

# **USAID COUNTRY PROFILE**

# PROPERTY RIGHTS AND RESOURCE GOVERNANCE

# **PERU**

#### **OVERVIEW**

Peru's 29 million people benefit from the country's exceptional biodiversity and abundance of natural resources. However, these are threatened by land degradation, deforestation, water pollution and weaknesses in the management of Peru's forests, minerals and water. Furthermore, although Peru's formal laws recognize the autonomy and rights of the country's indigenous and peasant communities, these groups still have the highest rates of poverty in the country. In recent years, programs to develop cadastres and title rural and urban land resulted in roughly half the land being titled, including formalization of informal rights in urban and peri-urban areas. While women have received an increasing share of rights to agricultural land, they often participate very little in community governance decisions about land and other natural resources.

In spite of Peru's substantial water resources, the populated coastal plains have chronic water shortages. And while more than half of Peru's land mass is covered by forest, there is a 0.1% rate of deforestation from poor agricultural techniques and the expansion of cattle-ranching, infrastructure development, mining and illegal logging. Land conflicts are common in Peru, with the most visible arising from exploitation of minerals and timber. The formal system of dispute resolution is not considered accessible by most of the population, especially the rural poor.

Peru's economy grew at a robust pace in recent years, only slowing during the global financial crisis. Growth has increased the pressure on the natural resource base. At the same time, inequality remains a major concern. In 2005, half of Peru's population was considered to be poor, and 18% extremely poor. The rate of poverty for the 29% of the population in rural areas was double the rate in urban areas, with the most extreme poverty found in remote rural areas among indigenous Peruvians.

#### **KEY ISSUES AND INTERVENTION CONSTRAINTS**

- Strengthen formal and informal land-dispute resolution systems. As Peru continues its programs to title land, and pressure to develop natural resources, especially mineral resources, continues, tenure security will depend in part on the strength of institutions of dispute resolution. Accessibility continues to be a problem for Peru's formal judicial system. The country's informal systems have greater social legitimacy but lack authority and may not reflect the equitable principles of formal law. Donors could assist the government in strengthening both formal and informal institutions and creating a single, integrated framework to support the efficient and effective enforcement of land rights.
- Improve women's rights to and control over natural resources. Although Peru has a strong legal framework for women's rights to natural resources, rural women often have little say in community governance over such resources. Donors could engage the government and NGOs in raising awareness about the importance of women's participation in community-level resource governance. This could further strengthen women's rights and access to land and other resources, thereby improving livelihoods and economic gains for both women and children.
- Continue support of the forest sector. USAID's support for Peru's forest sector has provided concrete assistance to INRENA, forest communities, and concession holders. Forestland presents unique tenure issues, including competing claims to land and forest resources asserted by various interests. The continued decentralization of forest resource management is likely to require continued technical assistance and support for participatory processes designed to include local communities in mapping forest rights, establishing concessions, and decision making. USAID and other donors could continue their technical assistance and support to local communities in managing forest resources, and

could review achievements to date and lessons learned in order to inform continued and expanded support for this sector.

• Strengthen environmental and social protections in the mining sector. The private mining sector in Peru has grown rapidly over the past decade, resulting in steadily increasing extraction as well as threats to human health and environmental damage in mining communities. Donors could work with the World Bank in its recent initiative to assess, improve and monitor environmental and social conditions related to artisanal-scale, medium-scale and large-scale mining.

# FOR MORE RECENT LITERATURE:

http://usaidlandtenure.net/peru

Keywords: Peru, tenure, agrarian, land law, land reform, property rights, land conflicts, water rights, mineral rights

### **SUMMARY**

Peru is one of the world's most biodiverse countries, its territory including the Andes mountains, Amazon rainforest, and coastal plains. The land provides a wealth of natural resources, including diverse forest products, a variety of minerals, and abundant water. Peru's formal laws recognize the autonomy and rights of the country's indigenous and peasant communities, which have the highest rates of poverty in the country. The rural communities struggle to retain control of the land and natural resources that they depend on for their livelihoods. Peru is distinguished by its efforts at agrarian reform. In the 1970's the government acquired and redistributed a substantial portion of the country's agricultural land to landless and land-poor agricultural families. Beginning in the 1990s, the country undertook programs to develop cadastres and title rural and urban land. Roughly half the land was titled as of 2007, including formalization of informal rights in urban and peri-urban areas. A consolidated program plans to expand into more remote rural areas. Women have received an increasing share of rights to agricultural land over the last decades, but they often continue to lack the power to manage and control land and natural resources.

Peru's natural resources are endangered by land degradation. deforestation, and water pollution. Most of the country's substantial water resources are located in the forest and mountain areas, which have low population densities. The populated coastal plains have chronic water shortages and are susceptible to El Niño floods. The government enacted a new water law that is designed to integrate the water sector, decentralize management of water resources to the river basin level, and provide for participatory community management.

More than half of Peru's land mass is covered by forest. The government has been decentralizing the management of forestland, creating a need for capacity-building and institutional strengthening at local levels. Peru has a substantial and growing mineral, oil and gas sector, which accounts for almost half of all export earnings. Subsurface claims

BOX 1. MACRO INDICATOR	S	
	Year	Score
Population, total	2008	28,836,700
Population ages 0-14: 15-64: 65+ (% of total)	2008	30.7; 63.5; 5.7
Population growth (annual %)	2008	1.1
Rural population (% of total population)	2008	28.6
Population density (people per sq. km)	2008	22.5
Literacy rate, adult total (% of people ages 15 and above)	2007	89.6
		1,280,000;
Land area: Surface area (sq. km)	2008	1,285,220
Arable land (% of land area)	2005	2.9
Agricultural land (% of land area)	2005	16.6
Permanent cropland (% of land area)	2005	0.5
Irrigated land (% of cropland)	2003	27.8
Forest area (% of land area)	2005	53.7
Nationally protected areas (% of total land area)	2006	13.7
Renewable internal freshwater resources per capita		
(cubic meters)	2007	56,684.9
Annual freshwater withdrawals, agriculture: domestic:		
industry (% of total freshwater withdrawal)	2007	81.6; 8.3; 10.1
Crop production index (1999-2001 = 100)	2005	112.6
Livestock production index (1999-2001 = 100)	2005	118.3
GDP (current US\$)	2008	127,433,926,566
GDP growth (annual %)	2008	9.8
Agriculture: industry: manufacturing: services, value		6.6; 38.1; 16.4;
added (% of GDP)	2008	55.3
Ores and metals exports: imports (% of merchandise	2007	40.4.0.0
exports: imports)	2007	49.1; 0.9
Aid (% of GNI)	2007	0.3
Source: World Bank. 2009		

to mineral rights extend over 10% of the country's land, and increased extraction has threatened both human and environmental health in mining communities. Land conflicts are common in Peru, with the most visible arising from exploitation of minerals and timber. The formal system of dispute resolution is not considered accessible by most of the population, especially the rural poor.

# I. LAND

#### **LAND USE**

Peru has a total land area of 1.2 million square kilometers. The country is home to 29 million people (2008), including 14 linguistic families, and 44 ethnic groups. An estimated 45% of the population is indigenous, 37% mixed indigenous-European, 15% European, and 3% other. Twenty-nine percent of the population is rural. Annual GDP was US \$127 billion in 2008, of which agriculture constituted 7%, services 55%, and industry 38%. In 2005, half of Peru's population was poor; 18% was extremely poor. The rate of poverty in rural areas was double the rate in urban areas (IDB 2007; Burns 2007).

