

To:

December 4, 2012

Executive Secretary  
The Inspection Panel  
P.O. Box 27566  
Washington, D.C., 20038

From:

The Alliance for the Restoration of Cultural Heritage, Kabul Office



Washington, D.C. Office:

The Alliance for the Restoration of Cultural Heritage  
Dr. Cheryl Benard, President  
2121 K Street, Suite 620, NW  
Washington, D.C., 20037  
USA

**Request for Inspection  
on Behalf of the Populace of Logar Province  
and in Defense of a Global Heritage Site**

*Note: In addition to the signatories from the local area, many more residents of Logar Province also support this letter and this effort and have asked us to speak on their behalf in this matter, because they fear retaliation if they do so on their own.*

*They do not feel able to contact the World Bank office here in Kabul, because they are afraid that their names will become known and they will face retribution. As you probably know, institutions and the rule of law in Afghanistan are still very weak and abuses of privilege occur with some regularity.*

We, the not for profit NGO ARCH International, Inc. hereby request that the Inspection Panel of the World Bank conduct a review of the planned mining project at Aynak/Mes Aynak in Logar Province, Afghanistan.

We know of at least three active World Bank projects connected to Mes Aynak:

1. Sustainable Development of Natural Resources (SDNR),  
Project ID P098118,  
*Environmental Category: C*  
Approval Date: Jun 20, 2006  
Closing Date: Dec 31, 2012
2. SDNR – Additional Financing, Project ID P116651  
Environmental Category: B  
Approval Date: Jun 11, 2009  
Closing Date: Jun 30, 2016
3. SDNR II, Project ID P118925  
Environmental Category: B  
Approval Date: May 31, 2011  
Closing Date: N/A

In this matter, we are acting on behalf of dozens of members of the local affected population, which, being fearful of repercussions, has requested us to submit this request on its behalf.

Because this project is already in the process of destroying a uniquely important and valuable cultural heritage site, we are further joined by Afghans wherever they reside, who are in danger of losing their historic patrimony; and of concerned civil society worldwide, because cultural heritage belongs to all of humanity. Protests from scientists, archaeologists, historians, representatives of the international Buddhist community and concerned citizens are already arising in many locations globally. There is growing media coverage, there are multiple international petition campaigns some with over 50,000 signatures already, and there have been significant demonstrations, with more planned. Many important international values, standards, regulations and best practices stand to be violated by the actions of the World Bank, principally, environmental safety, public health, right to livelihoods, and world cultural heritage.

We have attempted for well over a year to work with the relevant World Bank representatives in Afghanistan and the U.S., holding many meetings, presenting many facts and reports from affected persons and from experts, both locally in Afghanistan

and at headquarters in the U.S., but we must now conclude that no satisfactory response or reaction is forthcoming, and therefore we now turn our hopes to the Inspection Panel.

#### I. ARCH's Meetings with World Bank Officials and Staff

There were multiple meetings between ARCH and responsible World Bank officials and staff in the period from September 27, 2011 to the present.<sup>1</sup> These meetings, contacts and communications took place in person, via email, by phone, via teleconference, in D.C. and in Kabul with World Bank staff based in the U.S., Germany and Afghanistan.

Among other recommendations, we urged the convening of an Expert Meeting of independent geologists, archaeologists and mining engineers to objectively review the situation and attempt to develop solutions. We were assured that such a meeting would occur. Instead after multiple postponements the meeting was first downgraded from a "big tent meeting" at which the representatives of the local population and civil society were supposed to be present and able to pose questions to a small press conference (with only one press outlet included, the official government one) and then held in exclusion of the local populace and civil society. No independent experts were invited, civil society was not included, and no discussion took place.<sup>2</sup>

We feel that all avenues have been exhausted and we must now appeal to the Inspection Panel.

#### II. Local and International Support for this Request for Inspection

Several representatives of local community groups, as well as individual affected residents, are signatories to this request (see Appendix a).

Additionally, Afghan citizens and individuals of Afghan descent living in the Diaspora are also signatories to this request because they believe that their cultural heritage is in imminent danger of being destroyed. In regard to livelihoods and public health, too, they

---

<sup>1</sup> ARCH Representatives: Cheryl Benard, Yama Jewayni, Carlynn Stanley, Elvira Lored o, [REDACTED]

World Bank Officials and staff: Michael Stanley, Alison Reeves, Andre Ufer, Eshan Shamsi (World Bank Kabul office), Mohammad Haroon Naim (World Bank Kabul office), Gabriela Aguilar, Noora Arfaa, Angela Walker, Josephine Bassinette, Abdul Raouf Zia, Asta Olesen (World Bank Kabul office.)

<sup>2</sup> Dr. Cheryl Benard was able to gain entry to the event as the personal guest of the Deputy Minister of Culture.

feel a responsibility to act in support of their compatriots in Logar Province to petition the World Bank for relief (see Appendix b).

Finally, we attach two of the multiple currently circulating international petitions of concerned civil society members requesting that all involved parties including the World Bank work towards the protection of the Mes Aynak site (see Appendix c). Each of these has garnered more than 60, 000 signatures.

International support for our effort to save Mes Aynak from needless destruction is beginning to form, in illustration we may direct your attention to Thailand where an international campaign to save the cultural heritage of this ancient site has commenced. Organizers are the groups World Federation of Buddhist Youth (WFBY)<sup>3</sup> and the student group Save Mes Aynak Thailand (SMAtH).<sup>4</sup> The WFBY has submitted a letter to the UNESCO office in Bangkok, requesting the protection of the Mes Aynak site. The SMAtH has started a facebook campaign and is gathering a significant grass roots support (see Appendix f). We support their argument that a site so important to their religious and cultural heritage must not be unilaterally destroyed.

### III. Summary

The Aynak mine site is a mere 40 kilometers from Kabul, the country's capital. Logar Province is agricultural, with well-established orchards of fruit trees, farms and grazing areas for livestock. Aynak was on the Silk Road. As far back as 5000 years ago, this mineral rich area was already the locale for the mining, smelting and production of metals. Eventually, a wealthy and sprawling Buddhist city grew in Mes Aynak, guarded by a mountain-top fortress and walls, holding several religious complexes and multiple stupas, and containing commercial and residential districts. This remains today, buried beneath the ground; it is a find comparable to Pompeii. Its scientific value is obvious, as it holds unique information about early metal production and trade. The art works and artifacts including gold jewelry that have thus far been unearthed are of high artistic quality, indicating that the lower strata - where looters did not yet have access - likely hold much more. The tourism potential of such an accessible and fascinating site is obvious as well. ARCH can provide testimonials by multiple archaeologists, historians and other experts from many renowned international institutions such as the TU Munich, the University of Vienna, the Global Heritage Fund and others, to support this assessment of the value and importance of this site.

---

<sup>3</sup> President of this organization is Dr. Pornchai Pinyapong, ppornch@hotmail.com.

<sup>4</sup> [www.facebook.com/SaveMesAynakTH](https://www.facebook.com/SaveMesAynakTH), this Facebook profile has 3,113 "likes" as of December 4, 2012. Founder: Mr. Natdanai Yns.

Tragically, this site is slated for destruction in connection with a copper mining project supported by the World Bank. What we find especially insupportable is that options and alternatives were never explored. We have implored the World Bank for well over a year now to investigate whether mining methods and technologies were available that could save the site or portions of the site. We proposed that independent experts from the fields of mining and archaeology should compare the maps of archaeological remains vs. mineral deposits to see if a lower impact mining plan might perhaps be feasible. We asked that at the very least, a proper map of the antiquities should be obtained so that one could make an informed judgment in regard to what one was proposing to destroy – this is, with current technology, possible in non-invasive ways through ground-penetrating methodologies. Our suggestions were acknowledged to be sensible but they were not implemented. Instead the Bank has continued to support hasty salvage archaeology at this site. This is a method that archaeologists typically employ as a “last resort.” It consists of hurriedly removing anything that is portable and can be relocated to a museum or storage facility. It assumes that there is no alternative to the destruction of the site itself. The typical use of salvage archaeology would not be in a context such as Mes Aynak, where one finds an isolated buried city. Rather, salvage archaeology is more often used when, in the middle of a heavily populated modern urban area, a company constructing a new subway unexpectedly finds some ancient ruins.

As mentioned, Logar province where Mes Aynak is located, is agricultural. We are further concerned that the apparent negligence of the World Bank in not ensuring that environmental safeguards are in place, imminently endangers the health of the population living there, the quantity and safety of their water supply and through the aquifers and the river, that of Kabul and the Kabul River with potential consequences even cross-border into Pakistan.

Logar Province is an underdeveloped part of an impoverished country. People are not educated and no attempt has been made by the World Bank to properly inform them of the plans, how these affect them, or the risks. The initial resettlement efforts have been fraught with many problems and even with violent incidents. All of this, and how it relates in our opinion to violations of World Bank policies, is further detailed below.

#### IV. Risks for Local Population - Overview

We have extensively studied the situation at Mes Aynak, reviewed all accessible data and information, consulted with numerous subject matter experts and civil society groups, and convened an expert conference to assess the impacts of the intended mining project at Aynak. We have concluded that just as many of them fear and have expressed to us, indeed the residents of Aynak, Logar Province will suffer harm as a

result of the World Bank's failures or omissions in regard to the 30-year mining contract granted to the Chinese state-owned company MCC that is partially managed, overseen and funded by the World Bank.

We respectfully draw the attention of the Inspection Panel to eight specific areas reflecting potential harm to the population of Logar Province, and showing neglect on the part of the World Bank (*see OP 13.05 "Project Supervision".*)

1. Lack of disclosure of World Bank project documents, lack of transparency, inexplicable designation of the SDNR as an "Environmental Category C" project, as well as the questionable designation of SDNR II as an Emergency Project.

*(see OP 8.00 "Rapid Response to Crises and Emergencies," Active Project: "Afghanistan: Extractive Industries Transparency Initiative Implementation (ID P117077), GP 14.70 "Involving Nongovernmental Organizations in Bank-Supported Activities," "The World Bank Policy on Disclosure of Information")*

2. Lack of consultation with local population.

3. Failure of providing a basic Environmental Assessment.

*(see OP 4.01 "Environmental Assessment")*

4. Danger to public health as a result of violations of environmental safety regulations and standard best practices, including failure to develop a mine closure plan, and possible release of toxic chemicals into the air, soil and water.

*(see OP 4.01 "Environmental Assessment," OP 4.02 "Environmental Action Plans," OP 4.04 "Natural Habitats")*

5. Loss of livelihoods as a result of water depletion, pollution, loss of agricultural lands.

*(see OP 7.50 "Projects on International Waterways," OP 4.07 "Water Resources Management")*

6. Loss of their homes and farms on the part of displaced local residents due to an inadequate resettlement plan and risk of local unrest.

*(see OP 4.12 "Involuntary Resettlement")*

7. Special risk to a vulnerable indigenous minority population, the Kuchis (a nomadic group designated as a vulnerable population by UNAMA.)

(see OP 4.10 “Indigenous People,” OP 7.60 “Projects in Disputed Areas”)

8. Loss of a heritage site with strong future tourism income potential; destruction of irreplaceable cultural heritage due to a mine plan based on insufficient data, and a neglect to study available options for reconciling mining and heritage preservation.

(see OP 4.11 “Physical Cultural Resources”)

## V. Mine Site Preparation - Failures

The overlap of three important interests – economic development, environmental safety, and preservation of cultural heritage – demands that a thorough investigation of each should precede commencement of mining operations. The exact extent and location of the artifacts should have been mapped, using the available modern technical capacities – instead, only a cursory survey without the use of these instruments took place (explained further in the chapter “OP 4.11”.) An environmental impact assessment and a plan for mitigating the environmental risks ought to have been developed and made public for review by independent experts. This has not occurred. Finally, feasibility studies for the mining and for its reconciliation with the goal of preserving at least the most important portions of the heritage site must be created. They have not yet been.

With financial support from the World Bank, archeologists and workers have been hired for the explicit purpose of engaging in salvage archeology as opposed to regular archeology. This is a procedure which on the one hand rescues some of the objects but only at the cost of simultaneously destroying the site. Any objects that cannot be moved are sacrificed, and even those that are removed are often damaged in the process. The possibility of maintaining a heritage site is eliminated by this process, and the lower levels of the historical deposit – which often are more valuable than the surface layers that have already been looted or damaged by the elements - can then never be excavated or explored. Buildings and structures, fragile objects, items too large to remove, and anything still below the surface, all of that is sacrificed. This mode of archeology is justified only when no other alternatives exist, for example because an ancient deposit is accidentally uncovered in the middle of a modern city during the construction of a subway system.

## VI. Violations of World Bank Operational Policies

We believe that the following World Bank operational policies have not been observed or have been violated:

#### **OP 4.00, Table A1: Environmental and Social Safeguards Policies**

The operational principles listed in this document include: a screening process that should commence as early as possible; assessment of potential impacts; assessment of compliance of the project with international obligations; feasibility studies to include siting alternatives; disclosure of the draft Environmental Assessment (“EA”) “in a timely manner...in an accessible place and in a form and language understandable to key stakeholders.”

To date, no EA has been made public. As far as we have been able to determine, no feasibility studies have been conducted by the WB, Government of Afghanistan, or other stakeholder, or if they have been conducted, they are not known to any independent advisors or key stakeholders. This is despite the fact that active mining is supposed to commence in 2013. If a plan exists, which does not seem to be the case, then its publication has not been timely but is, indeed, long overdue.

