
A Field and Training Manual for the Heritage Documentation Team, Chilas Rock Carvings Cultural Landscape Project

Prepared by
Rogers Kolachi Khan & Associates
For
the Heritage Documentation Team
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PART I

INTRODUCTION TO THE PROJECT AND HERITAGE DOCUMENTATION



The Chilas Rock Carvings Cultural Landscape Project

More than 50,000 rock carvings and 5,000 inscriptions ranging from the Neolithic period, 8 to 9000 years ago, to the coming of Islam from the 16th century onwards have been recorded in the area between Shatial and Raikot. This work has been carried out primarily by Heidelberg Academy of Sciences and Humanities during a joint German-Pakistani project begun in 1980.

These carvings are a unique and rich archaeological record of the history of this area through the ages, as a trade and pilgrimage route. Many of them will be inundated by the reservoir of the Diamer Basha Dam. The Chilas Rock Carvings Cultural Landscape Project was begun by WAPDA with the contracting of Rogers Kolachi Khan & Associates (RKK) to carry out a Cultural Heritage Impact Assessment for the Diamer Basha Dam to assess potential impacts of dam construction and inundation of the reservoir on these and other important heritage resources.

In order to plan more effectively for the preservation, study and economic future of the archaeology of the Chilas area, it was decided to seek international support. The World Monuments Fund based in New York and the Prince Claus Fund for Culture and Development of the Netherlands are providing support to WAPDA, RKK and the Heidelberg Academy to carry out this project.



The Emergency Action Plan: why is it needed?

The need for supplementary documentation was identified by the Cultural Heritage Impact Assessment(CHIA). It recommended further documentation of other archaeological heritage in the study area and consolidation of the Rock Carving database and finalization of mitigation measures, particularly for the carvings identified as highly significant. This additional data from this phase will be reviewed following the CHIA process and integrated into a finalized version of the existing CHIA report. Mitigation proposals for these additional resources will be added to the CHIA and detailed mitigation plans prepared for implementation under the Management Plan stage of the project.

Engineering work for road and dam construction is due to start shortly with works being inaugurated in July 2010; construction will last for 9 years with the commissioning of the reservoir planned for 2019. This defines a short window of opportunity to carry out final studies and to ensure that monitoring systems are in place before works begin. Construction of a Peripheral Road along the right bank of the Indus, relocation of a 100km segment of the KKH and other works associated with dam construction will potentially impact on areas where field documentation of archaeological and ethnographic heritage is needed.

The Emergency Action phase is designed to achieve several important goals which will enable preparation of a long term Management Plan. Most importantly, it aims to get a better understanding of the area as a Cultural Landscape as reflected in the impacts on the environment made by human activity over time. To do this we need to fill in gaps in the data base regarding heritage resources and to assess impacts on these additional resources, following the format of the CHIA; this will ensure that, to the best of our ability, impacts on all heritage can be mitigated

Objectives: To understand why this project is taking place and what benefits it could bring in the future.

Cultural Heritage can be defined as all the evidence of past human activity, belief and practice.

It can be “tangible”, something we can see and touch, such as ancient buildings and archaeological sites, carved stones, pottery, bronze weapons or traditional field terraces.



It can also be “intangible”, something we experience in other ways – music, dance, stories and poems, traditional cooking and weaving of cloth.



Heritage can be the knowledge held by members of the community of how to do things in the “old way”. It can also be the places in villages and the landscape where people traditionally carry out cultural activities.

Cultural and natural heritage is among the priceless and irreplaceable assets, not only of each nation, but of humanity as a whole. The loss, through deterioration or disappearance, of any of these most prized assets constitutes an impoverishment of the heritage of all the people of the world.

(Operational Guidelines for the Implementation of the World Heritage Convention, p.2)

Cultural Heritage can play an important and meaningful role in the lives of today’s communities. Cultural heritage is not just about something that happened in the past. It links our past with our present by showing us what we have achieved in the past and how we have become what we are today.

Mapping heritage, preserving it and showing it to all can lead to economic benefit from tourism, increased employment and the revival of old crafts and technologies. It can also bring meaning and a shared sense of belonging that links the young to past generations.

Cultural heritage is fragile and, if we do not take good care of it, it can be damaged easily and even lost forever. This project aims to work alongside local communities to identify the heritage of Chilas, preserve it wherever possible and find ways to give it continued meaning and relevance.

Sources: Rogers Kolachi Khan & Associates



PART 2

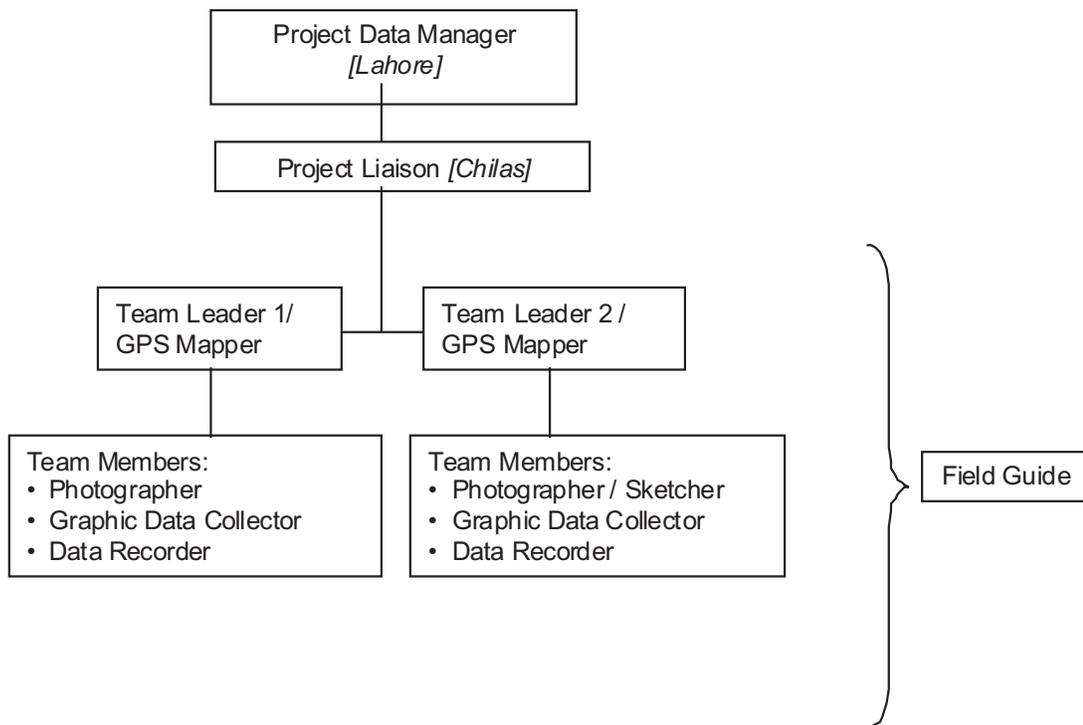
THE HERITAGE DOCUMENTATION TEAM



Heritage Documentation: the role you will play

The Heritage Documentation Team has an important role to play at this stage in the Project. In order to plan for the future of the rock carvings and other heritage we need to have as complete a picture as possible of what heritage exists and where. The Heidelberg Academy has thoroughly investigated the study area and documented thousands of carvings. However, more information is needed about other types of heritage. This will be the focus for the Heritage Documentation Team. The information you record will add to the important German database.

