

Mining Investment and Policy Developments: Argentina, Chile and Peru¹

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I. INTRODUCTION

From the last decade, Latin America has been the most popular destination for world-wide exploration investment. Among a series of factors, this has been driven by attractive general investment climates, designed in the framework of a shift of the role of the State from active participant and entrepreneur, to regulator, and the free play of market forces, as well as by an enabling environment for private mining investment.

The mining sector in these countries underwent a massive process of reform. The role of legal reform has been to reduce both real and perceived risks by designing legal safeguards, and to enable an environment appropriate for investment (World Bank, 1996). In this regard, Chile first and Peru later, as well as Argentina, Bolivia, and other countries in Latin America, drafted highly competitive legal frameworks for mining. Their aggregate features have come to be known as ‘the Latin American Mining Law Model’ and the World Bank has recommended the adoption of this model in processes of mining sector reform in developing countries. An important aspect of the investment climate has been reflected in the developments in the integration initiatives of the region. In this context, Argentina and Chile signed and ratified a Mining Integration Treaty that facilitates the development of deposits straddling the shared border. Argentina and Bolivia have recently signed up a similar agreement.

While a main driver of reform during the 1990s has been setting the conditions for private investment, another driver has consisted in gradually developing rules and standards towards the protection of the environment and human rights, in a context of democratisation and weaving commitments with the international community within the contemporary process of globalisation.

The purpose of this working paper is to provide an overview of the law and policy developments in the mining sectors of Chile, Peru and Argentina over recent years, as well as to summarise some of the challenges ahead. The underlying idea is that their experiences can contribute in their own debates and processes of reform, as well as in those of other countries that are starting the process.

II. BACKGROUND AND DEVELOPMENTS IN CHILE, PERU AND ARGENTINA

II.1 CHILE *(By Ricardo Irarrázabal)*

¹ An earlier version of this paper was presented at the Annual Mining Seminar organised by the Centre for Energy, Petroleum and Mineral Law & Policy, University of Dundee, and held in the Natural History Museum, London, 21st June 2005.

1. The Chilean Model

After a period featured by a socialist economic paradigm at the beginning of the 1970s, Chile made a complete shift in its economic policies, led by a generation of young Chilean economists with postgraduate studies mainly from the University of Chicago. The so-called Chilean Model was based on a free-market economy, the respect of property rights and a subsidiary role of the State. A threshold of the model was opening the country to foreign investment. In this regard, the *Foreign Investment Statute* (Decree-Law 600) of 1974 guarantees, by means of a contract between the foreign investor and the Chilean State, the free repatriation of profits and capital, tax stability and the principle of non discrimination against foreign investors.

In order to better understand the Chilean legal reform in mining, it is essential to appreciate that this change was part and parcel of the then emerging economic policy in the country. Indeed, the new mining laws were not isolated measures, but components of this new vision of the economy and of the State. This is one of the main features that explain the success of the mining reform, which was shaped under two laws, the *Organic Constitutional Law on Mining Concessions* (1982) and the *Mining Code* (1983). These are very simple laws that govern only mineral tenure and which reflect the principles of the new economic policy regarding mining activity. In effect, the respect for property was reflected in the constitutional protection of property rights over mining concessions, which are real rights that cannot be expropriated – neither the concession nor any of its essential attributes - unless by a law authorising the expropriation and provides for the prompt and full compensation according to legal criteria based on the net present value of the mining reserves. It is clear that these provisions were established as a response to the 1971 nationalisation of the American copper companies which operated in Chile (Piñera, 2002). Likewise, these laws grant complete security of tenure and establish that the rights over concessions are freely transferable and mortgageable, thus creating a market of mining rights. The principles of free-market economy and the subsidiary role of the State were also reflected in the mechanisms to maintain mineral rights under these laws, as there are no working or investment requirements, but reliance on the payment of a single annual fee. Besides, mineral rights are of indefinite duration. The rationale of these provisions was ensuring the free and rational operation of mines by companies, in accordance with their own criteria. Finally, it is noteworthy that according to the law, mineral rights are granted by resolution of the courts, so there is no room for neither political nor administrative discretion.

2. Development of the Model and Future Challenges

The outcome of this simple, clear and friendly environment for foreign investment was exceptional: US\$37,750 million in mining foreign investment authorised from 1974 to 2003, with US\$18,664 million as investment which has been materialised (Chilean Copper Commission, 2003).

