

# Quebrada de Humahuaca (Argentina)

### No 1116

### 1. BASIC DATA

State Party: Argentina

Name of property: Quebrada de Humahuaca

Location: Province of Juyuy

Date received: 31 January 2002

Category of property:

In terms of categories of cultural properties set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of Operational Guidelines para 39, it is also a *cultural landscape* and possibly also a *cultural route*.

Brief description:

The property follows the line of a major cultural route along the dramatic valley of the Rio Grande, from its source in the cold high desert plateau of the High Andean lands to its confluence with the Rio Leon some 150 km to the south. The valley displays substantial evidence of its use as a major trade route for people and goods over the past 10,000 years.

#### 2. THE PROPERTY

#### Description

The Quebrada de Humahuaca is a long narrow valley some 155.4 km in length carved out by the Rio Grande. It is flanked by high mountain ranges and stretches from the cold high desert plateau of the High Andean lands, where the river rises, to the wide warm humid Jujuy valley to the south-east.

The valley has provided a natural route for people to travel from the time of hunters and gathers right through to the present day. Also through its sub-valleys it linked the numerous tracks from the forest areas with the main arterial route, thus funnelling the resources of the uplands towards the plains.

A huge number of settlement sites testify to its significance both as a major route and as a place for substantial agricultural enterprise. The diversity of settlement also reveals the storey of the valley's role in the unfolding history of this part of South America.

The site covers an area of 172,116.44 ha. There are around 28,000 inhabitants living mainly in the three towns of Tumbaya, Tilcara and Humahuaca.

The key aspects of the site are the network of routes through the valley. These encompass remains of ancient tracks, revetted roads, a railway and finally tarmaced roads. Scattered along the valley's 150 km length are extensive remains of successive settlements whose inhabitants created and used these linear routes. They include:

- Prehistoric hunter/gatherer and early farming communities, 9000 BC to 400 AD;
- Large structured agricultural societies, 400-900 AD;
- Flourishing pre-Hispanic towns and villages, 900 AD 1430-80 AD;
- Incan Empire, 1430-80 1535 AD;
- Spanish towns, villages and churches, 1535-93 1810 AD;
- Republican struggles for independence, 1810-20<sup>th</sup> century.

The site also possesses other tangible and intangible cultural qualities including:

- Rituals and oral traditions;
- Shrines;
- Rock Paintings.

These are dealt with in turn:

Prehistoric hunter/gatherer and early farming communities, 9000 BC to 400 AD: The earliest evidence for paths and trackways (some of which are still in use) are associated with the use of caves and cave shelters high up in the mountains. 6 caves, decorated with both petroglyphs and pictographs, contain evidence from beads and arrows for their use as shelters. Associated with the caves are lithic workshops, lower down on the river terraces, where the stone was worked for axes and arrow-heads. 27 workshops have been located.

Between 1000 BC and around 400 AD it seems that settled farmers gradually displaced the hunter-gathers but still lived at high level and made use of the caves. 12 settlements have been identified with circular or elliptical houses built on stone foundations. At this early period, it seems that the most important routes were the lateral ones across the valley, linking east with west and the Chaco with the Pacific coast of Chile.

Large structured agricultural societies, 400-900 AD: Evidence for the five hundred years following 400 AD shows a distinctive demographic change. The population increased and settlements, now much larger, moved down to foothills immediately above the alluvial plain. House plans also showed a change to square. Around 20 sites have been found dating to this period and stylistically they show links with the wider Andean areas of Tiwanaku and the sub-Andean lands of San Pedro de Atacama, with whom trade links were established. In this period is the first evidence for extensive caravan traffic in trade goods.

Flourishing pre-Hispanic towns and villages, 900 AD - 1430-80 AD: This period reflects the final flourishing of the local settlements before the arrival of first the Incas and then the Spaniards. Numerous fortified towns, known as *pucaras*, were built on prominent eminences above the valley floor along a 50 km stretch of the valley. Each settlement consisted of densely packed and often contiguous substantial stone-built houses. A key aspect of the *pucaras* was their inter-visibility – the settlements being clearly sited for visual interconnection along the valley.

