bentonite clay is part of the adobe composition, an adequate material composition for the desert climate.

There are houses located inside the core zone, near Chehel Cheraq component. According to the former Mayor of the area, “the settlements were there before the earthquake, these structures are temporary and are used for religious purposes. They will be removed soon.” However, there is no evidence to confirm this statement. The fact that local population does not understand the value of WHP could explain the recurrent encroachment around some WHP components, even after systematic intervention of local police.

There is debris scattered around the core zone. Yellow signposts define the limits of the core zone and mention ‘World Heritage Property – Core Zone’, which follows the requirements of the Term of Reference (3.1.4.)

m) Centre Fault Fort (Hasht Borj) (MP reference nº13) – Located on the district of Baravat, this archaeological site is from the Archamenion and Sassadian periods. There are pieces of pottery scattered on the land (photo 38), but no signposts of UNESCO identifying the site. There are yellow signs delimitating the core boundary (photo 41). At this site, Greek inscriptions were found on the pottery. Around the landscape there are also several aligned CRAterre’s for mill-qanâts.

n) South Fault Fort (Khargushan) (MP reference nº14) – Located 8.5km SSE from Arg-e Bam, this is an archaeological site from the Archumenit period. It is the biggest site in Bam and the third biggest site in the country. As on the previous site, there are pieces of pottery everywhere, but no posts of UNESCO identifying the site. There are yellow signs delimitating the buffer boundary. The justification from Bam’s Base Management Direction for not locating the WHP post is to assure that looting of archaeological pieces does not happen, as well as illegal excavations. They ask advice on this concern. In this site a kiln is identified.

o) Fault Qanât (MP reference nº15) – 300 qanâts are located at a distance of 2 to 11kms from the Citadel. The oldest qanât was located here from around 2.500 years ago (513 B.C). Dr Adler did archaeological excavations three years ago (2008). Local team is still waiting for the deliverance of the report. The Fault qanât is the only historical component located in a private ownership, according to the Comprehensive Management Plan of Bam and its Cultural Landscape (see p.14).
The open tranches, exposed by archaeological excavations, and undertaken for stratification reading are too extensive (photo 37). In order to avoid irreversible loss and to protect the excavated site, back-fill to the original state, or at least conservation works at the tranche, should be addressed. The mill-qanāt was almost destroyed by the archaeological digging.

A yellow signpost is located near the fault qanāt visited to identify WHP boundary. However, it is missing the identification of the UNESCO component. The private ownership of the MP component nº15 should be also addressed, as it is located in a World Heritage Property.

**p) Paykam qanāt** – A visit was done with the presence of the Governor of Bam and the local female Mayor. The mission team was introduced to three local judges (photos 51 and 52). The mission team was informed that qanāt water is divided between the different agriculture fields, considering a total of 168 hours.

Paykam gives the name to the qanāt and to the village. This is the biggest qanāt in the landscape of Bam. Presently, 5 people manage the qanāt system. There are 400 field owners. This qanāt has an extension of 3.5km and a deepness of 60m. The mission team is informed that Bam’s Governor supports the qanāts through a special financial allocation and supports also tourism based on the qanāts protection. During the qanāt restoration, special clay was used on the stream channel.

**q) Deh Shotor qanāt** – It is located near the ‘wadi’. ‘Deh’ means village; ‘shotor’ means camel. It is a simple qanāt.

**r) Ghaemabad qanāt** – 3 people were working on this Mill-qanāt. One of them went inside the hole to collect water for private owned agriculture. Most of the qanāts are still active in the area.

**s) Restoration of the qanāts in the landscape**
Regarding the qanāts, the manager of the Ministry of Agriculture (Mr. Vajed) informed that 2 million dollars have been spent on the restoration of the qanāts. 9 ONGs helped with the reconstruction.

In Bam city, there are 125 qanāts. During the earthquake, 64 of those qanāts were destroyed. 80% of the gardens around the city are irrigated by the qanāts, which means 8,000 hectares. 306 kms have been used as channels for caring the water. 125 of the qanāts have been restored and cleaned.

In the cultural landscape all the qanāts have been cleaned. The mission team was informed that 3 of the qanāts from Bam were selected for an international qanāts nomination. At present, on the World Heritage property all the qanāts have been restored.

Regarding the historical qanāts, the oldest identified is located in the Fault Qanāt (MP reference nº15). One of them is still going through archaeological digging (photo 37), and no conservation project has yet been developed.

**t) Social system related with the management of the qanāts**
According to the Statement of Outstanding Universal Value (SOUV), the 'system is based on a strict social system with precise tasks and responsibilities, which have been maintained in use until the present, but has now become vulnerable to irreversible change.' During the
mission, several visits were done to the qanāts. It was confirmed following the restoration, that tasks and responsibilities from the social qanāt system are still alive nowadays.

Regarding economical self-sufficiency, it is important that the social and economical systems related with qanāts continue sustainable. In the past 13 years, there has been a particular tough drought, which made the Governor allocate a special budget for the qanāts. This financial support is dedicated to cleaning, restoration, etc.

3.1.2. Completion of necessary scientific studies for the recognition, registration, and legal protection of properties with historical, cultural, and natural significance within the cultural landscape zone, as well as marking the protective boundaries around each property within this zone;

In 2010, work has continued on the removal of debris, emergency stabilization and restoration of zones, focusing largely on the recovery of space for public use. These works have been fully documented and a unified monitoring system has been established to ensure compliance with developed standards for conservation. Research has also been carried out on water resources, urban plan development, documentation and preservation of archaeological findings (WD_WHC 2011_Bam and its Cultural Landscape). Since then, there has been progress on:

a) Completion of the archaeology and geomorphology mapping of the property
The archaeological and geo-morphological maps are fully completed at the citadel. The overall landscape property archaeological and geo-morphological maps are missing completion.

b) Archaeological studies
Archaeological finds, discovered during the removal of debris, have been conserved and documented. In the citadel, the archaeology studies are concluded. They are still missing to be completed on some of the other 13 components within the World Heritage property.

c) Physical assessment of the actual state
In several of the 15 components previously mentioned and part of the World Heritage Property, it is still missing the physical assessment of the actual state of the existent elements. There is an indicative record, but the mission team considered that this was insufficient. More information should be gathered and presented concerning the actual state of site deterioration, an extensive analysis of the pathologies affecting the sites and a proposal of conservation procedures to stabilise decay and deterioration.

d) Architectural record
Some of the architectural records done had lack of information regarding the undergone drawing scale. This was for instance the case of Qal‘eh-Dokhtar (MP reference nº5). It is advisable for architectural drawings to have more detailed information. It is also essential to develop not just the architectural record of the state of conservation following the earthquake, but also on a first phase, the project for structural stabilization, on a second phase the conservation project, and finally, to the long term approach, the maintenance plan for each of the 15 components.
e) Outreach Continuity through international scientific publications

Until 2009, there were several international publications by the Management direction about Bam’s state of art research (E.g. papers in several international conferences). After 2010, there has not been evolvement regarding this matter. For TERRA 2012, International Conference on the Study of Earthen Architectural Heritage, to be held in Peru, to which 600 experts are expected to attend, different Iranian authors submitted at least 7 papers specifically addressing Bam citadel. There was not one paper presented by the actual Bam’s Base Direction team. It is essential for Bam’s Base Direction team and Steering Committee to receive support to publish internationally, if it is intended for Arg-e Bam to become an International research centre on earthen architecture.