The Heritage Documentation Team will consist of:



The purpose of this Field Manual

This Manual is for use by Team members in the field; it contains all the information you need to carry out the tasks efficiently. It is designed to accompany a 4 day training program for members of the Chilas Rock Carvings Cultural Landscape Project's Heritage Documentation Team. The training will use the Manual to cover a range of skills needed to identify, locate and record archaeological and heritage features in the project study area.

This Manual has 4 parts:

Part I Introduction

Background to the Chilas Rock Carvings Cultural Landscape Project
The Emergency Action Plan: why it is needed
The Documentation of Road Alignments: the role you will play
The purpose of this Field Manual

Part 2 In the Field

Heritage documentation in brief
Finding Areas of Archaeological Potential
How to identify "Cultural Heritage"
Recording Heritage

- Using GPS and recording coordinates
- Filling in the forms
- Taking photographs
- Making sketches
- Making rubbings

Part 3 After returning from the Field

Processing forms and other data
Safe storage and retrieval

Training will last for 4 days from December 2 to 5, 2010 in Chilas and will be led by a training team made up of experts, including archaeologists, heritage manager, anthropologist, engineer, geologist and GPS trainer.

The goal of the training will be to:

- Familiarize the Team members with this Field Manual
- Equip the teams with the skills and techniques to locate, document and assess heritage in the investigation areas
- Explain procedures for data collection, storage and retrieval
- Ensure that all the information needed to plan mitigation measures for individual carvings and groups is collected in the field
- Train a core team which will be able to participate in other aspects of the Project over the long term adding to the sustainability of the processes

This training program is seen as the first “module” in what we hope will be a series of modules delivered to local trainees over the course of the Chilas Rock Carvings Cultural Landscape Project. It represents an investment in capacity building and localization of skills which will support community involvement in and benefit from future management of the cultural landscape.

Expected outcomes of the training include:

	Project Element	Immediate Aims	Long term Gains
1.	Training workshop	Trained field work teams with new skills	A resource for future field work and management tasks
2.	Field Documentation	Vital information re: additional carvings and heritage resources	A comprehensive database for planning future management of the cultural landscape
3.	Detailed Mitigation Assessment	Decisions re: mitigation measures for rock carvings identified by the HA as significant and other important heritage resources	Information needed to design programs for protection of carvings
4.	Data Collection and Processing	Data storage, management and analyses systems	Initial phase of a GIS program for long term management of the site
5.	CHIA Report revision	Comprehensive assessment of impacts resulting from the engineering works	Tool for mitigation and long term management planning and implementation

Activity type: Exercise	WORKSHEET 1
Title: Checklist of Heritage Documentation Team skills	Location:
Objectives: To identify the competency areas required for documentation in the field	Classroom
<p>Some of the skills needed are all about working together, showing initiative and being organized:</p> <p>Team members should enjoy working in a group and be willing to do their share</p> <p>Think in advance and organize all the equipment and materials needed each day in the field</p> <p>Must understand the importance of organization of the office and the storage of data</p> <p>Should be willing and able to improvise in the field and make decisions as they are needed – there is often no “right or wrong” way to do a job, just the most efficient and appropriate way!</p> <p>Other skills are more practical:</p> <p>Should know how to use the basic “tool kit”:</p> <ul style="list-style-type: none"> - compass - GPS unit - Measuring tapes - Camera - Computer - Map reading - Sketching materials <p>Should know how to fill in the forms and document what you find in the field – this is what we are going to learn during this Training Workshop!</p>	<p>Instructions:</p> <p>Equipment:</p> <ul style="list-style-type: none"> - big sheets of paper - coloured markers - tape <ol style="list-style-type: none"> 1. With the students, divide these skills and any others they can think of, into different categories (ex. Organizational skills, technical skills etc.) and write them on big sheets of paper stuck on the wall. 2. Ask students to identify the skill categories they are most confident of the categories they need to work on. 3. Mark these findings on the sheets, see what needs the most work and discuss. <div style="text-align: center;">  </div>
	Time: 10 minutes

Topic: How is the data you collect going to be used?

Reading 2

Objectives: To understand why the data collected by the Heritage Documentation Team is important and how it will be used in the future

The information collected in the next few months by the Heritage Documentation Team will be used in several important ways:

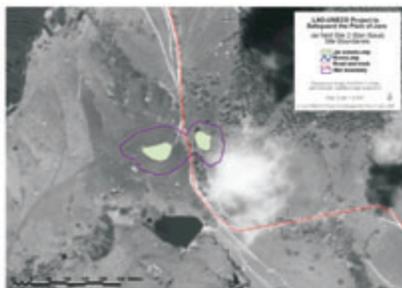
(a) To plan for “mitigation” - finding ways to keep heritage as safe as possible during and after construction of the dam and to make any damage or loss as little as possible.



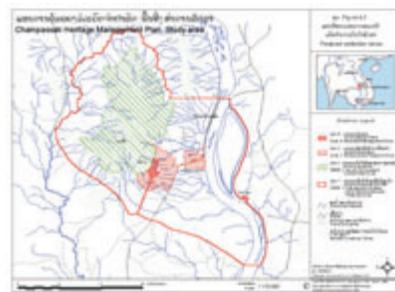
(b) To identify what needs to be done to different heritage in order to conserve it for the future; this may mean just documentation, or rebuilding, moving to a different location, making copies of rock carvings, building safety barriers – or many other alternatives.

(c) To help historians, scientists and archaeologists understand the story of the Chilas Cultural Landscape and to find ways to tell that story to people in Chilas and abroad.

(d) To plan future benefits that cultural heritage can bring to Chilas and its people and to Pakistan as a whole. An important part of this process will be the creation of a Geographical Information System or GIS. This is a sophisticated computer program that combines all kinds of information from maps, GPS readings, photographs, data from recording forms, population and tourism statistics and much more. Using GPS we will be able to overlay any or all of these to create new maps and plans for the Chilas Cultural Landscape and its community heritage managers.



GIS used to map where heritage is found and to plan site boundaries and access roads.



GIS used to make management zones and control activities in sensitive areas as part of long term management, conservation and tourism planning.