Despite these results, for a complete assessment of Chilean mining policy, there is a need to review its evolution and maturation, since many conclusions can be drawn from this experience of 30 years of investment law and more than 20 years of mining legislation. So, it is important to understand which have been the main investment and policy developments in mining over this period, as well as to conjecture if it might be possible to conceive a future complete revision of this policy. Indeed, it is clear that until recently the pendulum has been swinging in favour of mining investors. Is it now swinging in the opposite direction? (Crowson, 1998).

- *Democratic legitimation of the reform and continuity of the model*

One of the most remarkable features of the Chilean case has been the continuity of the economic and mining model with the return to democracy in 1990. Indeed, after three governments of a center-left coalition, in general terms the model has been preserved. It is precisely this characteristic the best guarantee for the long-term duration of the model.

However, it is clear that although the basic mining framework has been maintained, there have been several changes which to some extent have affected foreign mining investment in Chile. In general terms such modifications are related to new sensibilities, especially regarding the environment –environmental regulation has been developed in Chile only in the 1990s– and with the improvements that any model needs as it reaches its maturity. It is important to point out that these changes have affected either foreign companies or national companies, so none of these modifications have been built on a discriminatory basis.

- *Environmental matters*

Albeit the *Framework Environmental Law* was enacted in 1994, the submission of mining projects to a system of Environmental Impact Assessment (EIA) became compulsory only in 1997. The EIA includes a phase of public participation through public hearings and comments that can be made by those who may be affected by mining projects. Although the system has proved to be effective, there is a lack of control of the environmental commitments made by the companies. So, it was not surprise the announcement made by President Lagos regarding the creation of an agency whose task will be precisely the control and supervision in the fulfillment of these commitments by the companies (Lagos, 2005).

Apart from this initiative, there is a need to enhance current regulations on mine closure and rehabilitation, as they show serious shortcomings regarding the lack of incentives and guarantees to ensure compliance with commitments. In addition, there is no regulation which faces the problem of reclamation of abandoned mines. There are draft laws which are under study by the Chilean Copper Commission and by the National Service of Geology and Mining on both subjects.

It is important to stress that in general terms the main environmental problems in mining have been produced by the activity developed by the State-owned companies. In fact, lawsuits have been filed against State companies, with successful results in some cases (Lagos, 2004). Yet, the State and the private companies have done considerable efforts in

order to remediate and prevent major environmental problems. Examples of these initiatives are the so-called 'clean agreements', signed by the government and the Mining Council, which are a sort of codes of conduct and good practices regarding different matters, such as waste management, energy efficiency and acid drainage.

- *Contribution of mining to local and regional development*

With respect to social concerns, although there is a need to enhance and support public participation, it is of general recognition that there are no serious problems in this regard, probably because most mineral activity is located in unpopulated areas. Other social concerns are related to the poor flow of mineral revenues to mining regions, due to the centralisation of tax collection and its expenditure. This problem is being addressed by a cooperative initiative between the State and some mining companies which are promoting the creation of 'mining clusters' which include training programs, outsourcing, forging linkages between large mining companies and medium and small-scale service companies and the economic diversification of mineral regions.

- *Investment and taxation*

Apart from the new special tax on mining operational income whose draft law has been just approved, the system regarding investment and taxation has remained substantially the same. Modifications to the model are related to the ratio between equity and loans. Whilst in the early years of the model there was no restriction, the ratio is now 25/75, with some limitations in the indebtedness of mining companies in connection to its related companies and with certain changes in the treatment of the accelerated depreciation.

The most significant test to the model has been the recent discussion about the mining royalty. The first draft law that the government sent to Congress intended to amend the *Organic Constitutional Law on Mining Concessions* in order to levy a 3% royalty over the annual net sale of metallic mineral substances of *all* mining companies, even those which tax stability was protected under investment contracts. The argument for the royalty was that rather than a tax, it was a 'fair compensation to the State'. The amendment - would have required a super-majority to be approved - was rejected in Congress, with the opposition of centre-right parties which argued that the royalty would challenge the very basic constitutional and legal principles underpinning the fiscal system in Chile, namely non-discrimination between different economic actors, and neutrality, as the tax regime has been profit-related. Yet, the debate was already installed in society.

The government proposed in a second draft law a levy of an annual 5% tax over operational profits of mining companies with an annual output over the 50,000 tons of mineral. Nevertheless, the draft law was different this time: It acknowledges its status as a tax, it is not applicable to companies protected under tax stability and its payment is considered a deductible expense against income tax to be paid by companies. The draft law was approved by Congress in April 2005 and enacted as law.