Regarding the international research centre, it is fundamental to start a medium and long-term approach for Arg-e Bam to become an international research centre, for seismic resistant earthen architecture. This centre should be implemented with the collaboration of the Bam’s Base Direction and Steering Committee. Initial financial support should be provided to gather instruments and material. However, and as mentioned during the meeting held at ICHHTO Headquarters in Tehran, before spending 1 million of euros in a seismic vibrant structure for the laboratory, it is fundamental to define the aims and resources for the research centre to be implemented.

This will also contribute for capacity building of future professionals. Bam’s Governor informed that 8 MA post-graduate courses are planned to open by Bam’s university. These MA courses will be strongly related with risk (mining, geology, earth sliding, seismographic, etc.). According to the Governor, the courses will be implemented in 8 years, with experts and the people that work on the Steering Committee. It is fundamental to foresee the creation of masters and PhD’s strongly connected with the scientific investigation to be addressed at the research centre.

f) Methodology of intervention and interdisciplinary studies

An adequate methodology of intervention gathering the different phases of procedures are satisfactory pursued (debris documentation, archaeological registration, recording, etc.). What is not clear is how the different disciplinary teams work together. In archaeology, the methodological procedures are well comprehended. However, how is their work interconnected with the units that work with the architecture records, the conservation project and restoration intervention?

Additionally, there are 5 units (base, strategy, administrative, research, execution) that compound the base of the work at the citadel. There is a Committee for each unit. Bam’s Base Director concentrates on himself the cooperation among the different units and the decision-making. The mission team suggests that for the work efforts to be more effective, there should be less centralized responsibilities. Bam’s Base Director needs more human resources especially in the architecture and conservation disciplines, to be able to handle professionally, the challenges of strategic planning and daily management.

g) Conservation guidelines

There is also a lack of architectural and conservation registration in 1/500, 1/200 and 1/100 scale. The existent provided information was presented in 1/1000, 1/2000 or 1/5000 scales, which are important for a general approach and planning, but are too large records, for the architectural record and the conservation project of the single earthen structure. What is perceived is the fact that intervention is based on the experience of Bam’s Base Director and the site working teams experience. It is missing conservation guidelines in Farsi and in English.
h) Protective boundaries
13 of the 15 components of Bam’s World Heritage Property visited during the Reactive Monitoring Mission had the WHP posts well demarked within the property. The only two components that were missing the definition of boundaries were the two archaeological sites: Centre Fault Fort Hasht Borj (MP reference nº13) and South Fault Fort Khargushan (MP reference nº14). Fault qanāt is missing too.

The lack of human resources by Bam management team, to assure a 24h security of the two mentioned sites, is the main reason not to hold the WHP posts, as the archaeological sites could be looted and vandalised.

3.1.3. Implementation of the Management Plan
Bam’s management plan was concluded in 2008 and it was legally adopted in 2010, as an annex to the Comprehensive Management Plan. Stakeholders informed that by 2010, implementing agencies and local authorities had not yet been informed of the Management Plan. Presently, all the local stakeholders confirmed that they have received the MP.

A consulting group named ‘Architecture Consulting group of Bam’, created by the Governor in 2008, coordinates the implementation of the MP, through the ‘Office for Planning and Management of Bam and its Cultural Landscape (OPMBCL). According to the meeting that the mission team held with the stakeholders, there are monthly meetings to coordinate the implementation of the MP. The Governor supervises these meetings with the different stakeholders. However, it was perceived during the mission team consultation that these monthly meetings were arranged too resolve regular unexpected issues that need to be resolved and were not dedicated to the implementation of the MP.

The lack of clarity of the Action Plan to implement the Management Plan could also explain the difficulties for its implementation. A planning system should guide future actions intended to give significance to the Outstanding Universal Value of the site. An Action Plan should focus on how the management of work should be undertaken, how the implementation of work should be addressed, the schedule of maintenance, etc. In general, a management system should contribute as a decision-making tool when addressing external threats, such as pathologies, encroachment, tourism pressure, etc. In this case, the management plan does not integrate a deep analysis on the existing site and components conditions analysis; the condition of the earthen material; the conservation state of the site; a conservation proposal; a maintenance schedule; an effective programme of work, among several other issues.

It was also perceived that more compulsory rules have to be implemented by the Ministry of Housing, to assess the enforcement of the control construction work and the encroachment of new construction in the buffer zone. This has to be encountered on the management plan as well, to be able to control the illegal construction.

3.1.4. Precise understanding and definition of the outer boundaries of the heritage areas surrounding the property;

In July 2007, in the 31st Session of the World Heritage Committee, at Christchurch, it was requested to the State Party, to define the outer boundaries for protective zones. The Topographic Unit in charge of mapping the site concluded the topographic map of the citadel. A CD and a printed map were delivered to UNESCO-ICOMOS representatives.

The boundaries of the World Heritage Property are clearly defined. Topographic maps from
the citadel were handed over to the mission team on the 19th of October, in printed format (paper) and in a digital format (CD). Just missing are the landscape topographic maps.

3.1.5. Adequate security of the heritage areas within the World Heritage property in addition to the Arg-e Bam.

The measures taken to safeguard the property include the formation of a Security Unit with 11 permanent guards equipped with vehicles. This Unit has been operational since 2007. However, due to the limited number of guards integrating the Unit, security efforts are being concentrated in the citadel. Municipal police protects the remained 13 components within the landscape. The mission team observed that some of the components do not have systematic police protection, neither a minimum-security light, at night. This is the case at:

- Kushk-e-Rahimabad (MP reference nº9) (photo 56);
- Gazarshu Pool (MP reference nº10) (photo 55);
- Chahar Taqi (Chârtâq-e-Keleng-e-Hendusuz) (MP reference nº11);
- Chehel Cheraq (Chelache-Rajh) (MP reference nº12) (photo 54);
- Centre Fault Fort Hasht Borj (MP reference nº13) (photo 38);
- South Fault Fort Khargushman (MP reference nº14);
- Fault Qanât (MP reference nº15) (photo 37).

On some of the components, police is even troubled to drive there at night. This is the case, of Chahar Taqi (Chârtâq-e-Keleng-e-Hendusuz) (MP reference nº11); - Centre Fault Fort Hasht Borj (MP reference nº13) (photo 38); South Fault Fort Khargushman (MP reference nº14); Fault Qanât (MP reference nº15) (photo 37).

To preserve the outstanding universal value of Arg-e Bam and its cultural landscape, it is essential to address adequate security of the 15 components within the World Heritage property.

3.2. Assess the current state of conservation of the property, in particular concerns regarding demolitions and encroachments, as well as other factors that might have an impact on its Outstanding Universal value.

According to Valletta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas, a Buffer Zone is ‘a well-defined zone outside the protected area whose role is to shield the cultural values of the protected zone from the impact of activities in its surroundings. This impact can be physical, visual or social’ (ICOMOS, 2011). In this case, a physical impact has been addressed through systematic encroachment, near the site of Chahar Taqi (Chârtâq-e-Keleng-e-Hendusuz) (MP reference nº11) (photo 36), located within the World Heritage property. The construction of illegal settlements, presently located less than 800m from the component, persisted through the years (In 2010, the encroachment was 100m away).