Copper mining is associated with a number of significant risks to human health and to the natural environment. These risks can extend far into the future and can continue even after the closing of the mine; impacting the soil, air and water. Copper mines also permanently alter the landscape and the terrain, due to the high ratio of waste to ore – one ton of ore typically produces two tons of waste. The Environmental Protection Agency Report on Copper Mining provides an extensive summation of the risks and hazards, from which we cite only briefly the following:

“Mine pits and underground workings; waste rock piles; tailings and other ponds; spent leach piles are of particular concern in the copper industry, because these are the areas in which toxic contaminants are most commonly found...they have the potential to present harm to the environment... Contaminants associated with these areas may include heavy metals and, from some, acid drainage. These contaminants may degrade ground water, surface water, soil, and air quality during mine operation and after mine closure... Waste leach piles typically have large surface areas and contain highly permeable waste material. These factors act to increase the exposure of waste material to infiltrating liquids. When pyrite and sulfide minerals are exposed to air and water, sulfuric acid may be produced. Sulfuric acid may leach metals, yielding an iron- rich, acidic solution that contains high metals concentrations. If this solution infiltrates the underlying ground surface, it could reach the water table and potentially contaminate ground water... The generation of acids may then act to increase the dissolution, mobilization, and transportation of heavy and toxic metals noted above. Except for iron, all of these are toxic to humans and to aquatic life and are known to accumulate in the environment and concentrate in the food chain.”<sup>5</sup>

---

<sup>5</sup> Mining Industry Profile: Copper, United States Environmental Protection Agency, [www.epa.gov/osw/nonhaz/industrial/.../mining/.../copper/copper](http://www.epa.gov/osw/nonhaz/industrial/.../mining/.../copper/copper)



Copper mining produces an inordinate amount of waste. It is not uncommon for the resultant waste piles to be 400 hectares in size. Clearly this represents a significant alteration of the terrain of Logar Province. We have seen no plan that explains how this will be mitigated, and what livelihoods or habitation will be possible following the closure of the main. And this pertains only to the physical terrain. These waste piles also frequently contain toxic and at times, radioactive materials. In the U.S. increasingly stringent regulations have been put in place. Most recently, permits are only issued if it can be demonstrated that the aquifer on the site is not used for drinking water.<sup>6</sup> The enormous challenges associated with managing the tailings associated with copper mining are well known, for one instance we may refer to the case of the Marundique Islands, Philippines, where tailings contaminated rivers, ground water and the marine environment.

7

Mitigation processes for the above-mentioned risks are possible but complicated, often only partly satisfactory, expensive and they require competent continual monitoring. We have not seen a responsible plan for Mes Aynak and there is no indication that monitoring can be successfully accomplished, given the prevailing levels of non-transparency.

Examples of dramatic consequences that can result from the improper management and insufficient precautions at copper mines abound. These can lead to an area becoming permanently uninhabitable. For example, the Anaconda Copper Mine in Montana had to be declared a Superfund Site. Levels of arsenic found in the water, soil and in medical testing of local residents made it necessary for them to be permanently removed from their homes and resettled, because even after mitigation measures the continual return of hazardous materials into the environment was deemed likely by the health authorities.

8

Regarding Mes Aynak, sources close to this project inform us that the World Bank has attempted to comply with environmental protection requirements by hiring an independent monitoring agency, but that a lack of access, information, and transparency has made it impossible for these consultants to fulfill their mandate.

---

<sup>6</sup> USEPA, "Copper Mining and Production Wastes," <http://www.epa.gov/rpdweb00/tenorm/copper.html>

<sup>7</sup> US Geological Survey Open File Report 00-397, <http://pubs.usgs.gov/of/2000/ofr-00-0397/ofr-00-0397.pdf>

<sup>8</sup> Anaconda Smelter: Pollution from Copper Processing Wastes Forces A Community to Relocate, EPA, <http://www.epa.gov/osw/nonhaz/industrial/special/mining/minedock/damage/damage.pdf>

## **Failure to Comply with Afghan Law**

The current Afghan Minerals Law and associated Regulations contain a number of provisions relating to environmental protection, protection of cultural heritage, and protection of infrastructure, notably Chapter 7, Chapter 8, Chapter 9 and Chapter 15, and Articles 78, 81, 86, 87 and 90. These state among other things, that the initial bid for a minerals contract must contain an Environmental Screening Report/Environmental Impact Assessment, an Environmental Management Plan, a Mine Closure Plan, a Monitoring Program. The Environmental Management Plan is termed to be the “main condition” for the intended activity. These documents do not, so far as we can determine, exist. This would mean that the World Bank is in violation of Afghan national law, by proceeding with a project that does not meet the initial criteria of said law.

## **Inexplicable Designation of a Copper Mine as an Environmental “Category C” Project**

Given the known and significant risks associated with copper mining, it is hard to understand why this project was initially given an Environmental Category “C” designation by the World Bank. We would like to know the reason for this classification. While it has since been upgraded to a “B” designation, the lower classification during the early phases of the project affected decisions and chosen directions of effort at a critical juncture, just as the hasty and unfounded decision for “emergency archeology” has set a disastrous course for the piecemeal destruction of the cultural heritage site.

## **OP 4.11: Physical Cultural Resources**

World Bank policy requires that the cultural impact of a project be assessed, among other methods, through collecting baseline data, an impact assessment, design of mitigating measures and formulation of a management plan.

This is ARCH’s key area of competency; and to ensure that our conclusions are accurate,, we have solicited the views of many independent subject matter experts. We have obtained and reviewed the archeological survey conducted under the auspices of the World Bank (Delegation Archeologique Francaise en Afghanistan, Mes Ainak, A comprehensive assessment of the archaeological issue). Despite its name, this document cannot by any objective measure be described as “comprehensive.” Rather, it is rudimentary at best and the survey was, of necessity, superficial and cursory. State of the art technical means and technological resources for collecting baseline data (for example through ground penetrating aerial photography and laser-based remote

scanning technology) were not utilized, and the survey does not represent current international best practice. The archeologist who conducted the survey (Philippe Marquis of DAFA) has no doubt given this his best personal effort, but he was not provided with the time, resources, technical materials, manpower or mandate to conduct a proper survey; also, conducting such a survey is not his area of expertise, as he is a salvage archeologist. ARCH can provide several international experts who will attest to this conclusion. The failure to properly map, explore and evaluate the site is especially alarming given the magnitude and importance of this deposit.

The World Bank is funding and supporting the work of laborers and archeologists on the site. The goal is to salvage objects from the upper strata of the deposit, an approach termed emergency archeology or salvage archeology. This approach is highly prejudicial. The proper procedure according to international best practices and standards for cultural preservation would have been as follows: first, the deposits needed to be surveyed, mapped and evaluated. Next, the feasibility studies and mining plan needed to be reviewed to discover the extent to which the site could be responsibly excavated, documented and preserved in harmony with the mining effort. Finally, a joint plan for heritage preservation and for mining should have been developed, inclusive of timelines. This did not happen; instead the decision was immediately presumptuously made (with support of the World Bank) that the site would be sacrificed and salvage archeology was to take place. The possibility of site preservation was never even considered. A plan was never developed and no reliable timeline was provided; instead, the archeologists have continually been given incorrect estimates of how short a time they only had available to rescue whatever they could before mining commenced.

This false state of urgency has now gone on for years. In other words, there was in fact more than enough time for a responsible survey to be conducted and options to be discussed, and this had to be known to the World Bank mining department from the start, as they must be able to assess and predict how long it takes for a mine to be opened and they had to see and be able to evaluate the pace of preparations and therefore, the likely earliest start to mining – which at the present time, years into the contract, is still at least three and probably five years away according to independent mining experts. A prominent archeological expert, who had been hired as the site manager, was summarily fired when he attempted to raise some of these issues. He is willing to give his name and to speak with the Inspection Panel. An extensive description and assessment of the site, its history and significance, is attached and substantiates the need for a proper archeological survey (White Paper, Appendix d.)

The “consultation with relevant nongovernmental organizations” as required in Point 11 (of OP 4.11) has also not taken place. The most prominent experts on the subject of Mes Aynak, such as Professor Zmaryalai Tarzi, the internationally renowned Afghan

archaeologist who worked on the site during the 1960's and has urgently pressed for measures to properly study and assess the site and develop a mitigation and management plan commensurate with its value, and to earnestly consider options for in situ preservation, has been ignored. The World Monuments Fund and ICOMOS were not included in any discussions of the issue; both are on public record regarding the unique importance of this site and the necessity to consider with all due earnest any possibility to avoid its destruction.

Nor were representatives of Afghan cultural organizations consulted. Mes Aynak contains information about at least 4000 years of Afghan history. If the current plan goes forward, its lower levels will never be excavated and all the information contained therein will be lost forever. This loss affects all Afghans, which is why a number of Diaspora Afghan professionals have joined in signing this request. Arguably, it is also a loss to the history of science, since the lower levels of the site include artifacts and data about the history of early mining – copper has been mined at this location for thousands of years, but the methods and tools utilized in earlier millennia are not known.

### **Questionable Designation as an Emergency Operation**

The World Bank Project regarding Mes Aynak is designated as an Emergency Operation. This would allow the Bank to exempt the project from certain of the requirements related to Physical Cultural Resources (Point 13). However, this project does not satisfy the requirement of an Emergency Operation and is improperly categorized as such.

OP 8.00 defines an Emergency Operation as a “rapid response policy to address major adverse economic and/or social impacts resulting from an actual or imminent natural or man-made crisis or disaster” (Point 1.) Point 2 states that “the Bank may provide a rapid response to a borrower’s request for urgent assistance in respect of an event that has caused, or is likely to imminently cause, a major adverse economic and/or social impact associated with natural or man-made crises or disasters.”

None of this applies to the mining of copper at Mes Aynak, which is a routine and long-term commercial project. Mining copper at Aynak requires a lead-in phase of at least three years. Indeed, two years have passed already without any serious infrastructure preparation (such as road-building, power generation etc.) having occurred. In what way does the mining of copper represent an emergency? We fear that this designation only serves the purpose of circumventing protections and regulations that by rights should apply. Afghanistan – like many countries where the WB operates – indeed suffers from

security challenges, but that does not justify jettisoning the WB's well-crafted rules.

#### **OP 4.07: Water Resources Management**

Logar is a heavily agricultural province. The population consists largely of farmers, who grow wheat, maize, potatoes, onions, alfalfa, clover, tomatoes and okra, as well as maintaining orchards of apples, apricots, almonds and grapes. Agriculture relies on an extensive, traditional irrigation system (karez system).<sup>9</sup>

The mining project will draw down aquifers, reducing the water available for drinking by humans and animals, and for farming and irrigation.

We are also concerned about water safety. Already in 2005, a UNICEF study found arsenic contamination of well water in Logar Province, which it attributed to earlier small-scale copper mining.<sup>10</sup> What will happen once huge commercial mining begins?

#### **OP 4.12: Involuntary Resettlement**

WB policies on resettlement are clearly stated. Involuntary resettlement is to be avoided where possible and if it is unavoidable, a set of precautions are to be taken to safeguard the rights and the future of the affected population. This includes “informing and consulting” those affected, offering them choices and viable alternatives, providing them with housing and with replacements for infrastructure they have lost. So far this has not happened in Aynak. According to a report by the Afghan Analysts’ Network, the situation violates the policies of the WB in many particulars. The residents’ land was expropriated by government decree without prior consultation. The decree promised them “compensation” but did not specify what this would consist of. There have been allegations of corruption in regard to the registration of land ownership in the new location, as well as resistance by the population of the area of relocation who did not want the newcomers and disputed the availability of the land they were to be granted. There are also tribal issues bearing with them the danger of violence erupting if members of one tribal group are forced to settle in an area considered by another tribal group to be their property.

---

<sup>9</sup> <http://afghanag.ucdavis.edu/Province-agriculture-profiles/logar/Logar.pdf>

<sup>10</sup> Susan Murcott, Arsenic Contamination in the World, An International Sourcebook, IWA, London 2012

One of the affected groups is a vulnerable minority, the Kuchis (a nomadic group). The Kuchis have been designated by UNAMA, the United Nations Assistance Mission in Afghanistan, as one of the principal vulnerable populations in the country.

All of this has led to fear and reluctance on the part of those to be relocated, some of whom have fled to unknown destinations rather than put themselves at risk in their designated new location, while others returned home but were forcefully removed by the police. Information to those affected has been lacking, adding to the uncertainty and fear. There has been no authoritative statement on how many villages and which ones are to be relocated during which phase of the process.<sup>11</sup>

## VII. Conference

After the World Bank's failure to organize a serious meeting consisting of independent experts (see Chapter I) ARCH convened an expert meeting on our own, the findings of which are attached (Appendix e.) This meeting surfaced a high level of concern on the part of independent experts regarding the environmental dangers facing Mes Aynak, given the nature of the ore deposit and the fact that so far, the effort lacked any transparency and did not meet minimal common standards of practice such as publication of an Environmental Impact Assessment and Environmental Impact Mitigation Plan, Mining Feasibility Studies, or a Water Master Plan. The historians and archaeologists attending were uniformly of the view that it would be highly irresponsible to continue with rescue archaeology when a prior proper exploration of the historical deposits had not yet been undertaken to determine the age, extent, value and exact location of these deposits.

We request the Inspection Panel recommend to the World Bank's Executive Directors that an investigation of these matters be carried out.

Signature:



Date: 12/5/2012

---

<sup>11</sup> Thomas Ruttig, "The Many Owners of Ashab Baba, Land Conflict at the Ainak Copper Mine," Afghanistan Analysts Network.

We, ARCH, Inc., do authorize you to disclose our identities. We ask you not to disclose the identity of any residents of Afghanistan, for the sake of their personal safety; however they are willing to speak with the Inspection Panel.

**Appendix:**

- a. Signatures (Afghans living in Afghanistan)
- b. Signatures (Afghans living abroad)
- c. International Petitions
- d. White Paper
- e. Conference Report
- f. Illustrations

**Appendix a**  
**Signatures of Local Residents**  
**(Removed for Confidentiality)**



**Appendix b**

**Signatures of Afghans Living Abroad**

We request the Inspection Panel recommend to the World Bank's Executive Directors that an investigation of these matters be carried out.

Signatures:

Date: 04-12-12



Faramarz Ahmadi  
\* member of organization ~~for~~ petition on  
change.org worked on  
\* awareness campaign

Afghanistan - Born, living in the Netherlands.

We, ARCH, Inc., do authorize you to disclose our identities. We do not authorize you to disclose the identity of any residents of Afghanistan.

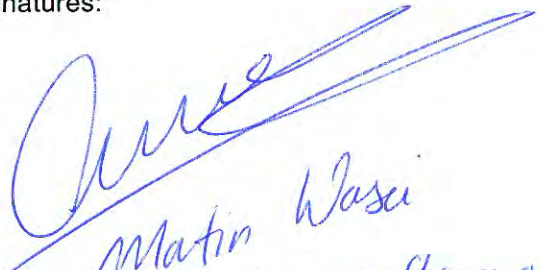
**Appendix:**

- a. Signatures (Afghans living in Logar Province)
- b. Signatures (Afghans living abroad)
- c. Signed Online Petitions
- d. List of Meetings with World Bank Staff
- e. White Paper
- f. Conference Report
- g. Pictures

We request the Inspection Panel recommend to the World Bank's Executive Directors that an investigation of these matters be carried out.

Signatures:

Date:

  
Martin Wasai  
Co-Organiser: - petition on Change.org  
- awareness campaign  
Afghan-Born . Living in the Netherlands

4-12-2012

We, ARCH, Inc., do authorize you to disclose our identities. We do not authorize you to disclose the identity of any residents of Afghanistan.