Regarding this new tax, it is important to understand that although it does not breach any principle of the model, it is clear that it will derive in a loss of competitiveness. In fact, as a

first outcome of this discussion Chile dropped from the second place to the fourteenth place in the index of policy potential of the 'Mining Annual Survey' elaborated by the Fraser Institute (Fraser Institute, 2004). Furthermore, a very negative feature of the royalty debate was the extreme politicisation of the arguments and the fact that, at the end of the day, this tax constitutes a discrimination against mining vis-à-vis other industries. Yet, it is noteworthy that this tax affects not only foreign companies, but also Chilean mining companies.

- *Artisanal and small-scale mining*

Emerging law and policies on artisanal and small-scale mining seek to focus the resources earmarked for the promotion of the sector in forging associations and clusters that allow the creation of a productive base that can resist changes in the global economy. A governmental programme for artisanal mining is aimed, *inter alia*, at facilitating access to resources, training, financial and technical assistance, as well as at accommodating and formalising mining titles and contractual modalities to the dynamics of the sector.

3. Some Final Comments

Despite the approval of the new tax, the future of mining in Chile is still optimistic, with a model that has proved to be effective and attractive for foreign investment. But we have to take into account that much of the investment has undergone a period of maturation, with more than 10 years since initial investments were made. It seems that a main challenge for these 'old investments' is to obtain a general validation of the activity by the whole Chilean society, with a view to avoid politicised discussions such as the one which occurred over the royalty. In this regard, enhancing measures towards environmental protection is crucial. Among other initiatives, it is important the openness of the foreign mining companies to Chilean investors, a greater unity of the mining companies' association in such a way that includes medium-size companies - and a better publicity of social voluntary initiatives launched by companies.

II.2 PERU (By Ricardo Labó F.)

1. The Mining Sector Launch

The turn of the 1990s saw a Peruvian mining sector in crisis. Indeed, by the end of the 1980s, the State-owned mining operations -which in practice monopolised the sector since the 1970s- were reporting annual losses of around US\$100 million and not receiving inflows of new investment; their production was stagnated and labour productivity in declination.

The Peruvian government that took office in 1990 initiated a series of structural reforms in 1991 characterised by the openness to foreign investment, mainly through the privatisation of the state-owned enterprises. As in Chile and Argentina, the mining sector was part and parcel of this national policy shift.

By enacting the *Mining Investment Promotion Law* (MIPL) in 1991, as an amendment to the *General Mining Law* of 1981, the government declared of national interest the promotion of investment in this sector. These changes, consolidated in the *Single Revised Text of the General Mining Law* of 1992, included important aspects such as a definition of the status of mineral rights and the functions and management of a modern cadastre. This reform did also simplify the tributary regime, implemented the principle of non-export of taxes, eliminated any discrimination between national and foreign capitals, opened the possibility to sign tributary stability contracts and removed restrictive foreign exchange rate policies, among other important changes. In this way, the government turned from being an active actor (i.e. its participation along the whole mining value chain from prospecting to marketing) to an investment promoter and regulator.

As part of the structural reforms, the government initially attempted to adopt a *central* environmental approach by application of the 1990 *Environment and Natural Resources Code*. Nevertheless, the 1991 MIPL incorporated a specific set of environmental norms for mining investment, which were regulated by the 1993 *Environmental Protection in the Mining Sector Regulation*. This regulation was characterised by a command and control and liability-types regime. It was not until 1998 that the submission of an Environmental Impact Assessment (EIA) as a prerequisite to exploit mineral deposits, was established, and closure plans were only required at a conceptual level. For existent operations, Environmental Adjustment and Management Programmes (PAMA) had to be complied.

Since the start of the privatisation process in 1992, the mining industry has seen phenomenal growth. This process involved more than 50 transactions that represented around US\$ 1.2 billion of direct revenues to the Peruvian government, and around US\$ 4.5 billion of investment commitments. The last State-owned operation was privatised in 2003, and a few projects and concessions remain to be privatised. Indeed, this shift in ownership and the enhancement of the legal framework contributed to the development of this sector by attracting investors from all around the world. Over the period of 1992-2004, some US\$ 1.9 billion of private investment capital were injected into the mineral sector for exploration, and about US\$ 5.5 billion were invested for the establishment of new mines as well as for the expansion and enhancement of existing ones. This flow of investment is clearly reflected in the output figures and other positive externalities for Peru.

2. The 21st Century: Filling the 1990s Gaps and New Challenges

As described above, the 1990s reforms had an important and rapid impact over the development of the mining sector and the country as a whole. Direct foreign investment continued to flow into the country at the beginning of the 21st Century. Nevertheless, these years are witnessing another generation of policy changes in both investment promotion and environmental issues, as well as the emergence of new challenges. These may be attributed to global trends, internal political and social issues, and gaps left by the 1990s reform. In a context of a decentralisation process and sound conflicts between mining companies and their surrounding communities, the elimination of some investment incentives, the integration of Sustainable Development (SD) concepts into the mining

legislation, and the imposition of a mining royalty have characterised the Peruvian mining sector in the last five years. These main themes are explained below.