Approximately 17% of Peru's total land is used for agriculture, of which 28% is irrigated. Forests make up 54% of total land area, and protected areas make up 14% of total land area (Tolmos and Elgegren 2006; World Bank 2009a).

Geographically, the country is divided into three regions: Costa (the long narrow Pacific coastal region); Sierra (the mountainous Andes region); and Selva (the rainforest region of the Amazon basin). Peru is among the world's most biodiverse countries, although this status is threatened by deforestation and soil degradation. Deforestation, which is occurring at an annual rate of 0.1%, is caused by slash-and-burn agricultural methods, cattle-ranching, infrastructure development, mining and illegal logging. Peru has very steep slopes, and its land is susceptible to erosion, seasonal rains, the effects of El Niño, and wind erosion near the coast. These factors are exacerbated by overgrazing of livestock, deforestation, and poor cropping practices (World Bank 2006b; Tolmos and Elgegren 2006; USDOS 2010).

BOX 2. LAND TENURE INDICATORS	
	Score
Millennium Challenge Corporation Scorebook, 2009	0.704
Land Rights and Access (Range 0–1; 1=best)  Liver of Property Picks (Range 0–2)	0.784
International Property Rights Index, 2009	5.7
Physical Property Rights Score (Range: 0–10; 0=worst)     World Economic Forum's Global Competitiveness Index, 2008-2009	5.7
Property Rights (Range: 1–7; 1=poorly defined/not protected by law)	3.8
World Economic Forum's Global Competitiveness Index	0.0
Ease of Access to Loans (Range: 1–7; 1=impossible)	3.6
International Fund for Agricultural Development, Rural Poverty Report,	0.0
2001	
<ul> <li>Gini Concentration of Holdings, 1981-1990 (Range: 0–1; 0=equal</li> </ul>	0.91
distribution)	
International Fund for Agricultural Development, Rural Sector	
Performance Assessment, 2007	
<ul> <li>Access to Land, 2007 (Range: 1-6; 1=unsatisfactory access)</li> </ul>	4.16
Food and Agricultural Organization: Holdings by Tenure of Holdings	
Total Number of all Agricultural Holdings, Year	1,756,141
Total Area (hectares) of all Agricultural Holdings, Year	35,381,809
<ul> <li>Total Number of Holdings Owned by Holder; Year</li> </ul>	1,108,966
<ul> <li>Total Area (hectares) of Holdings Owned by Holder; Year</li> </ul>	30,987,955
Total Number of Holdings Rented from Another; Year	40,738
Total Area (hectares) of Holdings Rented from Another; Year	301,505
World Bank Group, Doing Business Survey, 2009	60
Registering Property-Overall World Ranking (Range: 1–181; 1=Best)  World Bank Court World Property and Indicators 2000	62
World Bank Group, World Development Indicators, 2009	5
Registering Property-Number of Procedures  Pagintarian Property Property Procedures	33
Registering Property-Days Required     World Bank Group, World Development Indicators, 1998	33
Percentage of Population with Secure Tenure	
· · · · · · · · · · · · · · · · · · ·	00.0
Cajamarca	90.0
• Iquitos	97.3
• Lima	80.6
Heritage Foundation and Wall Street Journal, 2009	
<ul> <li>Index of Economic Freedom-Property Rights (Range 0-100; 0=no</li> </ul>	40
private property)	
Economic Freedom of the World Index, 2008 (2006 data)	
<ul> <li>Legal Structure and Security of Property Rights (Range 0-</li> </ul>	5.00
10;0=lowest degree of economic freedom)	4.04
<ul> <li>Protection of Property Rights (Range 0-10; 0=lowest degree of</li> </ul>	4.31
protection)	8.29
<ul> <li>Regulatory Restrictions of Sale of Real Property (Range 0- 10;0=highest amount of restrictions)</li> </ul>	0.29
10,0-nightest amount of restrictions)	

#### LAND DISTRIBUTION

Prior to agrarian reform in Peru, land tenure relations throughout the country were highly inequitable. One percent of landowners held 80% of the private land in large estates. In contrast, approximately 83% of farmers had farms averaging 5 hectares or less and controlled 6% of total land. In some areas, such as the highland sierras, indigenous peasants cultivated small plots on large estates in exchange for labor on the estate. These peasants were essentially serfs and were not allowed to move. In addition. landowners could rotate or take away the peasants' land at their discretion. In the mid-1960s, Peru was plagued by peasant unrest, resulting in land invasions and leftist rebellions stemming in part from the archaic land tenure regime. Land reform was necessary to avoid revolution (Albertus 2010).

During Peru's period of agrarian reform (1969–1991), 38% of the country's agricultural land was expropriated from estates, rice mills and sugar refineries and redistributed to landless and land-poor agricultural families. Under the military regime (1968–1980), all landholdings larger

than 150 hectares on the coast and 15-55 hectares in the sierras were subject to expropriation without exception. These ceilings were later lowered to 50 and 30 hectares, respectively. Compensation for the expropriated land was based on the value declared by the landowners for tax purposes, which averaged approximately 10% of the land's actual value (Lastarria-Cornhiel and Barnes 1999; Albertus 2010).

Urban migration in Peru gained momentum in the 1940s. The legal and administrative framework of the formal land markets excluded recent migrants, who began to build informal illegal settlements (Burns 2007).

Many poor households in Peru now own at least some land, although in urban areas this land may be located in substandard residential areas. Approximately 83% of poor households own land, and 4% rent land, whereas 73% of households classified as non-poor own land and 9% rent. Nationwide, 6% of households are squatters (8% in Lima). Sixty-eight percent of the population in urban areas lives in substandard housing without access to basic services (Deere and Leon 2003; UN 1996; IDB 2007).

The Ministry of Agriculture in Peru estimates that in 2006 there were 3.6 million rural individual plots and 7422 landholdings held by peasant communities (*comunidades campesinas*) and native communities (*comunidades nativas*) in Peru (Burneo de La Rocha 2005; Fuentes and Wiig 2009).

Peru's population of rural landless is particularly poor. Most poverty and extreme poverty exists in remote rural areas, such as the Peruvian highlands and Amazonian forests. Indigenous Peruvians tend to be concentrated in these areas, which have limited arable land. The more affluent tend to live in relatively flat coastal areas (World Bank 1999; Tolmos and Elgegren 2006).

#### **LEGAL FRAMEWORK**

The Constitution of Peru (1993) guarantees all persons the right to own and inherit property. Law No. 22175 (1978) and Law No. 24656 (1987) recognize the customs, practices and traditions of the peasant and native communities and their rights to communal land (GOP Constitution of Peru 1993; IDB 2007; Deere and Leon 2003).

Legislative Decree No. 495 (1988) recognized possession-rights to land by providing security to those people holding and legitimately occupying land but lacking formal documents of ownership (IDB 2007; Deere and Leon 2003).

