

Brazil's decision to pay for the development of a route linking the country with Peru's Pacific ports is viewed by many as vital for the economies of both countries.

But those who live along the route fear that, while it will bring prosperity for some, the road will also bring social and environmental problems for others.

Dominic Hamilton reports

THE ROAD TO RICHES THE ROAD TO RUIN

Abraham Cardozo's arm sweeps over the cut planks: mahogany, shihuahuaco and tropical cedar stacked in neat piles. In places, the wood reaches higher than our heads. A young woman checks the inventory; another half dozen are busy at their various stations. The open warehouse, baking in the tropical sun, is a hive of activity: screeching, sawdust, sweat and the occasional shout.

"I'm the third generation of my family to work in this area," Cardozo tells me, his thick-set frame testament to years of hard, physical labour in the forests. "First, it was the rubber boom, then the gold rush, then logging. We've been through it all. This place was completely abandoned for 40 years. I didn't see a television until I was 17."

Beyond the warehouse, trunks more than a metre in diameter await their turn in rows some six trunks wide and six deep. The trees come from the 98,500-hectare concession that Cardozo's company owns along the Brazilian border in the Peruvian department of Madre de Dios in the country's southeast. Later this year, Cardozo hopes his company will achieve Forest Stewardship Council certification for its products, only the second company in Peru to achieve this benchmark in sustainable forest management.

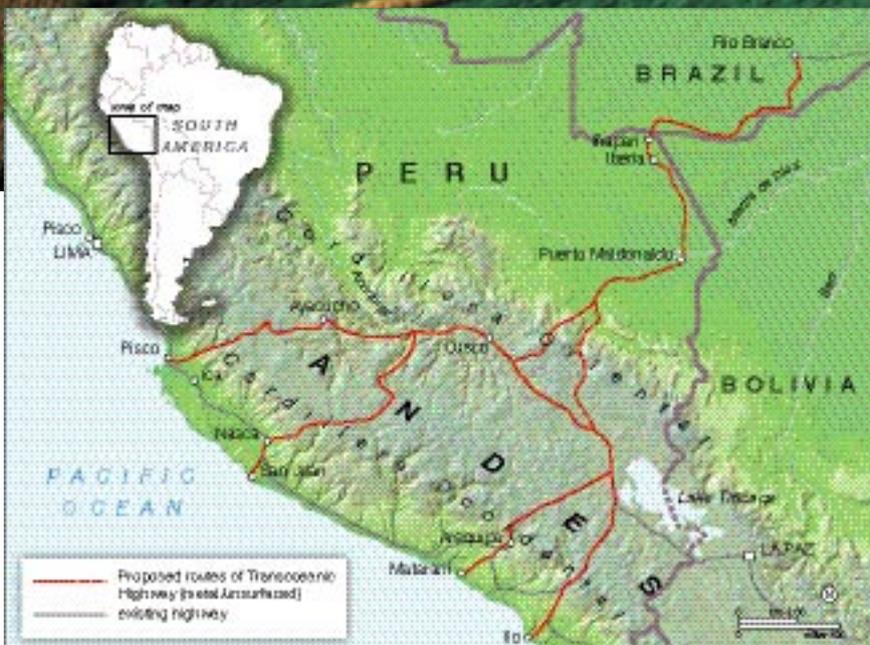
The outlook for Cardozo's company might be rosy, but there's a dark cloud on the horizon: the Interoceanic Highway. The paving, renovation and improvement of the road that connects Brazil with Peru's Pacific ports is one of the projects of the Initiative for the Integration of Regional Infrastructure in South America

(IIRSA). The initiative, which began in 2000 in Brazil, is aimed at physically integrating all 12 South American countries through transport, energy and telecommunications infrastructure.

The Interoceanic Highway, or *Interoceánica*, as it's known in Peru, is the first project to roll off the IIRSA mill. Total cost: an estimated US\$1.3billion (£0.7billion). So far, Brazil's National Development Bank (BNDES) has provided US\$400million for the segment between the Brazilian state of Acre and Cusco in Peru. Additional funding has come from the Andean Finance Corporation (CAF). Peru's former vice-minister of economy, Patricia Teullet, claims the road will eventually cost Peru a percentage point of its annual GDP.