**Appendix:**

- a. Signatures (Afghans living in Logar Province)
- b. Signatures (Afghans living abroad)
- c. Signed Online Petitions
- d. List of Meetings with World Bank Staff
- e. White Paper
- f. Conference Report
- g. Pictures

To the Inspection Panel,

November 30, 2012

One of the few things my poor country still has is its history and culture. To remember and build on our past can sustain us during the difficult present that we are forced to experience.

But if the great achievements of our past are erased, they can never be brought back.

I am very concerned and upset about Mes Aynak, not only because this unique heritage site is in danger, but because our population is at risk of terrible health consequences if the mining is not done with great responsibility. I feel endangered by this mining project and worried on behalf of my fellow citizens and I ask the Inspection Panel to review the project and see if they can responsibly promise us that no harm will come to us from this mining.

I do not want my name to be kept confidential. I want everyone to know that the life and health of Afghan people is the most important thing to me.

Sincerely,

*Marie Khalili Nasiri,*  
marie.k.nasiri.j26y@statefarm.com

## استخراج معادن افغانستان و تأثیر آن در حیات مردم

درین اواخر یک عده باستان شناسان، معدن شناسان و زمین شناسان در داخل و خارج کشور، استخراج معادن افغانستان را مورد بررسی قرار داده، و مقالات ارزنده درین باره به نشر سپرده اند. مقاله مفصلی از جنرل صبور فروزان در شماره ۱۸۵ جنوری ۲۰۱۲ هفته نامه امید، برای من بسیار جالب بود که به اصطلاح چشم و گوش مرا باز کرد.

قرارداد معدن مس عینک در لوگر با چیناییها، قرارداد معدن آهن حاجیگیک در بلخ و قرارداد معدن مرمر و رخام هرات به یک سرمایه دار ایتالیایی، درین مقاله به صورت مفصل تشریح و بدسترس خوانندگان گذاشته شده است. جنرل فروزان با تشریح مقاله وظیفه ایمانی و وجدانی اش را در مقابل ملت و خاک افغانستان ادا کرده است. امیدوارم معلومات بیشتر درین باره جهت آگاهی هم وطنان نشر نمایند.

من نه معدن شناسم، نه باستان شناس، نه زمین شناسم و نه ساینس دان، افغانستان عزیز را با ذره ذره خاک آن از دل و جان میپرستم. مردم عجیب افغانستان که سالیهاست باز به بازیهای سیاستمداران شده اند، به زبان شان تجاوز کرده اند، اعضای بدن کودکان شان در بازارهای پاکستان در معرض فروش قرار گرفته، خانه و شهرهایشان بلیه های زهر آگین ویران شده است، تو ای حاکم قدرتمند!

«زخم ها دارد، نمک بر زخم او کمتر فشار»

این معادن جزء خاک افغانستان است، و متعلق به مردم افغانستان قرار میگیرد. معلومات درجوار این معادن آثار باستانی مدفونست که تا پنج هزار سال قدمت دارند. من بچیت یک افغان، از دولت و وزارت معادن کشور تقاضای کم تا قبل از استخراج این معادن، بکلمه معدن شناسان و زمین شناسان داخلی و خارجی را استعمال نمایند، تا موارد ذیل را مورد مطالعه و مذاکره جدی قرار دهند، و نتیجه را به ملت بگویند:

اول: آیا استخراج این معادن به نفع مردم ماست یا به مفاد امضا کنندگان قراردادها؟  
دوم: آیا استخراج این معادن و فعالیت امراض هوئاک، از جمله مرض مرگبار سرطان در میان مردم ما نمی گردد؟  
سوم: آیا با استخراج این معادن حیوانات و نباتات ارزشمندی زهر آگین این معادن در امان خواهند بود؟

با این مسئولیت بدوش استخراج معدن شناس و زمین شناسان وطن دوست و نویسندگان افغان است از قول پدرم استاد خلیلی:

هر ذره خاک من زبانی دارد از گردش دهر داستانی دارد  
این کهنه ردای من نهان دهر چین تاج و کلاه جهان ستانی دارد

\*\*\*\*\*

# Affects of Mineral Extraction In Afghanistan on Its People

1/2

By Marie Khalili Nasiri

Lately, a number of Archeologists and mineral experts have been talking and writing about the mine exploration in Afghanistan. Some interesting articles on this subject have appeared. One article written by Eng. Saboor Farozan captures the essence and dissects the process, which has really opened the eyes of the readers. This article was published in the 18<sup>th</sup> January issue of the Omaid weekly from Washington DC.

The Logar's Mes Ayanak ( copper) exploration has been awarded to the Chinese, the Hajigak Iron ores have gone to India and the extraction of the marble stone to an Italian investor. The article deals in detail with these contracts and analyses its affect on the health and wealth of the Afghan people. He has tackled his responsibility very well and has tried to make people conscious of the repercussions.

I am not an archeologist, nor a metallurgist and nor a mineral expert however I worship every inch of my beloved Afghanistan.

The noble people of Afghanistan for years have been exploited by a bunch of opportunists and politicians. The Afghan women have been raped, the children maimed and killed and men subjected to torture. Many women and children have been sold in the markets of Pakistan. Their towns and villages have been pillaged and destroyed.

Page two

"They have wounds already, don't spray salt on their wounds"

These minerals are part of the Afghan soil and the people of Afghanistan own them. As it has been established the Mes Aynak is located on top of rare Archeological find of Bronze age which dates back to 5000 years in history.

As an Afghan, I urge the government of Afghanistan to go forward carefully. Before finalizing they should appoint a team of experts( local and foreign) to further study the fall out from this mineral exploitation. People's health should take priority. The result of this study should be broadcasted to the nation.

Will extraction of these minerals is in the interest of the people of Afghanistan, or it is in the interest of a few who have approved this contract?

Will extraction of these mines may lead to deterioration of people's health from its bi-products and become a source of Cancer?


Will the ecological system be destroyed or damaged as to affect the health of the humans, the fauna and the flora of Afghanistan?

In the end I would like to repeat this couplet from my father Khalilullah Khalili:

If every particle of my land could speak

It would have a story to tell from around the world

Hidden in the creases of my ancient land  
are the crowns and heads of conquerors

 Marie Khalili

## **Appendix c**

### **Signed Online Petition**

**(Panel received about 60,000 attached signatures)**



## Appendix c – Online Petitions

1. [www.change.org](http://www.change.org), Petition “President Hamid Karzai: Prevent Destruction of Ancient Site of Mes Aynak & the Environmental Damage,” by Matin Wasei.

→ as of November 30, 2012 – **64, 310 signatures**.

Link: <http://www.change.org/petitions/president-hamid-karzai-prevent-destruction-of-ancient-site-of-mes-aynak-the-environmental-damage-3>

“Sign our petition to save the ancient Buddhist city of Mes Aynak (Province Logar, Afghanistan) from needless destruction while preventing irreversible environmental harm to Kabul watershed and the Afghan people.

We, the undersigned, acknowledge the urgent need for revenue generation for Afghanistan. We also recognize cultural heritage is a treasure for the ages, and no amount of revenue can compensate for an environmental catastrophe.

1. We insist that the Mes Aynak mining project be conducted in accordance with international standards in a transparent manner that will safeguard public health, and ensure maximum protection for cultural heritage and the environment. International standards include publication of the final mining plan, the final, approved environmental impact plan, and the consensus advisory of archaeologists to optimize restoration of the site.

2. We strongly urge the Afghan government to set up a coordinating body composed of government and mining officials, neutral experts in the fields of environmental safety, archaeology and geology, and representatives of the local population and civil society to oversee the implementation of International standards. This body shall ensure that the mining plan is followed throughout the entire life of the mine.

### Issue Briefing on the Campaign to Save Mes Aynak

In November 2007 the Afghan government granted a 30-year lease for the Mes Aynak copper mine to the China Metallurgical Group (MCC). The hope is that this mine could become a significant source of revenue for a country that is emerging from three decades of conflict and trying to stand on its own feet.

However, the same site also holds a buried Buddhist city with multiple temples, fortresses and commercial and residential areas. Below that are older historic remains going back to 3000 B.C. and possibly including Bronze Age artifacts. Experts call this one of the premier archaeological treasures in Asia. **When mining begins in 2013, this unique heritage site will be destroyed forever.** Currently, a small team of salvage archaeologists is rushing to save whatever can be removed from the location.

The copper deposit also sits atop the aquifer that supplies water to the surrounding agricultural province and to Kabul, a city with an estimated 3 million inhabitants. Copper mining is hazardous and there is a real threat of a catastrophic environmental disaster if the proper methods of mining are not applied.

So far, NO environmental impact plan and NO mining plan has been made public. There has been NO discussion of variable mining technologies that might allow for portions of the site to be saved. Local residents and the Afghan population have NOT been informed of the costs and significant risks of this endeavor. An atmosphere of secrecy prevails and destruction is scheduled to begin in just a few months.

There is a better way forward – identified by a group of renowned international experts who met specifically to find a solution in June of 2012. Their recommendations are reasonable and should be followed by the Afghan government, MCC, and their supporting partners, the World Bank and the U.S. Department of State.”

2. [www.change.org](http://www.change.org), Petition “Save our Past – Ask UNESCO to Include Mess Aynak on the List of Endangered Sites,” by Nadia Tarzi.

→ as of November 30, 2012 – **60, 090 signatures.**

Link: <http://www.change.org/en-CA/petitions/save-our-past-ask-unesco-to-include-mess-aynak-on-the-list-of-endangered-sites>

“We the undersigned bring to your attention that, when one talks about the protection of world heritage one cannot help to think of UNESCO and its commitment and responsibility to find prompt solutions for the safeguard and protection of endangered sites.

After 30 years of armed conflicts Afghanistan has suffered the loss and desecration of thousands of objects and hundreds of sites such as the city of Ai Khanum and Bamiyan, a site that would eventually be enlisted as a site to be protected but too late.

Let us NOT repeat the same mistake and ACT now for: the Heritage of Afghanistan is once again faced with violation and impending loss, this time in the case of the immense Buddhist site of Mess Aynak.

We believe that while economical development through the mining of precious minerals, is necessary, it cannot become an additional tool or excuse for further destruction of an already weakened Heritage.

Therefore, we the undersigned, rely on UNESCO to be a force of dissuasion and hope for countries such as Afghanistan.

We the undersigned ask of UNESCO that the site of Mess Aynak, Afghanistan be enlisted immediately on the List of Endangered Sites and the World Heritage List thus giving UNESCO the opportunity to demonstrate its commitment to the protection and safeguard of our World's Heritage.”

## **Appendix d**

### **List of ARCH Meetings with World Bank Staff**

## **List of Meetings with World Bank Officials & Staff**

### ***Meetings***

October 6, 2011

Meeting: Michael Stanley, Andre Ufer

January 23, 2012

Meeting: Michael Stanley, 11am-1pm.

May 24, 2012

Meeting/Tel-con: Michael Stanley, Ehsanullah Shamsi, Andre Ufer

April, 30, 2012

World Bank Conference in Kabul: Cheryl Benard was able to gain entry to the event as the personal guest of the Deputy Minister of Culture and ascertain that it was not the promised "Big Tent" meeting.

June 5, 2012

Meeting: Michael Stanley and Harjot Khaur attended the conference ARCH organized in cooperation with CACI, SAIS, Johns Hopkins University.

Second Week of August, 2012

Meeting: Michael Stanley

### ***Conversations (Phone, Email)***

September 27, 2011

Phone Conversation: Alison Reeves.

September 27, 2011

Email: Subject: "Mes Aynak Afghanistan"

To: Alison Reeves

CC: Elvira Loredó

September 28, 2011

Email: Subject: "Mes Aynak Afghanistan/ Bamiyan Project representative wants to meet with Bank"

From: Alison Reeves

To: Abdul Raouf Zia

CC: Angela Walker, Gabriela Aguilar

September 28, 2011

Email: Subject: "Mes Aynak Afghanistan/ Bamiyan Project representative wants to meet with Bank"

From: Abdul Raouf Zia

To: Michael Stanley, Alison Reeves

CC: Angela Walker, Gabriela Aguilar, Josephine Bassinette

October 4, 2011

Email: Subject: "Mes Aynak Afghanistan/ Bamiyan Project representative wants to meet with Bank"

From: Michael Stanley

CC: Alison Reeves, Andre Ufer, Noora Arfaa, Ehsanullah Shamsi, Mohammad Haroon Naim, Angela Walker, Gabriela Aguilar, Josephine Bassinette

October 6, 2011

Email: Subject: "Mes Aynak Afghanistan/ Bamiyan Project representative wants to meet with Bank"

From: Ehsanullah Shamsi

CC: Michael Stanley, Andre Ufer, Mohammad Haroon Naim, Noora Arfaa

October 21, 2011

Email: Subject: "World Bank activities for Mes Aynak"

From: Andre Ufer

October 21, 2011

Email: Subject: "World Bank activities for Mes Aynak"

To: Andre Ufer

CC: Yama Jewayni

October 27, 2011

Email: Subject: "World Bank activities for Mes Aynak"

To: Andre Ufer

October 31, 2011

Email: Subject: "World Bank activities for Mes Aynak"

From: Andre Ufer

November 2, 2011

Email: Subject: "World Bank activities for Mes Aynak"

To: Andre Ufer

November 2, 2011

Email: Subject: "World Bank activities for Mes Aynak"

From: Andre Ufer

January 17, 2012

Email: Subject: "Broadcast: Afghanistan – Mes Aynak - ARCH..."