There is also a gas station (now closed) located 800m from this site (photo 35). The previous Governor of Bam allowed the construction of a gas station at Chahar Taqi. Under the present law, the gas station is illegal. The process to remove the gas station from the buffer zone is currently in courts. The Governor is waiting for judicial rule to remove it. Nevertheless, to ensure its removal, the Governor stopped supplying water and electricity to the gas station. The Governor also personally assured that the gas station would be removed to the outside of the buffer zone. Notwithstanding, the definitely removal of the gas service has to be a condition.
3.3. Evaluate progress made by the Iranian authorities in the implementation of the Comprehensive Management Plan of Bam and its Cultural Landscape submitted to the World Heritage Centre in January 2010. Evaluate whether adequate resources have been allocated and if effective mechanisms are in place for its sustained implementation.

It is identified that the coordination and implementation of the Management Plan is also not developed in a systematic way through the Architecture Consulting group of Bam meetings, under the Governor’s supervision. Meetings are addressed to coordinate present issues, but not to prepare the implementation of the MP.

To implement the MP, an action plan was presented, as an annex of the Comprehensive Management Plan. In order to achieve a clear implementation of the MP, there are six major elements to define and address in the action plan: identification of priorities (achieved), definition of existent resources (missing), definition of activities (achieved), assignment of tasks (missing) and time-periods (missing), in order to achieve milestones, and efficiently implement the MP.

The office of Bam’s Citadel Landscape Management, created in 2008, is a Unit of management at the Governorships Centre (with representatives from tourism, research, NGOs, tradesmen, etc.), to increase people’s knowledge and awareness for cultural heritage. This Unit could be used to contribute for people’s awareness on the OUV of the property, but also for supporting effective mechanisms of the MP implementation, in close collaboration with ICHHTO Bam Base.

3.4. Hold consultations with the Iranian authorities and relevant stakeholders in examining the progress made in addressing the concerns expressed by the World Heritage Committee in its previous Decisions, as well as on recommendations made by previous reactive monitoring missions.

In 2007, seven benchmarks were defined by the State Party for the eventual removal of Arg-e Bam and its cultural landscape from the List of World Heritage in Danger. 2010 was established as the deadline date for the appropriate response. A monitoring UNESCO mission addressed in February 2010 evaluated the state of response to the seven benchmarks (see Annexe 7.2). Following is presented the present state of situation regarding the seven established benchmarks.

**Benchmark 1. Emergency stabilization treatment and securing the parts of Arg-e-Bam, which are vulnerable to aftershocks;**

There is a steel retaining structure with a concrete foundation located at the Governor’s Seat tower. The state party does not have yet, a clear response of the time period needed for the steel structure removal. It also needs to be clearly acknowledge that the type of conservation intervention to be entailed should follow international charters and recognised conservation principles for intervention (minimum intervention, reversibility, unity, etc.).

**Benchmark 2. Providing adequately, sensitively designed and safe access to conservation professionals, general public, and to the citizens of Bam who will continue to utilize the Arg-e-Bam for traditional and religious activities;**

The design competition for safe access to Bam was concluded over one year ago. The best proposals were still not selected. The access with appropriate design is still not been provided.
**Benchmark 3. Removal of Debris from the Arg-e-Bam;**
Presently, just 3% of debris from the 2003 earthquake, remains to be studied and to be removed.

**Benchmark 4. Comprehensive Management Planning and the conservation of the Cultural Landscape of Bam;**
The publication and diffusion of the management plan was concluded in 2010. It is missing for the MP to be effectively implemented and to create tools for its regulation and monitoring.

**Benchmark 5. Preservation and enrichment of the tradition of earthen architecture;**
Earthen architecture is still alive as a building culture on the outskirts of Bam. However, in Bam’s inner city, the earthen building culture basically disappeared. Regarding the Citadel of Bam, adobe masonry is used for conservation intervention, but cob (chineh) is not used any more.

The study of earthen architecture within the Citadel was undertaken, in particular regarding the characterization of adobe (texture, ‘colour’, appearance, microanalysis, etc.). It is missing a rigorous research on cob. Earthen architecture studies are also missing on the landscape components.

**Benchmark 6. Completion of mapping of the archaeology and geo-morphology of the area of Bam and its Cultural Landscape and related studies; and**
The topographic map of the citadel was concluded and delivered to the team mission. The topographic map of the related 13 components is not yet fully accomplished. The archaeological and geo-morphological landscape maps are also not concluded, according to the information provided during the site mission. For instance, at Chehel Cheraq site (Chelache-Rajh) (MP reference nº12) (photo 54), just 20% is concluded according to the archaeologist information provided during the visit to the site.

**Benchmark 7. Protection of the heritage areas in the World Heritage property outside the Arg-e-Bam.**
There is a need for Arg-e Bam and related sites to be under security and protection. There is encroachment identified at Chârtâq-e-Keleng-e-Hendusuz (Chahar Taqi or Khâneh Sag-hâ) (Dog’s fort) (WHP reference nº11). This was identified since February 2010 mission, undertaken by UNESCO Tehran Cluster office consultants (photo 36, p.38). During the stakeholder meeting, the Mayor presented evidence of illegal settlements removed 4 months before. It was noticed that police occasionally visits the Dog’s site, and removes illegal settlements. It was also perceived that monitoring by the local police was not a systematic task addressed. Encroachment also returns regularly. Local police has difficulties to discontinue the regular intrusion.

3.5. **Follow up with the Iranian authorities on the request by the World Heritage Committee in its Decision 34 COM 7B.24, Paragraph 7 to submit a State Party progress report on the state of conservation of this property.**

It was assured by ICHHTO representatives that progress report concerning Bam’s State of Conservation would be submitted to the World Heritage Centre before 31st of January 2012. It was assured that communication between the different experts and professionals, as well as Steering Committee members would improve. It was also guaranteed that the progress reports submitted to the World Heritage Centre will be sent to the management team of Bam’s citadel and landscape site.
4. ASSESSMENT OF THE STATE OF CONSERVATION OF THE SITE

4.1. Authenticity value of the property
Following, a review concerning issues that arise based on the Authenticity value, on which the property was inscribed on the World Heritage List.

4.1.1. Heavy retaining structure built in steel and cement
Security measures and structural consolidation were addressed at the citadel to assure the safety of people and of the historical structures. Notwithstanding, the mission team is concerned with a large and heavy steel and cement structure at the Governor's Seat tower (photos 5, 6 and 7) and at tower 46 (photo 32). At the Governor's Seat tower (Hâkemneshin), a simpler structure was erected in 2007 (see Fig.6 at Vatandoust, Mokhtari and Nejati, 2008, p.316) to consolidate the wall through a support system. This structure was substituted in 2009 and 2010, by a heavy retaining structure, designed and constructed by Mr Datam Mirhosseini and his team. The UNESCO World Heritage Committee did not approve this major intervention, as it jeopardizes the Authenticity value of the site. The structure is composed by 8 concrete foundations, over which oblique steel structures are erected to act as bearing wall for the earthen wall. According to the UNESCO Cluster Monitoring Mission from February 2010, build piles or columns will be injected within the earthen structure before the rebuilding of the wall. Following which, the steel structure will be removed. The mission team is concerned with the impact of the heavy retaining structure, the procedures to be followed for the conservation work and the intervention itself.