The Brazilians' willingness to pay for the paving of a road from the Brazilian Amazon up and over the Andes and back down to the Pacific may sound surprising, but it's actually a national priority. At present, Brazil's Amazon products either have to be trucked all the way south, over the Andes to Chile's ports, or shipped from Amazonian or Atlantic ports and then around Cape Horn, both of which are expensive routes. With the coming of the paved highway, Brazil's central, northern and western exports – its tropical hardwoods, beef and, increasingly, its huge soybean production – will be able to reach the markets of the Pacific Basin faster and cheaper. The Peruvians hope that, in turn, their exports – including potatoes, coffee, wool and cement – will boom.

Brazil already sends 18 per cent of its exports to Asia. It's now the world's second-largest soybean producer and

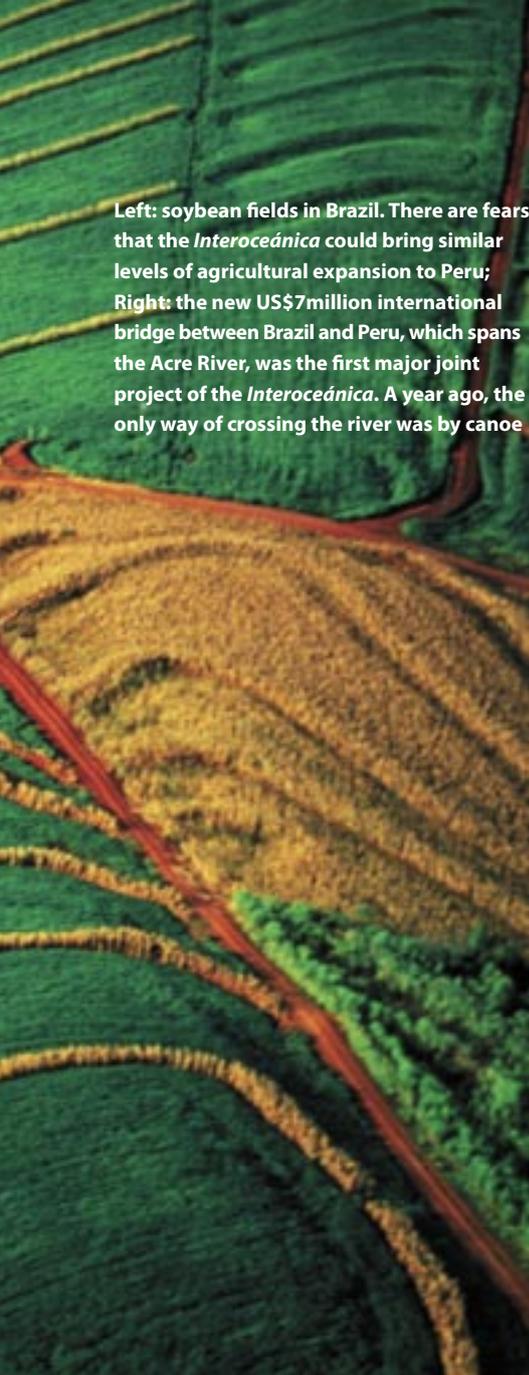


its major beef exporter. Both of these industries are responsible for the high rates of deforestation in Brazil's Amazon. Although overall deforestation is thought to have decreased recently, huge amounts of forest have been cleared and will continue to disappear. The western Amazonian state of Mato