From: Michael Stanley

To: Cheryl Benard, Karlyn Stanley, Noora Arfaa,

CC: Eshanullah Shamsi, Andre Ufer,

January 30, 2012

Email: Subject: "World Bank activities for Mes Aynak"

To: Andre Ufer

January 31, 2012

Email: Subject: "World Bank activities for Mes Aynak"

From: Andre Ufer

February 5, 2012

Email: Subject: "mutual introduction"

To: Andre Ufer, Erwin Emmerling

February 6, 2012

Email: Subject: "mutual introduction"

From: Andre Ufer

February 27, 2012

Email: Subject: "expert meeting"

From: Andre Ufer

February 27, 2012

Email: Subject: "phone call"

To: Andre Ufer

March 7, 2012

Email: Subject: "expert meeting"

To: Andre Ufer

March 8, 2012

Email: Subject: "expert meeting"

From: Andre Ufer

March 13, 2012

Email: Subject: "no luck with phone call"

To: Andre Ufer

March 14, 2012

Email: Subject: "expert meeting"

From: Cheryl Benard

To: Andre Ufer

March 15, 2012

Email: Subject: "expert meeting"

From: Andre Ufer

March 15, 2012

Email: Subject: "expert meeting"

To: Andre Ufer

March 16, 2012

Email: Subject: "no luck with phone call"

From: Andre Ufer

March 16, 2012

Email: Subject: "no luck with phone call"

To: Andre Ufer

March 17, 2012

Email: Subject: "expert meeting"

To: Andre Ufer

March 26, 2012

Email: Subject: "expert meeting"

From: Andre Ufer

March 30, 2012

Email: Subject: "expert meeting"

From: Andre Ufer

March 30, 2012

Email: Subject: "expert meeting"

To: Andre Ufer

April 2, 2012

Email: Subject: "expert meeting"

From: Andre Ufer

April 2, 2012

Email: Subject: "expert meeting"

To: Andre Ufer

April 3, 2012

Email: Subject: "Aynak contract monitoring"

From: Andre Ufer

April 3, 2012

Email: Subject: "expert meeting"

To: Andre Ufer

April 9, 2012

Phone Call & Email: Subject: "Kabul meeting dates"

To: Andre Ufer

Note: Telephone call asking the World Bank to participate in ARCH's expert meeting.

April 12, 2012

Email: Subject: "Big Tent"

To: Andre Ufer

April 13, 2012

Email: Subject: "Big Tent"

From: Andre Ufer

April 13, 2012

Email: Subject: "Big Tent"

To: Andre Ufer

April 19, 2012

Email: Subject: "Big Tent"

To: Andre Ufer

April 20, 2012

Email: Subject: "Kabul meeting"

To: Andre Ufer, Michael Stanley



May 16, 2012

Email: Subject: "June meeting"

To: Andre Ufer

May 17, 2012

Email: Subject: "Expert meeting June"

To: Michael Stanley

May 17, 2012

Email: Subject: "Expert meeting June"

From: Michael Stanley

May 22, 2012

Email: Subject: "Expert meeting June"

From: Michael Stanley

CC: Andre Ufer, Noora Arfaa

May 22, 2012

Email: Subject: "Expert meeting June"

To: Michael Stanley

CC: Andre Ufer, Noora Arfaa

May 23, 2012

Email: Subject: "Expert meeting June"

From: Michael Stanley

May 24, 2012

Email: Subject: "Mes Aynak Friday"

From: Michael Stanley

CC: Andre Ufer, Noora Arfaa, Ehsanullah Shamsi

May 24, 2012

Email: Subject: "Mes Aynak Friday"

From: Noora Arfaa

CC: Michael Stanley, Andre Ufer, Ehsanullah Shamsi

May 25, 2012

Phone Conversation: Cheryl Benard & Michael Stanley.

August 14, 2012

Email: Subject: Conference Report – Comments"

From: Andre Ufer

CC: Michael Stanley, Noora Arfaa, Ehsanullah Shamsi

August 17, 2012

Email: Subject: "Mes Aynak Post-Conference Report – Bank Comments"

From: Michael Stanley

CC: Noora Arfaa, Ehsanullah Shamsi, Andre Ufer

### ***Overview of All Involved Parties***

#### World Bank Staff & Officials:

Michael Stanley  
Harjot Khaur (Kabul)  
Alison Reeves  
Andre Ufer  
Ehsanullah Shamsi (Kabul)  
Mohammad Haroon Naim (Kabul)  
Gabriela Aguilar  
Noora Arfaa  
Angela Walker  
Josephine Bassinette  
Abdul Raouf Zia  
Asta Olesen (Kabul)  
Sophia Swire (Kabul)  
Helen Nguyen

#### Other:

Erwin Emmerling, Technical University, Munich

# **Appendix e**

## **White Paper**



## **WHITE PAPER: MES AYNAK**



photo: Hamid Naweed

report prepared by Dr. Cheryl Benard

ARCH International, 2121 K. Street NW Suite 620, Washington DC 20037

March 2012

## Executive Summary:

This White Paper addresses a situation of urgency, the heritage site Mes Aynak in Logar Province, Afghanistan. The paper and its recommendations are based on research conducted by ARCH International, in consultation with international subject matter experts, throughout 2011.<sup>1</sup>

Mes Aynak is an archaeological site of considerable value. Beneath its approximately 400,000 square meters are the remains not only of several Buddhist monasteries, but also of a fortress, urban dwellings and earlier remnants of human habitation going back 5000 years or more. Its multiple layers of habitation contain information about the technological, economic, religious and social history of Afghanistan and more broadly, of this key transit region between Asia and Europe. Mes Aynak was centrally located on the Silk Road.



Mes Aynak also holds a very significant copper deposit. This is not a coincidence – the area originally attracted human settlement because of its copper, and over time became prosperous for the same reason, inviting the construction of dwellings, a garrison, lavishly decorated monasteries and more. Recently, the contract to mine this copper was obtained by the Chinese company MCC.

Currently, MCC plans to harvest at least a portion of the copper through surface mining, a method that entails the use of explosives and typically leaves behind a deep crater that over time fills with toxic sludge. Contamination of the ground water is an associated hazard. Fears about the release of arsenic and sulfuric acid into the environment, with resultant danger to public health, have also been expressed by experts.

---

<sup>1</sup> - ARCH International is a registered non-profit 501©3 organization with headquarters in Washington D.C. It is dedicated to the support and restoration of physical and intangible cultural heritage endangered by conflict, post-conflict and war. A list of the consulted experts is separately available. Professor Hamid Naweed of ARCH conducted a site visit to Mes Aynak and held a series of conversations with the responsible authorities in Kabul in September 2011 and February 2012. The views expressed in this report are those of ARCH International. For more information, contact Dr. Cheryl Benard at [cbenard@archinternational.org](mailto:cbenard@archinternational.org).



Berkeley Pit, Montana, is a toxic lake decades after the open pit mining ended

On the other hand, Afghanistan urgently needs the income from its natural resources, and it is hoped that the work opportunities associated with international mining projects will provide jobs, improve infrastructure and attract collateral investments. This poses a dilemma. The profits from mining are measurable and the expectation is that they will be received immediately. But historic patrimony and an intact environment are also critically important to the future prosperity and stability of Afghanistan.

In the case of Mes Aynak, two additional aspects need to be considered. The role of Afghanistan as a site of early technological innovation, and a wellspring of artistic and architectural achievements, promises to be a significant image change and a source of national pride and identity. Secondly, the possibility of preserving a valuable destination so close to Kabul holds the promise of touristic and educational travel and income for many years to come. To destroy this is a tangible and material loss.

In this paper, we identify a proposed way forward that maximizes the outcome on all fronts. It is our conclusion that creative application of modern mining technology, building on a constructive partnership between archaeologists and mining engineers and premised on a full and responsible analysis of the geological, geographical, economic and archaeological circumstances of each site in question, can make all of the above important goals possible: mining, jobs, and the preservation of portions of this historic site for future generations.

Indeed, this paper argues that if approached constructively, a partnership of cultural conservation, economic interests, and national development is possible and in Mes Aynak can become a model for the many projected future situations in Afghanistan and elsewhere, where archaeological remains and mineral deposits share the same physical location.

## **INTRODUCTION**

Mes Aynak is located approximately twenty-five miles southeast of Kabul, in Logar Province. In 2007/2008, the Chinese mining company MCC (Metallurgical Corporation of China) won the contract to mine copper from this very rich deposit. However, the site also holds archaeological remains. Experts say these are significant, dating back 5000 years and spanning history from the Bronze Age through the Buddhist era and up to the early Islamic period.

The presence of important and large archaeological remains at this location has been well known since at least the 1960's<sup>2</sup> and preliminary excavations were conducted over the years by French, Russian and Afghan archaeologists. Nonetheless, the mining contract initially made no mention of archaeological finds. Indeed, some of the initial reporting stated that while conducting the initial mining exploration, engineers surprisingly happened upon these ruins. This is incorrect. Portions of the ruins were clearly visible at all times; their presence was known to inhabitants who in fact had been engaging in extensive looting over the years; the international archaeological community knew of this site and many famous archaeologists had worked there and published on the subject.

When their existence was finally taken note of in the context of the mining effort, a plan was developed to utilize the run-up to mining operations – i.e. the time period during which exploratory digging takes place, facilities are built, infrastructure is established etc. – to save some of the artifacts by removing them.

This approach is known as “salvage archaeology”, “rescue archaeology” or “mitigation.” In archaeology, this method is only chosen when there is no alternative, for example because an archaeological deposit is found in the middle of a heavily populated urban area during the construction of a subway station. Even then, city planners sometimes choose to build around them in order to preserve an original ancient portion of the site.



A section of Vienna's posh First District has been permanently sectioned off to display Roman ruins and a mural found during subway construction.

---

<sup>2</sup> Nicolas Engel, of the French archaeological association DAFA, dates the first exploration of Mes Aynak at 1963. "The Buddhist Monasteries and Settlement at the Mes Aynak Copper Mine, Logar Province," in ICOMOS, *Heritage at Risk* 2008-2010, Berlin 2010. Later, work was conducted there by Tarzi and by the renowned Russian archaeologist Viktor Sarianidi, and others.





Many ancient cities wrestle with ways to reconcile their different epochs. Here, Roman ruins surround a mosque and church in Beirut, Lebanon.

It consists of limited documentation of the currently visible portions of the site and the removal of whatever artifacts can be taken away for conservation or placement in a museum – Kabul Museum - or a yet-to-be-built storage facility. The site itself, along with the still undiscovered and unexplored bulk of the historic remains - the buildings and structures themselves, the deeper layers of earlier habitation, the artifacts too large or too fragile to be moved, and most of those made in the locally typical manner from unbaked clay - is still slated for destruction.

Experts term this “one of the most intriguing ancient mining sites in Central Asia, if not the world;” they point out that the finds include “monumental statues of the Buddha that will have to be left in situ”(i.e. that cannot be moved); and that excavations would “almost certainly document” continuous habitation and economic activity over a period of many centuries, indeed millennia.<sup>3</sup>

### **THE MINING CONTRACT:**

Mes Aynak, in Afghanistan’s Logar province, holds a very significant deposit of copper – an estimated six million tons. In 2007/2008, the Chinese company MCC won the mining contract for this site from the Afghan government. This was preceded by an elaborate bidding process overseen by international reviewers; nonetheless, allegations have persisted that corruption was involved and that the since-replaced minister may have received as much as 30 million dollars.<sup>4</sup>

---

<sup>3</sup> Zemeryalai Tarzi and David Stronach, The Copper Mine at Mess Aynak, New Channel Media, undated online publication. Professor Tarzi is an Afghan-French archaeologist who conducted three official explorations in Mes Aynak in the 1970s.

<sup>4</sup> See for example Dan Rather’s report, April 12, 2011, <http://www.prnewswire.com/news-releases/dan-rather-reports-looks-at-afghanistans-largest-foreign-investment-project---a-copper-mine-now-controlled-by-the-chinese-government-119612414.html>. The rumors have been sufficiently persistent that the Ministry of Mines, now under a different minister, took the unusual step of posting a reference to this matter on its official website. “Note: In 2009, there were some media reports of possible corruption in the form of bribes being taken for the award of the Aynak contract, although until now, any types of evidence in this regard has not been found but the position of the Government and the new management of the Ministry of Mines is that in case of any evidence found in this argument the government will seriously deal with the issue accordingly to country’s laws and other anti-corruption regulations.” <http://mom.gov.af/en/page/1392>, as per August 3, 2011.



At optimal extraction, 200,000 tons of copper are anticipated per year, which would generate an income of 450 million dollars for Afghanistan. There also are associated hopes for jobs, a railway, and a power plant.

Some independent observers and NGOs have questioned these expectations. Integrity Watch Afghanistan is concerned that the contract lacks binding timelines, and sees indications that despite contrary promises, MCC intends to largely employ Chinese workers. Doubts have also been expressed about the railway. Afghan authorities continue to hope for one, but there appears to be some uncertainty as to whether MCC has entered into a contractual obligation to build it or has only undertaken to explore its feasibility.<sup>5</sup>

As always with a mining project of this magnitude and nature, environmental concerns are also an issue. Copper mining carries risks to groundwater and to the long-term topography of the site. Some question whether Afghan authorities, given the overall uncertainties of their governance and the persistent instability in the country and in Logar in particular, are in a position to put adequate environmental safeguards in place and maintain oversight.<sup>6</sup> The likelihood of self-regulation by the Chinese company is also in some doubt.<sup>7</sup> To help with these issues, the World Bank has given the Afghan government a grant of over 50 million dollars to expand its capabilities for oversight and management of the project.

## **SIGNIFICANCE OF THE SITE**

In the judgment of subject matter experts, Mes Aynak is a location with the potential to be declared a World Heritage Site. A request to this effect has already initiated by the renowned Afghan archaeologist Zemaryalai Tarzi, although his action is symbolic, because such requests must come from a national government.<sup>8</sup> To garner attention, he has launched a signature campaign with over 10,000 signatories to date.

Mes Aynak is important not just for one, but for three reasons: 1) it is a Bronze Age site; 2) it was a religious/population center during Afghanistan's Buddhist era and contains several monasteries, the associated civilian dwellings and multiple structures and art works; and 3) it is believed to have been continuously inhabited from at least 3000 BC to the Early Islamic era.<sup>9</sup>

---

<sup>5</sup> this according to cables from the U.S. embassy in Kabul and in Beijing, published by wikileaks. <http://www.cablegatesearch.net/cable.php?id=09BEIJING2918> and <http://www.cablegatesearch.net/cable.php?id=09KABUL3101>

<sup>6</sup> - "Gold, platinum, chrome and copper mining, pose a direct risk to groundwater pollution. The extraction of minerals requires blasting and, often, dewatering of mines. Mining wastes from underground activities pollute ground water. Pollutants are spread through the aquifers of the region. The de-watering of mines can transport these wastes to the surface and facilitate the spreading of the wastes." [http://www.nwpg.gov.za/Agriculture/NW\\_ENVIRONMENTAL\\_OUTLOOK/chapter.asp?CHAPTER=11&PAGE=2&TITLE=Part%202](http://www.nwpg.gov.za/Agriculture/NW_ENVIRONMENTAL_OUTLOOK/chapter.asp?CHAPTER=11&PAGE=2&TITLE=Part%202). In the case of surface mining, hazardous chemicals are used.

<sup>7</sup> - conflicts and issues have arisen in Peru and Zambia, to name just two examples. These have involved large scale riots in protest of poor working conditions and low pay. <http://chinadigitaltimes.net/china/copper>.

<sup>8</sup> - UNESCO can only make such a designation at the request of a national government. Professor Tarzi has launched an online signature campaign, presumably to attract attention as a public relations method.