The 30 pucaras are associated with complex stone-walled, terraced field systems, based on irrigation techniques. Their layout reflects a sophisticated territorial organisation designed to optimise the agricultural resources of the valley. They are also on a grand scale, the major sites covering 4,000 ha with the stone fields thus extending along the valley over many kilometres. Many of the fields are visually distinctive for their peculiarly endemic vegetation of teasels or columnar cactus.

Trade between the towns and with the pastoral caravans who moved through the valley led to an intense flow of peoples and goods along the main routes.

As a group, these settlements and their field systems form a dramatic addition to the valley landscape and one that seems to be unrivalled in the Andean area.

**Incan empire, 1430-80 - 1535 AD:** The expansion of the Incan Empire in the 15<sup>th</sup> century curtailed local development. The period of the Inca Conquest from 1430-1535 AD is reflected in the introduction of new methods of agricultural production, such as dairy farms, and different building methods using mortar between the stones. Some new settlements were built; in other areas the Inca and pre-Inca remains sit side by side.

Quarries and goldmines were opened and specialised craft workshops introduced to provide goods for export to the Incan Royal capital of El Cuzco. To facilitate this new trade, revetted roads were constructed raised slightly above the plain to allow the passage of traffic through out the year. Along the road, hostelries known as *tambos* were built for travellers to rest.

Part of what is known as the Incan 'Royal Road', runs along the valley linking the valley into the vast Incan road network which extended form Chile to Ecuador. It remained in use until the early  $20^{th}$  century.

**Spanish towns, villages and churches, 1534-93 to 1810:** In the 16<sup>th</sup> century, the valley became the Spanish access route from Alto Peru to the interior. There was strong resistance to the invaders with attacks from the pucaras.

The Spanish opened silver mines and introduced horses as pack animals alongside traditional llamas. Two large ranches or haciendas were set up. Spanish activity led to a huge increase in trade with the route through the valley being used for animals, goods and also slaves.

They also built planned settlements constructed around churches and squares or plazas. The Churches, often the main monumental building in the settlements, were built in two main styles, the earlier 'mudejar' style with steepletowers, and the later 'Italian Mannerist' style known as *Gesé* without towers. Although many of the churches have been rebuilt, sometimes more than once, some still retain earlier portable paintings and altarpieces brought from previous buildings.

The single storey houses in the Spanish settlement were constructed of local materials but often had the street facades decorated with pilasters.

Alongside the Spanish settlements the local traditions of building and farming in irrigated terraced fields continued. These local settlements became known as 'Indian' settlements. Their distinctive architecture of adobe construction on a stone base, with extensive walled yards, is still extant today.

**Republican struggles for independence, 1810 to 20**<sup>th</sup> **century:** The valley proved to be an essential route for the transit of troops in the struggle for independence and was the scene of ferocious combats. Forts were set up and many of the local population were forced to flee. And again in 1936 during the war against the Peruvian-Bolivian Confederation, the valley was of strategic importance.

Nevertheless, during this time there was much increased trade up and down the valley as droves of mules brought in European goods and took out the products of the Potosi silver mines. At the end of the 19<sup>th</sup> century the extraction of salt-peter in the trans-Andean desert led to a substantial increase in east-west traffic, which continued until 1929-30.

The arrival of the narrow-gauge railway in 1900 had a profound impact on the driving of flocks and herds and also led to the development of new urban centres as trade once again increased.

**Rituals and oral traditions:** The valley shows evidence of important rituals connected with travel and life along the routes. Visitor staying in local hotels are still called *pasajeros* or 'passengers' rather than guests.

The long and extensive cultural interchange in the valley has left its mark in several intangible ways. There is still a vibrant oral traditions of ballads, songs and festivals; some display a fusion of Christian and pre-Christian beliefs, while other pre-Christian beliefs, such as the Mother Earth or *Pachamama* tradition, co-exists with the Catholic faith.

The Spanish language spoken in the valley reflects linguistic structures of Quechua; while in music, indigenous musical instruments are successfully mixed with Spanish guitars, and Quechua tunes combined with Aymara music introduced by the Incas.