Sources: Project for the Safeguarding the Plain of Jars, UNESCO-Government of Lao;
Champasak Archaeological Landscape Management Plan, Government of Lao PDR

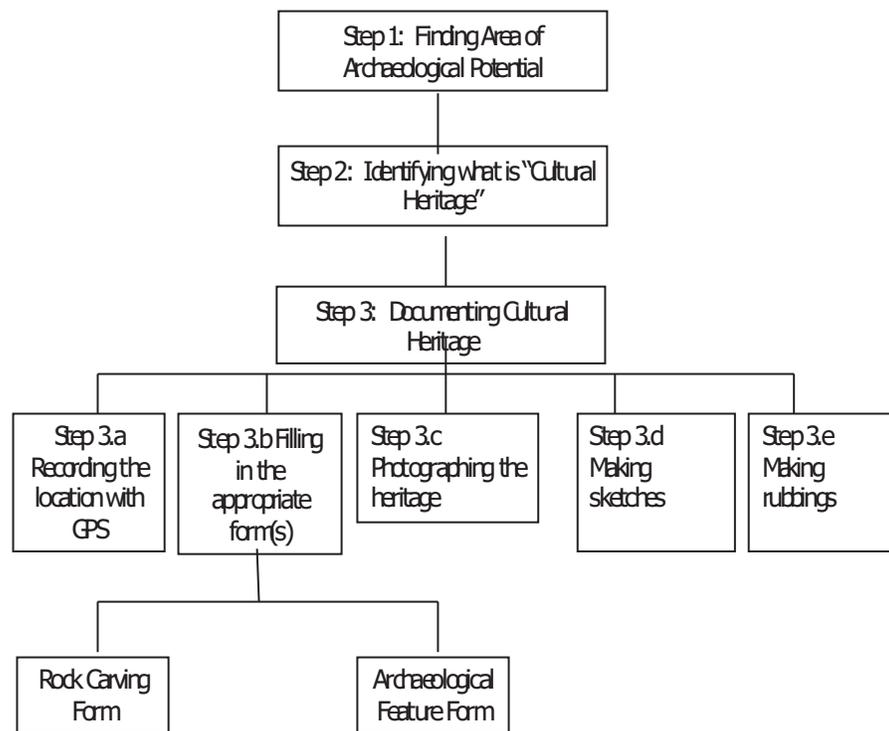
Part 3

HERITAGE DOCUMENTATION



An Overview of Heritage Documentation

This diagram illustrates your job in the field:



Step 1

Where to Document?

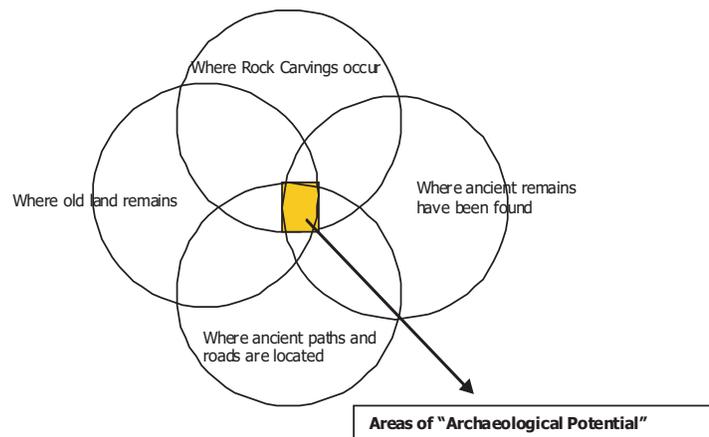
The area we need to investigate extends from Basha, where the new dam will be built, to Raikot Bridge. This is where the reservoir of the dam will flood all land lying below 1160 m. asl., forming a long lake. We need to search this area systematically for remains of human activity such as ancient pilgrims walking the path along the Indus and into the mountains, armies and traders camping near bridges across the river, leaders building forts, Buddhist monks living in monasteries, Muslim farmers settling in small villages near the Indus and into the mountain valleys.

To find the places where we might find such evidence we will:

- Look at where the rock carvings cluster
- Find references to archaeological remains found in the past such as ruined buildings and pottery lying in fields
- Look at the routes of the ancient paths and roads
- Identify areas where old soil still remains that could have archaeological deposits and where erosion has not wiped away all evidence of the past.

If we combine all this information it will highlight certain areas that have “archaeological potential” those places most likely to have evidence of the past. These are the places that the Heritage Documentation Team will visit and document.

Priority will be given to those areas which will be directly affected by construction, land formation and flooding from the Diامر Basha Dam. These can be identified from the maps provided by WAPDA.



Identifying each area with an “Area Code”

Each Area of Archaeological Potential will be given a code made up of the name of the area and a number reference, such as Gichi:02. A list of all the areas and their Area Codes will be prepared and the Team Leaders need to check it before going into the field to make sure they have the necessary code. The team can add to the list as they visit new areas.



Who can help?	
WAPDA engineers	The engineers know the area well and know where dam and road construction will take place
Local village communities	People living in the area will know the landscape and can help you identify places and locate yourself on the map
Team Guide	He has experience working with the German researchers and knows the rock carving area very well. His job is to help you find where you need to go

Activity type: Exercise

WORKSHEET 2

Title: What are the Areas of Archaeological Potential?

Objectives: to identify those sections of the study area which should be investigated by the Heritage Documentation Team

Data sets or sources of information that we will use for this task:

- (a) Maps of the study area showing where known rock carving sites are located
- (b) Information on where archaeological features have been found
- (c) Maps showing the ancient routes through the area
- (d) Information about where soil deposits have built up and still remain, particularly at the mouths of nalas.
- (e) Maps of the Damer Basha Dam project showing where construction will take place and which areas will be flooded by the reservoir.



Getting input from local communities on where heritage and archaeological features can be found

Instructions:

Equipment:

- maps, Google images
- tracing paper
- marker pens and highlighters
- tape

1. Using tracing paper, block out on the Study Area maps all the known rock carving sites and archaeological features
2. Highlight areas where soils remain
3. Trace on the ancient routes
4. Discuss where all these overlap and form "Areas of Archaeological Potential" – places where it is most likely that remains of past use by people will be found in the landscape.



Time: 45-60 minutes

Step 2

What to Document?

The planned Diamer Basha Dam is located in an area of northern Pakistan endowed with a wealth of heritage in the form of rock carvings, built heritage and archaeological remains. This cultural heritage is associated with millennia of use of the Indus River valley and adjacent mountain passes by invading armies, settlers, traders and pilgrims traveling between Central Asia to Tibet and China beyond. This "silk road" is a route of great historical and cultural importance to many cultures and religious groups.

When you go into the field you will be looking for rock carvings and heritage remains. This **Illustrated Guide** will help you identify these and other features in the field:

ILLUSTRATED GUIDE TO HERITAGE	
Cultural Heritage	Illustration
1. Rock Carvings (RC)	
<p>Document a rock carving only if you think it may not have been recorded already by the German team; the field Guide may know whether it has been recorded and you will have copies of the maps showing the sites they have documented.</p> <p>Regardless of suspected date/period Not including spray painted items unless they are located over or near carvings</p>	
2. Archaeological Features (AF)	
Remains of Buildings and Structures	
<p>Walls or remains of ancient structures such as forts, monasteries, observation posts etc. You may not be able to tell what it was or how old it is; if in doubt document it!</p>	

Remains of towers

Watch towers or beacons like this one may still be remaining in the landscape



Remains of historical villages

Villages or groups of houses that have been abandoned for some reason in the past or destroyed by flood



Old stone terracing or retaining walls
and evidence of abandoned agricultural fields



Remains near rivers or streams that may have been bridgeheads or crossing points



Sections of old pathways

Some of these may be abandoned and be visible only in patches; others may still be in use today. If in doubt document!



Stone graves or tombs

Burial places of all periods and all peoples should be noted and documented for preservation.