<sup>9</sup> - see for example Christoph Machat, Michael Petzet, John Ziesemer(eds.), "Heritage at Risk, ICOMOS World Report 2008-2010 on Monuments and Sites in Danger, ICOMOS, Berlin 2010.

The recent discovery of gold and gem jewelry items underscores the likelihood that this was a prominent settled area in the past, not just a residence for some monks and miners.<sup>10</sup>



jewelry items recently found on site

While the Buddhist aspect is important, what makes the site special is this continuity of habitation across millennia. In Central Asia, the Bronze Age is dated at 2300-1700 BC. During this epoch, many foundations of human civilization were developed: the ability to smelt and work ores such as copper, the invention of writing, agriculture, and early systems of law and social stratification. Over 5000 years old, this is a site where early technology and society unfolded.

A site of this caliber merits thorough mapping and exploration. This is a prerequisite for an informed decision on how, where, and when to conduct the mining operation. To date, such a survey has not been carried out.<sup>11</sup> Initially, there was not even any mention or consideration of the archaeological aspects of the site; that recognition came as an afterthought subsequent to the granting of the contract, even though the existence of massive archaeological remains at this location was well known. Until today, the site has not been properly surveyed or mapped and there appears to be no intention to do so. Small-scale surveys have taken place but in the view of subject matter experts, these were not comprehensive or adequately resourced and did not make use of available technological resources.

The scientific, historic and touristic value of Mes Aynak, as well as its potential qualification as a World Heritage site and segment of a World Heritage route (the Silk Road), have not been assessed. Options for mining in a way that preserves the site or at least its most valuable portions, have not been discussed or developed. Consequently, the relative costs and benefits have also not been explored, i.e., on the basis of present levels of information it is not possible to weigh the pros and cons of different mining outcomes against the possible advantages and disadvantages of leaving portions of the site intact for scientific and touristic use.

---

<sup>10</sup>[http://www.scotsman.com/news/international/afghanistan\\_s\\_ancient\\_jewels\\_finally\\_see\\_the\\_light\\_of\\_day\\_1\\_1973845](http://www.scotsman.com/news/international/afghanistan_s_ancient_jewels_finally_see_the_light_of_day_1_1973845)

<sup>11</sup> - DAFA has published a two part mini-survey. Mes Aynak, Archaeological Assessment Report, Transitory Document, DAFA assessment 15/XI/2010



In Pompeii, Italy, visitors can tour the ruins of the ancient city. Tourists bring in 20 million dollars each year just at this one site alone.

Instead, what is happening at present is “salvage archaeology.” Experts have been given funding to document and remove as many items as they can in the time allotted. This is better than nothing. But as the terms “salvage archaeology” and “rescue archaeology” indicate, this is a path of last resort, not a desirable or good outcome. This is especially true given the magnitude and importance of the site:

- Experts believe that layers of habitation, including towns and commercial complexes from varying periods of history are likely to lie beneath the surface of this site.
- Ancient statues, jewelry, coins and portions of murals all have value and deserve to be exhibited in a museum. But, as many UNESCO conventions and experts<sup>12</sup> attest, cultural heritage preservation is not a matter of just collecting and displaying individual statues and artifacts. It is their context that gives them meaning. The forum in Rome, or the city of Pompeii, convey the texture and the details of life and culture in a different era. The value would not be the same if one just removed the statues and some pottery shards from those two sites and put them in a museum. In sites that have historic continuity and where the remains are especially noteworthy, intact and extensive, the real value lies in keeping them in their historical placement.

It is fair to say that the stakeholders, for whatever reasons, have downplayed the archaeological and heritage aspects of this site. For example, the World Bank document “Mineral Resource Tenders and Mining Infrastructure Projects Guiding Principles, Case Study: The Aynak Copper Deposit, Afghanistan,” notes on page 51 that “the Aynak project area includes one of the most prominent new archeological sites in South Asia, Mes Aynak.” Yet the table of contents which is three pages long does not contain an entry for Mes Aynak or

---

<sup>12</sup> - see for example UNESCO documents “Recommendation concerning the Preservation of Cultural Property Endangered by Public or Private Works”(1968); “UNESCO Recommendation Concerning the Safeguarding and Contemporary Role of Historic Areas”(1976); and the World Heritage Convention (1972) which states that setting is an attribute of authenticity and needs protection through the establishment of buffer zones. See especially also the “Xi’An Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas,” adopted in Xi’An, China by the 15<sup>th</sup> General Assembly of ICOMOS, October 2005.

archaeology; instead, the sentences about this acknowledged major site are subsumed under “Regulatory, Cultural and Social Issues at Aynak” and the text itself gives the impression that the matter has been successfully resolved and there are no outstanding concerns or issues.<sup>13</sup>

Mismanagement of Mes Aynak can have negative consequences for all parties involved. The procedures and the outcome will be judged by the international expert community in the decades to come, with potential fallout if it appears that due diligence was not applied for the protection of cultural heritage.

Afghanistan is a signatory to international conventions obligating it to protect such sites. Analogies to the Taliban’s destruction of the Bamiyan Buddhas are already been drawn in the press reporting.<sup>14</sup> Commendably, China is spearheading an effort to have the Silk Road declared a World Heritage Route – pro-active steps to conserve portions of a Silk Road site such as Mes Aynak would contribute positively to this effort. This ancient site could potentially become a cutting edge model for mining that preserves antiquities.

---

<sup>13</sup> - World Bank, Extractive Industries for Development Series 22, September 2011.

<sup>14</sup> - Writing in Science Magazine, Andrew Lawler notes that “A decade after the Taliban destroyed the famous Bamiyan Buddhas...archaeologists are warning that Afghan antiquities are again at risk. This time the threat comes from a venture blessed by the Western-backed Afghan government.” “Copper Mine Threatens Ancient Monastery in Afghanistan,” Science Magazine, vol. 329, 30 July 2010. See also Heidi Vogt, “Chinese Copper Mine in Afghanistan Threatens 2,600 year-old Buddhist Monastery,” The Huffington Post, 14 November 2010; “Afghan Buddhist Relics: Archaeologists Issue Warning,” BBC News South Asia, 15 November 2010; Ann Marlow, “Rescuing Afghanistan’s Buddhist Heritage,” Wall Street Journal/wsj.com, September 17, 2010; Alex Rodriguez, “Teams scramble to save Afghan artifacts before copper mining begins,” Los Angeles Times, July 13, 2011; Joshua Foust, “How Chinese Mining is Destroying Afghanistan’s Historic Ruins,” The Atlantic, July 2011.

## **RECOMMENDATIONS:**

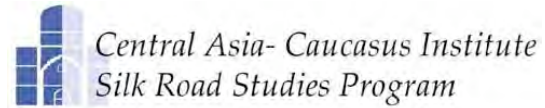
1. First, an independent group of Afghan and international experts should conduct a proper assessment of the site, horizontally and vertically, to determine exactly what it holds and where its more important substrata are located. It should follow standard, state of the art procedures for a site of this importance and magnitude. This should culminate in the development of a master plan for the site.
2. Until this is completed, no further action should be taken at the site. Bearing in mind that both the destruction of heritage objects, and their removal to a storage facility, are irreversible, neither should occur before the assessment is completed and a responsible plan has been formulated.
3. Next, a technical and engineering committee should be convened to meet with the archaeologists and discuss and develop options for mining that allow for the preservation of the site or the most important portions of the site.
4. Fourth, a joint group consisting of members of the above two committees should oversee the mining project during all phases and be available for advice and consultation.
5. The approach should be documented with a view to creating a model for future comparable cases. The intersection of economic, social development, technological and cultural preservation goals is not unique to this site.

## **CONCLUSION:**

Ideally, Mes Aynak can become a model case with a win-win outcome, pioneering methods for the extraction of resources in a way that is ecologically, culturally and historically responsible while meeting the needs of social development and the global economy.

# **Appendix f**

## **Conference Report**



## CONFERENCE REPORT

# **Cultural Heritage vs. Mining on the New Silk Road? Finding Technical Solutions for Mes Aynak and Beyond**

June 4-5, 2012  
SAIS, Johns Hopkins University  
Washington, D.C. 20036

sponsored by Ludus and ARCH Virginia



*Photo by Hamid Naweed: Mes Aynak*



## TABLE OF CONTENTS

1. Summary.....	2-5
2. Acknowledgements.....	5
3. About Us.....	6
• The Alliance for the Restoration of Cultural Heritage	
• The Central Asia-Caucasus Institute	
4. Overview and Conference Objectives.....	7-10
• Mes Aynak: A Bridge to the Future or a Looming Environmental/Cultural Tragedy?	
5. Key Conference Assessments.....	11-18
• Global Mining Background	
• Significance of the Mes Aynak Site	
• Environmental Assessment of the Mes Aynak Site	
• Specific Mes Aynak Mining and Contract Information	
6. Recommendations.....	20-22
7. Appendix: Participant Biographies.....	23-27



*Photo by Cheryl Benard: Conference Participants*



## 1. SUMMARY

As the United States and NATO prepare to scale down their mission in Afghanistan, and with it the massive international funding that has subsidized the country and its government for the last ten years, how does Afghanistan keep afloat economically? The country possesses rich mineral resources. But due to its ancient history, these typically lie intertwined with priceless archeological remains. And mineral extraction carries serious ecological risks, which a country emerging from decades of conflict is only now gaining some experience in managing.

Mes Aynak, where the Chinese company China Metallurgical Group (“MCC”) obtained the contract to mine one of the world’s largest copper deposits, fully embodies these dilemmas. Copper is extremely lucrative for both the company and potentially for Afghanistan, the hope being that mining can catalyze development for the country. But project as currently planned foresees the destruction of a 5,000-year-old buried city at the same location, containing multiple monasteries and settlements believed to go back to the Bronze Age, a site at least as significant as the tragically lost Buddhas of Bamiyan. And mining copper, especially in such proximity to a densely populated capital city, and even more especially when the deposit is on top of the country’s two principal aquifers, is very risky. In such a situation, mistakes are consequential and some decisions are irreversible.

When the issue was first brought to our attention, we expected and anticipated that the domestic and international agencies in charge either had already, or were imminently preparing to, conduct a systematic study, i.e. that they would first make a thorough determination regarding the extent and value of the cultural heritage site; that they would next and on this basis review the available mining technologies; that they would then make a determination of the technical options and their respective pros, cons and costs; and lastly, that the findings would be shared with the local population and the concerned public. Equally, we anticipated the sharing of substantive information about the environmental hazards and the methods chosen to mitigate them. We discovered, however, that none of the above had occurred. Resources had not been made available for the kind of survey appropriate to a site of this magnitude. Even more alarmingly from a public health standpoint, mere months before mining was due to begin, there was yet no sign of an environmental impact plan. In the meantime, major and irreversible decisions were being made on the basis of two untested assumptions: first, that the heritage site would have to be sacrificed because the mining would necessarily destroy it; second, that the benefits to the country would make this worthwhile. As for the vast looming ecological dangers, these did not appear to have been taken note of at all.

In full understanding of Afghanistan’s pressing need for revenue, and the hoped-for role of minerals in providing funds for the country’s development, ARCH therefore endeavored to provide the missing step in this process: to convene a meeting of neutral,

world-class experts to objectively study the facts and identify the options for weighing and if possible reconciling mining, heritage and environmental safety.

Specifically, ARCH International and the Central Asia Caucasus Institute's (CACI) Silk Road Program at SAIS/Johns Hopkins, invited a group of prominent experts to study the situation in Mes Aynak. On June 4 and 5, 2012, the experts met at SAIS in Washington, D.C. to develop strategies to ensure real economic benefit to the Afghan population, safeguard their environment and health, consider livelihoods during and after the mining, and preserve the cultural treasures at Mes Aynak. The meeting was co-chaired by ARCH's President Dr. Cheryl Benard and CACI Silk Road Program Chairman, Fred Starr.

The participating experts included geologists; archeologists with a range of sub-specializations including emergency archeology, high tech ground penetrating survey technology, pre-historic and early mining archeology, and the restoration and management of heritage sites; mining engineers with field experience as well as academic credentials; historians and art historians specialized on pre-Islamic, Buddhist and Central Asian history; a documentary film-maker working on a report about Mes Aynak; a photographer engaged in a Silk Road project; development economists; and political scientists with regional expertise.<sup>1</sup>

The group identified a very positive way forward. They found that the archeologists would be able to continue their work not just for the three year run-up that still lies ahead before mining can commence, but throughout the entire life of the mining project, without unreasonably impeding the mineral extraction; that the preservation of significant portions of the site is possible; and that the economic gain to the local population and to the country from an explored and developed heritage site will be significant in the future, providing revenue and jobs.

Their greatest concern was for the environmental risks, especially in light of the fact that no discernible serious measures to mitigate these are presently apparent. They stressed the need for absolute transparency on the part of the mining company and the project, and for project oversight centralized at the highest level of the Afghan government through a tripartite body of officials and stakeholders; independent experts; and the affected populace and civil society.

On the basis of these findings, ARCH International sees the necessity for a major public campaign to prevent the needless decimation of ancient Buddhist temples and ancient metal foundries at Mes Aynak, to educate and inform the local citizenry about the facts of the situation, and to create effective safeguards against an environmental disaster and the devastation of Logar province's economic future.

---

<sup>1</sup> For the participant biographies, see Appendix 1.

As the subject is controversial, it is perhaps necessary to state that it is neither the purpose nor the outcome of this conference to oppose mineral extraction either in general or for the particular instance of this copper mining project. Rather- because Mes Aynak is only one of many current and future mining projects that threaten antiquities and the environment – the collective goal and purpose is to work with engineers and other experts to find the means of balancing new methods of mining with the careful preservation of cultural heritage, the safety of public health and ecology, and the mid and long term economic future of local populations.



*Photo by Cheryl Benard: Stupa at Mes Aynak*

A summary of the conference and the group's key findings and recommendations follows below.

This Conference Report will be made available to the World Bank, MCC, the Afghan government, UNESCO and other heritage organizations, and other interested parties. It should be of interest to mining companies active or considering future investment in the region, governmental institutions dealing with mining, ecology and cultural preservation, to technical professionals working on new ways to mine responsibly through modern technology, and to civil society groups dealing with issues of environmental protection, heritage preservation, and mining in politically vulnerable states.



