

Teamwork. Italy's Andrea Bruno (right) and Afghan colleagues huddle over rescue plans.

for the Preservation of Afghanistan's Cultural Heritage to shore up the banks of the rivers with huge metal baskets, or gabions, filled with stone. They were just in time: On 14 April this year, a flood roared through the valley, carrying tons of debris. "Without the [gabions], the minaret would have been destroyed," says Gulagha Karimi, who heads a local body dedicated to the tower's preservation.

Bruno says that the next step is to examine the minaret's foundations, which lie about 5 meters below the ground, to determine its stability. A geologist did some preliminary work in August, and a UNESCO team accompanied by four Afghan engineers is now at Jam to take exact measurements of the tower's slight lean, which Bruno and others fear has increased in recent years. During the winter, Bruno and an expert on Italy's own leaning tower in Pisa, Giorgio Macchi of the University of Pavia, will examine the data before starting work in earnest next April. Once the engineers understand the tower's foundations and exact position, they will propose how to strengthen the fragile minaret.

Meanwhile, the local, provincial, national, and nongovernmental organizations involved must come up with a new road plan, including where to put a bridge to span the Hari River. The prospect of more road building worries Bruno, who notes that widespread looting in the valley has intensified since 1999. Karimi says that the diggers have found wooden doors, necklaces, and dishes buried near the site. He says he saw one necklace that sold for thousands of dollars.

Work on a road up and down the Hari River, as well as the Jam road, has made

"systematic excavation" of the area by looters possible, Bruno says. "They want to build a road to find stuff," he insists. But if archaeologists can move quickly, Bruno predicts that the results will be dramatic. "Jam will be more important than Bamiyan," the famous Buddhist site east of here. University of Rome archaeologist Giovanni Verardi tentatively hopes to conduct a small excavation near the minaret in April.

And international recognition has finally arrived. UNESCO this summer designated Jam a World Heritage Site, the first in Afghanistan, which confers at least paper protection to the minaret and the area surrounding it. Any new structure built nearby—roads or buildings—must undergo strict review. A short digging campaign and

paper rules of distant bureaucracy, however, might do little to prevent looting. "There are so many valuables; you just can't stop it," says Karimi.

One piece of good news for Jam supporters is the backing of Ismael Khan, famed warlord, governor of Herat province, and arguably the single most powerful man in Afghanistan. Although Jam technically is not in his province, it is within his control. He told Bruno and other UNESCO officials in a 15-minute audience at his heavily guarded compound that he was worried about the monument's stability and added that the organization's efforts "are good news for us." In a land where raw power is still an important currency, those words might be worth all of UNESCO's paper.

—ANDREW LAWLER

NEWS

'Then They Buried Their History'

Years spent on the front line of a civil war have made a shambles of Afghanistan's once-incomparable National Museum

DARULAMAN—On a frosty February afternoon last year, a group of senior Taliban officials accompanied by a squad of armed religious guards pulled up outside the nearly gutted hulk of the National Museum, a bumpy 10-kilometer drive from Kabul's center. They asked to see the storeroom, where much of what remained of the building's once proud collection of artifacts was held in safekeeping. When unsuspecting employees opened the padlock and swung open the metal door, the visitors began searching for statues.

Then the destruction began, as the horrified staff looked on. "From afternoon until evening they broke statues," says Omar Khan Masudi, the museum's new director. "A few days later, they came back, and they followed the same procedure. They came back many times."

That terrifying time was only the last in a series of blows to one of the world's best collections of Central Asian art, artifacts, and research documents embracing an enormous range of ancient cultures. The

museum was both chief repository for the fruits of 60 years of excavations and national display case: Neolithic female figurines, stone Hindu goddesses in togalike robes, intricate ivories combining Indian, Greek, and Chinese styles, gold coins from the time of Alexander the Great, and troves of early Islamic art, as well as an extensive library and a basement full of tens of thousands of pottery shards spanning 10 millennia.

The collection was well protected while the Soviets controlled Kabul in the 1980s. But the fierce civil war that followed placed the venerable building in a hotly contested battleground between rival factions. In the spring of 1993, a rocket ex-



Reincarnation. A museum worker pieces together an ancient Buddhist statue that was smashed by the Taliban last year.

CREDITS: (TOP TO BOTTOM) A. LAWLER; CHAPUIS PATRICK/GAMMA

ploded into the roof, gutting the upper floors. That autumn, a second rocket slammed into the basement containing artifact storerooms. In between, soldiers and their leaders took turns stealing what they could carry, including 40,000 ancient coins that made up one of the world's most important coin collections. Museum staff who braved crossing mujahideen lines to go to work were often pulled out of their cars and beaten.