4.1.2. Overdesign decoration of some of the walls
The mission team is concerned with the overdesign reconstruction of some of the walls (e.g. between the commander's house tower and Asiyab Badi Tower) (photos 18, 20, 24 and 26). When comparing the images of Bam before and after the restoration entailed since 1958 until 2003, it is perceived that the post-earthquake conservation approach addressing these walls and towers follow the same stylistic restoration from the conservation intervention previous to the earthquake. Instead, it should follow how the original wall was before being overdesigned. Even Mokhtari et al. mentioned that there was a lack of retrofitting of historical structures and even incorrect design during the last 50 years following the beginning of the restoration process in 1958, especially when it was known that it was an area historically prone to seismic activity (2008, p.167).

4.1.3. Identification of historic fabric and new intervention
During the intervention in adobe walls, attention should be drawn to the existent pattern of adobe masonry, keeping in mind the respect for the form and scale of the existent fabric, and of the new material that ‘should be identifiable by an experienced observer’ (Feilden, 2003, p.vii). The lack of recognition between historic and new restored fabric, it is conflicting in terms of conservation intervention of an archaeological site, considering the recommendations of international charters. When a building is not coated, differences should be acknowledge through a different colour, texture or identifiable distinction. It that is not the case, it is advisable to inform the visitor, at least through proper signalized information. This is the case, also for plastered structures, where it is impossible to identify the distinct building periods.

4.1.4. Continuity on the use of cob in the citadel
Arg-e Bam was built using mainly two earthen techniques: Cob, locally known as chineh (or chiney), which consists in overlaying without formwork, successive deep layers of a
homogenous earth mixture with fibres. Several authors incorrectly translated *chineh* into English as rammed earth, when in fact it is cob (see ICHHTO, 2009b, p.6). The other technique is *adobe*, called *khesht*, sun dried earthen bricks to build adobe masonr y walls. Throughout the site, elaborated know-how enabled the construction of large arches, vaults and domes, which illustrates the expertise of local builders and it also confirms the architectural significance of the site.

There is a need for deeper documentation and interpretation analysis of local and historical cob (chineh) building culture - Its expression is of significant quality. Cob is still used on the outskirts of Bam (photo 33 and 57), but it is not used anymore on the inner city. To return value to cob in the Citadel, with an appropriate seismic resistant strengthening would contribute for the reinforcement of the material value and the need to be continuously addressed by the local community. As a result, local know-how and capacity building of local population would have been reinforced.

Therefore, it is missing a more detailed data collection concerning the local cob (chineh) building technique (how is it built by locals, historical measure, tools used, local maintenance, how to address reinforced cob, etc.);

4.1.5. Authenticity through continued use

The population also encompasses authenticity by the continuous use of different buildings and spaces of the citadel. In this case, intangible heritage is present by the reuse of some buildings of the Citadel for education, religious practices, historical celebrations, rituals, local festivities, traditional handicraft, etc. This can be observed through the religious activities of the Arg Mosques; the 13 days of Noruz celebrations, data festival, among others. These type of activities already being partially celebrated at the Arg, should be stimulated and further supported by local authorities, notwithstanding the assurance of the property security throughout continuous use. This will also bring more sustainability to the site.

4.2. Integrity of the property

Following, a review concerning issues that arise based on the Integrity value, on which the property was inscribed on the World Heritage List.

4.2.1. Lack of unity of some citadel components

Regarding the integrity value of Arg-e Bam site, attention should be addressed to the lack of unity that will probably emerge from the overall impact of each project, as distinctive teams developed different conservation approaches. This can be already foreseen on the exterior out wall between the Italian tower and the entrance south gate (photo 31) or at the tower near Gate 2, second entrance gate (photo 23).

Different institutions were involved in specific projects at Bam’s citadel: Mie University (Japan) was restoring the Bazaar; the Italian Ministry of Culture was restoring Tower One; Universities of Milan and Padua (Italy) were restoring the Mirza Naim School; Kassel University (Germany) was addressing tests for retrofitting masonry structures using natural fibres; Isfahan University (Iran) was restoring tower 32 (Mokhtari et al., 2008, p.163). Other entities carrying out restoration works were CRAterre-ENSAG, restoring Gate 2. Barracks restoration was concluded by RPBC, as were the Stable restoration by Soil Engineering Services and the Sistani House restoration by the Faculty of Architecture of Dresden University (Germany). Some of the institutional projects are concluded, but others are taking longer than expected due to discontinued interventions (Correia, 2009, 170-171). That is the case of Gate 2, which conservation has not been addressed yet, except for structural stability. It is fundamental that Bam’s Base Direction and the Steering Committee addresse a
general supervision, to coordinate the different international conservation interventions, in order to have an overall unity of the project. This is possible through a balance approach to the strategic unity of the site conservation intervention.

The team mission was also informed of the possibility for the Governor’s tower intervention to be assigned to the University of Milan. If this is the case, the mission team recommends for this important intervention to be addressed not as an isolated intervention, but with an overall integrity conception.

4.2.2. Extensive reconstruction
Extensive reconstruction has been undertaken more intensively since 2009, which is starting to affect the integrity and authenticity values of the site. This entails reconstruction of elements that did not exist previously to the first restoration, which begun in 1958. For instance, a lack of merlons can be observed on the photos from the fifties, however they were rebuilt recently on the top of several walls. Present intervention should correspond to international conservation guidelines, following International Charters and ICOMOS Recommendations.
5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Recommendations for any additional actions to be taken by the State Party

In today’s urban age, more and more historic areas adopt strategies and policies that assign an important role to cultural heritage in the local social and economic development scheme. A well-managed cultural landscape property is a strong competitive tool as it attracts not only visitors, but capital and residents as well. Historic structures and spaces contribute significantly to the value of Bam city and the city is branded with this historic characteristics. Next to the tangible heritage, increasing intangible values and benefits, including local cultural identity and community pride, the links with local history, educational value and symbolic role of cultural heritage should be addressed in studies measuring benefits of built heritage, as they constitute ‘cultural capital’ in the overall development programme for local community.

In the Arg-e-Bam and its associated Cultural Landscape, one of the primary issues in the years to come will be urban/rural rehabilitation and expansion as emergency responses to post earthquake disaster and the needs of local population. In this regard, it is essential to establish an active and more dynamic interaction between conservation efforts and development needs, including processes of community consultation and public participation.

The Mission held open and frank discussions with the competent national and local authorities as well as different stakeholders and concluded the following brief recommendations:

5.1.1 Development of a Strategy for Conservation Interventions

1. Although each individual conservation and/or redevelopment project, that has already been implemented as well as planned for future action, is considered to be of relatively high level of overdesign, they should be integrated into an overall conservation strategy in order to avoid unnecessary imbalance between post-earthquake development and cultural heritage conservation.

2. In this regard, it appears that there is no strategy for future action, such as estimation of incoming tourists in future, and development within and around Arg-e Bam. For example, there is a plan to open some parts of Arg-e Bam to visitors but there is no visitor management component in the current CMP. The CMP should include this information and draw the future plan to provide the tourists with proper routes and basic facilities.

3. The CMP should also be closely coordinated with the local regional development plan of Bam County in terms of overall integration with regional social and economic development.

5.1.2 Implementation of the Comprehensive Management Plan (CMP)

4. A clear policy on the degree of limited acceptable change for each conservation intervention seems to be lacking. The decision is very centralized, always lying on Arg-e Bam Base Director, who has to address is conservation responsiveness to the all citadel, plus 13 components and the landscape property. Clear conservation guidelines should be formally addressed.

5. Also, the coordination with the other local bodies such as local community organizations, and chamber of commerce is necessary to monitor the law enforcement situation,
particularly the tourist related commercial activities along the heritage buildings and structures and some conservation projects.