- *Decentralisation Process*

Peru has historically been a centralised State. The political, administrative, fiscal and economic power has always been concentrated in Lima, the capital of the country, which currently is home of almost one third of the entire Peruvian population. Lima has a population of more than 8.5 million people, compared to less than 3.5 million in the 1970s. This extraordinary growth is mainly explained by the immigration of people from all around Peru looking for opportunities in the capital, given the stagnation of economies outside Lima.

Given the failure of the decentralisation process in the 1980s, the new government of 2001 reinitiated it in 2002 by setting up a legal framework that states the guidelines and responsibilities related mainly to resource allocation to regions. Currently, Peru is divided into 25 regions, each of them with their own governmental structure; responsible for enhancing their region's development and economy by promoting investment, improving public services and related activities. This decentralisation process includes the progressive transfer of powers and competences and fiscal resources. Regarding the latter, it has been established that one of the sources of the annual budgets of the regions is the so-called Mining Canon (currently determined by 50% of the Income Tax paid by the mining companies). Indeed, this source represents up to 90% of the total investment budget of some regions. Mining is active in 17 regions and 92% of the mining GDP is generated in them (without considering Lima). The private sector is also taking part in this process. The National Confederation of Private Entrepreneurial Institutions (CONFIEP by its Spanish acronym) has designated the National Society of Mining, Petroleum and Energy (SNMPE by its Spanish acronym) to lead this process from the private side, given the fact that mining is the most decentralised economic activity in the country. The decentralisation process is still in progress and the gradual transfer of competences will take several years. The importance of mining as a main source of most regions' budget has been generating several pressures on this activity.

- *Investment Promotion Changes*

The transition government of 2000 eliminated some of the so-called fiscal benefits granted to the mining sector in the 1990s, basically the reinvestment of profits free of income tax and the accelerated depreciation. Likewise, the annual fee paid per hectare of concession was increased. These changes came as a response to some interest groups that considered that mining held too many privileges vis-à-vis other economic activities. Nevertheless, an initiative of the Executive branch paved the way for the enactment, in 2003, of an important law to incentive investment in exploration activities: the refund of the value added tax paid on goods and services during this phase (however, this legislation is only current for five years).

- *Environmental Liability*

The environmental legislation of the 1990s, which included emission limits, periodical monitoring, fines, economic liability and mandatory EIAs, among others, prevented and corrected only part of the environmental issues faced by the mining sector. They did not consider the legacy of more than 600 abandoned mine sites left without any technical or environmental studies to prevent future damage to the environment (Ministerio de Energía y Minas –MEM– (a), 2004). Their reclamation and appropriate closure may demand an investment of more than US\$ 1,2 billion; funds that the government does not have available. This situation has triggered the enactment of two new laws in the last couple of years: one related to the management of this abandoned mines and other to mine closure activities. Additionally, at the beginning of 2005, the MEM signed an agreement with the National Environmental Fund (FONAM by its Spanish acronym) providing an initial capital of around US\$ 1 MM that will be aimed to environmental remediation. The government expects to attract private sources to feed this fund; so far, the SNMPE has contributed with a similar amount to the FONAM.

- *Mine Closure*

The Peruvian government enacted its first *Mine Closure Law* (MCL) in October of 2003. This new legislation sets the obligations that every company with a mine in operation must comply with regarding rehabilitation, closure and post-closure activities to avoid or mitigate future environmental damage. The MCL mandates the establishment of an Environmental Guarantee at the early stages of the mining project to avoid future lack of funds. Mining companies claim that special tax treatment should be given or clarified for the provisions and rehabilitation costs incurred during the life of the mine, especially if they will be considered tax-deductible, and at what stage of the project. Even though the law was enacted more than a year ago, it has not been possible to enforce it yet given that its regulation was enacted on August 2005.

- *Public Participation*

On 2002, the *Citizen's Consultation and Participation in the Approval of Environmental Studies in Mining and Energy Sectors Regulation* was approved. As its name suggests, it aims to the enhancement and strengthening of public participation in the public hearing process prior to the EIA approval. An underlying objective is to deliver clear information to local stakeholders regarding the mining project and expectations. Nevertheless, this legislation by itself has not been able to stop sound mining conflicts, as explained below.