*Photo by Cheryl Benard: Kabul Museum,  
Exhibition "Buddhism in Afghanistan"*

## **2. ACKNOWLEDGEMENTS**

Many colleagues and experts gave generously of their time and knowledge during the preparation for this conference and in the context of our broader research about Mes Aynak, mining, and heritage preservation.<sup>2</sup> Special thanks are owed to our counterparts at ICOMOS Paris, ICOMOS Washington, the World Heritage Fund, the Global Heritage Fund and the World Monument Fund, to Professor John Grubb of the Colorado School of Mines, Professor Wolfgang Neubauer of Archeo-Prospections, and Professor Moser of the Mining School of Leoben.

Primary funding for the conference was generously provided by LUDUS. LUDUS is a Miami-based lifestyle brand of eco-conscious athletic wear for women. Additional information about LUDUS's philanthropy is available at: [www.ludusathletics.com](http://www.ludusathletics.com).

Members of the ARCH Virginia Group and the Afghan-American-owned restaurants Current Sushi and Café Bonaparte contributed material support to the conference.

---

<sup>2</sup> For more background information on Mes Aynak, see the White Paper at [www.archinternational.org](http://www.archinternational.org).

### 3. ABOUT US

#### *The Alliance for the Restoration of Cultural Heritage (“ARCH”)*

ARCH International is a 501(c)3 non-profit research and advocacy organization dedicated to the promotion and defense of cultural heritage in situations of crisis and war, its repair after a conflict, and the utilization of cultural values both tangible and intangible to help rebuild fractured societies after conflict. Our main goals include:

- The defense and restoration of cultural treasures and monuments threatened or destroyed by violence and war;
- The support of our fellow cultural activists especially in areas of crisis – poets, artists, writers and ordinary citizens who share our purpose; and
- The dissemination of stories and historical narratives that emphasize creative cultural achievements and universal values of civilization as a counter-force to chauvinism, sectarianism, and hate.

More information about ARCH’s activities is available at: [www.archinternational.org](http://www.archinternational.org).

#### *The Central Asia-Caucasus Institute (“CACI”)*

CACI is a primary institution in the United States for the study of the Caucasus, Central Asia and the Caspian Region. The Institute, affiliated with Johns Hopkins University-SAIS, forms part of a Joint Center with the Silk Road Studies Program, affiliated with the Stockholm-based Institute for Security and Development Policy.

Additional information about the Joint Center, as well as its several publications series, is available at [www.silkroadstudies.org](http://www.silkroadstudies.org).



#### 4. OVERVIEW AND CONFERENCE OBJECTIVE



*Photo by Cheryl Benard: Seen from the top of the mountain, this shows the extent of the ancient city, note at least three separate "neighborhoods" that have been partially uncovered so far. One of them is a commercial area with workshops and jewelry stores.*

##### ***Mes Aynak: A Bridge to the Future or a Looming Environmental/Cultural Tragedy?***

Aynak is one of the largest copper deposits in the world. It is located 40 km south of Kabul in Logar Province. In November 2007, a 30-year lease was granted for the copper mine to the state-owned Metallurgical Corporation of China ("MCC") for \$3 billion, making it the largest foreign investment and private business venture in Afghanistan's history. There are high hopes it will soon become a major source of revenue for the Government of Afghanistan (GoA) and a driver of the country's much-needed economic growth.

However, atop the mine sit a vast array of over twenty ruin sites, including several 4<sup>th</sup> to 8<sup>th</sup> century Buddhist monasteries, residential and commercial areas, and ancient fortifications – an area of ancient settlement known as Mes Aynak. Experts believe that the site may include rare Bronze Age remains. Archeologists from around the world agree that Mes Aynak represents a cultural heritage site of immense importance. In the words of Professor Deborah Klimburg-Salter, "The site contains a larger diversity of media than hitherto known at any site in Afghanistan: metal objects, glass, coins, mural paintings, wooden artifacts and sculptures. Because of the vast archeological area that is uniquely accessible – no modern city having been built on top of it – the excavation promises to provide much new information about both secular and religious life during

this region's past, and to document the close cultural and economic ties along the entire extent of the Silk Road encompassing China, India and Iran.”

In addition, Mes Aynak also sits atop two major aquifers and abuts agricultural areas and population centers, most notably Afghanistan's capital and most populous city, Kabul.

Mes Aynak's unique cultural sites coupled with its environmental characteristics and vast mining potential make it a complex project with huge potential but also huge risks. The stakes at Mes Aynak are hard to overstate – if the mine is not properly planned and managed, it could become a human and environmental disaster and result in the permanent loss to the nation's wealth-generating potential, instead becoming an expensive liability.<sup>3</sup>

**Everyone wants Afghanistan to obtain revenue. No one wants an ecological disaster to result. Nobody wants to be remembered in history alongside the Taliban as having presided over the destruction of priceless world heritage. Therefore, an optimized solution is in everyone's best interest, and such an optimized solution can only be found on the basis of an exhaustive review of the facts and all possible options.**

As shocking as it might sound, none of the involved parties has as of yet fully studied and assessed the environmental and cultural impacts of proposed operations at Aynak. Certainly, no one wants Mes Aynak to become Afghanistan's Butte, Montana – formerly the U.S.'s most valuable hill, now turned into its most costly environmental cleanup effort at a price tag of billions of dollars. But how can risks be mitigated and the benefit to Afghanistan maximized?

To fill this void and focus expert attention on this pressing crisis, ARCH International and the Central Asia Caucasus Institute's ("CACI") Silk Road Program at SAIS/Johns Hopkins, convened a group of highly experienced experts in the fields of geology, mining engineering, archeology, history and economic development to study the specific situation in Mes Aynak. On June 4 and 5, 2012, the experts met at SAIS in Washington,

---

<sup>3</sup> In the US, serious attention to the consequences of industrial and commercial pollutants followed the discovery, in the 1940's, that the areas surrounding certain mining and construction sites were experiencing highly elevated instances of cancer, mental retardation, and birth defects. Mitigation was completely beyond the abilities of local government or industry, so the national government established a Superfund Trust. According to estimates, the cleanup of just the most egregious sites carries a price tag of about 35 billion dollars. One of the most prominent Superfund Sites is in Butte, Montana, where the since abandoned Berkeley open pit copper mine left behind an enormous open pit filled with an estimated forty billion gallons of acidic, metal-contaminated water. Persons needing to visit the site must first complete a 40-hour training session on hazardous materials, and workers must enter the water in fiberglass boats because the water can dissolve aluminum.

D.C. to develop realistic strategies to ensure real economic benefit to the Afghan population, safeguard their environment and health, consider livelihoods during and after the mining, and preserve the cultural treasures at Mes Aynak. The meeting was co-chaired by ARCH's founder Dr. Cheryl Benard and CACI Silk Road Program Chairman, Prof. Fred Starr.

Conference participants embraced not only the importance of protecting Afghanistan's cultural heritage, but also economic development for Afghanistan, and the use of its natural resources to advance that development.

After extensive discussion and review of the available information, they expressed strong concern that Mes Aynak is on a troubling path. They also identified clear steps that can prevent a negative outcome and create the conditions for this site to instead become a model.



*Photo by Cheryl Benard: Mes Aynak*

The essential prerequisite for a positive outcome is for all parties to approach it in a spirit of constructive and collaborative intent. This should be achievable because their goals are not inevitably in conflict. Everyone wants Afghanistan to obtain revenue. No one wants an ecological disaster to result. Nobody wants to be remembered in history alongside the Taliban as having presided over the destruction of priceless world heritage. Therefore, an optimized solution is in everyone's best interest, and such an optimized solution can only be found on the basis of an exhaustive review of the facts and all possible options.

Unfortunately, this is not the approach that so far has been pursued by the key parties, including the GOA, MCC, and World Bank. The archeologists at Mes Aynak have been



ordered to engage in salvage archeology and to remove whatever they can take from the site, because they will be ejected and the mining will commence in six months time. Yet the experts were clear on three points: the site is far too valuable to justify salvage archeology; salvage archeology is not necessary because conventional archeology will not obstruct the mining; and there is absolutely no way that mining can begin in six months, anyway. It is one thing to face an actual decision point, and to be obliged to make a painful choice between culture and commerce. But to make this decision without first checking your facts and your options, and to sacrifice cultural treasure when it is objectively not necessary, is blameworthy in the extreme.

If archeologists had been given a realistic timeline from the start, they could have planned accordingly and accomplished much more. Yet even today, they are under orders to depart the site at the end of the year, and this in spite of the fact that in the universal opinion of the conference experts, actual mining cannot possibly begin at the Aynak location before the end of 2015 because none of the necessary preparatory surveys and work have been completed or in many cases, even initiated.

In sum, the experts believe that the interests of different parties involved in this project can be reconciled, but if the project continues on its current course, a real disaster is also possible. With adequate planning and control mechanisms, Mes Aynak can become a bridge for Afghanistan's future and a model for other sites throughout Afghanistan and the region at large; in their absence, it may become a mining case study of human and environmental tragedy.



*Photo by Cheryl Benard: Mes Aynak*

## 5. KEY CONFERENCE ASSESSMENTS

### *Global Mining Background*

Mining for precious resources dates back to antiquity. Today, mining is an immense global industry. Each year, billions of tons of metal and ore are mined from the earth. Unfortunately, along with the metal, mining also creates billions of tons of waste, some of it toxic. A delicate balance must be struck between mining for the resources needed to sustain and fuel the global economy, and mindfulness regarding the ecological impact and, as in the case of Mes Aynak, co-located heritage sites. Conference participants stressed that critical new thinking is called for in the area of heritage sites and mining.

There are examples, guidelines, international and national standards and multiple other resources available for the enlightened management of mining operations. In the past, there was often little or no effort made to consider the needs of environmental and ecological management, sustainable development, or preservation of heritage sites in mining operations. Unfortunately, it often took a catastrophe to draw public and political attention to irresponsible commercial and industrial practices such as the dumping of toxic wastes. However, the last decades have witnessed a considerable development towards responsible and regulated mining. This important new emphasis on sustainable development includes reduction of resource consumption, waste and pollution as well as the enhancement of health, economic opportunity, and quality of life for both miners and the communities affected by their work. This includes the responsibility to avoid compromising the land or cultural heritage for future generations.

Conference mining experts conclude that Mes Aynak will be both a long-term mining and archeological project. Contrary to expectations held in some quarters, mining and cash will not and cannot begin flowing immediately. Assuming a mine capacity of 200,000 tons, where mining has not yet begun but is still in the block-model phase, it will take at least three and probably five years to begin mining, and ten years to reach peak capacity.<sup>4</sup>

This has been further complicated by recently emerging infrastructure and security issues. A new study sheds doubt on the practicality of rail connections for the transport of ores.<sup>5</sup>

---

<sup>4</sup> For a general introduction into the complexities of launching a mining operation see Kuipers, James R. "Characterization and Monitoring During Different Phases of Mining: Characterizing, Predicting and Modeling Water from Mine Sites." *Kuipers&Associates*. URL: [http://www.waterboards.ca.gov/academy/courses/ard/day1/day1\\_sec4f\\_5a\\_characterizationphases\\_jk.pdf](http://www.waterboards.ca.gov/academy/courses/ard/day1/day1_sec4f_5a_characterizationphases_jk.pdf).

<sup>5</sup> LeVine, Steve. October 5, 2012. "The Itty-Bitty, \$54 Billion Railroad Network Needed to Export Afghanistan's Mineral Wealth." *Quartz*. URL: <http://qz.com/12443/the-itty-bitty-54-billion-railroad-network-to-export-afghanistans-mineral-wealth/>; Nissenbaum, Dion. October 3, 2012. "Doubt Cast on Afghan Mining: U.S. Says High Cost of Railway May Quash a Pillar of Kabul's Economic Strategy." *The Wall Street Journal*. URL: <http://qz.com/12443/the-itty-bitty-54-billion-railroad-network-to-export-afghanistans-mineral-wealth/>.

The costs are assessed as prohibitive, with some experts citing a figure of \$54 billion for the construction and maintenance of a railway network. MCC is expected to conduct its own feasibility study and may come to a more optimistic conclusion; however, documents made public on Wikileaks seem to indicate that China does not seriously intend to move forward with railway construction in Afghanistan at least in the short term.<sup>6</sup> Transport by trucks has its own problems both technical – the weight/load limit will almost certainly be an issue – and security-related, with trucking having proven particularly vulnerable to Taliban attacks and banditry.



*Photo by Cheryl Benard: Watch towers surround the perimeter of Mes Aynak*

The security situation is of serious concern and appears to have deteriorated since 2009. At that time, MCC officials described it as “better than expected,” and constructed a large residential and administrative compound. Since the spring of 2012, in response to increasing security incidents, all Chinese employees with the exception of a small skeleton staff have been evacuated. Obviously, this represents a further delay of mine site preparation.

---

<sup>6</sup> Lawrence, Quil. April 4, 2012. “Dreams of a Mining Future on Hold in Afghanistan.” *NPR*. URL: <http://www.npr.org/2012/04/04/149611352/dreams-of-a-mining-future-on-hold-in-afghanistan>; see also the cable in question at Embassy Beijing, October 21, 2009. “PRC/Afghanistan: MCC on the Aynak Copper Mine Project.” *Wikileaks*. URL: <http://www.cablegatesearch.net/cable.php?id=09BEIJING2918>.





*Photo by Cheryl Benard: The Chinese compound in the distance. There is another excavation inside which can no longer be worked on because the compound is closed.*

With this in mind, there is time for exploration and ground penetrating study of the heritage site at Mes Aynak, and no need for salvage or emergency archeology. Even once the mining has begun, the experts concluded, archeology can work in parallel. There should be an archeological presence throughout.

The sequential approach favored by MCC, in which an emergency archeology phase concludes, the archeologists depart, the heritage site is shut down and mining commences, is neither advisable nor necessary – nor, given the enormous value both material and intangible that will be lost through such a proceeding, is it defensible.

### ***Significance of the Mes Aynak Site***

Mes Aynak's history is believed to span from the Bronze Age through the Buddhist era, and up to the early Islamic period. This continuity of habitation across millennia is virtually unparalleled. In Central Asia, the Bronze Age is dated at 2300 – 1700 BC. During this epoch, many foundations of human civilization were developed: the ability to smelt iron ores such as copper, as well as the invention of writing, agriculture, trade and early systems of law and social stratification. Accordingly, this is a site where early technology and society unfolded for over 5,000 years. The site is known to contain coins, glass, wooden elements, tools, Buddhist monasteries and many artifacts, including manuscripts that may date from the time of Alexander the Great.

Recent excavations inside one of the monasteries found the walls covered in early paintings. These paintings are invaluable illustrations of ancient life, including styles of dress from which conclusions can be drawn about patterns of migration and cultural influence. Many images and statues were found to be painted in gold, an indication of the wealth of the Mes Aynak area. Additionally, a large number of stupas, the dome-shaped monuments usually containing Buddhist relics, were discovered. Those on the surface had been previously looted of the relics inside, but the archeologists believe that many more remain underground, still intact.