6. The promotion and enhancement of intangible heritage component such as Dates Festivals and Norus festivities should be integrated into the CMP, as a cultural revival component form Bam.

7. An operational monitoring mechanism/system should be integrated into the CMP with the involvement of local population. As it is absolutely important for the population to understand and be aware of the World Heritage property’s value. This awareness should not be imposed with a top-bottom approach, but instead should first emerge from the population. If succeed, the community could become the principal protectors of the WHP, in particular protecting the 13 components outside the citadel.

5.1.3 State of Conservation

8. In general, the Arg-e Bam and its Cultural Landscape has undergone a wide range of changes in the post earthquake emergency response. It is understandable to accept some limited range of change because Arg-e Bam needs to revive its role, as a living town and the local population needs basic living facilities. But the speed of the change should be controlled within a manageable extent and local authorities should act as a principal player to safeguard Arg-e Bam in a good condition.

9. As far as the mission team observes, local authorities have been making enormous efforts to address the situation and undertaken some emergency restoration works for the damages caused by the 26th December 2003 earthquake. However, the quality of conservation works should be carefully reviewed to avoid any overdesign of interventions, which should comply with the historic environment.

10. Attention should also be focused on the extensive and excessive reconstruction that has been entailed since 2010, without being in accordance with international charters and recommendations. If continued, it could jeopardize the Authenticity and Integrity value of the World Heritage property.

11. It is advisable that the final conservation decisions for Bam’s citadel and its components should not to be concentrated in just one person’s judgement, Bam’s Base Director. If the Director is substituted, the conservation effort is discontinued, a planned intervention is missing during the starting period of the new director and a common strategy effort for conservation is lost. It is then advisable that the consultant experts integrating Arg-e Bam’s Steering Committee be more involved on the site conservation decision-making. See example of the discontinued conservation approach addressed at Chahar Taqi (Chârtâq-e-Keleng-e-Hendusuz).

12. The mission is of the view that further attention should be paid to the overall Cultural Landscape such as continuous repair and maintenance of traditional Qanâts.

13. Any further development / rehabilitation projects within the WH property boundary should be strictly controlled with proper regulatory measures / guidelines.

14. It is Bam’s Base Direction and the Steering Committee that have to bring balance to the general conservation approach and to the overall unity of the project. Each consolidation, conservation, restoration and reconstruction team decision should be evaluate under the overall scope and unity of the citadel.
15. It is recommended that one of the principal tasks for the Bam County Governorship will be involving the evaluation and assessment of project proposals for change through Steering Committee peer review with careful impact assessment (environmental, social and economic), so that conservation and sustainable development may work together.

16. At the institutional building level, it is recommended to build a participatory conservation and management process, involving regular consultations with different stakeholders involved in the Cultural Landscape and the community’s direct participation in the site management (for instance, security check at some distance landscape components, ChelcheRagh, Khargushan and Hashborj).

5.1.4 Capacity building and international outreach

17. The mission team considers that Arg-e Bam can be a good base to study and demonstrate post-earthquake interventions on earthen architecture. The idea of an Earthen Architecture Research Centre focusing on seismic related activities should be further developed and realized.

18. A research centre focusing in capacity building and research, should address more training on international recognized conservation concepts and practices, in particular relating to earthen architecture conservation, but also with the different approaches to post-earthquake interventions.

19. It is also recommended that the Bam Base Direction team and the Steering Committee participate in international conferences, in order to be updated with the present state of art regarding earthen architecture conservation. To assure international outreach, as well as international recognition and dissemination of the advance of knowledge in Bam, scientific papers should continued to be published in international conferences. Also important is to publish in English, the periodical scientific report of Bam and its Landscape.

5.2 Recommendations for removal of the property from List of World Heritage in Danger

The Desired State of Conservation for Bam and its Cultural Landscape has not been yet achieved. The Mission team does not recommend removing, at present, the property from the List of World Heritage in Danger. The mission team acknowledges and congratulates the Bam Base team, the local stakeholders and ICHHTO, for their significant effort towards Bam and its Cultural Landscape desired state of conservation. Nevertheless, the benchmarks defined by the State Party in 2007, have not yet been accomplished, in spite of the delay from the 2010 deadline established by the State Party to remove Bam from the List of World Heritage in Danger.

Following are exposed the principal milestones to be achieved for the removal of Bam and its Cultural Landscape property from the List of World Heritage in Danger. Additionally, a list of subsequent and relevant recommendations is suggested.

A. Encroachment and existence of a gas station in the buffer zone

The mission team observed the existence of informal settlements and a gas station near Chahar Taqi (Chârtâq-e-Keleng-e-Hendusuz) (Comprehensive Management Plan reference nº11), which are within the property boundaries. Previous UNESCO monitoring missions
addressed recommendations regarding the removal of these illegal settlements, as well as the gas station. The 2010 UNESCO monitoring mission revealed that some forbidden construction was dangerously built too close to Chahar Taqi. Police removed the illegal settlements, but encroachment always return back. Regarding the gas station, presently Bam’s Governor is awaiting for the court decision to remove the service station.

**Recommendation 1**

There is a need for security measures to be addressed monthly and systematically. Visits to the WH property components by municipal police cannot be irregular and occasional. They have to be constant and systematically, to avoid recurrent encroachment. If the land invasion continues, it must be foreseen, a permanent guard team, near the component.

Regarding the gas station, it is fundamental to definitely remove away the service, as it jeopardizes the WH property. This is one of the benchmarks (nº7) presented in 2007 for the eventual consideration of the removal of Bam and its landscape from the List of World Heritage in Danger.

**B. Implementation of the Comprehensive Management Plan (CMP)**

Bam’s Comprehensive Management Plan was adopted in 2010, by the Higher Council for Architecture and Urban development, as an annex to the Special Structural Master Plan of Bam. The World Heritage Committee was informed by the State Party that the comprehensive plan for the conservation of Bam Citadel was updated and now includes precise actions for every sector of the Citadel; and has already been used to guide conservation actions throughout 2010. In addition, the comprehensive archaeological plan of the property, as well as the plan for the definition of its boundaries has been finalised (WD_WHC 2011_Bam and its Cultural Landscape).

The mission team confirmed that all the stakeholders received Bam’s Comprehensive Management Plan (CMP). However, the coordination and implementation of the Management Plan is not developed in a systematic way through Bam Architecture Consulting group, which holds the meetings, under the Governor’s supervision. Meetings are addressed to coordinate and resolve encountered issues, but not to deal with the implementation of the MP.

Additionally, the mission team was informed informs that the comprehensive archaeological plan of the citadel is concluded, as well as the plan for the definition of the landscape boundaries. However, the comprehensive archaeological plan of the all property is not yet completed.

**Recommendation 2**

To implement the MP, an action plan was presented, as an annex of the Comprehensive Management Plan. In order to achieve a clear implementation of the MP, there are six major elements to define and address in the action plan: identification of priorities (achieved), definition of existent resources (missing), definition of activities (achieved), assignment of tasks (missing) and time-periods (missing), in order to achieve milestones, and efficiently implement the MP. Four of the six main issues were not addressed which is clearly a challenge for an efficient implementation of the MP.

**C. Sustainability of the property site**

When referring to the importance of a long-term sustainable management plan, Arg-e Bam and its landscape should become more sustainable in terms of future financial resources.
This demands for a short two to three years time period, to be less dependable on international assistance foreigner funding; and for a medium time period, to have more financial autonomy and be less dependable of national state funding.