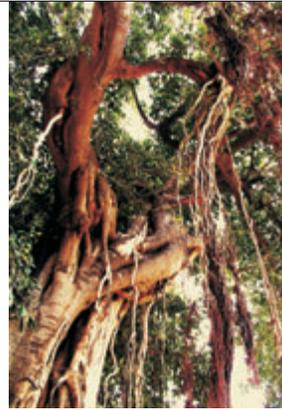


Standing stones or "megaliths"

Any examples of stones which look like they have been positioned on purpose by people should be documented

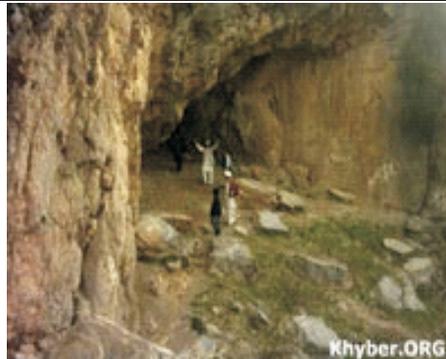


Shrines of any kind such as tree shrines or shrines at springs



Caves with signs of use

Look out for caves or overhanging rock shelters that may have been used by people in the past and may still be in use today



Scatters on the surface of archaeological material

Evidence of prehistoric or ancient camps, villages and sites may be seen today as scatters of pottery sherds and quartz flakes and other fragments lying on the surface of the ground or eroding out of cut slopes and stream beds.



Who can help?	
WAPDA engineers	The engineers know the alignment and will have visited these areas; they may be able to report rock carvings and other items for you to follow up
Local village communities	Ask nearby villagers if they know of heritage in the area you are investigating; they may be able to lead you to the spot

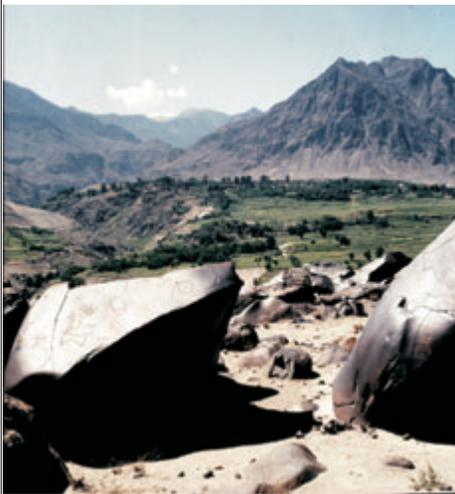
Objectives: To understand what a Cultural Landscape is and why we call this the "Chilas Rock Carving Cultural Landscape"

A Cultural Landscape:

"The cultural landscape is fashioned from a natural landscape by a cultural group. Culture is the agent, the natural are the medium, the cultural landscape is the result" ¹

"Cultural Landscapes represent the combined works of nature and human kind, they express a long and intimate relationship between peoples and their natural environment" ²

The Cultural Landscape of Chilas:



The landscape of the Chilas area is very special and different from other parts of Pakistan. It has been formed through millions of years of volcanic activity, movement of the earth's crust, erosion and sedimentation. The Indus and the many small rivers and streams that feed it have created pathways through the huge mountains. Over thousands of years people have used these pathways to travel from Central and Western Asia to Western China, Tibet, India and beyond. They brought different religions, ideas and skills.

Some people stayed in these valleys and they and their descendents created villages and agricultural land. They changed the rough landscape and adapted to it at the same time, creating a special and distinctive pattern of life. Layers of land use and building have collected on the environment. Together they form what we call the "Cultural Landscape" of Chilas and its remarkable rock carvings. This is the landscape we hope to document and understand.

Sources: ¹ SAUER, C (1925) The Morphology of Landscape. University of California Publications in Geography. Number 22. Pages 19-53 and ² UNESCO Operational Guidelines for the Implementation of the World Heritage Convention, UNESCO World Heritage Centre. Paris. Page 83.



Title: Successful documentation and management of thousands of ancient rock jars spread over a large, mountainous area

Objectives: To see how a similar project which started, like this one, with the work of a Heritage Documentation Team

Heritage Site: The UNESCO-Lao Project to Safeguard the Plain of Jars, Lao PDR

High in the mountains of northern Laos, there are thousands of large jars cut from stone, in groups scattered on foothills and slopes. Nobody knows exactly when these jars were made (best estimate is about 1⁰⁰ BC – 100 AD) nor who made them. They are a mystery which attracts many visitors to this remote and poverty stricken part of Laos.



The UNESCO project began by documenting all the jars they could find. The work was done by a small team of local men ranging in age from 20 to 60, some with experience but most new to mapping and recording heritage. After training they carried out the work over a period of two years and recorded thousands of previously unknown jars as well as many other types of heritage that they found in the cultural landscape. This team went on to become the main management team for the World Heritage Site of the Plain of Jars.



This part of Lao has a long history with many peoples passing through over the centuries including Chinese invaders, French colonists and Vietnamese immigrants. Several wars have been fought here all leaving their marks on the cultural landscape.



A decade on, the Plain of Jars has become an important tourist attraction. The UNESCO project designed and set up a system where local villagers manage the stone jar sites and also manage tourism. As a result, financial benefits have come to the local community and stayed there. This is what planning for the future of a cultural landscape can bring to the heritage and to the people.



Sources: Dr. AP Rogers



How to Look for Heritage: Doing a Surface Scan

What is a Surface Scan?

Surface scanning means to walk over an area looking carefully at the ground for any remains of heritage. The team must space themselves so that every bit of the land can be seen by at least one member. This will mean different spacing for different areas – open fields are easy to walk in straight lines at a regular distance from your team mates, but rocky slopes need to be approached differently. The Team Leader will need to decide the best arrangement for each area.



You walk in lines or whatever direction is best suited to the landscape; scan the surface with your eyes and stop whenever you find something of interest – you will have bright coloured “high visibility” survey tape that you can use to mark the location while you continue your scan.

When the scanning walk is finished, go back and record the position of any features found (Step 3), fill out the appropriate forms (Step 4) and photo or and /or sketch them.

An important point: Even if you can see something important like building remains in the distance it is very important that you walk in this systematic manner and wait until the scanning brings you to the remains. Otherwise valuable evidence might be missed that could tell us about the remains and the area.



Collecting material you find on the surface

If you find fragments of pottery, stone flakes or other pieces you think may be tools or left over from making stone tools, do the following:

- (a) Photograph the pieces on the ground before you move them; make sure you have one picture showing the setting and another showing a close up.
- (b) Pick up the objects and put them in a plastic bag
- (c) Write on the bag with a marker:
 - Date
 - Your name or initials
 - Area Code



An Important Point

Often when archaeologists carry out survey or excavation in an area, local people think it means that there is "treasure" to be found in their land. We know this is not the reason we are carrying out this surface scan, but you must take every opportunity to tell people that this is not the case.

Tell villagers and interested locals that you are collecting information only and that you are not looking for treasure!

This is serious because if villagers think that there is treasure in their fields they may dig it up which causes problems for everyone villagers and researchers alike!