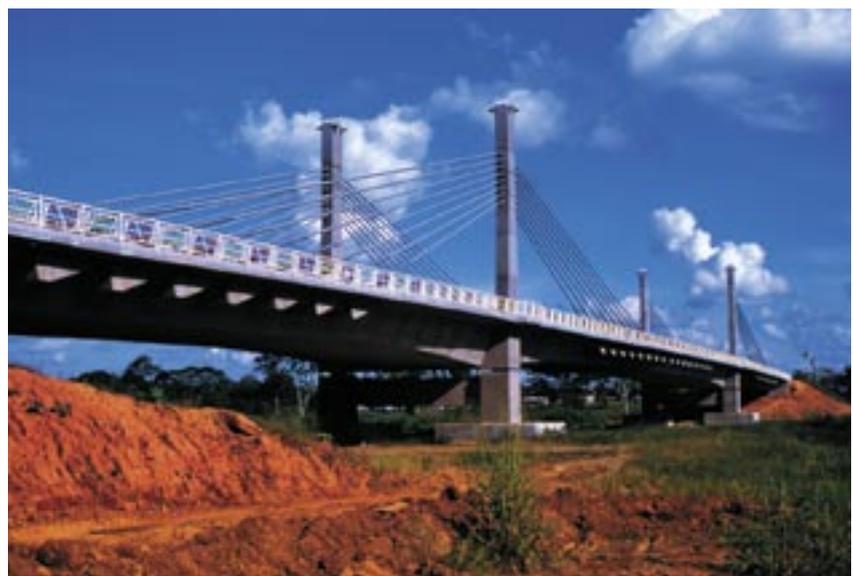
Grosso, about 1,500 kilometres west of Cardoso's concession, felled an area of rainforest equivalent to that of Belgium in 2003 alone. Deforestation along the road between Cusco, Puno and Madre de Dios' capital Puerto Maldonado nearly doubled between 1995 and 2005 to 360,000 hectares per year.

The fear is that the highway will not only increase the rate of deforestation in both countries, but will also increase the pressure on Peru's forests, especially if the country emulates Brazil's agricultural development. According to Brazilian lawyer Elsa Mendoza of IPAM, a São Paulo law institute, Brazil's road building, which began in earnest during the 1970s, has had serious environmental and social repercussions. In the western Amazonian states, 50-kilometre strips have been cleared on either side of the various trans-Amazon roads. "The impact isn't always immediate," she says. "It can take between three and five years for the true picture to begin to emerge."

Cardozo has mixed feelings about the future. "On the one hand, our transport costs will drop considerably," he says, possibly by as much as 30–40 per cent. "On the other, we'll have land invasions, tensions in the town and all of the



Left: soybean fields in Brazil. There are fears that the *Interoceánica* could bring similar levels of agricultural expansion to Peru; Right: the new US\$7million international bridge between Brazil and Peru, which spans the Acre River, was the first major joint project of the *Interoceánica*. A year ago, the only way of crossing the river was by canoe



Building bridges between nations

The *Interoceánica* project entails the construction and renovation of a total of 2,603 kilometres of roads connecting the Amazonian state of Acre in Brazil with the port cities of Ilo, Matarani and San Juan de Marcona on the southern coast of Peru. Around 20 bridges will be built along the route, including the 722-metre President Guillermo Billinghurst Bridge over the Madre de Dios River near Puerto Maldonado, Madre de Dios’s capital. This bridge alone is expected to cost around US\$22million.

According to Richard Díaz of CONIRSA, the mainly Brazilian consortium that won the concession for the Brazil–Cusco segment, the dry-season journey time for a car driving from the former Inca capital to the border will be reduced from around 24 hours to about 12. Construction of the segment will cost US\$440million and employ more than 1,500 people. “This is the biggest civil engineering project of its kind in Peruvian history. Nothing on this scale has been done before,” he says.

Before the consortium began work in March, this section of road was considered one of the worst transportation routes in South America. The journey time has already been reduced by about six hours. Bridges have been repaired, the surface of the road improved along its entire length and there are now road signs along the highway for virtually the first time. As well as speeding up the journey, these improvements have also reportedly reduced the number of accidents along the route.

negative aspects of development here. Already, there has been an invasion of private land down the road. The first ‘improvement’ to happen in the town near the workers’ camp has been a discothèque. We’re very worried about the road’s impact.”

Creaky infrastructure

The *Interoceánica* is seen as crucial to the integration of this forgotten corner of Peru. Transport costs will fall by a third and new job opportunities will be

created in the region. The whole of southern Peru is expected to feel the effect of the increase in trade. Outgoing president Alejandro Toledo has stated that the highway will result in an annual increase of 1.5 per cent of Peru’s GDP.

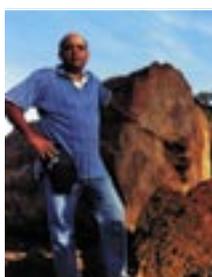
Along the section of highway that heads south to Puno and Lake Titicaca, electricity from the San Gabán hydroelectric complex will be brought down to Puerto Maldonado. At present, petrol tankers make their way down from the highlands laden with 15,000

litres of diesel each, the majority of which is used to power Puerto Maldonado’s electricity-generating plant. As a consequence, the town has the most expensive electricity in the country. Unsurprisingly, just about everyone with a light bulb in Puerto Maldonado supports the *Interoceánica*.