*Photo by Cheryl Benard: Mes Aynak*

Geographically, Afghanistan and Mes Aynak represent a central point of the ancient Silk Road, whose culture was shaped by three ancient civilizations - China, India, and Iran. This location provides great value in terms of ancient art and architecture and the influences of these great cultures. During antiquity, Mes Aynak and greater Afghanistan were already centers for both copper and silver mining. In addition to the precious coins, jewelry and metal works recoverable at Mes Aynak, this site also presents a significant opportunity to learn about the development of ancient mining technologies.

All of this historical material is in imminent danger of destruction by the mining endeavor, which is allowing for only minimal salvage archeology. The plan will destroy the site and everything still buried beneath it, either directly or as a consequence of vibrations from the detonations, allowing only for the removal of whatever statues and artifacts can be carried away by a small archeological team supported by DAFA, the French archeological mission to Afghanistan.

The experts are in full agreement that this plan is not sufficient, not reasonable and most importantly, not warranted by the objective circumstances. If properly planned and coordinated, a full exploration and excavation of the site need not conflict with the mining project. This however requires certain steps and measures, which the experts articulated in two working group sessions that generated a set of specific recommendations.

The recommended approach designed by the expert group foresees an overall vision wherein the mining activities are consistent with Afghanistan's economic and social development in the near, mid and long-term. This model increases the probability of livelihoods and jobs throughout the entire mining process, which can be expected to go on for four to six decades. It includes a plan for the closing of the mine and for what the province should look like once that closing has occurred. In this vision, the mine becomes a bridge to the future, not just a pit to be excavated and then abandoned. This is clearly better for the country, but it is also in the best interest of the mining company, as it minimizes conflict, avoids recrimination and reduces the risks of a disastrous outcome.

**The recommended approach designed by the expert group foresees an overall vision wherein the mining activities are consistent with Afghanistan's economic and social development in the near, mid and long term.**

## *Environmental Assessment of the Mes Aynak Site*



*Photo by Cheryl Benard: Fertile landscape around Mes Aynak*

While assessments are not fully complete at the Mes Aynak site, it is beyond doubt that the ecological impact of mining will be severe. The greatest subject of concern is water use, water depletion, and water pollution. Massive quantities of water are needed for copper mining operations. This can deplete the groundwater. Rivers and wells can dry up, impacting irrigation and farming networks. In addition, to mine one ton of copper, 100 tons of soil need to be removed from the land. This will distort the meteorological balance of the area and increase the risk of landslides, reduce soil fertility, and expose to the air heavy minerals and naturally occurring radioactive metals. Heavy metals can leach into ground and surface water, endanger nearby fisheries and make the water toxic for human consumption.

**The sequential approach favored by MCC, in which an emergency archaeology phase concludes, the archaeologists depart, the heritage site is shut down and mining commences, is neither advisable nor necessary – nor, given the enormous value both material and intangible that will be lost through such a proceeding, is it defensible.**

In addition to these environmental effects, which elsewhere, in some instances, have proven to be irreversible, there is also a real concern that mining activities could contaminate water, air, and food for nearby populations. The increase in heavy minerals and metals can lead to increases in asthma, lung disease, brain damage, and cancer as well as increased rates of mortality and morbidity particularly among children and the elderly.



Due to Mes Aynak's location adjacent to the country's most dense population center, these devastating health problems could affect the over three million inhabitants of Kabul. The people of Afghanistan have not been properly informed of the risks that accompany the benefits of mining. The fact that no Environmental Impact Plan for Mes Aynak has as of yet been developed and published is contrary to mining standards, and is of extreme concern.



*Photo by Cheryl Benard: Vegetation and orchards around the Mes Aynak site*

The expert group strongly feels that it is essential for the citizenry to be made fully aware of environmental and health impacts, and to have the opportunity to learn about and review the mitigation plans, before any mining commences.

### ***Specific Mes Aynak Mining and Contract Information***

The experts group believes that the goal for Mes Aynak should be to achieve a partnership of cultural conservation, economic interests, and national development that can become a model for the many projected future situations in Afghanistan and elsewhere, where archeological remains and mineral deposits share the same physical location. In the words of one of the participating expert, “[i]f mining is the only game in town, at least make it a winning game.”

For Mes Aynak, the prerequisite for a positive outcome is absolute openness. Transparency has been completely lacking until now. All involved parties – the World Bank, the Afghan Government, and MCC – need to make information available to the public immediately. It is unconscionable to leave the public in the dark regarding the schedule and plan for the mining operation, the measures that have or have not been included for public safety, the feasibility studies that have or have not been conducted to



responsibly explore all options for mining so that the plan of least negative impact can be selected, the funds that have or have not been set aside for the relocation of displaced communities, the plans for avoiding an environmental disaster and for dealing with one if it should nonetheless occur, and the plan for closing and rehabilitating the site at the conclusion of mining. And the MCC contract needs to be released immediately.

The experts unanimously warned that if handled incorrectly, Mes Aynak could put both people's lives and the country at risk. The legal context requires that international standards be met, everyone must be clear about the direness of the consequences if things are handled poorly, and everyone must cooperate fully in ensuring that this does not occur.

Proper heritage preservation requires resources. The experts believe that in the context of a potential 110 billion dollars in mining revenue, putting aside some millions for heritage preservation would be reasonable. The Malta Convention can serve as an orientation; ratified in 1992 it lays out methods for determining the presence of archeological remains prior to construction and other commercial projects and requires funding to preserve them if they are found to be present. In Aynak, such funding could go towards training locals as archeologists, preservationists, tour guides and to provide other skills that, if the country preserves its heritage, can provide economic opportunities, jobs and revenue for the indefinite future.

There should also be put into place a trust fund or letter of credit to ensure that the mine winds down properly. As the experts noted, the closing of a mine is if anything, even more important than how the mine is opened.

As can be seen, this complex project will likely have a very significant impact on Afghanistan, positive or negative. In order to monitor and manage all aspects of the project throughout the multi-decade life of the mining project, and to ensure the collaborative sharing of information and the joint and coordinated development of solutions, a committee of officials, experts and civil society should be established immediately under the direct authority of the President.



*Photo by Cheryl Benard: Kabul Museum, Exhibition "Buddhism in Afghanistan," this head of a Buddha shows remnants of paint pigment on the face (pink) and hair (black)*

## 6. RECOMMENDATIONS

The experts agreed upon a set of specific recommendations, which are summarized below:

1. Openness, transparency, and information sharing amongst all parties is absolutely critical.
  - With the current dearth of information and secrecy, it will not be possible to implement a constructive plan that encompasses mining operations, environmental protection, and respect for cultural heritage sites.
  - Much necessary information required by Afghan laws and international norms is not publicly available at this time and needs to be released immediately.
  - This includes the mining contract itself as well as various other operational and environmental assessment plans.
  - Maintaining transparency and complying with legal and regulatory requirements is the only way to ensure that all environmental and other dimensions of Mes Aynak are taken into account and that the interests of the Afghan people are protected.
  - The conference should be repeated in Kabul with broader participation and with Afghan experts, in order to launch a collaborative discussion among experts and to help inform and bring in the Afghan public.
2. A realistic timetable for mining operations, environmental impact assessment, and protection of heritage sites is needed.
  - A timetable is needed that clearly spells out MCC's plan on infrastructure, opening blocks of the site, etc. This can then be coordinated with plans for conserving all other resources, particularly the heritage sites.
  - The immense size and complexity of the Mes Aynak deposit means that it cannot and will not be exploited except through a phased mining approach.
  - Candor on this front – not repeated statements about an imminent start to mining – will open up the possibility of responsible archeology without impeding progress of the mining.

- Mes Aynak is a long-term mining project, and it requires a long term plan for ongoing collaboration between mining, environmental and heritage experts throughout the entire life of the mine.
3. New coordination mechanisms are needed. Ideally, a standing management group would be placed directly under the authority of the President. It would be a tripartite group consisting of the relevant administrators from the GOA and the mining company; neutral subject matter experts with the relevant scientific background in mining, geology, heritage preservation and ecology; and representatives of the citizenry and civil society.
- At present, the mechanism to coordinate is the Inter-ministerial Commission (IMC) of the Government of Afghanistan and the Aynak Authority under the Ministry of Mines.
  - The IMC is responsible for overseeing all minerals projects in the country and does not have the bandwidth to give adequate specific attention to Mes Aynak. The Aynak Authority and the IMC do not involve all stakeholders. Given the global scale of this project and its potential to break new ground in terms of modern mine management, these need to be included.
  - An overarching and integrative body is needed and we seek the urgent attention of the President of Afghanistan on this matter; we encourage him to propose how to coordinate MCC, GOA ministries, EPA, international cultural experts, etc.
  - This body needs a standing secretariat to support its activities.
  - Only by this coordinating body having the highest level of authority, will its conclusions reflect compromises on all sides that are implemented in a collaborative way.
  - The participating Citizen Group can serve as an active intermediary to the Afghan public. This group should obtain and disseminate information about the mining effort, the heritage preservation work, and the environmental plan and represent the interests and concerns of the affected local population.
4. Greater engagement by MCC
- It is also crucial that MCC play a more active role engaging with different stakeholders, especially those focused on the environmental and cultural dimensions of this project.

- This includes MCC dedicating long-term financial resources to the effort to protect cultural heritage sites. It also includes similar long-term financial support to establish archeology, heritage and tourism as an income stream for the local population.
- Such funding represents a very small percentage of overall revenue expected to flow from this immense mining project and reflects international best practices.

The scale of the project, the security and infrastructure complications inherent in the location, and a host of other circumstances specific to Mes Aynak, undeniably make this a challenging endeavor. The expert group, however, saw a positive way forward. Its principle requirement is an open, collaborative and transparent process, which is not currently in place but which should be instituted immediately in the interest of a good outcome.



*Photo by Cheryl Benard: CACI's Fred Starr in conference session at SAIS, Johns Hopkins University*

## 7. PARTICIPANTS BIOGRAPHIES

**Paul Craddock** is an expert on prehistoric archeology and on early mining, extractive metallurgy and metalworking. His PhD is in bronze metallurgy of the classical period. He joined the British Museum in 1966, and has conducted excavations and surveys at early mines and smelters around the world, including Bronze Age copper mines in Israel, King Croesus' gold refinery at Sardis in western Turkey, copper mines in Nigeria, Roman silver mines at Rio Tinto in southern Spain and in Serbia, zinc in India and China and crucible steel production sites in Central Asia and southern India. He has been Secretary of the Early Mines Research Group since its inception. Dr. Craddock has produced over 400 papers. Recent books include *Early Metal Mining and Production, 2,000 years of Zinc and Brass*, *King Croesus' Gold*, *Mining and Metal Production Through the Ages* and most recently *Scientific Investigation of Copies, Fakes and Forgeries*. He is currently completing books on Indian metallurgy.

**Hans Curvers** is an archeologist and heritage site expert with a strong background in fieldwork and numerous publications. He has 18 years experience in public and private heritage planning and urban design in Western Asia. He has a long-standing connection to the University of Amsterdam and since 1994 has worked with Solidere, the Lebanese company in charge of the reconstruction and development of Beirut's City Center. He recently completed the implementation of the Beirut Heritage Trail and continues to advise on the integration of archeological sites in public gardens of the Beirut City Center and the Beirut City History Museum. For seven months he coordinated the Mes Aynak Archeology Project in Afghanistan (2011-2012). Earlier excavations include Tell Hammam et-Turkman (1981-1986), Tell al-Raqa'i (1986-1993), Tell Umm el-Marra (1994-to present) in Syria, and excavations and heritage planning at Tibnin Castle (1999-2002) in Lebanon.

**Sabour Ferozan** is an Afghan-American professor of geology and a regular contributor to professional and popular journals. After obtaining a degree in geology from Kabul University, Sabour first worked as a field geologist in Afghanistan, focusing on the study of seismic and tectonic plates, and participating in oil and gas exploration and geological survey research. Until 1992, he was professor of geology at Kabul University. Upon moving to the U.S. he became a professor at Raritan Valley College. His publications include *The Geology of Uranium*, *The Geological Development of Kabul Block*, and *Seismo-Tectonic Properties of Katawaz Basin*. Professor Ferozan has a strong interest in adult education and in publishing about environmental issues for lay audiences.

**John Grubb** holds a PhD in Mining and Earth Systems Engineering from the Colorado School of Mines. He is adjunct professor with the Colorado School of Mines, teaching classes on mine management, mineral resource development, mine planning, risk management and ethics. He is the primary investigator for a research program funded by NIOSH (National Institute for Occupational Safety and Health). Over the course of his

professional life, he has been President, COO and Mining Director of a range of companies including New Mexico Coal, BHP Minerals, Ok Tedi Mining, Sierra Coal and others, and has set up, managed or closed down mining operations in New Mexico, Kentucky, Brisbane, Melbourne and Harare. For a copper and gold mining project in Papua New Guinea, Grubb oversaw the resolution of serious environmental problems.

**Brent Huffman** is assistant professor at the Medill School of Journalism, Northwestern University, and a filmmaker. His work ranges from documentaries aired on The Discovery Channel, The National Geographic Channel, NBC, PBS and Al Jazeera, to Sundance Film Festival premieres, to films made for the China Exploration and Research Society. Huffman has been making social issue documentaries and environmental films for more than a decade in Asia, Africa, and the Middle East. These films have gone on to win numerous awards including a Primetime Emmy, Best Conservation Film-Jackson Hole, Best Documentary-Fresno, three Cine Golden Eagle Awards, a College Emmy, and a Grand Jury Award at AFI's SILVERDOCS. He is currently completing a film about Mes Aynak, a site he has visited on five occasions.