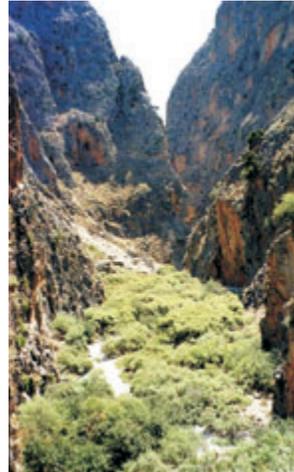
Title: The use of archaeological field scan and survey to reconstruct the story of human activity

CASE STUDY 2

Objectives: To illustrate how a complex picture of history and land use can be developed from surface observation and study

Heritage Site: The Sphakia Survey

The Sphakia Survey is an interdisciplinary archaeological project whose main objective is to reconstruct the sequence of human activity in a remote and rugged part of Crete (Greece), from the time that people arrived in the area, by c. 3000 BCE, until the end of Ottoman rule in AD 1900. The project's research covers three major epochs, Prehistoric, Graeco-Roman, and Byzantine-Venetian-Turkish, and has involved the work of many people using environmental, archaeological, documentary, and local information.



The initial stage of this project was to carry out extensive field scanning. The environment, like Chilas, is mountainous and it was very difficult to walk straight parallel lines. Instead, the teams adapted to the land forms while still being sure to cover the whole area. They recorded surface finds and standing remains and collected samples of archaeological material such as pottery.



From this preliminary survey data the Project was able to identify a pattern of sites across the landscape, spanning thousands of years. On the basis of this work they were able to plan future detailed investigations and studies to answer the many questions they have about the cultural landscape of Sphakia.



Sources: based on The Sphakia Survey: Internet Version, courtesy of Lucia Nixon



Step 4

How to Record Location of Heritage using GPS

What is GPS?

The Global Positioning System (GPS) is a satellite-based navigation system that can be used to find your location quickly and accurately anywhere in the world. The GPS unit reads location information from satellites overhead, combines the data and tells you exactly where you are on earth.

Why use GPS?

Any location on Earth can be described by two numbers--its **latitude** and its **longitude**.

These coordinates are used to specify position on a map. Latitude lines circle the globe horizontally. Longitude lines run vertically from one pole to the other. Latitude and longitude are collected using a GPS unit. When these coordinates are included as part of data collection, the resulting information is called **geo-referenced**.



Information that is not geo-referenced can cause confusion and imprecision. Without coordinates, it would be very difficult to know where a rock carving was located or how to find it again. Having the location information reduces the need for multiple visits to the same area to determine exact locations. Geo-referenced data can be used as baseline data and displayed on a map for planning.

The GPA data you collect in the field will be an important part of the Chilas Rock Carvings Cultural Landscape Project. It will be put into a computer program called a **Geographic Information System (GIS)** along with information about many other parts of the cultural landscape, such as geology, roads, villages, streams and dam construction. The program combines all this data to create maps that can be used to assess how the dam and reservoir will affect the heritage, how it can be preserved or managed for the future.

Collecting coordinates with a GPS Unit

1. Turn on the GPS unit (power button). You need to be outdoors, most GPS units do not work indoors.
2. Wait while the unit tracks the satellites. When the screen states 'READY TO NAVIGATE ACCURACY xx m' you can record a location. Sometimes it takes several minutes for the GPS to acquire satellites.



- a. Press the 'PAGE' button to change the display page. Press the 'PAGE' button until you reach the page titled 'MENU'
 - b. The MENU has options which can be accessed by pressing the up or down arrows. For collecting point data, use only the 'Mark' option
 - i. **Mark** – this records the Latitude, Longitude and Elevation for a single point. This is the feature you will use most frequently.
 - ii. Waypoints –navigate to a recorded location (advanced use)
 - iii. Routes – records a route (advanced use)
 - iv. Tracks – records a journey (advanced use)
 - v. **Setup** – DO NOT **change the settings on the HIC's GPS units**. HIC's units have been set up to accurately collect data for the Earthquake Response in Pakistan. If you are setting up your own GPS unit, the 'dd.dddd' format is the preferred option for units. For Pakistan the GPS should be set to WGS84

3. On the MENU page, select 'Mark'. The unit will display an image of a man holding a flag. On the flag is an ID number. At the bottom of the screen are three rows of data:

- ELEV:** (this is the elevation measurement)
- N** (this is the Latitude measurement)
- E** (this is the Longitude measurement)

4. Write down the screen information on the **GPS Log**. Include the number on the flag (this is the GPS point number) plus the data at the bottom of the screen.

5 Press 'ENTER' on the left of the unit to save the location mark. The screen will then return to the Menu. Each time you arrive at a new location that you wish to capture, repeat the process to collect a new mark.

GPS Log

Name of Data Collector:				Team No.		
GPS Point No.	Date	Alignment Section No.	RCG or AF No.	Latitude [North]	Longitude [East]	Elevation

Numbering system for GPS readings

The GPS Mapper in each team fills out the GPS Log. The GPS Point No. is taken from the GPS screen along with the coordinates and elevation. It is **very important** that for every GPS Point No. he also writes down the number of the Rock Carving Group (RCG No.) or the Archaeological Feature (AF No.) which is being located.

Hints for Using GPS

GPS reading is taken for each rock carving (if it is all on its own) or group of carvings; not for each separate motif within the group (even if it is a significant carving which gets a Detailed Carving Form).

Hold vertically; wait until the satellite strength bars are generally solid black with a D in or above at least four bars and 3D differential is shown in the Receiver Status Window before reading the position.

The "sky view" shows where the satellites are in the sky. Try to have the antenna positioned so that the most satellites are in "view" of the antenna.

Wait until the least significant digit is stable or slowly goes up or down no more than one digit.



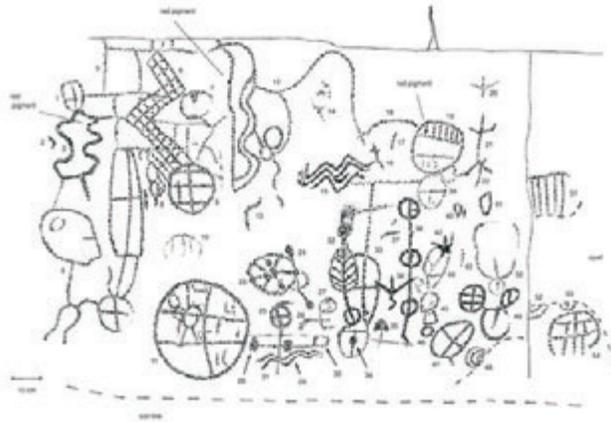
Power is an issue. Make sure you have enough batteries for the trip, and remember the more you play with it on your journey the quicker you will run the batteries down

Receivers need a clear view of the sky for satellite acquisition. This can be difficult if the unit is carried in your pocket. If carried in the top pocket of your rucksack, or better still mounted in some fashion on your shoulder strap, the receiver has a clear view of the sky allowing it to track your position accurately.



Who can help?	
WAPDA engineers	Many of the WAPDA engineering staff and their contractors will be familiar with GPS units and how to use them.

Activity type: Field Exercise	WORKSHEET 3
Title: Learning how to use the GPS unit	Location:
Objectives: To explain how the GPS unit works, how it should be used and how to record the data from it onto the GPS Log	On site
<p>This is a hands-on exercise. Although the GPS Mapper for each team will be in charge of this task, it is important that all the team members know the basics and can fill in in case of emergency.</p> 	<p>Instructions:</p> <p>Equipment:</p> <ul style="list-style-type: none"> - GPS units - GPS log sheets - pens, pencils etc. <ol style="list-style-type: none"> 1. Arrive at site and divide into 2 teams, each with one of the GPS units 2. Follow the instructions for taking GPS readings 3. The GPS expert will be on hand to explain its use and answer any questions 4. Afterwards spend some time discussing problems, concerns and exchanging tips. 
	Time: 2 hours



If there is more than one carving on a rock face then sketch the face and show where the carvings are located. Put the numbers of the individual carvings on this sketch in their approximate positions on the rock surface.