**Rock Paintings:** The extensive rock painting sites in the valley – some 26 have been identified – show evidence of the use of caves and shelters from the time of the hunter gathers right down to the arrival of the Spanish. In some caves, early petroglyphs and pictographs of geometric and zoomorphic shapes, peoples and animals, are found alongside representations of the Spanish on horseback confronting warriors on foot.

### History

The history of the valley begins with evidence of hunter-gatherer societies living in caves and cave shelters around 10,000 BCE. There probably took part in seasonal migrations.

Deteriorating climate between the 6<sup>th</sup> and 3<sup>rd</sup> millennium BCE, which heralded drought conditions, seems to have deterred further settlement until an increase in rainfall after 2500 BC, encouraged new groups of people to re-colonise some of the earlier caves.

These new settlers combined hunting with agriculture and this restricted their mobility. After about 100 AD villages emerged, and linked to these, traffic between them and with different ecological areas. Caravans of llamas began

to transport goods such as obsidian, turquoise, ceramics and the hallucinogenic drug *cebil* from the eastern forests.

After around 700 AD an increase in population, linked to the improvement agricultural techniques, led to the development of large settlements near the river. Surpluses were traded with neighbouring areas and perhaps much further afield. These settlements certainly reflected the rising power of the Tiwanaku State around Lake Titicaca and there is evidence of trade between the two.

After 1000 AD, and perhaps prompted by the collapse of the Tiwanaku state, there was yet another period of social change that heralded the final flowering of the local Quebrada culture. The low settlements were abandoned and towns built on higher rocky outcrops. Known as *pucaras* (fortresses), they were characterised by densely grouped housing for growing populations. The separate pucaras may have been the seats of the heads of different ethnic groups within the valley.

An increase in population, and a huge increase in trade, led to the cultivation of vast areas along the valley and on the lower slopes of the mountains. Caravan traffic grew in volume and also in extent with the valley becoming linked to the forests, to the Jujuy valley, to the south of Bolivia and to the neighbouring parts of Chile.

Between 1430 and 1480, the expansion of the Incan Empire curtailed any further local development. Almost certainly the Incan conquerors arrived along the very trade routes they sought to control. The Incans were interested in exploiting minerals and in setting up large agricultural enterprises to export the products of both to their heartlands. New settlements were established to facilitate this trade and the transport system improved through the construction of a complex system of new engineered roads that linked Quebrada with the formidable transport system that crossed the Incan Empire from Ecuador down to Chile and Argentina – along a space of some 5,000 miles.

In the 16<sup>th</sup> century the valley gradually succumbed to new conquerors, the Spanish. As with the Incas, the Spanish wished to control the strategic trade routes and harvest the resources of the valley. Trade increased along the existing road network with silver, cattle and cotton being exported and European goods imported.

A huge demographic change took place as many of the inhabitants fell victim to new diseases and immigrants from Spain begun to settle in the valley in new settlements. Trade increased and by the 18<sup>th</sup> century a line of staging posts was established along the main route through the valley and further afield, as part of the link between Buenos Aires and the High Peruvian area.

For 14 years from 1810, Quebrada played a crucial role in transferring troops and armaments to and from High Peru in the fight for Independence which was achieved in 1816, and subsequently in the 'civil wars' and border clashes between the new states. In peaceful times in the 19<sup>th</sup> century, trade increased, particularly after the opening of the salt-peter mines in the trans-Andean desert. The character of that trade changing markedly with the arrival of the railway along the valley in 1900.

Finally, in the 20<sup>th</sup> century, the main valley route became part of the Pan-American north-south road and thus the

valley continues to play an important role in linking the Atlantic with the Pacific.

#### Management regime

Legal provision:

The National Constitution of 1994 provides the overarching framework for the protection of both the cultural and natural heritage, through establishing the right to protection in order to enjoy a healthy and balanced environment. Other relevant Acts are:

- Decree of 2000 which declared as National Historical Monuments the archaeological deposits of Coctaca, Los Amarillos el Pucara de Tilcara and La Huerta in Quebrada;
- Resolution of 1993, whereby Quebrada de Humahuaca and its integral villages were declared of National Interest:
- Decree of 1975 whereby the two villages of Purmamarca and Humahuaca were declared Historical Places:
- Decree of 1941 which protected the six key chapels and churches as Historical Monuments;
- The Act of 1913 which protected archaeological and palaeontological deposits as assets of scientific interest.