Legislative Decree No. 653 (1991) ended the period of agrarian reform in Peru by removing restrictions on the transfer of land. The decree permits the subdivision of land, and land sale, transfer, rental, mortgage, and inheritance. The Land Law (1993) followed the decrees, legalizing the parcelization and sale of land held by agrarian reform collectives. Law No. 26505 (1995) provided that beneficiaries of agrarian reforms would receive title to the allocated land and made special provisions for recognizing communal holdings (Lastarria-Cornhiel and Barnes 1999; IDB 2007; Deere and Leon 2003).

# **TENURE TYPES**

Peru's legal framework recognizes ownership, possession rights, leaseholds, and communal rights to peasant and native community lands. Land ownership rights may be private, communal, or held in partnership. In fact, rural and native community lands are usually held collectively and are known as *comunidades*. This tenure form is used by both indigenous people and peasant communities (GOP Constitution of Peru 1993; Lastarria-Cornhiel and Barnes 1999).

The 1993 Constitution provides that indigenous and peasant communities have the right to choose how their lands will be administered. Communities are considered autonomous in their organization, in communal work, and in the use and free disposition of their lands. Law No. 26505 permits native peasant communities to elect how they hold land (i.e., communally or individually). The actual management and administration of communal land depends on local conditions including production, resources, ecology, and historical use patterns (IDB 2007; Burneo de La Rocha 2005; Fuentes and Wiig 2009).

The general assemblies of communities have the power to give, rent, sell or mortgage community lands. The assemblies in coastal communities must have a 50% majority support for their actions; in the highlands and the jungle, assemblies must have a two-thirds majority (IDB 2007; Fuentes and Wiig 2009).

#### **SECURING LAND RIGHTS**

In Peru, methods of obtaining land rights include purchase, lease, state allocation, community allocation and, most commonly, inheritance. Formal law permits occupants of land to obtain rights of possession after a period of two to ten years, depending on the circumstances. Peru's titling programs have granted possession rights after occupancy of private land for five years and state land for one year. Registering property in Peru requires five procedures, takes an average of 33 days, and costs 3.3% of property value (Deere and Leon 2003; World Bank 2008a).

The Special Land Titling and Cadastre Project (PETT) was initiated in 1992 as a branch of the Ministry of Agriculture with the objective of formalizing all rural land rights, including mapping land, creating a cadastre, and issuing and registering titles. As of 2007, PETT had provided formal titles on about 1.9 million plots of rural land, with over 1 million titles issued in the first stage of the project (1996–2002). A total of 45% of rural land plots were titled as a result of PETT and follow-on registration projects, including 70% of land in the coastal areas and 28% of land in the highlands. Much of the land titled in the highlands was titled as communal land, representing the land interests of numerous community members (Field 2003; Torero and Field 2005; Bandeira et al. 2010).

Peru's land titling programs have not, in most cases, resulted in significant increases in investment in land or improvements to agricultural productivity. According to a recent study, over 83% of Peruvian households reported no increase in land investments after receiving titles, 80% reported no increase in innovations or in landuse intensity, and 72% reported no increase in yield. Observers have suggested several reasons for these findings, including a lack of agricultural financing and credit sources in rural area, overlapping responsibilities of public agencies in charge of cadastral maps, and incomplete cadastre information. Furthermore, land titles become void upon transfer if the new owner fails to register the land (Bandeira et al. 2010; Bandeira et al. 2010).

Urban property-rights reform, managed by the Organization for Formalization of Informal Property (COFOPRI), resulted in the distribution of 1.2 million property titles to squatters on public land. Roughly 6.3 million of the approximately 10 million urban residents received property rights recognized by formal law and registered with the state. As a result, 30% of urban land plots were titled by 2007. The rural and urban projects merged in 2007, and both now fall under the responsibility of the Ministry of Housing, Construction and Drainage (Field 2003; Torero and Field 2005; Bandeira 2007).

## INTRA-HOUSEHOLD RIGHTS TO LAND AND GENDER DIFFERENCES

Marital property is governed by Article 5 of the Constitution, the Civil Code and by the Civil Code of Commerce. Women have the legal right to own land in Peru, and all marital property is presumed to be community property. Although marriages create a property community that cannot be renounced, property owned at the time of the marriage, gifts during marriage, and money paid for insurance are considered separate. In addition, some property obtained by one spouse during marriage may be deemed to be separate property depending on how it was obtained (Martindale-Hubbell 2008).

Joint titling of land to spouses was adopted in Peru by administrative decree and applies to legally married couples. Married persons are obliged to identify and include their spouses when registering property. Recent studies suggest a growing number of husbands and wives holding joint title to land: in 2000 only 13% of titled land plots were held jointly, whereas by 2004 43% of titled plots were held jointly. One pervasive impediment to listing

BOX 3. LAND AND GENDER INDICATORS	
OECD: Measuring Gender In(Equality)—Ownership Rights, 2006  Women's Access to Land (to acquire and own land) (Range:	
0-1; 0=no discrimination)	0
<ul> <li>Women's Access to Property other than Land (Range: 0-1;</li> <li>0=no discrimination)</li> </ul>	0
Women's Access to Bank Loans (Range: 0-1; 0=no discrimination)	0.5
FAO: Holders of Land Classified by Sex, 1993	
Percentage of Female Holders of Agricultural Land	

women's names on land titles, however, is that most women in indigenous communities lack personal identification documents (Fuentes and Wiig 2009; Deere and Leon 2003; Lastarria-Cornhiel and Barnes 1999; Hvalkof 2008).

Peru's Constitution and the Civil Code (1984) govern inheritance of land. The law provides that property can pass by will but requires a portion of the estate to pass by intestacy statutes in order to protect the interests of children and surviving spouses. Children inherit equally, regardless of sex. Surviving spouses receive the same share as a child, but the share is reduced by the amount of the spouse's interest in the community property (Martindale-Hubbell 2008).

Despite the gender-neutral legislative framework for land rights in Peru, traditional practices in rural and indigenous communities often discriminate against women and girls. In agricultural communities, daughters have traditionally married and moved outside their community of origin. Historically, families often denied daughters their right to inherit land because they left the community, and their husbands' families were expected to provide for them. Sons remained in their birth village after marriage and were expected to help with the agricultural land and care for their parents. As income sources have diversified and land is no longer the only indicator of power in a village, inheritance of land has become more egalitarian. Land rights tend to be inherited based on opportunities and preferences as opposed to gender (Deere and Leon 2003).

Peru's Law of Peasant Communities, No. 24656 (1987), which guarantees the integrity of communal property and recognizes the relative autonomy of peasant communities, also establishes that both women and men have the right to be community members with the right to use the goods and services of the community. However, to vote and participate in community decisions, one must be a qualified community member (*comunero calificado*). The customary practice is for one person in a household to hold this status, and the male head of household normally represents the family before the community. Although women are taking on increasing responsibility for agricultural work in Peru's *campesino* communities, they have little say in community decisions concerning land and collectively managed natural resources (ARD 2006; Burneo de La Rocha 2005; Hvalkof 2008).