At each **Archaeological Feature** location you must make an Archaeological Feature Sketch Map:

Make a sketch of the area/setting around the feature(s) showing which direction the existing road/paths are, any stream, cliffs and flat areas. Do not make exact measurements but put approximate distances on the sketch map. Put the numbers of the feature(s) on the map.

If there are a group of features then draw a plan showing how they are located in relation to one another. Put the numbers of the features on the map.



Points to remember about Sketches and Sketch Maps:

- make sure you put a north arrow on every sketch map
- if you use symbols in your maps, make sure you add a legend on it to explain them
- a sketch map does not have to be "to scale" but it makes it more useful if you can make some measurements, either by pacing or with tapes, to make it approximate

Step 6

How to take Photographs

The photographs of heritage are very important because they will be used to make decisions regarding future care and management. Each team will have a camera and a designated “photographer” who will be responsible for making sure that all the necessary pictures are taken and that they are recorded on the [Photo Log](#).

Points to remember about taking photos:

The reference number for each photograph is the same as the number given to the Carving or Archaeological Feature.

Photograph a person in views of the Carvings or Archaeological Features taken from a distance in order to provide scale.

Before you start photographing at a Carving /Feature site, photograph a piece of paper with the RC or AF no. on it to divide the photos of one carving from another.



Always take more photographs rather than less! They don't cost anything!

If the light is very bright and contrast high or if the carving is partly shaded and partly lit then shade the rock surface with a cloth held above it to give even light conditions and make the carving clearer. If in doubt, take pictures with and without shade.

For each Carving location you should have photos of the following:

- Setting
- view(s) of Group
- view(s) of individual carvings or clusters
- rock condition
- examples of motifs
- photo of any significant carving which also has a [Detailed Carving form](#)
- evidence of damage, vandalism
- and anything else you think is important or interesting...

CHILAS ROCK CARVINGS CULTURAL LANDSCAPE PHOTO LOG

Team No.:		Photo Log Pg.			
Carving / AF no.	Taken by	Date	Taken from	Comments	Recorded by
RC 0026	ABC	13.11.10	SSE	Carving group view	DEF
RC0026.1	ABC	13.11.10	S	Carving detail – technique and overlay of carvings	DEF



Step 7

How to make Rubbings

Rubbings are only made for special carvings which are given a Detailed Carving Form.

Rubbing is done as follows:

- Hold the paper against the surface of the carving or tape it lightly in place
- Rub it gently with the sponge wrapped in carbon paper. Do not put carbon on the actual rock surface.
- When the image is visible, rub it carefully with a handful of grass or leaves to set the image.



If a carving is large and requires several rubbings, number each sheet and do a sketch showing how the numbered sheets fit together.



Remember:

Make sure the following information is written on each sheet:

- Rock Carving ref. number
- An arrow showing "up"
- Date
- Sheet number [ex. RC 0026.1 Sheet ¼]



Step 8

Filling in the Rock Carving Form

This form is filled out for every group of carvings or individual carving (if it is on its own); it documents the carvings as a group, numbers and locates the individual motifs but provides only summary information on each

How to fill out the Rock Carving Form:

Identification

RC#.: _____ [NOTE 1] Area Code: _____

Date: _____ [Dd/mmy/10] Recorded by: _____

Location

GPS Coordinates: N _____ E _____

Elevation reading: _____

Nearest village or landmark: _____

Setting

Distance to infrastructure:

Type of infrastructure: road path bridge settlement

General description of setting:



NOTE 1

Rock Carving Group No.

- Each Carving Group form gets a number (ex. #26) which applies to the whole group; the Team Leader keeps track of the numbers on the Carving Master List and tells the team what number to use next. Each Team Leader will be given a different range of numbers (ex. Team Leader 1 will record starting from RC 0001 and Leader 2 will start from RC 0501

RCG no.		GPS Coordinates: N	GPS Coordinates: E	Elev.	Area Code	Group Carving?	Individual Carving?	Date
0001								
0002								
0003								
0004								
0005								
0006								

- Each individual item within the group is numbered sequentially with a Rock Carving No.(ex. 0026.9); these numbers are linked to locations on the Carving Sketch(es) and Sketch Maps



Rock Information:

Material: Gabbro Some other rock

Nature of rock surface: boulder outcrop face

[NOTE 2]

Max. dimensions if a boulder:
 Height _____ Width _____ Depth _____

Condition of the rock surface: **[NOTE 3]**
 Spalling Cracks Plant action/ Lichen Other

NOTE 2

Nature of Rock Surface

Boulder

The carving(s) are on a freestanding, separate piece of rock



Outcrop

Carvings are on a rock that sticks out of the ground; the rest of the rock is buried deep below



Face

The carvings are located on the side of a cliff or side of a very large outcrop



NOTE 3

Condition of Rock Surface

Spalling

Spalling is when layers or patches of the stone's surface come off as a result of weathering. It is a form of gradual erosion of the stone material.



Cracks

A crack is a break or fracture in the stone; it may form along natural fracture lines or it may be the result of impact. In time it will cause the stone to break up into pieces.



Plant Action /Lichen

Plants may damage rock in several ways:

- Large plants or trees can grow in cracks in the rock; their roots make the cracks bigger and speed up breakage of the rock.
- Lichens, mosses or other small organisms may grow on the rock surface. They can let off acids and cause chemical changes in the rock surface.



SITE SIZE & ELEMENTS

Total number of motifs in group: _____
 Is number actual or estimated

Aspect of carved surface(s): **[NOTE 4]**
 Horizontal Vertical Sloping Overhanging