“Years ago, we started our crusade for a road that will allow us to develop,” Eduardo Zavala Cancho, the mayor of Tambopota Province, part of Madre de Dios, told reporters recently. “Now that the work has started, we’re grateful, because it opens up possibilities for hundreds of thousands of families in this part of the country.”

But there are doubters. “Madre de Dios is a very isolated department. Its infrastructure is creaky at best,” says Hernán Cuba Chávez, the Defensor del Pueblo or ombudsman for Puerto Maldonado. “We’re not prepared for

Right: Abraham Cardozo hopes that the planned improvements to the highway will cut his logging company’s transport costs; Far right: stacks of cut wood in Cardozo’s compound



INTEROCEANIC HIGHWAY



Above: the paving of many roads along the *Interoceánica* is expected to slash journey times, particularly during the wet season; Below: a petrol-tanker-cum-bus prepares to leave the town of Urcos in the Andean highlands. Trucks leave every day for the arduous journey down to Puerto Maldonado



the population migration that will follow in the highway's wake. The government's publicity campaign about the road has built up high expectations."

In the town of around 100,000, only 40 per cent of the population has access to running water. Only 70 per cent has access to electricity. "We have severe social problems, particularly with prostitution, child sex abuse and drug trafficking," Chávez says. "The highway is a national necessity, but it could very well exacerbate the problems we're already failing to address regionally."

The CONIRSA consortium responsible for the Cusco-Brazilian border segment, is going to some lengths to work

socio-economic and environmental aspects into its road-building programme. CONIRSA spokesman Richard Díaz says it has held dozens of meetings with local representatives, has created a 'Good Neighbour Committee' and is looking for sustainable solutions to development along the road. No-one is forcing them to do any of this. In fact, the BNDES lacks sound socio-environmental policies and regulations, and the CAF leaves applying any measures up to the awarding government.

The fear for the environment is heightened by Madre de Dios's staggering biological riches. The Tambopata River watershed, through which the road passes, is considered one of the world's most diverse ecosystems. In an area of 550 hectares (half the size of Richmond Park in Surrey) researchers have recorded 91 species of mammal, 570 bird species, 127 amphibian and reptile species and 94 species of fish.