#### LAND ADMINISTRATION AND INSTITUTIONS

In 2007 the Ministry of Agriculture's Special Land Titling and Cadastre Project (PETT) merged with the Organization for Formalization of Informal Property (COFOPRI) to form the Ministry of Housing, Construction and Drainage, which now has overall responsibility for both the rural and the urban land titling programs. (Prior to 2007, PETT applied to agricultural land rights and COFOPRI to urban rights.) The Land (or Praedial) Registry and the Registry of Immovable Property are responsible for registering titles, which are issued by provincial-level municipalities. The Land Registry is piloting the PROFORM method of property registration, which is essentially a systematized deed registration system aimed at providing a quick and inexpensive method of titling land (Lastarria-Cornhiel and Barnes 1999; Fuentes and Wiig 2009).

The Tax Service Administration is comprised of semiautonomous local tax agents. The tax agents are responsible for administering local property tax collection and receive a portion of the tax revenue that they collect (DIE 2007).

Community organizations, nongovernmental organizations, and in some cases private enterprise, have been instrumental in helping to formalize both rural and urban property in Peru (Lastarria-Cornhiel and Barnes 1999; Bury 2005).

The Constitution empowers Peru's native and peasant communities to administer their own customary law, provided they do so within the limits of the Constitution (Faundez 2003).

#### LAND MARKETS AND INVESTMENTS

With the passage of Legislative Decree No. 653 in 1991, agricultural land could be freely sold, subdivided (with certain limitations on minimum parcel size), mortgaged, and rented. This decree thus lifted multiple restrictions on agricultural land transactions that were implemented during Peru's agrarian reform, and constituted an initial step toward establishment of a rural land market (Kagawa 2001; Field 2003; Lastarria-Cornhiel and Barnes 1999).

Whether Peru's efforts to issue and register land titles over the past decade will result in strengthened land-market transactions is not yet clear. The World Bank Urban Property Rights Project, which recorded over 1 million property titles by 2004, reported in 2005 that land values had increased, and that around 630,000 of the titled properties had been transferred through market transactions. Other studies have confirmed a probable increase in land values for those with titles, at times by 20–30%, but have noted that Peru's formal land market remains

weak, and that neither transactions nor investments have substantially increased following titling efforts (World Bank 2005; Bandeira et al. 2010; Hvalkof 2008; Payne et al. 2009; Woolsey 2008).

One of the primary reasons for a stifled land market in Peru may be continued high land-transaction costs, caused by factors such as: (1) a relatively high land-transfer tax (at 2.8%, Peru's land-transfer tax is a full point higher than that of most developed countries); (2) a very low number of land registry offices (Peru has only a fraction of the registry offices, per area and number of people, of most developed countries); and (3) incomplete and overlapping cadastral information (Peru does not have cadastral coverage for those plots not yet registered, which increases required time for registration, especially in the case of a conflict over plot boundaries.). One additional benefit to developing a universal cadastre could also be improved land-tax collection (for standing taxes, as opposed to the transfer taxes mentioned above), which could in turn stimulate the allocation of land to productive users on the land market (Bandeira et al. 2010; Payne et al. 2009).

As of 2005, the formalization of land titles had not increased mortgage lending. This indicates that access to loans in Peru is complicated by external factors, such as income informality, rather than solely by property title issues.

According to one recent study, only a small percentage of those with titles in Peru have used them as collateral, perhaps because of the lack of credit unions willing to work with indigenous communities, or because the demand for credit by most landowners is for small operational loans in amounts not suitable for mortgage. Most loans based on land rights, therefore, have not been mortgages but rather have been small loans where proof of title is used as evidence that the borrower has the agricultural production-capacity to repay (Bandeira et al. 2010; UN-Habitat 2005).

#### COMPULSORY ACQUISITION OF PRIVATE PROPERTY RIGHTS BY GOVERNMENT

Under Article 70 of the 1993 Constitution, property rights are inviolable and guaranteed by the State unless national security interests are involved. Property rights must be used in harmony with societal needs. Peru's General Law of Expropriation, No. 27117, 1999, provides that the government can expropriate private land upon declaration of public utility and social interest. The government has the right to expropriate the surface and subsurface rights, if desired. Compensation must be paid to the landholder based on appraised value (GOP Constitution of Peru 1993; GOP Expropriation Law 1999).

In some cases, state expropriation procedures have been used to benefit private industry. When the Newmont Mining Corporation Yanacocha began operations in the Cajamarca region in 1992, for example, the company needed to obtain large quantities of land. In some areas, landowners were unwilling to sell, and the state used its authority to acquire the land by expropriation, with the company paying the fair market value for the land (Bury 2005).

## LAND DISPUTES AND CONFLICTS

Land conflicts are common in Peru, with the most visible arising from exploitation of natural resources. Government concessions for oil and gas exploration, mining, biofuel production, and logging in areas where national parks, towns, farms and villages are located have caused local uprisings. Mining operations are among the most prominent causes of land disputes. In 2005, there were 17 significant conflicts related to the mining industry: five conflicts involved the use of water and the pollution of rivers and lakes; four involved land acquisition and resettlement issues; five raised concerns about air pollution and public health; and three were related to other issues (World Bank 2005; Abusabal Sanchez 2001).

Legislative change has also caused conflict in Peru. In 2008, the GOP issued a series of decrees, primarily amending the forest and wildlife laws, that permitted the sale of tribal lands by majority vote. Indigenous groups protested, asserting that they had not been consulted. The protests were often violent -- resulting for example in the deaths of 33 people in the province of Bagua in June, 2009 -- and the government retracted some of the controversial decrees (*Economist* 2009; Salazar 2010).

Most Peruvians, and especially the poor, do not look to Peru's formal judicial system to resolve land disputes. The regulatory framework governing the judicial sector is weak, and infrastructure has been neglected. The formal system has struggled with efficiency, professional competence, and lack of public trust. The formal system is not considered accessible by most of the population, especially the rural poor (IDB 2007; World Bank 1997).

Conflicts over land in indigenous and peasant communities tend to be intra-community, especially where population increases and migration put pressure on the scarce amounts of quality land. Private family conflicts are usually resolved by the extended family or by a council of elders. The political organs of the community, such as the General Assembly, deal with conflicts and disputes of wider community interest. Women in indigenous communities often believe that they are not fairly treated by communal authorities in land-dispute resolution (Faundez 2003; Abusabal Sanchez 2001; Hvalkof 2008).

Rural Centers for the Administration of Justice, which were established to help peasant communities reconstitute civil society after the war against Shining Path guerrillas, are also used as an informal system of dispute resolution. The centers hear and resolve cases on a variety of matters, including property rights. The centers are staffed with community representatives, a representative of the local women's association, the mayor, the justice of the peace, and the local police. Proceedings are usually conducted in Quechua or the local indigenous language, and decisions are recorded in Spanish to guarantee that they are recognized by the state. NGOs such as the Institute for the Peace and Development of Ayacucho (IPAZ) have helped establish these centers (Faundez 2003; Wojkowska 2006).

#### **KEY LAND ISSUES AND GOVERNMENT INTERVENTIONS**

The Government of Peru has undertaken the largest land titling programs in South America. The first of these, the Special Rural Cadastre and Land Titling Project (PETT), focused on titling and developing a cadastre for all rural land. A second phase merged rural and urban land titling programs and, as of 2007, approximately 53% of land in the country was titled. The third phase of the project, PTRT 3, plans to consolidate the registry and cadastre process and to formalize indigenous community land-rights both in Sierra and Selva (Torero and Field 2005; IDB 2007).

