



Khyber
Pakhtunkhwa
**MINERALS
POLICY
2014**



MINERALS DEVELOPMENT
DEPARTMENT

CIVIL SECRETARIAT, PESHAWAR,
KHYBER PAKHTUNKHWA, PAKISTAN

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Message from Chief Minister Khyber Pakhtunkhwa

Khyber Pakhtunkhwa is endowed with vast mineral resources that include precious and base metals, non-metallic minerals, precious and semi-precious stones, rare earth elements and also materials used in the construction industry. Although some of these resources have gone through some stages of development, yet geoscientific data indicates that further exploration according to international best practices is necessary.



The priority of Khyber Pakhtunkhwa Government is that with least impact on the environment, to explore, mine, process and market minerals scientifically, and in the spirit of absolute transparency and diligence, such that this industry underpins broad-based job creation, poverty alleviation, economic growth and mineral supply through viable mines and mineral businesses. The Federal and Provincial Governments are also cognizant of the need to keep pace with the changing international investment climate, and the important objectives which need to be satisfied in order to secure foreign and local private risk capital investment into the mineral sector. The development of the mining sector will significantly contribute to the development of the country's economy by increasing the gross domestic product (GDP), creating new employment opportunities and opening the international market for export. Domestic and foreign venture capital is beginning to recognise Khyber Pakhtunkhwa minerals as an untapped business opportunity. With greater provincial autonomy, and the fact that the ownership of minerals vests with the provinces, it was felt imperative to formulate Khyber Pakhtunkhwa Minerals Policy. This policy provides a set of guiding principles and a programme of action to further develop the mineral industry of Khyber Pakhtunkhwa by creating a business environment that will benefit the people.

Mr. Pervez Khattak

Chief Minister
Government of Khyber Pakhtunkhwa, Pakistan

Message from Minister of Minerals Development

Under the visionary leadership of Pakistan Tehreek-e-Insaf Chairman Imran Khan and the guidance of Chief Minister Pervez Khattak, it was felt imperative to formulate a provincial minerals policy in line with indigenous demands and market conditions. In my department, a new regime has been introduced which ensures transparency and accountability through effective implementation of the legal and regulatory framework. Such change in the system has attracted business interest in Khyber Pakhtunkhwa mineral sector and significant opportunity exists to commence and improve exploration and mining activities. The expected outcome of this policy is an equitable, competitive and thriving mining sector, fully integrated into the provincial, national, regional and international markets. For this purpose a comprehensive critical review of mining and related rules and regulations is in progress to give practical effect to this policy. As to environmental impact of mining, I urge the mining sector to take advantage of the technological jump toward facilitating modern mining including much improved environmental stewardship of Khyber Pakhtunkhwa mineral resources.



With this policy, we envisage a series of mining/mineral processing operations dotting the countryside throughout the length and breadth of the province. The overall goals can be expressed in terms of broad-based development, growth, poverty reduction and significant improvement in governance culture of the province and country.

In the end, I would like to thank all the stakeholders, mine owners association, members of the mineral working group and academia for their constant feed back in drafting of this policy. I especially extend my gratitude to Barrister Salman Hamid Afridi, International Consultant Mary Louise Vitelli, Consultant Dr. Fuzail Siddiqui, Secretary Minerals Development Department Dr. Mian Waheeduddin and staff of the department who worked tirelessly in preparing this policy document.

Ziaullah Afridi

Minister of Minerals Development
Government of Khyber Pakhtunkhwa, Pakistan
07 July 2014

Background

This policy stands for a steady increase in mineral production from Khyber Pakhtunkhwa safely and legally

At the time of creation of Pakistan, the mineral sector contributed less than 1% of GDP; this percentage has remained more or less static since then. The mineral sector has the potential to do much more and to jump-start the economy and social development. A list of main mineral resources of Khyber Pakhtunkhwa is provided in Section 4 below that indicates the variety of mineral wealth with which nature has endowed Khyber Pakhtunkhwa.