- *Prior Commitments*

On December 2003, the Peruvian government enacted the Supreme Decree N° 042-2003-EM, which introduced an extra requirement to the procedure for obtaining mining and beneficiation concessions. This additional requisite consists of the submission of a sworn declaration from concession title-holders to commit themselves to develop their mining activities under a SD framework, the so-called Sworn Declaration of Prior Commitment

(SDPC). The Table below shows those no-binding commitments. On its side, the SNMPE released for the first time a Code of Conduct in 2002.

Prior Commitments – Supreme Decree No. 042-2003-EM
<ul style="list-style-type: none"> • Perform production activities under a policy framework that aims environmental excellence.
<ul style="list-style-type: none"> • Respect the local institutions, authorities, culture, and customs; keeping a propitious relationship with the population of the mining operation’s influence area.
<ul style="list-style-type: none"> • Keep a continuous and opportune dialogue with the regional and local authorities, the population of the mining operation’s influence area, and its representative organizations, providing them with information regarding its mining operations.
<ul style="list-style-type: none"> • Foment, preferably, local employment, offering the required training opportunities.
<ul style="list-style-type: none"> • Acquire, preferably, local goods and services to cover the necessities of its mining activities and staff, in reasonable conditions of quality, opportunity and price; creating the adequate mechanisms for agreements.

- *Mining Conflicts*

As in other mining districts worldwide, the last five years have been featured by conflicts between mining companies and their surrounding communities. Indeed, several exploration projects have been put on hold, the development of others has been delayed, and social unrest has been registered. Social conflicts characterised mining projects all around the country, including Tambogrande, Yanacocha, Antamina, and Quellaveco. This review does not aim to further into details on these conflicts, rather to point out efforts towards finding solutions to those issues have been a main concern to Peruvian authorities. In effect, in 2004 the MEM participated and organised 105 workshops related to conflicts’ resolution (MEM (b)).

Reasons for opposition are several, ranging from political interests, to environmental complaints, and the feeling of the communities of not receiving any positive externalities out of this activity. Indeed, local communities find mining companies responsible for the few (or nil) positive externalities their operations create to their communities, not taking into account the misuse and misallocation of funds done by their own authorities. The mining sector is seen by many as an activity that simply exploits mineral resources, exports them, keeps all the profits, does not pay taxes, contaminates, and does not leave any benefits for the communities, i.e. it only creates negative externalities. The main problem might lie on the fact that from the US\$ 2.8 billion collected by the government in the form of taxes during 1992-2003, only 16.7% was destined to investment projects. Moreover, from that total turnover, only around 16.5% was distributed among the regional and local governments where the mining operations are located. This circumstance could be considered as a misuse of those rents, since they were not used to stimulate future economic growth and development (i.e. through its use directly in education or infrastructure, for instance), especially in areas surrounding mining operations. The above perception,

accumulated over years, has created adverse side-effects, being translated into social unrest, controversial anti-technical fiscal policy measures, and other oppositions against mining in Peru. As of June 2005, 27 mining conflicts were in process all around the country.

- *Royalty*

The Peruvian government has attempted to correct part of the above-described situation. Some of the solutions have become part of the problem though. Indeed, it has not taken into account what, in this author's view, is the real issue (i.e. poor management of mineral rents) but has rather focused on increasing the portion of the rent the government earns from this activity. One of these responses was the imposition of a mining royalty in June 2004. This is an *ad-valorem* type royalty based on the value of the mineral concentrate. Its range goes from 1% to 3%, using a method of incremental sliding scale. The royalty payment is considered as a cost for Income Tax purposes.