The Government began operating its National Program of Watershed Management and Soil Conservation (PRONAMACHCS) in 1981. This program, which operates under the authority of the Ministry of Agriculture, has been responsible for sustainable natural resource management in Peru. The program's work expanded from soil conservation to working with enhancing livelihoods and strengthening production-marketing chains in 5000 communities in 850 watersheds. Program activities included small-scale irrigation infrastructure, technology transfer, reforestation, rural community organization, and agricultural marketing. The program was supported by external donors, including the Japan Bank for International Cooperation (JBIC), which has provided over US \$155 million worth of support (World Bank 2006a; GOP 2010a).

# **DONOR INTERVENTIONS**

The Inter-American Development Bank (IDB) is the main donor financing the rural land titling program (PETT), granting loans of US \$21 million for the first stage in 1996 and US \$23.3 million for the second stage in 2001. A third stage is being designed. The first stage focused on the coastal areas, the second on the highlands, and the third will work on land in the Amazonian rainforest (Fuentes and Wiig 2009).

The World Bank Urban Property Rights Project supported the urban land program from 1998 to 2004. The project reports recording over one million property titles, benefiting over 5.7 million Peruvians in marginal communities. The project received continuation funding in 2005 for five additional years. The Real Property Rights Consolidation Project's objectives are to enhance the welfare of real property owners, facilitate access to economic opportunities, ensure legal security of property rights, and complete conversion of informal tenure. The project will also establish the cadastre services in urban and peri-urban areas among the participating municipalities and provide capacity-building for provincial and district municipalities (World Bank 2006a; World Bank 2005).

Between 1997 and 2005, the International Fund for Agricultural Development (IFAD) carried out a US \$8.25 million project in Peru's southern highlands, where 88% of the population is poor or extremely poor. The project, Market Strengthening and Livelihood Diversification in the Southern Highlands (MARENASS), was implemented by the *Corporación Andina de Fomento* (CAF), under the Ministry of Agriculture, and had the objectives of: increasing cultivated areas and the commercial value of farmers' productive natural resources by reconstructing agricultural terraces; increasing the area of irrigated land; doubling the livestock load of pastureland; and reforesting certain areas. The project supported community land titling in two districts. As of

December 2001, 20,015 families in 360 communities (an average of 55 families per community) located in 69 different districts had participated directly in project activities. MARENASS reported that it enabled many households (20,000 by 2002) to move from a situation of subsistence and food insecurity to one in which they are rural producers with greater financial and physical assets, increased food security and production surpluses (ARD 2006; IFAD 2002).

Between 2005 and 2009 the European Union (EU) funded a GTZ-implemented project entitled Supporting Reform of the Justice System in Peru. The project included an objective to improve legal access for Peruvians and building judicial capacity (GTZ 2009).

Several Peruvian NGOs have been active in land-rights issues. The civil society organization Peruvian Center for Social Studies (CEPES) is at the forefront of land-related issues and engages in matters of land reform and rural, indigenous, and environmental issues. The Land Group, or *El Grupo ALLPA*, supports land rights, rural development and farmer communities. Other organizations with a focus on land include the Association for Rural Education Services (SER) and the Center for Sociological, Economic, Political and Anthropological Studies (CISEPA-PUCP). Ensuring fungible property rights in Peru and throughout the developing world is among the three core areas of technical assistance provided by the Institute for Liberty and Democracy (ILD), founded by Hernando de Soto and based in Lima. ILD's mission is to move assets of the poor from the extralegal economy into an inclusive market economy (ILC 2009; ILD 2008).

# 2. FRESHWATER (LAKES, RIVERS, GROUNDWATER)

## RESOURCE QUANTITY, QUALITY, USE AND DISTRIBUTION

Peru has the highest per capita availability of renewable freshwater in Latin America. In 2006, the per capita availability was 68,321 cubic meters. The Andes divide Peru into three natural drainage basins: the Pacific Basin (279,000 square kilometers), the Atlantic Basin (959,000 square kilometers), and the Lake Titicaca Basin (47,000 square kilometers). The Pacific Basin has 53 rivers, the Atlantic Basin has 44 rivers, and the Lake Titicaca Basin has nine rivers (FAO 2000).

Despite its substantial quantity of freshwater, Peru is South America's most water-stressed country. The country's water resources are characterized by geographical and temporal variability, inefficient irrigation, and declining water quality. The coastal area has only 2900 cubic meters of water per person per year, but supports 59% of the population and generates the bulk of Peru's GDP. In contrast, the tropical rain forest area has 80% of the country's water resources (643,000 cubic meters per person per year) and supports 10% of the population. Chronic water shortages occur in dry seasons, and there are frequent floods and droughts (Bebbington and Williams 2008; World Bank 2006b).

As of 2006, 87% of Peru's urban population had access to improved water resources, in comparison to 62% of the country's rural population. Peru's water quality is deteriorating, primarily due to the release of untreated effluents from mining, industry, municipalities, and agriculture. Of the 53 rivers in the coastal area, 16 are partly polluted by lead, manganese and iron, which threaten irrigation and potable water supplies (UNESCO 2006; Bebbington and Williams 2008).

#### **LEGAL FRAMEWORK**

According to the Constitution, the state holds sovereign rights to all renewable and nonrenewable natural resources in Peru, including water. Organic laws define the terms for their use and concession to private parties (GOP Constitution of Peru 1993; Portilla and Eguren 2007; Del Gatto et al. 2009).

After years of consideration, the General Water Law of 1969 was replaced by the Water Resources Law No. 29338, which passed March 31, 2009. The government is also debating a National Water Resources Strategy. Together, the law and draft policy integrate Peru's water sector, decentralize management of water resources to the river basin level, provide for stakeholder participation in water resource management, and recognize water as an economic and social good (GOP 2009b).

#### **TENURE ISSUES**

Under the Constitution, the state owns all renewable and nonrenewable natural resources. The Water Resources Law, 2009, provides that water for primary uses (direct consumption, food preparation, personal hygiene, and religious and cultural rituals) is available at no charge and does not require administrative approval. Productive uses of water, such as for agricultural and industry, are subject to regulation (GOP Constitution of Peru 1993; GOP Peru Water Resources Law 2009a).

Large-scale irrigation is managed by permit. As of 2005, the government had issued 200,000 such permits. The water permit system, along with land titling, is widely believed to have reduced conflicts and frustrations between farmers over the resource (World Bank 2006b).

The Water Resources Law recognizes customary law governing water resources so long as it is not contrary to formal law. Under Peruvian customary water management systems, water rights are distributed to households within a community, based on a hierarchical system. Existing water rights are often governed by *turno*, a right to irrigate a plot of land in rotation with other legitimate users of the same resource (GOP Peru Water Resources Law 2009a; Trawick 2003).

#### **GOVERNMENT ADMINISTRATION AND INSTITUTIONS**

The National Water Authority (under the Ministry of Agriculture) was created in 2006 and is responsible for the design and implementation of water policies, including water quality and irrigation use. In accordance with the Water Resources Law, 2009, the National Water Authority will establish 14 River Basin Authorities and multiple Local Water Authorities within each River Basin Authority. Other Ministries with responsibility for water resource management are: the Ministry of Agriculture (irrigation); the Ministry of Housing and Sanitation (domestic water use); the Council of Ministries (environmental policy); the Ministry of Energy and Mining (hydropower and mining); and the Ministry of the Environment (hydro-meteorological information) (GOP Peru Water Resources Law 2009a; FAO 2000).