Further Provincial Laws protects folklore and craftsmanship as well as heritage of provincial importance. Specifically a Decree of 2000 gives high priority to pursuing the inscription of Quebrada as a World Heritage Site and a Resolution shaped the composition of the Technical support Team for the proposed World Heritage Site (see below).

Overall therefore, Quebrada is well protected by both general and specific legislation designed to protect its discrete cultural heritage and pursue wider protection through World Heritage status. There is also a legal framework for the coordinating management structure.

Management structure:

There are three main levels of management.

At the National level, the National Museums and Monuments and Historical Places Committee are responsible for the designated national urban, architectural and archaeological heritage. It is advised by the Argentinean Committee for the National Heritage.

At the Provincial level, the Secretariat of Culture is responsible for a broad range of cultural heritage, supported by Direccion de Antropologia, Arqueologia y Folklore; Archivo Historico Provincial; Museuo Provincial de Arcqueologia; Museo Historico Provincial; Complejo Patrimonio Cultural de Hornillos, and the Museo Soto Avendano. Alongside the Secretaria de Tourismo is responsible for development and planning of tourist activities and their necessary resources.

At the Municipal level, the Municipal Committees are responsible for heritage within their areas.

Coordinating the activities of these various other authorities is the Comision del Sitio, or Site Committee for the World Heritage Site. It is responsible for the preparation and implementation of 'rules and strategic actions for the preservation, defence, care and use of the asset'. The Commission is supported by a Technical Team of specialised professionals in the different heritage subject matters. As well as being involved in planning and programming, they are responsible for advice on records and monitoring.

The Commission liaises with the following bodies: Consejo de Notables (Council of Notables); Comision Asesora (Advisory Committee in scientific and technical matters); Comisiones del Sitio Locales (the local Site Committees which bring in 'communidades aborigenes'); and the Centros de Interpretacion (Interpretation Agency).

An impressive project for the production of a Management Plan has been initiated. This includes developing:

- Strategic Plan for Integral Management
- 'Lets all of us together prepare a school for all' Education Project
- Tourist Development Plan
- Sustainable Tourist Development for rural communities
- Integral use of Solar Energy in scattered communities
- Environment Education Programme
- Provincial Emergency Plan
- Community Involvement Workshops for main sentiments along the route
- World Heritage TV show
- Weekly newspaper column on World Heritage

The first two phases of this project have now been completed and a detailed progress report - amounting to some 40 pages has been sent to UNESCO. In phase I, workshops were held in the main settlements to present the World Heritage approach, to discuss implications, to look at problems within different groups of peoples, to identify roles for the key players and to look at an overall vision for the property. Phase II has begun to identify risks, to evaluate and promote the conservation and restoration of the architectural, archaeological and the natural heritage, as well as looking at the education programme and how to pass on knowledge about the whole World Heritage process. Local commissions have been set up in the nine settlements along the route with key players identified and the main organisations represented. Overall, a Culture Heritage Agency has also been established.

Thus a very systematic approach has been taken to setting the groundwork for a responsive and involving management process. In addition progress has already been made on specific items such as getting the agreement of local bishops to opening churches 8 hours a day with local guides; creating a Farming and Craft Fair, and merging the Culture and Tourism Secretary's Offices.

#### Resources:

Funding for maintenance, conservation restoration and development comes from national, provincial, and local government sources and from non-governmental sources.

In 2001, the National Government allocated 300,000 \$ to Quebrada de Humahuaca, while the Provincial administration gave 171,011 \$. In addition the National Secretary of Tourism allocated funds for diffusion of cultural heritage and further funds came for infrastructure improvements.

In response to the major threat of floods, funding for a short term Strategic Plan for the handling of the Rio Grande basin has been allocated 94,400,000 \$ for the three years 2002-2005.