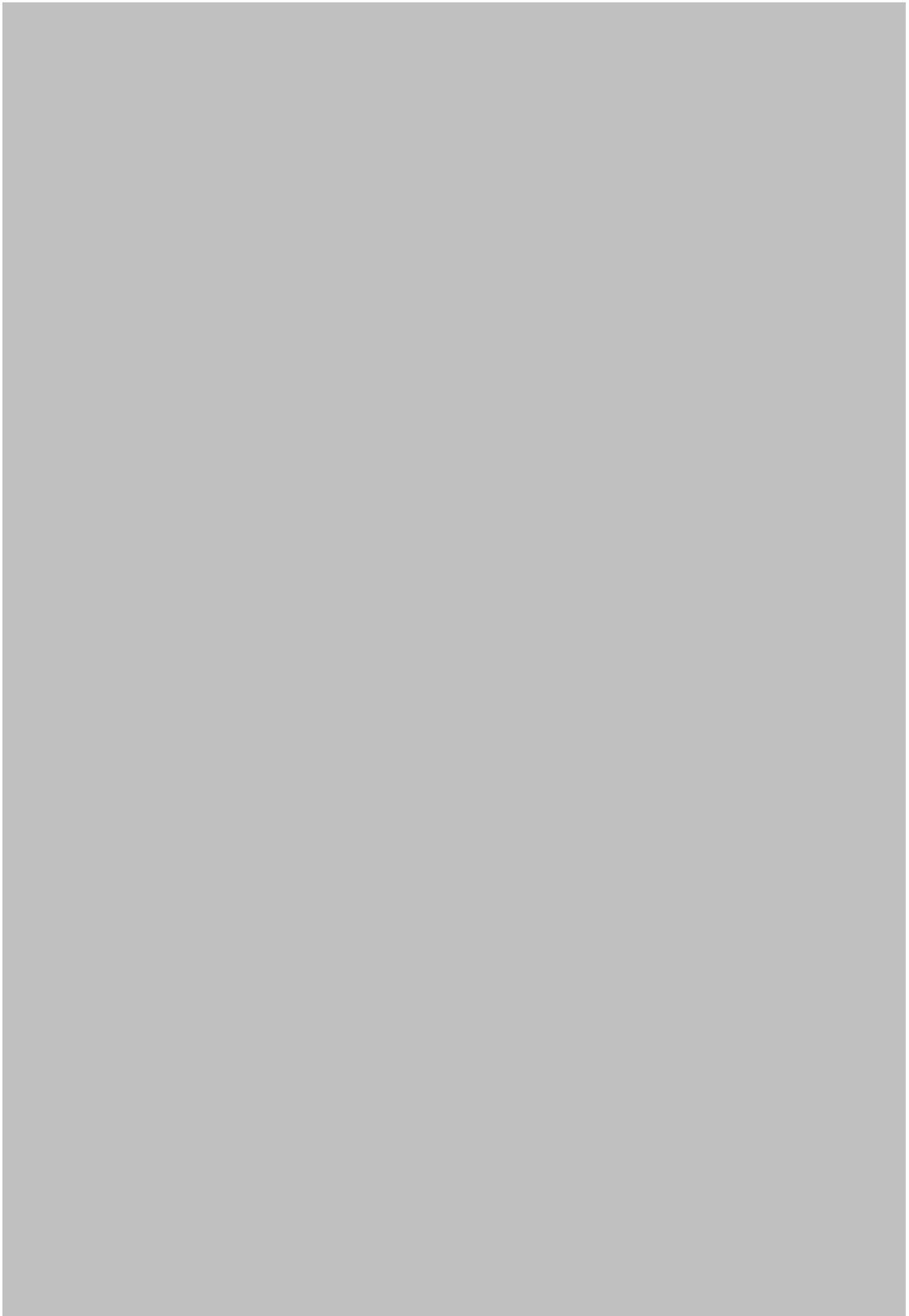
This natural bounty attracts tens of thousands of visitors every year. Numbers have increased seven-fold since 1994 to more than 40,000 visitors in 2004. The highway is expected to play an important role in the development of Peru's tourism industry, which generates an estimated US\$10million a year. Tourist entrance

fees are the lifeblood of the country's protected areas system, both regionally and nationally; before the tourists came, Peru had to find funding from international donors to maintain its reserves. With easier, cheaper access from Cusco and Lake Titicaca as well as from Brazil, everyone expects the industry to benefit greatly. But the road is a double-edged sword.

"We're already affected by migrants encroaching on our ecotourism concession. The situation will only get worse with the coming of the *Interoceánica*," says José Koechlin, the founder and chairman of award-winning tourism company Inkaterre, which has a lodge 45 minutes from Puerto Maldonado. "Expelling these people isn't the solution," he explains. "We're working on a series of social and environmental programmes with local communities, both Indian and colonisers, in order to help them use the forest more sustainably and to protect our long-term investment."

Non-stop trouble

The most commonly used road between Cusco and Puerto Maldonado is a brutal 500-kilometre route that travels through high Andean passes overshadowed by snow-capped peaks then winds down through cloud forest to the lowlands.



INTEROCEANIC HIGHWAY

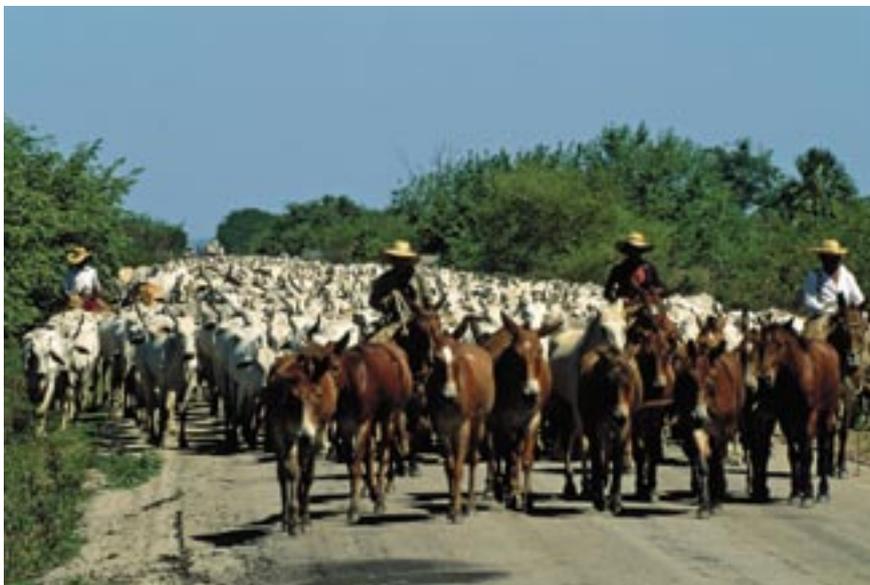
Until work began on the *Interoceánica*, the journey took the petrol trucks three days of non-stop driving in the dry season, up to seven in the wet. Their average speed – just 8km/h – gives an indication of how bad the road was.