Customary water management practices are often determined by the number of communities using the resource. Under one type of system, a single community shares a canal network and its water resources. Under a second system, different villages share one or more water sources, and the canal network encompasses more than one settlement. Communities will often employ an alternating water-use arrangement in which communities take turns using a given water source rather than dividing the flow (Trawick 2003).

#### **GOVERNMENT REFORMS, INTERVENTIONS AND INVESTMENTS**

With support of the World Bank and the Inter-American Development Bank (IDB), the Government of Peru undertook a National Water Resources Management Modernization Project that overhauled management of its water resources. The reforms included revisions to the legal framework, institutional structure, governance, and revenue that supported a decentralized, integrated, participatory approach to water resource management. The project included specific attention to strengthening management of water resources at the river basin level (World Bank 2008b; IDB 2009).

In 2007, the Government of Peru initiated a program known as Water for Everyone. The program was designed to increase the efficiency, equity, and sustainability of water use by supporting measures designed to pave the way for the necessary structural, institutional, legal and policy reforms. The program was supported by a US \$200 million loan from the IDB and the Japan International Cooperation Agency (JICA) (IDB 2007; JICA 2008).

# **DONOR INTERVENTIONS AND INVESTMENTS**

The World Bank is supporting Peru with a US \$330 million loan for an Environmental Development Policy Loan Program (ENVDPL). The 3-year (2009–2013) program will support government efforts to strengthen environmental governance and institutions in Peru and mainstream environmental sustainability in the development agenda of key sectors, including water, sanitation, and flood protection (World Bank 2009b).

USAID is helping small farmers in Ayacucho and other Peruvian Andean regions to manage water resources through: building irrigation systems, providing assistance to diversify crops, increasing access to markets, and strengthening community organizations that represent farmers. As a result of USAID's projects in the region,

farmers have boosted production of crops such as potato, maize, barley, and beans and have started exporting avocados, chili peppers, snow peas, and onions (USAID 2008).

Since 2002, GTZ has been funding a drinking water and sanitation program, PROAGUA, which runs through 2013. The program supports the Peruvian government in setting up a National Water and Sanitation Capacity-building System with a view to personal and institutional capacity-building. PROAGUA also provides technical support to companies on modernizing technical and commercial operational processes, corporate management and public relations (GTZ 2002).

In addition to its environmental focus on the water sector, the World Bank funds the National Rural Water Supply and Sanitation project, which runs through 2010. The objective of the project is to encourage the sustainable use of a new and rehabilitated water supply and sanitation facilities in rural areas and small towns while emphasizing improvement in hygienic practices and training in operation and maintenance of water systems (World Bank 2002).

#### 3. TREES AND FORESTS

#### RESOURCE QUANTITY, QUALITY, USE AND DISTRIBUTION

Peru has nearly 70 million hectares of natural forest that cover 54% of its national territory, giving Peru the world's eighth most extensive forest cover. The northern coastal region has relatively large areas of productive, floristically homogeneous forest. These forests are classified as mangrove, closed dry forest, dry savanna forest, and scrub. The forest region in the eastern section of the country (Selva) is totally covered by natural forest, which is generally classified as tropical moist forest, subtropical moist forest, tropical wet forest and subtropical wet forest (World Bank 2006b; FAO 2010).

Roughly 83% of Peru's forestland is state-owned and 15% is privately owned. The forestry sector employs about 0.3% of the population and contributes 1% to GDP (FAO 2010).

Approximately 87% of rural and 11% of urban households rely on wood or charcoal for fuel, a need satisfied by the country's forests. The annual rate of deforestation is estimated to be nearly 150,000 hectares per year which, while lower than that of neighboring countries, nonetheless poses an environmental concern. Illegal logging and the illegal trade in timber are major problems in Peru. The government has been challenged by inadequate surveillance and control systems, corruption, and an inadequate enforcement system (World Bank 2006b; Salazar 2010).

In 2006, there were 60 protected areas in Peru, around 14% of the total land mass. These protected areas include national parks, reserves, and sanctuaries. Due to low institutional capacity, the areas do not receive adequate protection. The protected areas are further stressed by illegal squatting and encroachment, unsustainable economic activities, and mismanaged development projects (SINANPE 2009; Tolmos and Elgegren 2006).

#### **LEGAL FRAMEWORK**

The legal framework for forestry rights in Peru is complex and often contradictory. According to the Constitution, ownership rights to natural resources (including forests) belong to the state. The Constitution also recognizes the need to protect the environment in Peru for all Peruvians (SINANPE 2009; World Bank 2006b; Del Gatto et al. 2009; Portilla 2007).

Important laws establishing forestry rights include:

- The Environmental and Natural Resources Code (Legislative Decree No. 613, 1990);
- The Natural Protected Areas Law (Law No. 26834, 1997);
- The Forestry and Wildlife Law (Law No. 27308, 2000);
- The National System for Environmental Impact Evaluation Law (Law No. 27446, 2001);
- The National Environmental Management System Framework Law (Law No. 28245, 2004); and
- The General Law of the Environment (Law No. 28611, 2005).

(Portilla and Eguren 2007)

The government has drafted a new Forestry Law (Law of Forestry and Wildlife), which is currently before the legislature. Key provisions of the draft include: establishment of a land registry to better identify forest zones and to reduce the number of land-related disputes; some degree of additional protection of forests, or lands suitable for forests, from agricultural encroachment; and establishment of the Forest Service, a new entity under the Ministry of Agriculture. Some observers have expressed concern that the draft does not go far enough to establish and protect tenure rights to ancestral lands, or to protect forested lands from (a) agricultural expansion due to the production of biofuel products or (b) projects related to fossil fuels and mining in the Amazon (Salazar 2010).

Peru entered a free trade agreement with the US in January, 2009, which includes an Annex on Forest Sector Governance. This annex obliges the Peruvian government to take specific actions, within 18 months, to improve forest governance. The General Directorate for Forestry and Wildlife recently published a report detailing progress per its commitments in the Annex (Del Gatto et al. 2009; GOP 2010b).

#### **TENURE ISSUES**

The state owns all natural resources, including forests, in Peru. Most forests are located on public lands, and the state may grant use rights to the private sector through time-limited concessions. Publicly owned forestland includes permanent production forests, conservation concessions, natural protected areas, and state reserves. Some forests are also located on privately owned land. While the land owners enjoy a private concession right, the forest resources remain the property of the state, which can heavily regulate the private use. Privately owned categories include land held by Amazonian indigenous communities, Andean peasant communities, private conservation areas, and private agriculture plots (World Bank 2006b; Portilla and Eguren 2007).

The Forestry and Wildlife Law of 2000 and its 2001 Regulations permit a variety of forms of access to timber and non-timber forest products, including permits from native communities, extraction from local forests, afforestation/reforestation concessions, conservation concessions, and ecotourism concessions. Legislation provides that communities may use timber resources on community lands on the condition that they submit a forest management plan to the government, and obtain approval of the plan prior to using timber resources. According to the Inter-ethnic Association for the Development of the Peruvian Forest (AIDESEP) in November, 2010, the proposed new Forest and Wildlife Law does not go far enough to protect forest resources used by indigenous communities. AIDESEP argues both that the state has not adequately titled indigenous forest lands, and that the new law opens land traditionally used by indigenous communities (even if the land titled) to exploitation through concessions for timber, conservation projects, REDD and plantations (World Bank 2006b; Lang 2010; GOP Forest and Wildlife Law of 2000; Salazar 2010).