A balanced medium term approach should be foreseen for the implementation of the Management Plan, less dependable on large allocation funds and with more involvement of the local community and stakeholders, as recommended by the Operational Guidelines.

There has been also a decrease on the number of workers at the property site. In 2005, there was 1000 workers; in 2008, there was 490; in 2010, there 145 and in 2011 there is 25 workers. This brings difficulties to decentralise decision-making and to start implementing the Comprehensive Management Plan. It is also noticed that most of the efforts (conservation, protection, security, etc.) are concentrated in the citadel, which brings difficulties to address the other World Heritage property's components that are missing conservation, as well as contributing for the components' sustainability.

**Recommendation 3**

It is fundamental to address adequate resources in both human and financial contribution for the implementation of the Management Plan. Although the mission team has been assured by the Governor of Bam’s County of his will to respond to this matter, the mission team does not have further information on how this issue will be effectively addressed. Through time the CMP should gain autonomy and sustainability, but for now it is recommended that further resources be allocated to address the implementation of the Management Plan and support Bam’s Base Direction team.

**D. Systematic Security in the World Heritage property**

The World Heritage Committee was informed that a Safeguarding Unit and the Cultural Heritage Office of ICHHTO have been established and are now staffed and resourced to ensure full operation, including the monitoring of sites throughout the property and the buffer zone (WD_WHC 2011_Bam and its Cultural Landscape).

In spite of the assurance by ICHHTO regarding the creation of an ICHHTO on-site Unit, to monitor the property WHP, among other tasks, the fact is that the few people that work for this Unit contribute as expert workers for the site, due to the overall very limited human resources available at the site. The Unit does not contribute for the resolution of security issues, neither, conservation concerns. Thus, there is a Security Unit created in 2007 that assures the security of the citadel. The remained 13 components do not receive a systematic and consistent security protection.

**Recommendation 4**

Bam World Heritage property is still not granted an adequate security system. Progress has been made in this regard, however achievements have not been fully accomplished, to address security through a systematic approach. Police and guards visits to the 13 components included on the WHP are sporadic and under inconstant surveillance. The involvement of local population can help guarantee after proper training, the human resources needed for consistent surveillance.

**E. Regulatory Measures and Conservation Guidelines**

Sometimes, the conservation proposal is not entirely consistent in terms of intervention (see Governor’s seat wall). Besides, in some structures, it is missing further uniformity between
the design, and the conservation intervention project, which should be addressed in an adequate design scale.

**Recommendation 5**

Regulatory Measures and Guidelines should be developed and implemented in line with the Comprehensive Management Plan. Therefore, it is missing:
- Guidelines for physical stabilisation of structures in decay;
- Guidelines for criteria in conservation intervention;
- Conservation manual for the maintenance of earthen structures;

**F. Adequate and safe visit access and development of strategy for tourism pressure**

The 2010 State Party’s State of Conservation report indicates that the plan for promotion and for tourism improvement has yet to be completed. To support the communication of results, professional seminars as well as Steering Committee meetings have taken place, with pending meetings with the Ministry of Housing to control construction works in Bam. The adoption of rules and regulations for Bam and its Cultural Landscape is still reported as pending. No precise timeframe has been provided for the expected completion of work (WD_WHC 2011_Bam and its Cultural Landscape).

Meetings took place between the mission team and representatives of the Ministry of Housing to clarify pending regulations and rules. The representatives of the Ministry of Housing informed the mission team that the Rules and Regulations are clear: in the buffer zone, construction is forbidden; in Bam, the highest point to build is 4.5 m and in the landscape is 10.5m.

The mission was also informed by Bam’s Base Director that the plan for tourism has yet to be completed. There is also lack of information regarding visitor’s facilities, visitor centre project, access and parking, etc. Foreseen activities for tourism should be carefully planned, in order not to change the natural balance of the site and its landscape.

**Recommendation 6**

Further effort, as to be made for the implementation of the tourism plan, the design of a visitor’s centre and parking balanced with the landscape, the implementation of safe site routes for tourists, as appropriate designed equipment (trash bins, toilets, site protective fences). It is also missing at the citadel’s entrance, a map of the landscape of WHP mentioning protected components, as well as more informative signage at the site.

More site information should be available in English; as well as site models that do not have translation to English; neither the site brochure. Arg-e Bam’s official website is also just presented in Farsi. It is also fundamental to address more effective promotion and dissemination of Arg-e Bam and its cultural landscape through national and international tourism offices.

**G. Capacity building, research centre and international outreach**

As for human resources, capacity building efforts, including training on interventions and archaeological works, have also continued to ensure the conservation of traditional know-how and therefore, the long-term maintenance of the property (WD_WHC 2011_Bam and its Cultural Landscape).

At present, capacity building is not formally established (it is addressed in an informal way), nor is concerted, as a common strategy, the opening of a research centre at the WH property.
International outreach was developed through several papers and conference participations until 2009. Following the change of Bam’s Base Direction, there has been a discontinuation of international publications as well as attendance to international earthen architecture and seismic resistant conferences.

Recommendation 7
As suggested by Bam’s Base Direction and Bam’s Steering Committee, a training research centre for seismic resistant earthen architecture could be considered, as a long-term research centre within the Citadel. For that to happen, capacity building, international and national publication of scientific research and the development of a strategy for research regarding the seismic resistance approach should be foreseen. This has to be coordinated and prepared by an interdisciplinary team and not just by Bam’s Base Director, as it happened until present.

H. Improved communication and cooperation between stakeholders and direction teams from different management periods

Several questions addressed by the mission team to ICHHTO representatives, the actual and previous Bam Site Director, and site consultants, indicate that site directors (present and past), Bam experts and professionals, stakeholders and consultants do not communicate among them, when there is a substitution of management team. It also indicates that the Steering Committee does not hold systematic meetings and its action is not effective.

The mission team also noticed that the Bam annual state report (e.g. January 2010 and 2011 reports) submitted by the state party to the World Heritage Committee are not communicated to the local team in Bam. There are inconsistencies regarding what is stated on the report and information acknowledged during the site visit.

Recommendation 8
Communication between the different management committees should improve, as well as between the consultant experts and Bam’s management team, from different time periods. It is crucial that when substitution of local professionals and experts occurs, to avoid disruption of common efforts and goals, the new teams have to be informed of all the previous strategies, methodologies, plans and projects. The team mission urges ICHHTO to play a key role by improving communication between the different parts, as well as sending all the state reports to the Director of Bam site, the Governor of Bam and the Mayor of Bam.

I. Possible date for the removal of Bam and its Cultural Landscape from the List of World Heritage in Danger

In line with the corrective measures defined by the World Heritage Committee in July 2007, the State Party defined 7 benchmarks as Desired State of Conservation to be achieved by until 2010, in order to remove the property from the List of World Heritage in Danger. As of 2011, there are still some missing milestones to be completed.