Specific project funds are allocated by the National Commission of Museums, Monuments and Historical Places. In 2002 they gave 300,000 \$ for the restoration of chapels and have committed 30,000 \$ per annum for the years 2002-2005. In addition the Commission works to gain private sponsorship for projects it identifies, and in 2002 raised 48,850 \$ for Los Amarillos.

The management process being put in place seems to be very effective in achieving conservation gains indirectly by working through existing organisations. Thus the indirect resources harnessed for the site are considerable.

# Justification by the State Party (summary)

The site is put forward as a cultural itinerary – the first such nomination for Latin America. Quebrada de Humahuaca displays evidence for the use and intervention of man from the time of the first hunter-gatherers right down to the present day.

The valley displays a great wealth of settlement evidence previous to the arrival of the Spanish. In particular are the extensive remains of stone-walled agricultural terrace fields at Coctaca, thought to have originated around 1,500 years ago and still in use today. These are associated with a string of fortified towns known as pucaras. The field system and the pucaras together make a dramatic impact on the landscape and one that is unrivalled in South America.

The valley also displays several churches and chapels and a vibrant vernacular architectural tradition.

Although the value of the valley as a trade route is brought out in the descriptive text, it is, surprisingly, not spelt out in the overall justification for nomination.

#### 3. ICOMOS EVALUATION

### Actions by ICOMOS

An ICOMOS evaluation mission visited the site in July 2002.

#### Conservation

#### Conservation history:

The National Museums, Monuments and Historical Places carried out an inventory of cultural heritage in 1998 and 1999 and this information is available on the Internet.

Allied to this inventory, a system of monitoring has been put in place. This is a complex system, which combines evaluating the state of repair of assets with an assessment of frequency of intervention to keep the property in a stable condition. Assuming, say, doors last 50 years and roofs 7 years, for instance, an estimate can be made of the likely building work over the next hundred years and thus the overall funding required.

#### State of conservation:

The most visible remains of the main Inca route have been restored. Many of the chapels and churches along the route have been restored recently using traditional materials. As for the lived in villages and towns, these seem mostly to be up to an acceptable conservation level.

Of the key issues is the way some of the churches were restored or re-built in the 1950s and 1960s when the work was perhaps more thorough than would be undertaken now.

### Management:

A detailed Management Plan process has been set in train. Although this has not yet produced a final management plan, perhaps equally importantly it has put in place a coordinated management structure along the valley linking local, provincial and national levels on an on-going basis and drawn in considerable funding. Moreover it seems to have allowed an admirable degree of local participation, which is reflected in local support for this nomination. As part of the management plan, a number of projects have been initiated which should allow the World Heritage status to begin to deliver real benefits along the valley not just in terms of conservation and restoration but in social and cultural terms – through cultural tourism, alternative energy, education and training projects.

Once completed, the Management Plan should be submitted to the World Heritage Bureau.

An unknown quantity in the nomination is the scope and extent of the major flood alleviation project. As this has not yet started, it is suggested that this should be interrogated in a similar way to any other major project, which might impact on an already inscribed site. It is suggested that the State Party be thus asked to undertake a full environmental impact assessment before the project commences.

#### Risk analysis:

The following threats were identified in the nomination:

- Flooding
- Urbanisation
- Intensification of Agricultural processes
- Electric power lines
- Re-building/building extensions
- Increasing tourist pressure

These are considered separately:

**Flooding:** Flooding seems to happen most years caused by excessive rainfall and local landslides. The Rio Grande is an area of high seismic and volcanic activity, both of which impact on flooding. Flooding also seems to be exacerbated by illegal tree felling and other changes to the vegetation.

A large sum of money has been set aside for a major shortterm flood defence project. However no details of what this consists of are given. It is thus not clear whether the project is to mitigate the problem through reversing trends in environmental change, or is to do with hard-landscaping and trying to control the flow of the river. The scope of this project needs clarification, to assess the impact on World Heritage values.

A Provincial Emergency Plan has been put in place to deal with floods and other natural disasters.

**Urbanisation:** A package of creeping changes is listed, such as non-local building materials, alteration to roads, the installation of satellite dishes, new factories. It seems these are mostly evident on the fringes of the towns.