- *Small-scale mining*

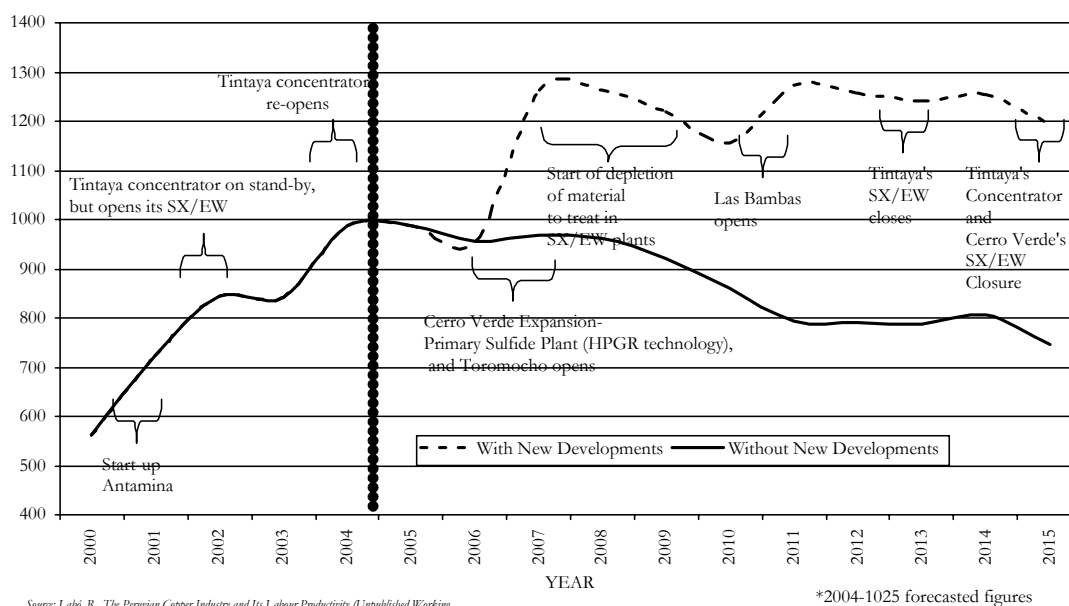
The reform of the 1990s practically forgot the artisanal and small-scale mining, which is an important source of employment and income, especially in the South part of Peru. With a view to filling this gap, the *Formalization and Promotion of Small-Scale and Artisanal Mining Law* was enacted at the beginning of 2002. Additionally, other administrative simplification measures were implemented by the MEM. The most important impact of this measure has been the formalization, as of June 2005, of around 1,800 small-scale miners and 700 artisans. Nevertheless, the MEM still lacks of a special office with the necessary human resources to attend other demands of this important subsector.

3. Current Issues and Future Challenges

If the 1990s were characterised by its pro-investment approach and measures, the 21st Century went backwards on some of those policies given the political and social pressure that may be an answer of the gaps left and mistakes done in the 1990s; however, foreign investment continued to flow.

Nevertheless, it is important to take into account that the 1990s saw the development of deposits discovered before the 1970s, with the exception of Pierina gold mine (owned by Barrick). In that sense, new discoveries are needed to maintain the future mining production. The copper sector is an illustrative case, as shown in the figure below. Indeed, copper production will start declining if no new discoveries are made.

Figure X. Copper Mine Output and Forecast for Peru (2000 - 2015*)



At the end of May 2005, the MEM publicly acknowledged the crisis of mining conflicts that this sector is passing through. One of the most recent sound conflict is the one related to the copper mine Tintaya, owned by BHP Billiton. Although the company had entered into an agreement with the surrounding communities at the end of 2003 –which was taken as a model in the mining sector and included 3% of the profits of the company destined to social investment-, at the end of May 2005 the mine had to stop its operations for more than one month due to social unrest. Another copper project in the exploration phase, located in North Peru and operated by the English junior mining company, Monterrico Metals, was also stopped on July 2005; negotiations are still on place.

The remaining part of this decade would be characterised by the continuation of the development of mining project as: Las Bambas, Cerro Verde (expansion), Cerro Corona, Alto Chicama, and Toromocho; which will represent around us\$ 2.6 billion of new direct investment. Also the flow of investment on exploration should continue; indeed, the Lima Stock Exchange is getting ready to list its first junior mining exploration company to raise capital internally.

Finally, regarding governance and social responsibility issues, the enhancement of distribution and use of mining rents and the development of mining activities under a SD framework will be necessary to a smooth the development of the mining sector in the following years. It has to be taken into account that Peru is currently passing through an electoral campaign (general elections will be held on 2006); hence, some interest groups will take advantage of this situation and may go against the mining sector -which is one of the most exposed sectors to public and political critics- to gain some popularity and votes.

II.3 ARGENTINA (By Elizabeth Bastida)

1. Launching the Mining Sector in Argentina

The 1990's signalled a turning point in the history of mining in Argentina. While Argentina has traditionally been a non-mining country, concentrating its mineral production in construction materials, exploration and mining acquired a tremendous expansion since the implementation of an aggressive strategy to open the sector to private investment in 1992. Even during the deep economic and political crisis which imploded at the end of 2001, legal and policy measures ensured the stability of the legal regime of the mining sector. With a more favourable international climate and domestic exchange rate, investment in the sector after 2002 has even soared, paving the way to what has been called as the 'second wave' of mining investment in the country. A recent report published by the Mining Journal commented that while about U\$S 4 billion have been invested in the past ten years –provided all the projects in the pipeline are built-, about U\$S4.7 billion could be invested in the next five years (Mining Journal, 2005).