**Deborah Klimburg-Salter** is Professor for Asian Art History at the Department of Art History and Director of the Research Platform CIRDIS (Center for Research and Documentation of Inner and South Asian Cultural History) at the University of Vienna. She also directs the National Research Network (S98) "Cultural History of the Western Himalaya" a program of the Austrian Science Fund. She received her PhD from Harvard University and her Habilitation from the University of Vienna. She has been a Fellow at the Institute of Advanced Studies, Princeton; the Wissenschaftskolleg Berlin; and Magdalen College, University of Oxford, among others. She has been Visiting Professor at the University of Pennsylvania, The Ecoles Pratiques des Hautes Etudes, Paris, and was the Mary L. Cornille Distinguished Visiting Professor in the Humanities at Wellesley College (2009-2010). She is an Associate of the Oriental Institute, University of Oxford and has served as President of the European Association for South Asian Archaeology and Art (2007-2010). Since 2003 she has been a member of the UNESCO coordinating committee for the Cultural Heritage of Afghanistan. Since 2004 she has directed a joint program between the National Museum of Afghanistan, Kabul, and the University of Vienna, providing training for the curatorial staff of Kabul Museum. In addition to numerous scientific articles, her books and catalogs include *Tabo Monastery. Art and History; Buddha in Indien. Die frühindische Skulptur von König Asoka bis zur Guptazeit; The Kingdom of Bāmiyān: The Buddhist Art and Culture of the Hindu Kush* and *The Silk Route and the Diamond Path: Esoteric Buddhist Art on the Trans-Himalayan Trade Routes*.

**Philippe Marquis** is an archeologist with DAFA, the French government's Archeological Mission in Afghanistan. He has worked on numerous sites across the country including in Bamiyan and Balkh. In recent years most of his time has been spent

on the ground in Mes Aynak, where he conducted the official site survey and continues to take part in the ongoing excavations.

**Said Mirzad** holds degrees in applied geology and engineering geology. In the 1970's he was Director of the Afghan Geological Survey. Emigrating to the U.S. in the wake of the Soviet invasion, he was hired by the U.S. Geological Survey and presently works in their offices in Reston, Virginia. He was instrumental in the recent publication of a much-discussed data report regarding the projected extent of Afghanistan's mineral wealth.

**Marla Mossman** is an artist and photographer and founder of the nonprofit art project, The Peace Caravan. Since 1996, she has been traveling along segments of the Silk Road, recording places of historical and religious significance along that path, including a photo documentation of the Dalai Lama and the Buddhist traditions in the Himalayas. Besides a number of exhibits in Berlin, Moscow, Beijing, New York and elsewhere, she has published three photography books about this project, and created a documentary, "The Peace Caravan Project – Journey Along the Silk Road, Xinjiang, China."

**Wolfgang Neubauer** studied Prehistoric Archeology, Mathematics, Archaeometry and Computer Science at the University of Vienna and at the Vienna University of Technology. He specialized in archeological prospecting, digital documentation and virtual reality visualization of archeological heritage. He obtained a Ph.D. at the University of Vienna based on his thesis "Magnetic Prospecting in Archaeology".

Wolfgang Neubauer has conducted archeological research at sites all over the world for over 25 years. Together with the team Archeo Prospections® he developed equipment, logistics and software for the high-resolution geophysical prospecting of archeological sites, and directed more than 200 archeological geophysical field surveys in Austria and abroad. The main developments are in multisensor cesium-gradiometry, 3D processing and interpretation of ground penetrating radar. His most recent research focused on the applications of terrestrial 3D laser scanners in archeology and the complete digital recording of stratigraphic archeological excavations. He directed the "Scanning of the pyramids project 2004" focusing on the Great Pyramid and the Sphinx at Giza and over 30 national and international archeological documentation projects and 3D laser scanner surveys. Neubauer provided a video presentation to the conference.

**Jack Medlin** is the Afghanistan Project Lead at USGS, the U.S. Geological Survey. Before joining the USGS, Jack was a tenured Associate Professor of Geology at West Georgia College. He spent over five years there. He has received both his B.S. and M.S. degrees from the University of Georgia, his PhD, from Pennsylvania State University.

**Hamid Naweed** received his MA from State University of New York at Buffalo in Arts & Humanities. He was a Professor of Art History at Kabul University. He is also a Fulbright scholar and researcher. Currently he is a guest lecturer at academic institutions and universities, with frequent appearances on V.O.A Dari Service, Ariana Afghanistan



TV Network and Zarin TV. He is the author of numerous scholarly articles on the schools of art from classical Greek to post impressionism, but his specialty is in the Art History of Afghanistan and its neighboring countries. Hamid Naweed is also a poet and a novelist and member of “Arch International” as well as other cultural societies, such as “Sham-i-Erfan” and “Seven Cities of Arts.”

**Raja V. Ramani** is Emeritus Professor of Mining and Geo-Environmental Engineering at Penn State. He has held a range of academic positions including Chairman of the Mineral Engineering Management Section and Department Head of Mineral Engineering, and was elected to the National Academy of Engineering. He is a certified mine manager and mine safety professional and has led mining projects in the Subcontinent, as well as assessing mining operations in over 35 countries during the course of his research. He has been co-director of three research centers, Generic Mineral Technology Center on Respirable Dust, National Mined-Land Reclamation Research Center and the Standard Oil Center of Excellence in Longwall Mining. At Penn State, he directed the Miner Training Program and taught courses on underground and surface mining, mineral engineering management, mine operations analysis, mine systems engineering, exploration, geostatistics, and more. His research areas include innovative mining methods, simulation and mathematical programming, human resource development, environmental monitoring, land use planning and environmental site planning for underground and surface mining. He has published over 200 research papers and contributed to 25 books, encyclopaedias and handbooks. Dr. Ramani has served on a large number of technical and regulatory advisory groups for the U.S. government, international organizations and corporations including the World Bank, the United Nations, the U.S. Department of Energy and many others.

**Douglas D. Walker**, Ph.D., PH, is the Senior Advisor for Resource Management for the Offices of Afghanistan and Pakistan, in the Bureau of South and Central Asia, and has served at the State Department since 2010. He tracks and analyzes information and policy regarding water resources, agriculture and mining issues for the Offices of Afghanistan and Pakistan and provides on-call technical expertise in science and technology. He earned a B.S. in Watershed Science (1983), an M.S. in Civil Engineering (1986), and a Ph.D. in Agricultural Engineering (1994), all from Colorado State University. He is a registered Professional Hydrologist, the author or co-author of over 60 publications, and has over 25 years experience conducting groundwater studies and evaluating nuclear fuel and waste repositories in Sweden, Japan, and the United States. He was a member of the Peer Review Panel for studies of contamination resulting from underground nuclear weapons tests at the Nevada Test Site. He has been an American Association for the Advancement of Science (AAAS) Science and Technology Diplomacy Fellow, a Fellow at the National Center for Supercomputing Applications, an Associate Editor of the journal Ground Water, a member of the numerous national committees on water resources. He has served with the American Red Cross for nearly a decade, supporting six national-level disaster relief operations.

**Mark Weber** joined the World Monuments Fund in 1998 and is currently the Senior Field Projects Director for its Programs Department. Mr. Weber manages a range of WMF's field projects in regions including Central and Eastern Europe and South Asia; assists with the planning and review of WMF's country-wide initiatives in India and Turkey; and monitors the work of building conservation specialists on WMF projects. Prior to joining WMF, Mr. Weber worked for the Technical Preservation Services Center, the major public outreach program at the New York Landmarks Conservancy, New York, NY. Previously, Mr. Weber worked for the Preservation Society of Newport County, Newport R.I., and the Newport Restoration Foundation. While in Newport he co-authored the book *Newport Houses*, Rizzoli International Publications, New York, N.Y., 1989. Mr. Weber has a M. A. in Historic Preservation from Boston University's Preservation Studies Program and a B.A. in Economics from the Whittemore School of Business and Economics at the University of New Hampshire.

### ***Hosts***

**Dr. Cheryl Benard** is the President of ARCH, the Alliance for the Restoration of Cultural Heritage ([www.archinternational.org](http://www.archinternational.org)). After undergraduate studies in International Relations at the American University of Beirut, Lebanon, she received her doctorate and later her Habilitation from the University of Vienna, Austria, where she subsequently taught for some years before becoming Research Director of the Boltzmann Institute of Politics. In 2001 she became a senior analyst and program director at the RAND Corporation, specializing in nation building and a range of issues related to societies in conflict and post-conflict. She directed the RAND Initiative for Middle Eastern Youth and the Alternative Strategies Initiative. Her current focus is on the role of cultural heritage in supporting stability and a positive national identity. Benard has published over thirty books and numerous scientific articles, as well as two novels. She is a board member of the Afghan American Chamber of Commerce, where she leads a working group on Culture and Tourism.

**Dr. S. Frederick Starr** is Chairman of the Central Asia-Caucasus Institute and Silk Road Studies Program. He is a Research Professor at the Paul H. Nitze School of Advanced International Studies, Johns Hopkins University. His research, which has resulted in twenty books and 200 published articles, focuses on the rise of pluralistic and voluntary elements in modern societies, the interplay between foreign and domestic policy, and the relation of politics and culture. Starr holds a Ph.D. in History from Princeton University, an MA from King's College, Cambridge University, and a BA from Yale University. He was appointed President of Oberlin College in 1983, a position he held for eleven years. In 1994-96, he served as President of the Aspen Institute.

# **Appendix g**

## **Pictures**





กรุงเทพธุรกิจ

# จุดประกาย

วันที่ 20 กันยายน 2555 วันศุกร์ที่ 30 พฤศจิกายน 2555

**ก**ารค้นหาอาณาจักรโบราณ "เมส อานแน็ค" ในพื้นที่กรุงเทพมหานคร ปริมณฑล และจังหวัดนนทบุรี ซึ่งมีความสำคัญในแง่ประวัติศาสตร์และวัฒนธรรมของเมืองเก่าแก่ของประเทศไทย ซึ่งได้มีขุดพบซากปรักหักพังของเมืองโบราณเมส อานแน็ค ในพื้นที่ตำบลบางพลีใหญ่ อำเภอบางพลี จังหวัดสมุทรปราการ

## Mes Aynak... สำคัญเกินประเมินค่า

นาย กานต์ Mes Aynak เป็นนักเขียนสมัครเล่นที่หลงใหลในประวัติศาสตร์และโบราณคดี เขาได้ค้นพบซากปรักหักพังของเมืองโบราณเมส อานแน็ค ในพื้นที่ตำบลบางพลีใหญ่ อำเภอบางพลี จังหวัดสมุทรปราการ

จากการที่เมส อานแน็ค เป็นเมืองโบราณที่มีความสำคัญในแง่ประวัติศาสตร์และวัฒนธรรมของเมืองเก่าแก่ของประเทศไทย ซึ่งได้มีขุดพบซากปรักหักพังของเมืองโบราณเมส อานแน็ค ในพื้นที่ตำบลบางพลีใหญ่ อำเภอบางพลี จังหวัดสมุทรปราการ

เมส อานแน็ค เป็นเมืองโบราณที่มีความสำคัญในแง่ประวัติศาสตร์และวัฒนธรรมของเมืองเก่าแก่ของประเทศไทย ซึ่งได้มีขุดพบซากปรักหักพังของเมืองโบราณเมส อานแน็ค ในพื้นที่ตำบลบางพลีใหญ่ อำเภอบางพลี จังหวัดสมุทรปราการ

ในปี 2552 เมื่อมีการขุดพบซากปรักหักพังของเมืองโบราณเมส อานแน็ค ในพื้นที่ตำบลบางพลีใหญ่ อำเภอบางพลี จังหวัดสมุทรปราการ

วันที่ 21 สิงหาคม 2555 จังหวัดนนทบุรีและกรุงเทพมหานคร ได้ร่วมกันขุดพบซากปรักหักพังของเมืองโบราณเมส อานแน็ค ในพื้นที่ตำบลบางพลีใหญ่ อำเภอบางพลี จังหวัดสมุทรปราการ

**ผศ.บุญส่ง ชัยสิทธิ์กานนท์** อาจารย์ประจำภาควิชาศิลปวัฒนธรรม มหาวิทยาลัยศิลปากร กล่าวว่า เมืองโบราณเมส อานแน็ค มีความสำคัญในแง่ประวัติศาสตร์และวัฒนธรรมของเมืองเก่าแก่ของประเทศไทย ซึ่งได้มีขุดพบซากปรักหักพังของเมืองโบราณเมส อานแน็ค ในพื้นที่ตำบลบางพลีใหญ่ อำเภอบางพลี จังหวัดสมุทรปราการ



## ร่วมด้วยช่วยชีวิต อู่อารยธรรมโลก 'เมส อานแน็ค'

3-11 พฤษภาคม 2555

**คนกลุ่มหนึ่ง  
ก้าวออกมาปกป้อง  
อู่อารยธรรมที่  
กำลังถูกทำลายลง  
เพียงเพราะ  
ผลประโยชน์  
ทางเศรษฐกิจ  
สำหรับพวกเขา  
นี่คือการปกป้อง  
สมบัติของชาวโลก  
มิใช่เพียงแค่ชาวพุทธ**

หากไม่ได้อ่านหนังสือ "เมส อานแน็ค" ของนาย กานต์ Mes Aynak ผู้ค้นพบซากปรักหักพังของเมืองโบราณเมส อานแน็ค ในพื้นที่ตำบลบางพลีใหญ่ อำเภอบางพลี จังหวัดสมุทรปราการ

ในช่วงเวลาที่ผ่านมา เมืองโบราณเมส อานแน็ค ได้กลายเป็นที่สนใจของนักท่องเที่ยวและผู้สนใจในประวัติศาสตร์และวัฒนธรรมของเมืองเก่าแก่ของประเทศไทย



เมืองโบราณเมส อานแน็ค เป็นเมืองโบราณที่มีความสำคัญในแง่ประวัติศาสตร์และวัฒนธรรมของเมืองเก่าแก่ของประเทศไทย ซึ่งได้มีขุดพบซากปรักหักพังของเมืองโบราณเมส อานแน็ค ในพื้นที่ตำบลบางพลีใหญ่ อำเภอบางพลี จังหวัดสมุทรปราการ



**ผู้สื่อข่าวรายงานว่า** ผศ.บุญส่ง ชัยสิทธิ์กานนท์ อาจารย์ประจำภาควิชาศิลปวัฒนธรรม มหาวิทยาลัยศิลปากร

เมืองโบราณเมส อานแน็ค เป็นเมืองโบราณที่มีความสำคัญในแง่ประวัติศาสตร์และวัฒนธรรมของเมืองเก่าแก่ของประเทศไทย ซึ่งได้มีขุดพบซากปรักหักพังของเมืองโบราณเมส อานแน็ค ในพื้นที่ตำบลบางพลีใหญ่ อำเภอบางพลี จังหวัดสมุทรปราการ



# Save Mes Aynak

Peaceful Protest on 13 November 2012 at UN and UNESCO



Ancient site needs  
saving not destroying

Mes Aynak  
is for all!  
Save it for all

Help save ancient  
Mes Aynak  
for posterity

Protection  
Not  
Destruction

2,300 years old Mesopotamian  
"Museum" in Mesopotamia  
Save it!

Mes Aynak "Museum"  
Save it!