Recommendation 9
The authorities and stakeholders should concert their efforts, to define a suitable date for the removal of Arg-e Bam and its Cultural Landscape from the List of World Heritage in Danger, which will be reached, when the above corrective measures and Desired State of Conservation is fully responded. The mission team suggests that the time of the Ten year anniversary of December 2003 earthquake could be considered. This may provide a sufficient time period to achieve the missing milestones. Nevertheless, the decision lies on the State Party’s commitment and determination to fully respond to the outlined benchmarks.
6. BIBLIOGRAPHIC REFERENCES


7. ANNEXES

7.1. TERMS OF REFERENCE

In the framework of the Decision 34 COM 7A.24 of the World Heritage Committee adopted at its 34th session (Brasilia, 2010), and in light of the State of Conservation report as well as the technical report submitted by the State Party, the mission shall:

1. Assess whether the Desired State of Conservation for Bam and its Cultural Landscape, listed below, has been achieved in view of removing the property from the List of World Heritage in Danger at the 35th session of the World Heritage Committee in 2011;
   a) Conservation of the Arg-e-Bam and other cultural heritage components within the World Heritage property;
   b) Completion of necessary scientific studies for the recognition, registration, and legal protection of properties with historical, cultural, and natural significance within the cultural landscape zone, as well as marking the protective boundaries around each property within this zone;
   c) Implementation of the Management Plan;
   d) Precise understanding and definition of the outer boundaries of the heritage areas surrounding the property;
   e) Adequate security of the heritage areas within the World Heritage property in addition to the Arg-e-Bam.

2. Assess the current state of conservation of the property, in particular concerns regarding demolitions and encroachments, as well as other factors that might have an impact on its Outstanding Universal value.

3. Evaluate progress made by the Iranian authorities in the implementation of the Comprehensive Management Plan of Bam and its Cultural Landscape submitted to the World Heritage Centre in January 2010. Evaluate whether adequate resources have been allocated and if effective mechanisms are in place for its sustained implementation;

4. Hold consultations with the Iranian authorities and relevant stakeholders in examining the progress made in addressing the concerns expressed by the World Heritage Committee in its previous Decisions as well as on recommendations made by previous reactive monitoring missions;

5. Follow up with the Iranian authorities on the request by the World Heritage Committee in its Decision 34 COM 7B.24, Paragraph 7 to submit a State Party progress report on the state of conservation of this property;

6. On the basis of the foregoing findings, and in close cooperation and consultation with ICHTO, make recommendations to the Government of Iran and the World Heritage Committee and identify measures to ensure the conservation and management of the property;

7. Prepare a mission report on the findings and recommendations of this Reactive Monitoring Mission following the attached format (Annex B). This report should be prepared jointly by the participants involved in the mission; with the ICOMOS expert focusing on the cultural heritage values of the property. ICOMOS representative to the mission will originate the first draft of the mission report, unless other arrangements are agreed at the time of mission.
7.2. THE SEVEN ICHHTO BENCHMARKS AND THEIR STATUS IN 2010.
1. Emergency stabilization treatment and securing the part of Arg-e-Bam which are vulnerable to aftershocks;

This made progress for achieving this benchmark, notably in 2009, to erect the Governor's Seat, a large and heavy steel and cement structure. UNESCO's World Heritage Committee did not approve this major intervention, but nevertheless, its construction is now finished. The following measure has been suggested for this retaining structure:

The retaining structure should be first used as a scaffolding for conducting a full stratigraphical archaeological study in the side of the Governor's Seat before any further reconstruction, pursuant to previous World Heritage Committee decisions and the Comprehensive Management Plan's Action Plan for Archaeological Research of Arg-e-Bam;

Once the archaeological studies are completed, previous structural designs for the conservation and restoration of the wall should be examined, they exist, and new designs could be requested from as many interested parties as possible to obtain the best design following international conservation norms; and

The most appropriate restoration design should then be selected in consultation with the ICHHTO's Bam Steering Committee and other technical bodies, such as ICOMOS Iran, etc.

2. Providing adequately, sensitively designed and safe access to conservation professionals, general public, and to the citizens who will continue to utilize the Arg-e-Bam for traditional and religious uses;

At the general public can visit the Arg-e-Bam by going through the main Gate to the former stable area. A competition for design of visiting routes was jointly announced by ICHHTO Bam Base with the support of UNESCO Cluster Office. This activity has not yet been finalized.

April 2010, extensive reconstruction has been undertaken within the Arg-e-Bam which do not necessarily correspond to international conservation norms. Such reconstruction may adversely affect the authenticity and integrity of the World Heritage property, may imperil its outstanding universal value, and prevent the property from being removed from the List of World Heritage Sites.

3. Removal of Debris from the Arg-e-Bam;

The progress for achieving this benchmark has been commendable, although additional efforts are necessary in order to complete the objective.

Rehabilitation of the Cultural Landscape of Bam;

The Comprehensive Management Plan for Bam and its Cultural Landscape has been elaborated in consultation and with the participation of national, provincial, and local authorities and stakeholders. This Comprehensive Management Plan and its Cultural Landscape was adopted by the Iranian Higher Council in Planning and Architecture as a Complementary Document to the Structural Master Plan of Bam on 25 January 2010. This document has been officially transmitted by ICHHTO to the implementing agencies and authorities for implementation.

Mark 5. Preservation and enrichment of the tradition of earthen architecture;

In 2003 and 2009, commendable state-of-the-art research was undertaken to conserve and preserve techniques for earthen architecture. Unfortunately, such research activities have appeared to have halted since:

Mark 6. Completion of mapping of the archaeology and geology of the area of Bam and its Cultural Landscape and related areas;

Important work for achieving this benchmark is still in progress.

Mark 7. Protection of the heritage areas in the World Heritage outside the Arg-e-Bam.

There is no effective protection of the Bam and its Cultural Landscape heritage property, aside from the Arg-e-Bam, neither in the property’s co-territory. This information was provided in a letter sent by Mr. Qunli Han, UNESCO Representative to the Islamic Republic of Iran & Turkmenistan, to Mr. Alavian-Sadr, Deputy for Conservation of ICHHTO. The letter was sent on the 21st November 2010 (Ref.: UTSO/DALT/CLT/JT/211), as Attachment 3.
7.3. ITINERARY AND PROGRAMME OF THE MISSION

16th of October, Sunday:
- Arrival to Tehran through international flight
- Meeting for lunch with ICOMOS-Iran representative (Dr. Haydeh Laleh).
- Travel from Tehran to Kerman through national flight.
- Meeting for dinner with Mr. Nima Naderi.

17th of October, Monday:
- Morning travel by car from Kerman to Bam
- Arrival reception at Arg-e Bam by the Mayor, local authorities, site Director, site expert team, consultants and children.
- First visit to the Arg-e Bam (photos 1 to 4).
- Lunch with local authorities.
- Formal meeting with local authorities (4.00pm); Managers of: Housing, Landscape, Agriculture, Natural Resources, Water Urban Sour System, Guidance, Industry, Media, Cultural Heritage of Bam, Archaeology, Consultant Group of the City, Deputy of Construction, Deputy of the Kerman’s Governor, Bam’s Mayor and General Governor (approximately 26 people) (photo 50).

18th of October, Tuesday:
- Second visit to the citadel. More technical information was provided (photos 5 to 32, except 8) (photos 44 to 48).
- Visit to the site of adobe production on the buffer zone of the Citadel (photo 49).
- Visit to the Icehouse (WHP reference n°3) and the two Kot-e-Kerm Fortresses (WHP reference n°4) on the outskirts of the Citadel, in Rabaz region (photos 43 and 28).
- Lunch.
- Visit of several WHP sites outside the Arg, as well as some qanâts:
  a) Qal’eh Dokhtar (daughter fortress) (WHP reference n°5) (photos 39 and 40);
  b) Paykam qanât (photos 51 and 52);
  c) Qanbarabad qanât;
  d) Kushk-e-Rahim Abad (WHP reference n°9) (photo 56);
  e) Chârtâq-e-Keleng-e-Hendusuz (Chahar Taqi) (Khâneh Sag-hâ) (Dog’s fort) (WHP reference n°11);
  f) Gazarshu Pool (WHP reference n°10) (photo 55).