The revitalisation of the mining industry in Argentina took place in the context of the profound liberalisation of the economy promoted during the 1990s. A new highly competitive fiscal and legal framework for mining investment was the key to transformation of Argentinean mining. The core pieces of such a framework are the *Mining Investment Law* (1993) establishing a mining incentive scheme and tax benefits, such as fiscal stability of the tax burden at the time of submission of the feasibility study, for 30 years; the *Federal Mining Covenant* (1993) which had an important role in defining consensus policies in the mining sector between federal and provincial authorities, within the federal structure of the country; and two sets of legislation which introduced significant amendments to the old 1887 *Mining Code*. The main piece of legislation governing mining is still this code, which in substantial aspects is applicable nation-wide, while procedural rules are entrusted to provincial authorities. On the basis of the principle of State ownership of the provinces over its mineral resources, it adopts the concession system as the method to grant mineral rights to private parties. The amendments have expanded mining areas, cancelling outdated institutions and improving the co-ordination of procedural aspects of the mining law by means of inter-jurisdictional agreements aimed at implementing a unified procedural code for mining in provincial jurisdictions.

Even with the *Law of Public Emergency and Reform of the Foreign Exchange Regime* of January 2002 and the devaluation of the Argentinian currency –which was pegged to the dollar-, and following a period of uncertainty, the mining sector has remained competitive with a series of legislative measures that ensured the stability of the regime. Decree 417/03 stipulated that mining companies protected under the fiscal and foreign exchange stability regime established under the Mining Investment Law were exempted from the export retentions set out by the Law of Public Emergency.

The need to set out rules for environmental protection for mining has been a second driver of law and policy reform in the sector. In line with the constitutional recognition of the right of any inhabitant to enjoy a healthy and balanced environment, suitable for human development, embraced in the constitutional reform of 1994, the Law of Environmental Protection for Mining (1995), incorporated to the Mining Code, set up the environmental framework for the activity on a sectoral basis. Being a federal country, special emphasis has been placed on co-ordinating national and provincial powers for the regulation of environmental matters in the mining sector. This has been done by enshrining

environmental regulations in the all-embracing *Mining Code*, which is applicable nationwide, thus achieving great uniformity among the provinces in the application of environmental regulations to the mining sector. The *Mining Code* acts as a management framework for the distribution of powers between federal and provincial governments (Di Paola and Walsh, 2000), not only for mineral tenure aspects, but also for environmental regulations. In Argentina, the competent authority is either the mining authority or the environmental authority, according to the preference of each province. A persistent emphasis has been placed on finding mechanisms for building up appropriate environmental institutions while maintaining a climate of predictability and stability for private investment.

2) Further Developments and Challenges

This set of legal provisions has consistently developed towards the clear policy objective to establish an enabling framework for investment. As exploration and mining materialise and interface with the environment, provincial and local levels of governments and communities, some gaps become apparent and raise challenges to all the actors participating in the sector and for law and policy-making.

- *Standards and compliance with environmental regulations.*

As Chile and Peru, the environmental legal framework for mining in Argentina has a series of weaknesses, such as the absence of specific goals, measures and technical guidance for achieving pollution prevention in the different phases of mining (this is being reversed in Peru). It also has inadequate legal tools to support pollution prevention in critical areas such as closure planning, economic incentives and public participation, and no financial insurance is contemplated under the specific legislation.

The EIA covers the prospecting, exploration, exploitation, development, extraction, storage and beneficiation phases, including those activities aimed at mine closure. They all require separate Environmental Impact Reports (EIR), and are reviewed separately for approval. For the closure phase, the operator must file another EIR, or an update or amendment of the existing one to cover it, including measures and actions aimed at avoiding environmental impacts after the closure of operations. Though the EIR must include post-closure monitoring, no formal closure plans are required, thus weakening the enforcement of these rules. There is currently debate on the extent of a financial insurance for mining, as required under the 2002 *General Law of the Environment*.

The legislation relies heavily on the traditional administrative (from warnings and fines to temporary and definite shutdown), civil and criminal mechanisms to enforce compliance. New approaches to enforcement, such as trusts, bonds or financial sureties to guarantee compliance have not been introduced yet. In addition, the voluntary use by the mining sector of environmental management systems, such as ISO 14000, is just beginning. As to economic instruments, there is a special tax benefit set up to prevent and mitigate environmental impact up to 5% of operative costs of minerals extraction and treatment which will be deductible from income tax under the *Mining Investment Law*. Enforcement

is further hindered by the lack of financial and technical resources, especially to deal with mega-projects on which there is little or no experience.