Orientation(s): _____

NOTE 4

Aspect of the carved surface

Horizontal aspect

The carving is mainly on a flat table-like surface of a rock



Vertical aspect

Carving is on an upright, wall-like surface of the rock



Sloping aspect

The carved surface lies at an angle or on an irregular surface



CARVING IDENTIFICATION

Buddha figures

Devotional Scenes

Scenes from Buddha's life

Stupas, Temples, Altars

Human Figures

Giants

Hunting, Fighting, Riding Scenes

Animals

Symbols

Inscriptions

Buddha Figures



Devotional Scenes



Scenes from the Life of Buddha



Stupas, Temples, Altars



Human Figures



Humans fighting, riding, hunting



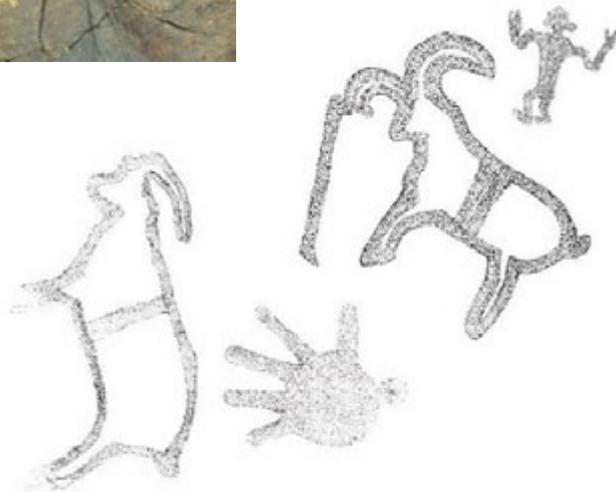
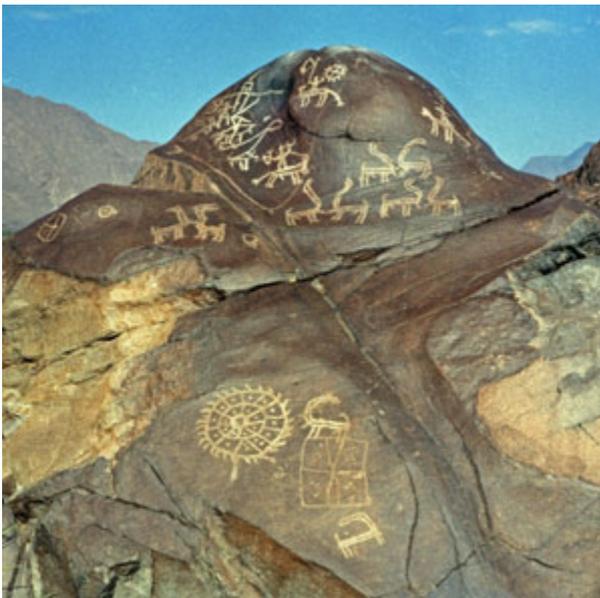


Giants



Animals





Symbols



Inscriptions



Evidence of vandalism at this site: [NOTE 7]

Defacement / chipping or scratching

Painted graffiti - text and/or drawing

Attempts to cut out a piece of carved rock

Misc. damage

NOTE 7

Evidence of Vandalism at the site

Defacement , scratching or chipping

Using a tool to erase a carving or make it impossible to read.



Painted text or drawing

Drawing on rocks is an ancient tradition but painting logos and trying to rub out historic carvings is a form of vandalism.



Attempts to cut out a piece of carved rock

Unfortunately, some people try and steal carvings despite their size, by cutting chunks or rock.



On-site Checklist:

Photos taken:

Setting View(s) of Group View(s) of individual carvings or clusters

Rock condition Examples of motifs

Evidence of damage Vandalism Other

Total number of photos of this Rock Carving Site: _____

Sketch(es):

Rock Carving Sketch Map
(setting and location of carved rocks)

Rock Carving Sketch(es)
(carved area with locations of motifs shown)

Total number of sketches made: _____

Theft is a Form of Vandalism

These carvings from the southwestern United States have been cut from their rock locations and mounted on the wall of a private collector's home. This is vandalism because it takes the carving away from its meaningful place and makes it private property rather than a treasure for all.



Activity type: Field Exercise	WORKSHEET 4
Title: Documenting Rock Carvings	Location:
Objectives: To become familiar with the requirements of the recording form through hands-on application	On site
<p>This is a hands-on exercise to be carried out at a rock carving site near Chilas town.</p> <p>Trainees will go through all the steps of documenting a rock carving: filling out the form, taking photographs and drawing sketches, and making rubbings.</p> <p>Documentation will be followed by an on site assessment of the process to identify problems, changes needed in the recording system or additional training requirements.</p> <div style="display: flex; justify-content: space-around; align-items: center;">  </div> <div style="display: flex; justify-content: space-around; align-items: center;">  </div> <div style="display: flex; justify-content: space-around; align-items: center;">  </div> <div style="text-align: center; margin-top: 20px;">  </div>	Instructions: Equipment: <ul style="list-style-type: none"> - Rock Carving Group forms, Photo and Sketch Logs - paper and clipboards - copies of the Motif Reference Guide - pens, pencils etc. - compasses - Rubbing materials - compass and GPS <ol style="list-style-type: none"> 1. Students working in 2 teams will firstly count or estimate the number of motifs. Discuss when an estimation is to be used. 2. Then the teams will decide on the aspect(s) of the carving and will find out the orientation using a compass. 3. Each team must produce a sketch of the carved rock faces, locating the motifs on it by their RC no. 4. Then the team should practice filling out the "Description of Carvings" section of the form: identifying motifs with the help of the Motif Reference Guide and assessing condition. 5. Each team will make a rubbing of a selected motif or group of motifs.
Sources:	Time: 4-5 hours

Step 9

Filling in the Archaeological Feature Form

This form is used to record the finding of different types of archaeological heritage. For an idea of the kinds of heritage you may come across, look back at the [Illustrated Guide to Heritage](#) in Step 2.

How to fill out the Archaeological Feature Form:

Identification
AF#: _____ NOTE 8 Area Code: _____
Date: _____ Recorded by: _____
Location
GPS Coordinates: N _____ E _____
Elevation reading: _____
Nearest village or landmark: _____
Setting
Distance to infrastructure:
Type of infrastructure: road path bridge settlement
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
General description of setting:
Is the AF near any rock carving site(s)?: no <input type="checkbox"/> yes <input type="checkbox"/> RC # _____

NOTE 8

Each Archaeological Feature will be given a number and will be listed on the Archaeological Features Log. This will help us keep track of what is found. Each Team Leader will be given a different set of Log numbers to avoid confusion. For example, Team Leader 1 will use AF no. 001 – 500 and Team Leader 2 will use AF no. 501 - 999



Archaeological Feature Log							AR Master List Pg.		
AF number	GPS Coord: N	GPS Coord: E	Elev.	Area Code	Type of Feature *	Recorded by		Date	
001									
002									
003									
004									
005									
006									

Description of Feature See Illustrated Guide NOTE 9

Remains of Buildings and Structures

Remains of stone building(s) Tower Abandoned village

Terrace /retaining wall(s) Bridge head /crossing point

Other Archaeological Features

Path/ road Grave(s) / tomb(s) Megalith / standing stone(s)

Shrine Cave Scatter of quartz flakes and/or pottery sherds Other

Description:

Area occupied by the AF: _____ ft. x _____ ft. [#]

Total number of elements in feature: _____ [#]

Is number actual or estimated

Material(s) used:

Un-worked stone Cut stone Wood

Mud/earth Metal



Condition

Condition of the AF: Good Partial

[NOTE 10]

Vandalism evidence: Graffiti Intentional destruction

Elements removed

Damage from new construction

Other _____

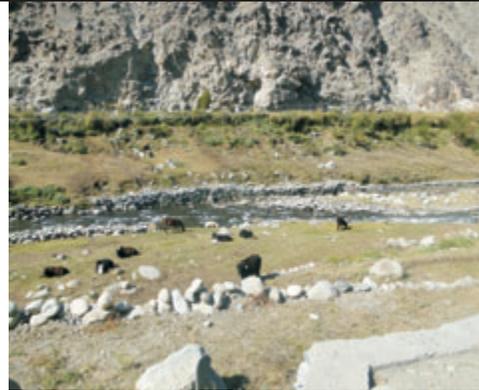
NOTE 10

Condition of Archaeological Features

Good condition

Enough of the feature remains to give an idea of its original form and extent

Ex. These traditional terrace and retaining walls are in good condition because we can see their shape, how they were built and where they are located in the landscape.