19th of October, Wednesday:
- Visit of WHP properties:
  g) Chelache-Rajh (Chehel Cheraq) (WHP reference n°12) (photo 54);
  h) Center Fault Hasht Borj (WHP reference n°13) (photo 38);
  i) South Fault Khargushan (WHP reference n°14);
  j) Fault Qanâts (WHP reference n°15) (photo 37);
  k) Khajeh Afagh Shrine (WHP reference n°7);
  l) Mirza Ebrahim Shrine (WHP reference n°8);
  m) Shahrbast Fortifications (WHP reference n°2) (photos 8 and 34).
- Visit of the Ghaemabad Qanât, where 3 people were working.
- Lunch with local authorities near a qanât.
- Visit of the gas station and encroachment (photos 35 and 36) near Chahar Taqi, up on request of the mission team.
- Meeting for debriefing with local authorities (approximately 15 people representing local stakeholders were present).
20th of October, Thursday:
- Travel by minivan from Bam to Kerman.
- Visit of one of the 9 Persian Gardens in Kerman, recently inscribed as a World Heritage Property.
- Lunch reception and meeting with local authorities, as the Kerman deputy Governor and the Kerman Cultural deputy.
- Flight back from Kerman to Tehran.
- Mission team debriefing at the hotel.

21st of October, Friday:
- Formal meeting in Tehran with the Vice-Minister and Head of ICHHTO Dr. Masoud Sadr, Dr. Eskandar Mokhtari, Mr. Judakki, Dr. Mohammad Talebian and Ms Atussa Momeni, head of ICHHTO-Kerman province (photo 42).
- Mission team debriefing at the hotel.
- Meeting with Ms. Ladan Sadeghian and Mr. Ali Pandidan.

22nd of October, Saturday:
- Workshop at UNESCO-Tehran Office, regarding Disaster Risk Reduction.
- Mission team debriefing at the hotel.
- Departure back to France / Portugal.
7.4. COMPOSITION OF THE MISSION TEAM

1. Feng Jing, Chief, Asia and the Pacific Section, UNESCO World Heritage Centre (Paris)

7.5. DETAILED LIST OF PEOPLE MET DURING THE MISSION (photos 48, 50, 51, 52, 58)

1. H.E. Mr Hamid Reza Jazini Zadeh, Governor of Bam County;
2. Mr Khodamorad Hazinzadeh, Mayor of Bam;
3. Mr Hossein Dehghani, Governor of Baravat-Bam County;
4. Mr Musa Hafezabadian, Director of Education, Bam County;
5. Mr Afshin Ebrahimi, Director of Bam Cultural Heritage Base and its Cultural Landscape;
6. Dr Asdolah Gordan, Director of Medical Science University of Bam;
7. Mr Kamal Espargham, Chief of Protocol for the Deputy of Conservation, ICHHTO;
8. Mr Mahmood Ebrahimi, Special Advisor for Bam Governorship on the Cultural Landscape of Bam;
9. Mr Mahmood Poortaheri, Chief of Natural Resources and Aquifers Office of Bam;
10. Mr Mohammad Raze Ghalandari, Security Office Director of Environment of Bam;
11. Mr Farzad Esmaeipour, Director of Rural Water and Sewage Management of Bam County;
12. Mr Khatereh Hemmati, Reporter;
13. Mr Mohammad Amini, Director of Urban Water and Sewage of Bam;
14. Mr Mohsen Dehghanfar, Sound and Image Technician;
15. Mr Mansooreh Arjomandi, Deputy Director of Payam Noor University;
16. Mr Saeed Zolfaghari, Deputy of Islamic Culture and Guidance Office, Bam;
17. Mr Hajmousa Hafezabadian, Director of Education;
18. Mr Ali Reza Hakimnia, Director of Industries and Mines;
19. Mr Mahmnoud Balangi, Deputy for Transportation Office;
20. Ms Atusa Momemi, Director-General for Registration, Preservation and Rehabilitation of Intangible and Natural Heritage;
21. Mr Mohsen Movahedi, Deputy of Kerman Provincial Cultural Heritage;
22. Mr Amin Bagheri, Deputy of Development and Planning for Bam’s Governorship;
23. Mr Margam Mehran, World Heritage Registration Expert;
24. Mr Mehdi Vajed Ebrahimi, Deputy of Agricultural Jihad; Bam County;
25. Mr Ali Reza Ghasemi, Deputy for Vocational and Technical Education;
26. Mr Ali Ranjbar, ICHHTO Bam Representative;
27. Mr V. Samet, Head of Bam City Council;
28. Mr Judaki, Chief Archaeologist of Bam Base;
29. Young Archaeologist (Shirazi lady);
30. Supervisor Architect, Bam Cultural Landscape Management Committee;
31. Ms Maryam Mehran, Interpreter of ICHHTO;
32. Mr Ali Tabassum, ICHHTO;
33. Mr Babak Sedighi, Photographer;
34. Dr Mohammad H. Talebian, ICHHTO consultant;
Debriefing Meeting at ICHHTO Headquarters in Tehran (21 October, Friday)
10:45 am - 14:25 pm (photo 42)

1. Mr Masoud Alavian Sadr, Deputy for Conservation of ICHHTO;
2. Mr Eskandar Mokhtari, former Director of Arg-e Bam (consultant of ICHHTO);
3. Dr Mohammad Hassan Talebian, ICHHTO consultant, Tehran University Professor;
4. Mr Judaki, Chief Archaeologist of Bam Base, ICHHTO;
5. Ms Atusa Momemi, Director-General on Heritage Registration, ICHHTO;
6. Ms Maryam Mehran, interpreter;
7. Mr Feng Jing, UNESCO WHC;
8. Dr Mariana Correia, ICOMOS

In addition, the mission consulted the following independent professionals.
1. Mr Reza Nikpour
2. Mr Nima Naderi (Former Local Manager of Arg-e Bam site)
3. Ms Ladan Sadeghian (landscape architect that worked with UNESCO-Tehran)
4. Mr Ali Pandidan (engineer that worked in Arg-e Ban with Italian team)
5. Dr Haydeh Laleh (Executive Board member of ICOMOS-Iran)
6. Dr Chahryar Adle (Foreign Relations delegate of ICOMOS-Iran) (phone interview)

7.5. MAPS

Mr. Judaki, Chief Archaeologist of Bam Base delivered the citadel topographic maps missing, in paper format and digital form, to both Feng JING, UNESCO representative, and to Mariana Correia, ICOMOS representative.

7.6. PHOTOGRAPHS

Cover page: photo of Bam’s citadel.
Credits: Mariana Correia, 18th October 2011.

Mission photos:
From photo 1 to 42 – Credits: Ms. Mariana Correia
From photo 43 to 58 – Credits: Mr. Babak Sedighi
Joint UNESCO/ICOMOS Reactive Monitoring Mission to Bam and its Cultural Landscape, IRAN

Site visit (16-22 October 2011) - Photo Credits: Mariana Correia
Joint UNESCO/ICOMOS Reactive Monitoring Mission to Bam and its Cultural Landscape, IRAN

Site visit (16-22 October 2011) - Photo Credits: Babak Sedighi