**Intensification of Agricultural processes:** The recent closure of mines in the valley has led to more people gaining a living from agriculture and this has led to intensification of processes and the increased use of fertilisers.

Antennae/Electric power lines: A major power line project was successfully stopped by community pressure. A growing proliferation of aerial and dishes and smaller power supply lines continue to cause concern. The need to try and avoid power lines spreading to remote areas has been accepted, and this is linked to the project to deliver alternative energy supplies to remote areas. A move is being made to try and stop antennae being sited on prominent places.

**Re-building/building extensions:** Much of the character of the towns and smaller settlements is linked to the prevalence of single story buildings. Growing prosperity is putting pressure on this tradition and a number of vertical extensions have appeared in some of the towns. As yet there seems to be no effective control for the key areas as there are no unified building codes. It is intended that this issue will be addressed by the Management Plan.

**Increasing tourist pressure:** There is some evidence that over-visiting is becoming a problem in some areas with excessive wear and tear on paths and some archaeological sites. This is partly it seems because existing visitor management tools are not always being enforced. Another

issue is the apparent debasement of local crafts through overexploitation by visitors.

### Authenticity and integrity

The Quebrada de Humahuaca valley is a combination of different aspects of settlements and transport routes which together make up the cultural route and the cultural landscape. Overall the valley still retains a high degree of integrity but this is made up of a combination of discrete factors, each of which need to be assessed individually.

The archaeological sites seem to be well preserved. Most of the remains of the later abandoned settlements are likewise reasonably intact and have a high integrity. There is one exceptions and that is the Pucara of Tilcara which was partially reconstructed in the 1940s and thus now has low integrity.

Many of the field systems associated with the pucaras are still in use and thus have integrity as part of a continuing agricultural system.

Spanish Churches still retain their overall form and particular construction techniques, although a few seem to have been over restored.

The cores of the main settlements still hold onto their distinctive low-rise form and traditional spatial planning but around the margins show diminishing authenticity in response to development pressures. On the other hand, there is evidence that the use of introduced modern materials is being countered by an increasing interest in the use of traditional local materials and techniques as a means of asserting identity.

### Comparative evaluation

The nomination notes that 'not too many sites have been found which can be compared to this route'. Two possible comparators in South America are the Valle de Colca in Peru and San Pedro de Atacama in Chile.

The Valle de Colca is an inter-Andean valley in the north of Peru. Its river runs for some 200 km from the Andes to the Pacific. Like Quebrada de Humahuaca, it shows evidence of the way societies have used its resources over around 10,000 years. There are seventeen traditional towns in the valley, many with colonial churches. Also like Quebrada de Humahuaca, the valley was one of the great emporia of agricultural production in pre-Hispanic times. However there are also important differences. The Valle de Colca has suffered from the pressures of tourism, and the modernisation of agricultural production has led to the abandonment of many traditional terraces, which in turn has led to erosion. Much of the landscape is thus now a fossilised landscape rather than one still living.

San Pedro de Atacama in the dry north of Chile is on the western side of the Andean chain and an example of desert culture. Like Quebrada de Humahuaca it shows long evidence of human activity but one that displays a battle for survival rather than agricultural richness. Water, always at a premium, is now needed both for agriculture and for mining and the mining projects are threatening the survival

of agriculture. Although San Pedro de Atacama was used as a trade route, the scarcity of resources limited its use and most trade seems to have been one way, rather than the two-way exchange that was such as feature of Quebrada de Humahuaca.

The nomination does not consider comparators outside South America. Looking further afield, it is difficult to find a discrete valley, which shows such long evidence of a cultural route, without major periods of decline or abandonment, where the valley routes were linked into a much wider network, and where the valley is still part of a main transcontinental highway.

Perhaps the best comparators are valleys in the north of Pakistan. There tracks from Baltistan feed north to the silk routes of China and south to the plains of Pakistan and northern India. The Karakorum Highway has revitalised the links and many of the villages and towns along the route still display extensive evidence of traditional land use, dramatic terracing and much evidence of early settlement.