Partial condition

Only enough remains to show that it existed, not enough visible to identify its original form or extent

Ex. The remains of this structure are in partial condition because although we can tell that it was once a building, not enough is left for us to easily identify its form, function or extent.



On-site Checklist:

Photos taken:

Setting View(s) of AF View(s) of individual elements of the AF

Condition

Evidence of damage Vandalism Other

Total number of photos of this Archaeological Feature: _____

Sketch(es):

Archaeological Feature Sketch Map (setting and location of feature)

Archaeological Feature Plan

Total number of sketches made: _____

RECENT VERNACULAR HERITAGE

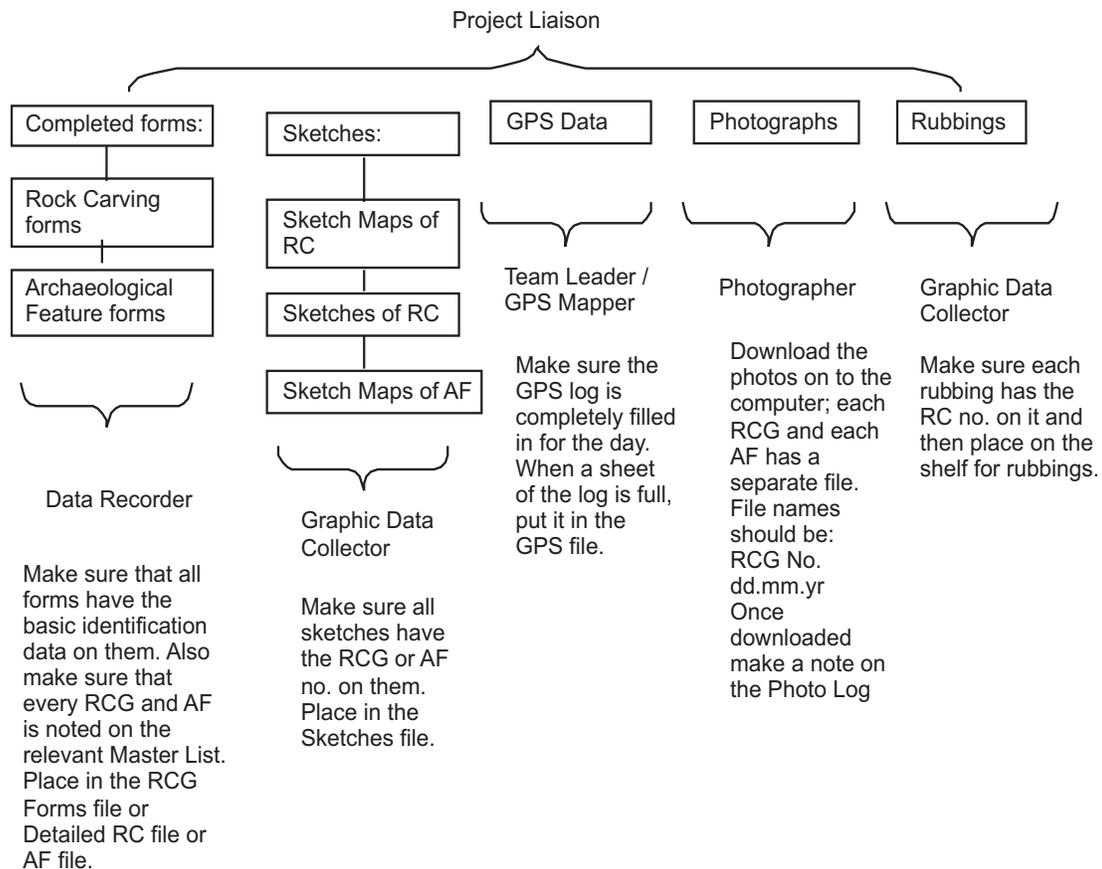
The Thor Nala Mosque is an excellent example of living heritage; remember that Cultural Heritage includes traditions still in use today. The methods of construction, use of earth, wood and stone, and the decorative carving and molded clay patterns are an important part of the heritage of Chlas.



Activity type: Field Exercise	WORKSHEET 5
Title: Scanning an area and documenting Archaeological Features	Location: On site
Objectives: To become familiar with the requirements of the recording form through hands-on application	Instructions:
<div data-bbox="326 512 699 821" data-label="Image"> </div> <p data-bbox="716 506 1068 821">This is a hands-on exercise to be carried out at an Area of Archaeological Potential. The trainees will carry out a field scan including documentation, photographing and sketching. It will be a "dry run" to identify any points that need clarification or any need to fine tune the methodology.</p> <div data-bbox="480 888 902 1226" data-label="Image"> </div>	<p data-bbox="1089 474 1224 499">Equipment:</p> <ul data-bbox="1089 506 1349 789" style="list-style-type: none"> - recording forms and logs - maps - pens, pencils etc. - compass - high visibility tape - sketching equipment - camera - GPS <ol data-bbox="1089 827 1382 1654" style="list-style-type: none"> 1. Each team will discuss and propose what they think is the most efficient way to scan this particular area. 2. Teams will then carry out their scanning plan, noting any heritage features and marking them. 3. When the area has been walked and scanned, teams will then fill in Archaeological feature forms, photograph and sketch the area and setting of the heritage. 4. The teams must take this opportunity to ask lots of questions of the trainers and raise any problems or issues!
	Time: 4-5 hours

Step 10

What to do with the Forms, Photos, Sketches and Rubbings when you get back from the field?



Who can help?

WAPDA staff	The Chilas Project Office will be in a space kindly provided by WAPDA; if there are problems about storage, computer access etc. they may be able to help.
Project Liaison	The Project Liaison is responsible for making sure that all the data is stored safely and is sent or carried to the Project Office in Lahore at regular intervals. He is the person to ask about problems that need to be answered by the Project management.

Activity type: Office Exercise	WORKSHEET 6
Title: Organizing filing and storage systems for the data	Location:
Objectives: To make group decisions and design an effective and manageable system for downloading and storing all the data and making sure it gets safely to the Project Office in Lahore	At Project Office
<p>A system which is planned by all the participants is more likely to work than one designed in advance by the project management.</p> <p>The trainees have learned the field procedures, practiced them and produced some sample data. They now have a clear idea of what kind of data will be produced and how they need to be organized – they will work with the trainers to set up a simple system in the Chilas Project Office that allows quick and reliable retrieval of information.</p>  	<p>Instructions:</p> <p>Equipment:</p> <ul style="list-style-type: none"> - data collected during this Training workshop - field equipment and materials - forms, logs and master lists - office stationery and equipment - computers and printer <ol style="list-style-type: none"> 1. Trainees and trainers will sit together in the Project Office space and discuss what the easiest and most efficient ways will be to store data from the project. 2. Identify any additional storage facilities or equipment is needed 3. Make some decisions about who will take responsibility for doing what ! 4. Make a chart or diagram showing how this system for organizing and retrieving data is going to work and hang it on the Office wall as a reminder.
Sources:	Time: 3 hours
	