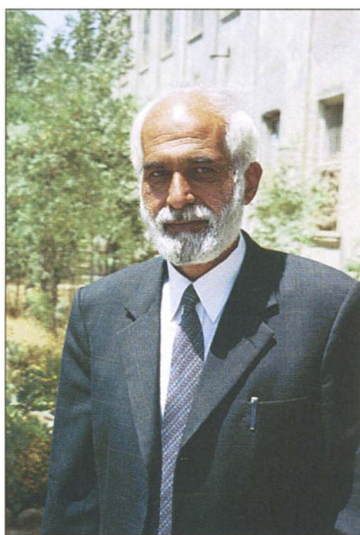
Hardship doesn't generally impress archaeologists, who often work long days in terrible conditions. But the handful of Western and Japanese researchers who have recently visited the museum have come away astonished and moved by Masudi and his team of 60 dedicated workers, most of whom have gone for long periods without pay and even now earn only about \$40 a month. Masudi himself, who this year was promoted from deputy to director, left his job last year in protest against the Taliban actions and was reduced to selling potatoes to survive.

Now he is trying to glean international support to rebuild the museum, rescue endangered objects, and educate his staff. A graduate in history and geography from Kabul University, he has worked in nearly every position at the museum during the past 24 years. A tall, lean, dapper man with gentle eyes and a courtly manner, Masudi describes himself as "52 or 53 years old." During a recent interview with *Science*, he spoke of the museum's trials while workers a few meters away quietly pieced together the shattered remains of a small Buddhist terra-cotta altarpiece.

Q: How large was the collection, and how much was looted?

A: We had more than 100,000 pieces, and unfortunately about 75% were looted during the civil war. When we returned [in 1996], we started work registering the remaining objects with the help of SPACH [The Society for the Preservation of Afghanistan's Cultural Heritage], took photographs, and packed a portion of them and sent them to the Kabul Hotel—the security situation in the city center was better

than here. After the Taliban took over [later that year], the first 4 years were good. They sought to keep the objects in the museum. But unfortunately, in the last year they decided to destroy statues and other articles.



Fresh start. Masudi, the museum's new director, is picking up the pieces.

Q: Were the objects at the Kabul Hotel destroyed too?

A: Yes. They had been transferred to the [Culture and Information] ministry during hotel renovations.

Q: But you saved some material, both at the museum and ministry?

A: Yes, but it was very difficult. Some of my colleagues assured the Taliban that some boxes didn't contain statues. Another method was to put the statues under other things [in boxes] so they couldn't

see what was underneath. Another way was to hide some statues underneath artifacts they had already searched. We told the Taliban that these objects are part of our history, that nobody was worshipping these statues, and that those of us working in the museum were responsible for keeping these statues safe.



Exposed. The National Museum is still without a roof as winter approaches.

Q: Do you have a list of those things destroyed and rescued?

A: Our documentation office was on the upper floor, and it was completely burned. But we saved some catalogs.

Q: What are your priorities now?

A: We have to do so many things. The

Greek government is ready to pay for the rehabilitation of the building. Now we are awaiting those funds. We have to recreate our restoration department; we have no chemical materials. We need to organize a photography department. We need the help of many, many countries. Most of our objects are damaged. For the past 15 years, we have had no chance to treat our artifacts. But the big problem is this building. We've had no electricity or running water for 10 years.

Q: Some foreign governments want to help build a museum in the city center. Does this make sense?

A: The current site is not very good: It is small, it's not in good condition, [and] it is far from the city. And the palace across the street, it was the Defense Ministry. We should not be sitting beside the Defense Ministry! It is very necessary to have a building in the center of the city. But we need to fix this building first. If we wait for the new one, it will be 2 or 3 or 4 years. But our remaining objects in the meantime can be treated and fixed here. We can't wait.

Q: Do you have money now?

A: Just to pay salaries. But last year, during the Taliban regime, we went for 4 months without salaries. Most people who worked here had business on the side. Myself, I sold potatoes. We worked [here] from 8 a.m. to 1 p.m., then in the afternoon [we] worked in the bazaar.

Q: Despite not being paid, you and your staff kept coming to the office?

A: We should work. We are responsible. We are happy with our work. We should work a lot. But we are happy the government now gives us a monthly salary.

Q: How do you feel about the past decade?

A: This has been a very sad time for everybody, not just for me and my colleagues, but for every Afghan. First you heard of people burying their children; then they buried their history. This was bad news for me and my colleagues and for all educated people, in Afghanistan and in the world.

—A.L.