- *Public participation.*

Environmental regulations applicable to mining at the national level require the enforcement authority to provide *information* to whoever requests it regarding the application of environmental provisions. It is noteworthy that, generally speaking, EIAs (or summary reports) are not placed in governmental websites –as per a review on the competent authorities in Catamarca and San Juan-. In turn, the provinces -that have retained the powers to regulate general environmental matters within their own jurisdictions- can introduce *public participation* mechanisms as long as these do not contradict national law. In this context, a few provincial constitutions and environmental framework statutes have provided scope for public hearings in development projects. There is no obligation to pay due regard to the comments of interested parties. As in Chile and Peru, opportunities for public participation are designed for project approval and are located within the EIA process, rather than acting as a consensus-building tool throughout the project, or as a starting point for communication with those affected by the project. In addition, there are practical hindrances to the effectiveness of public participation if they do not go together with wider information to the affected population and capacity-building programmes.

- *Community and NGOs opposition to mining projects.*

Shortcomings within the formal system are probably at the heart of the use of local referendums which, although do not have legal strength, have emerged as tools to express community disapproval to projects using cyanide leaching. There is an increasingly active and questioning stance towards mining and its impacts at a provincial, local and community level. In 2002, the starting-up of the *Esquel* project in a pristine area in the South-West of Chubut Province by the American company Meridian Gold encountered fierce opposition from the local community. Following a campaign promoted by Greenpeace Argentina against the use of cyanide leaching for the extraction of gold in the proposed operation, the local community organised a local referendum opposing the mine –opposition based mainly on the environmental impacts of the project-. The project is currently on hold. In 2003, pressure on the provincial government led to the enactment of a provincial law banning all metal mining activity mined by means of open pits and using cyanide in the processes of mining production in the Chubut Province. A similar law banning the use of cyanide in extractive processes has been adopted in the neighbour province of Río Negro, as a result of opposition to the *Calcatreu* project. A similar pattern of protests from local communities and international NGOs is being initiated in the Province of San Juan, a current hot spot for mining investment. While opposition has prompted mainly on environmental grounds and before the starting up of projects, experience in Peru and other jurisdictions has shown the building up of conflicts if communities perceive there is no linkage between the mine and local development.

- *Contribution of mining to regional development?*

Now largely overcome, an initial controversy back in 1997 between the federal government and the Province of Catamarca –home to Bajo de la Alumbrera, the first large-scale mine operating in the country- related to the scope of the concept of ‘mine-mouth value’ as the basis to assess royalties due to the Province and established under the *Mining Investment Law*. The provincial government argued for the precedence of application of a provincial law which assimilated the basis to assess mine-mouth value royalties to gross-value, in contrast to the definition of the regulatory decree of the *Mining Investment Law* which stipulated the deduction of certain costs. The conflict was solved by consensus and the enactment of an amendment to the law clarifying the extent of the definition and the costs to be deducted. In the end, the driver of the conflict was the initial discontentment of the Province that would become the main mining producer in the country as to the direct contribution of mining to its economy.

While this conflict has been overcome it is important to take into account experiences in other jurisdictions regarding share and participation of local governments in some portion of mineral rents, as well as in the management of revenues and reinvestment in development projects in ways that can ensure the contribution of mining to local and regional development and avoid the dissipation of mineral rent. In this regard, it is noteworthy the case of the province of Río Negro, which created the Regional Development Tax, a 7.5% of the market value of the final product (Law 3897). In projects developed under the *Mining Integration Treaty*, this raises important and unique challenges as the so-called multiplier effect of mining would be shared across two jurisdictions.

- *Small and medium-scale mining.*

Legal and policy efforts in mining from the last decade have focused on large-scale mining. There is some debate and some draft legal initiatives on the need to articulate policies to for small and medium enterprises, which have had a rather traditional role in mining construction materials, and to ensure their contribution to development.

3) Final Comment

Recent developments can be construed as indicative of gaps in the system and a demand for a readjustment of the roles of traditional players in the mining industry. Beyond rhetoric, there is a need *to strengthen governance institutions* in such a manner that they can manage and ensure that investment works to ensure economic and social development while protecting the environment. Main mining projects in Argentina are taking place in provinces with perplexing levels of poverty, exclusion and chronic unemployment. While it would be unrealistic and irresponsible to raise expectations, there is an opportunity to materialise the *potential* contribution of mining to development. In this connection, it is important to open up the debate between all players in mining, those participating in and those (probably potentially) affected by it, in ways to look for mechanisms to manage the challenges and to build legitimacy for mining.

In this author’s view, there is a need to *build on* and *go beyond* current reform efforts to address these challenges -while maintaining the competitive legal framework for mining-

and to articulate a vision of the minerals sector in the context of sustainable development in Argentina.

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