According to the Forestry and Wildlife Law of 2000, the government grants timber extraction rights to the private sector through renewable 40-year forest concessions of at least 5000 hectares obtained through a public bidding

process. Forestry concessions for —local forests" (500-hectare forest plots) can be granted to regional governments to allocate for local use. The law requires sustainable management plans based on forest inventories, censuses, and forest resources access-rights (World Bank 2006b).

The national government (SINANPE) has established a system of natural protected areas, which includes ten categories: National Parks, National Sanctuaries, Historic Sanctuaries, National Reserves, Wildlife Refuges, Landscape Reserves, Communal Reserves, Protected Forests, Enclosed Hunting Lands, and Reserved Lands. The state's categorization of the land determines its legal status, purpose, and allowable uses (Portilla and Eguren 2007).

In many indigenous communities in Peru, forests are governed by customary law and are considered community resources subject to community jurisdiction. However, individual families will often use forest resources on or near their land for cultivation and selective tree-cutting (FAO 1993).

# **GOVERNMENT ADMINISTRATION AND INSTITUTIONS**

The Ministry of Agriculture (MINAG) has general authority over the formulation, coordination and evaluation of national policies regarding the management and conservation of natural resources. The General Directorate for Forestry and Wildlife (DGFFS), which operates within the Ministry of Agriculture, designs, monitors, and controls norms and actions related to forest resource management and is responsible for enforcement of the forestry law (World Bank 2006b; Tolmos and Elgegren 2006; GOP 2009b; GOP 2010c).

Peru established a new Ministry of the Environment (MINAM) in 2008, with Legislative Decree No. 1013. MINAM holds administrative authority for the national environmental sector, which it manages at national, regional and local levels. The Ministry includes the Vice-ministry of Natural Resources and Strategic Development and the Vice-ministry of Environmental Management. MINAM has authority over several dependent agencies, including the Geophysical Institute of Peru (IGP), the Peruvian Amazon Research Institute (IIAP), the Environmental Assessment of Oversight Agency (OEFA), the National Meteorology and Hydrology Service (SENAMHI), and the National Service of Natural Protected Areas (SERNANP) (GOP 2010d).

The National Service for Natural Protected Areas (SERNANP) administers the protected areas that constitute the National Protected Areas System (SINANPE), as well as regional, municipal, and private conservation areas and buffer zones. SERNANP manages 25 national protected areas covering 14 million hectares of Peruvian Amazon ecosystems (Portilla and Eguren 2007; World Bank 2006b; Tolmos and Elgegren 2006).

The Supervision Office for Wood Forest Concessions (OSINFOR) is charged with ensuring legal compliance by holders of timber concessions and permits, as well as auditing the government's plans for forest management and supervising the national forest authority's inspections. OSINFOR has the power to revoke harvesting rights and issue administrative sanctions. OSINFOR reports to the Council of Ministers and is independent from MINAG and MINAM (Del Gatto et al. 2009).

Peru has been decentralizing forest management over the past decade. In 2007, per Decree No. 011-2007-AG, the government delegated many of the responsibilities of the National Institute of Natural Resources (INRENA) to regional governments. Some but not all regional governments have since completed the legal procedures necessary to assume greater forestry management authority. Some observers express concern that regional governments will not have adequate resources to manage the forests, while others believe that decentralization will provide local communities with greater access to the decision-making process regarding forest resources (Del Gatto et al. 2009).

Peruvian legislation established the private National Environmental Fund (FONAM) in 1997 to finance projects and programs related to energy, transportation, forestry, water and waste, and the environmental consequences of mining. FONAM is Peru's focal point for the World Bank Carbon Finance Unit (Portilla and Eguren 2007; GOP 2010c).

#### **GOVERNMENT REFORMS, INTERVENTIONS AND INVESTMENTS**

Peru's Multi-Sectoral Commission to Fight Illegal Logging released the National Strategy to Fight Illegal Logging in November 2004. The reformed Commission, which became operational in 2005, was charged with implementing the Strategy to combat illegal logging by: 1) strengthening organizational and institutional

capabilities in forest control and supervision; 2) designing and implementing a system for law enforcement, timber tracking, forest raids and timber trade transparency; and 3) promoting and supporting civil society and local population participation in forest control and supervision. As part of the strategy, the government developed a computer system and database to review, evaluate and manage concessions nationwide (World Bank 2006b).

The Forest Development Promotion Fund (FONDEBOSQUE) is a public-private organization primarily funded by the donor community. The organization's objective is to promote investment in sustainable and competitive forest enterprises and in environmentally responsible projects generating economic opportunities and conservation of biodiversity. The organization has focused on implementation of forest concessions, technology for sustainable forest use, forestry plantation development, communal forestry management, and institutional creation and strengthening (World Bank 2006b).

The GOP has committed US \$25 million to fund NGOs focused on protecting natural rainforests in the Peruvian Amazon and Andes. The spending will focus on ten forested areas within SINANPE (USAID 2009a).

#### DONOR INTERVENTIONS AND INVESTMENTS

USAID's CEDEFOR (Certification and Development of Peru's Forest Sector) project, which was implemented by the World Wildlife Fund (WWF), worked to help reform, modernize, and promote sustainable use of forest resources by strengthening institutions and improving markets. By 2005 the project had provided technical assistance to 132 forest concessions; helped the government in review and approval of 86 Forest General Management Plans (representing 1.53 million hectares) and 62 Annual Logging Plans; advised in the creation and operation of 21 Forest Management Committees; assisted in the certification of 63,000 hectares of forests; helping in the generation of 615,734 temporary jobs; and generated almost \$10 million in timber sales. The project was completed in 2008. USAID also implements a program designed to improve the Government of Peru's environmental policy and build the capacity of environmental institutions to promote sustainable forest management, protect biodiversity, and comply with the Environmental Chapter and Cooperation Agreement of the Peru Trade Promotion Agreement, including the Forest Annex (USAID 2008; World Bank 2006b; USG 2008; USAID 2009b; Del Gatto et al. 2009; BBC News 2009).

The World Wildlife Fund has three active projects in Peru. WWF is currently in the process of drafting the Peruvian RPP for REDD. The goal of this project is to increase forest conservation through market-based financial incentives. The second project, Natural Resource Use in Indigenous Lands in Peru, seeks to help indigenous Peruvians uphold their natural resource rights. Lastly, the Forest Conservation project will encourage the sustainable use and management of forests to avoid deforestation. This project will end in December 2010 (World Wildlife Fund 2010).

PROFONANPE is a Peruvian non-governmental organization started with seed funds from the Global Environment Facility (GEF) in 1992, with the goal to support preservation and management of protected areas. It has become an important actor and financial tool for biodiversity preservation in Peru (Portilla and Eguren 2007; GOP 2010b).