The petrol tankers double as buses, and I travelled down from Cusco on top of one, inside a metal frame with 40 other people. I spent most of the 13-hour journey squinting into the dust and blindingly blue high-altitude skies.

“We get a day off every now and then, but usually only when the truck is in for repairs,” the tanker’s driver, Demetrio Farfán, tells me over lunch. Farfán has been driving the route for 34 years. He now shares the driving with his son. Relentlessly, they grind the gears, gun



Above left: the highway passes through the forests of Tambopata; **Above right:** the remote town of Marcapata, one of many expected to benefit from the highway; **Below:** a cattle drive, Brazil



the engine and swing the Volvo truck around the road’s endless bends.

Farfán doesn’t think the road paving will benefit Peru. “The Brazilians will out-compete us with their products,” he says. “The livestock farmers along the road lower down will go out of business.” Even the asphaltting of the road causes problems. “The towns along the way will lose out since the truckers won’t stop there anymore. The transport companies will be able to carry more, using bigger vehicles and even trailers, which means fewer of us doing the trip.”

I share the space at the front of the tanker-bus with Miguel, who drives earth movers at the gold mines of Huaypetue. Two days later, I reach the mines, which are about 200 kilometres from Cusco. As we approach, my impression is of a tropical version of the Somme. Vast hills of ochre sediment scar the landscape.

According to Carlos Purizaca of the

Peruvian National Institute of Natural Resources (INRENA) in Puerto Maldonado, the situation at Huaypetue is “calamitous”. The rivers for kilometres around have been contaminated with mercury as miners have turned over the gold-rich alluvial deposits that have washed down from the Andes. There is little or no control of the miners or the mining concessions. Every year, the industry pushes deeper into the forests, national parks and indigenous reserves.

Angel Rodríguez, the man in charge of the ballots on election days in Huaypetue, estimates that there are as many as 8,000 people in the town and about 10,000–12,000 in the district. Only 2,600 are registered voters, he says with a wry smile.

The price of gold is high, he tells me, around 70 soles (£12) a gram. According to government figures, Madre de Dios produced 15,000 kilograms of gold in 2004. “The road will be a big boost to

mining,” he says. “Everything will be cheaper; food, fuel, machinery. And it will be easier to get here. Many miners are migrants from the highlands who come to work a few months at a time.”

Positive planning

Many of the project’s negative impacts can be offset with planning. “The biggest lesson from the Brazilian experience is that we need to know the facts, the terrain and the soils. With that information, we can plan adequately for the road’s impacts. Management is essential in these fragile soils,” explains Carlos Loret de Mola, the director of the Consejo Nacional del Ambiente (CONAM), the Peruvian equivalent of the Ministry of the Environment.

INRENA and CONAM recently announced a US\$10million programme for the environmental and social management of the indirect impacts of the *Interoceánica*. “Nearly all of the areas close to the highway have been demarcated as concessions for certain economic activities, whether Brazil nut or timber extraction or tourism. We need to work on these, providing dignified jobs for people, directing them away from the illicit industries that currently plague the region.”

Loret de Mola is optimistic, despite admitting that the programme is ten years late. Much will depend on Peru’s macro-economic health, he claims. “If there’s an economic crisis, then things will go horribly wrong with the opening up of the region. If the hoped-for boom from oil, gas and minerals happens over the coming years, then we’ll be able to plan and manage the impacts of the road for the better.”