Further east, part of the main route in China linking Sichuan with Lhasa still retains its importance as a modern-day route as well as displaying much evidence of early settlements and again, in parts, dramatic traditional settlements with terraced fields stretching way up very steep hillsides.

What all three display are long continuity of use, a strong persistence of traditional culture, and distinctive agricultural solutions in mountainous terrain. What distinguishes Quebrada de Humahuaca is the fact that it was not only a route linking the uplands to the lowlands but within the valley were resources that were a key part of the trade. What now makes the valley significant is also the fact that it has survived reasonably intact whereas other valleys in South America have atrophied in recent decades.

#### Outstanding universal value

General statement:

Running along the Quebrada de Humahuaca valley and fanning out into its hinterland is a network of routes that have played a crucial role not only in the development of the valley itself but also of the wider areas of central South America. Successive waves of peoples have gained access to the rich resources of the uplands along the valley routes. They have also allowed the development of trade, which in turn fostered the growth of large-scale agricultural societies, and of settlements to service trade.

The strategic importance of the trade routes led to the development of a sophisticated pre-Hispanic territorial organisation in order to optimise the resources of the valley and promote trade between the uplands and the lowlands. It also led to conquest first by the Incas who wished to control mines, crafts and agricultural produce, and later by the Spanish who also exploited mines and dairy herds, both of whom added to trade and the infrastructure to optimise that trade.

The rich cultural remains of this long legacy of movement of peoples, goods, and ideas over some 10,000 years is manifest in a collections of settlement sites, reflecting occupation of the valley from pre-historic times, to the present day. Particularly notable are the pre-Hispanic and pre-Incan remains of large scale agricultural societies at more than a dozen prominent sites in the valley which overall created a landscape of fortified towns and extensive stone-walled fields, unrivalled in South America.

Evaluation of criteria:

The Quebrada de Humahuaca is nominated under *criteria ii, iii, iv* and *v*:

*Criterion ii:* The valley has been used over the past 10,000 years as a crucial passage for the transport of people and ideas from the high Andean lands to the plains, thus providing a link between the highlands and lowlands and indirectly between the Pacific and the Atlantic.

Criterion iii: In defence of this criterion, the nomination sites the disappearance of successive societies as they are replaced by others. Such a sequence isn't in itself of universal value. This criterion is not seen to be relevant unless one can cite the fact that the long valley route is the cultural tradition that has now lost its economic and strategic value — and this is not put forward in the nomination. Moreover the nomination stresses the continuing functioning of the routes along the valley as a continuing part of cultural history.

Criteria iv and v: Both these criteria can be justified in the same way. As a whole, the valley reflects the way its strategic position has engendered settlement and agriculture and trade. Perhaps most important amongst the settlement phases is the pre-Hispanic and pre-Incan settlements which display a complex territorial organisational strategy designed to position settlements advantageously along the valley and allow the development of intensive agriculture through sophisticated irrigation technologies.

As a group, the defensive settlements and their associated field systems form a dramatic addition to the landscape and one that can certainly be called outstanding.

#### 4. ICOMOS RECOMMENDATIONS

### Recommendation for the future

Once completed the Management Plan for the Site should be submitted to the World Heritage Centre.

As soon as possible the State Party should carry out an environmental assessment of the proposed flood defence project in order to gauge its impact on the outstanding universal values of the valley.

The possible nomination of a trans-national Incan cultural route has been mooted. The current nomination of the Quebrada de Humahuaca valley routes would link well into such a nomination.

### Recommendation with respect to inscription

The property should be inscribed on the World Heritage list as a cultural route on the basis of *criteria ii, iv* and *v*:

*Criterion ii:* The Quebrada de Humahuaca valley has been used over the past 10,000 years as a crucial passage for the transport of people and ideas from the high Andean lands to the plains.

Criteria iv and v: The Quebrada de Humahuaca valley reflects the way its strategic position has engendered settlement, agriculture and trade. Its distinctive pre-Hispanic and pre-Incan settlements, as a group with their associated field systems, form a dramatic addition to the landscape and one that can certainly be called outstanding.

ICOMOS, March 2003