#### 4. MINERALS

## RESOURCE QUANTITY, QUALITY, USE AND DISTRIBUTION

Peru is the world's second-largest producer of silver, the third-largest producer of zinc, the fourth-largest producer of lead, the fifth-largest producer of copper, and the sixth-largest producer of gold. As of 2003, the mining industry accounted for 57% of Peru's exports. The industry directly employed over 70,000 people and indirectly employed another 350,000 (World Bank 2005).

Since 1992, mining claims throughout the country have increased from 4 million to 22 million hectares. Approximately 10% of all land in the country is covered by subsurface mineral rights claims. These claims have increased most rapidly in the highlands, where large-scale mineral operations have been privatized or where new mineral resources are likely to be exploited in the near future. Over 95% of mining interests are held by private firms (Bury 2005).

Peru's oil and gas resources are substantial; it is possible that the country's crude oil reserves top 5,864 million barrels. The country's legal framework is favorable towards investors in the oil and gas sector, and there are several foreign countries involved in exploration and extraction there. Between 2000 and 2006, the government increased the number of approved petroleum lots from 30 to 151; exploration permits now cover an estimated 89% of Peru's Amazon region (Gurmendi 2005; Salazar 2010).

The country's mining sector includes large-scale operations which are generally run by foreign companies, often in partnership with local corporations. Large-scale operations are the country's leading producers of gold and copper and use open-pit methods. Environmental issues include the risk of cyanide or acid solution leaks, leaching of waste materials, dust, noise, and disruptions of the local topography. Medium-scale mines tend to be owned by Peruvian companies. Most of their production comes from underground mines. In general, the medium-sized companies have less capacity and fewer resources to meet environmental standards. Small-scale and artisanal mining operations, almost entirely dedicated to gold mining, are run by individuals and often use methods that can cause substantial environmental damage (World Bank 2005).

Mining and smelting operations have significant impacts on the livelihoods of local residents, including water and air pollution, erosion, and land degradation. In the Cajamarca region, households reported decreased access to water, less land for livestock and agriculture, erosion and reduced land quality, and decreased influence of traditional social relationships and institutions. Some positive impacts included increased infrastructure, employment opportunities, access to formal education and health care. According to Peru's Ombudsman's Office, 86 mining-related conflicts occurred between 2004 and 2007 alone. Twenty-seven of these were between local communities (mostly indigenous) and mining companies, most related to pollution, and most were in highly impoverished areas (World Bank 2005; Oxfam America 2009; Bury 2005; Portilla and Eguren 2007).

In some cases, mining operations urged formalization of individual rights to rural land. The Newmont Mining Corporation Yanacocha (MYSA) in the Cajamarca region needed to clarify land ownership where it planned to operate because land was held communally and had to be parceled into private holdings before the company could negotiate for purchase. The company initiated a series of rapid land-titling initiatives in communities. Between 1992 and 2000 MYSA purchased over 11,000 hectares, which included 259 different land purchases in 44 different communities (Bury 2005).

## **LEGAL FRAMEWORK**

The Constitution (1993) establishes the state's obligation to promote sustainable use of natural resources and promote conservation of biodiversity and protected areas through a defined environmental policy (World Bank 2005).

The mineral sector is governed by Peru's General Mining Law (1981), which was amended by the Mining Investment Promotion Law (1991). These changes have been consolidated in the Single Revised Text of the General Mining Law (1991) (Martindale-Hubbell 2008; Bastida et al. 2005).

Other legislation governing mining includes: the General Law of the Environment (2005), the Law for Environmental Legacies of Mining Activities, the Mining Investment Promotion Law (1991), the Supreme Decree Regulating Mining Procedures and Environmental Protection (1993), the Control of Mining Activities Law, and the Decree of Regulation of Environmental Protection of Mining Activities (World Bank 2005).

#### **TENURE ISSUES**

Mineral deposits, including geothermic, belong to the state and cannot be alienated or acquired by adverse possession (Martindale-Hubbell 2008).

The state grants concessions for the exploitation of mineral resources to nationals, foreign nationals, or juridical persons. The state can grant exploitation rights to subsurface resources existing below otherwise privately held land. In urban areas, mining operators must first attempt to reach an agreement with the landowner, but if the parties cannot agree, the mining company can obtain an easement directly from the national government to access underground resources. An environmental impact assessment (EIA) is mandatory to gain a license, yet issuing institutions lack the capacity to process them efficiently. Holders of concessions must pay annual fees, taxes, and royalties to the state (Martindale-Hubbell 2008; Franco 2006; World Bank 2009c).

Informal prospecting concessions can be obtained except in areas subject to prior mining rights or excluded by law (Martindale-Hubbell 2008).

#### **GOVERNMENT ADMINISTRATION AND INSTITUTIONS**

The Ministry of Energy and Mines (MEM) is responsible for regulating the technical operations, environmental impacts, and health and safety of mines. The Natural Environmental Council (CONAM) is responsible for the planning, promotion, coordination, and protection of natural resources of Peru. In practice this Council has little actual decision-making power (World Bank 2005).

## **GOVERNMENT REFORMS, INTERVENTIONS AND INVESTMENTS**

Reforms in the 1990s resulted in the sale of state-owned interests, and many existing mining operations were transferred to private firms. Fifty-five percent of mineral-extraction activities were privately owned in 1990; in 1999, 95% were privately owned. In the time after these reforms, the spatial distribution of mining activities in the country have altered, both in terms of the amount of the land subject to a concession and in terms of the geographical location of concessions. In addition, mine ownership has become increasingly transnational and concentrated into large-scale enterprises (Bury 2005).

In 2009, China and Peru signed a free trade agreement, which will give China access to Peruvian minerals. The Government of Peru vowed to maximize resource exploitation, including in the mining sector, to attract further foreign investment. This agreement will become effective in March 2011 (*Forbes* 2009; Merco Press 2010).

#### **DONOR INTERVENTIONS AND INVESTMENTS**

The World Bank is giving the GOP a US \$330 million Programmatic Loan for Environmental Development Policy. The program, which will have an initial three-year (2009–2013) period, includes specific focus on the mining sector. The program will conduct an inventory of the current negative impacts of former mining and smelting operations and prioritize these liabilities to set up strategies for improvement. The program will promote citizen involvement in the entire mining cycle, including participatory environmental monitoring, with the objective of reducing social conflict (World Bank 2009).

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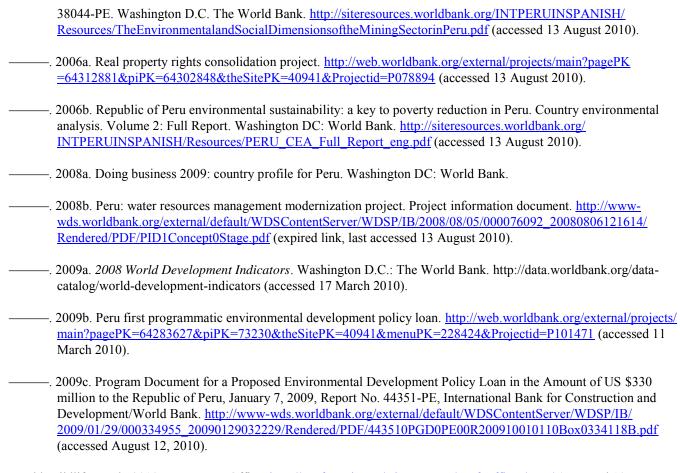
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