One of the main strategies of the current Khyber Pakhtunkhwa Government is to activate the mineral sector to enhance and sustain its contribution to government revenues, foreign exchange earnings, employment creation, ancillary economic activities, human resources and technology development and the improvement of social and physical infrastructure. This policy seeks to provide a framework for the sustainable management of mineral resources and to guide

interventions by government institutions that would be designed to result in a quantum leap in mineral production in Khyber Pakhtunkhwa. It sets out the expectations for how sector development will contribute, not only to the vitalisation of the Khyber Pakhtunkhwa economy, but more broadly to social and economic development and the enhancement of a democratic culture. Minerals are non-renewable; there is one opportunity to develop them. However, impacts of strategic mineral development may catalyse sustainable economic activity in other sectors through economic “linkages”. Strategies to develop these multi-directional linkages are dealt with in this policy.

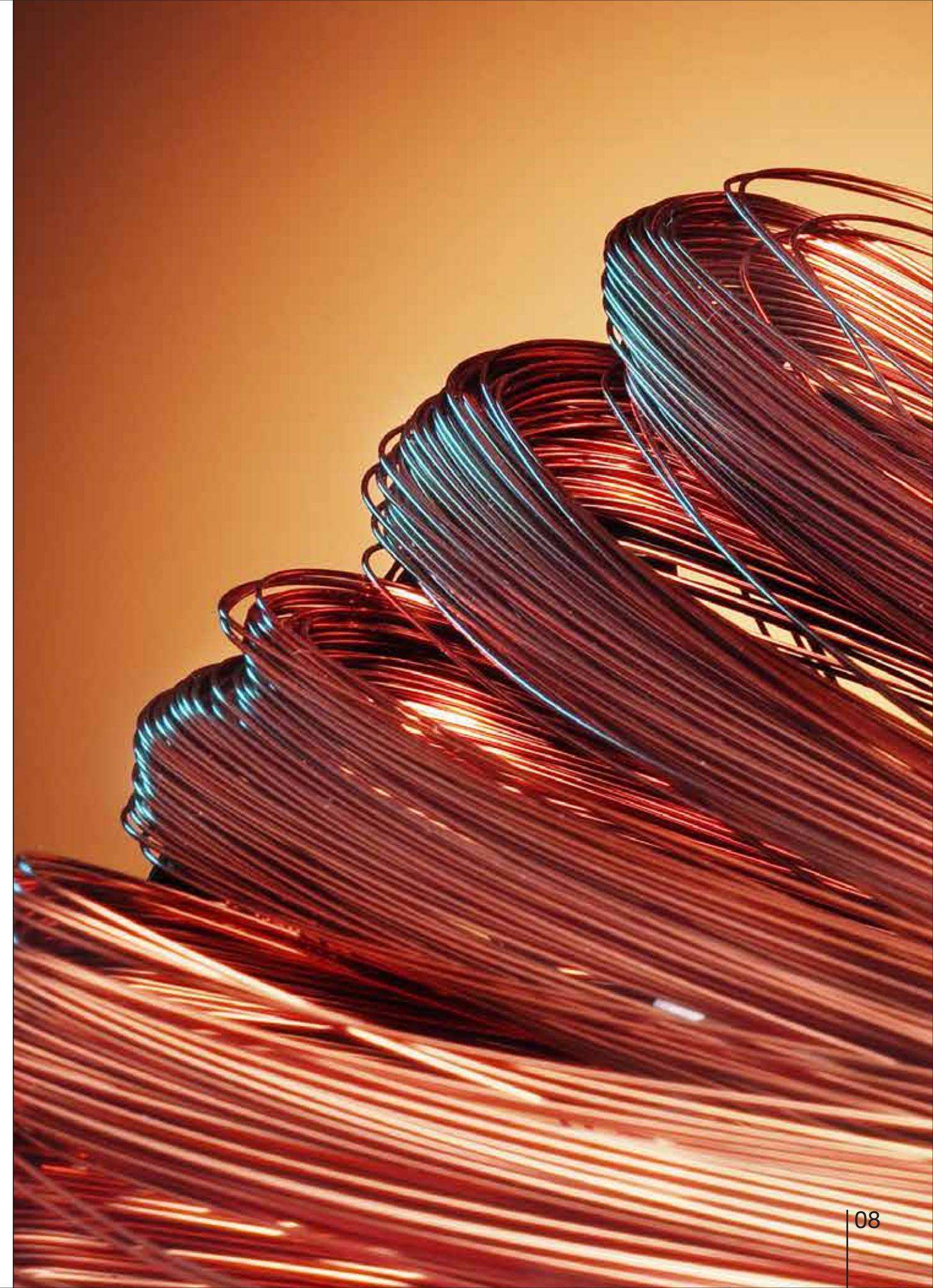
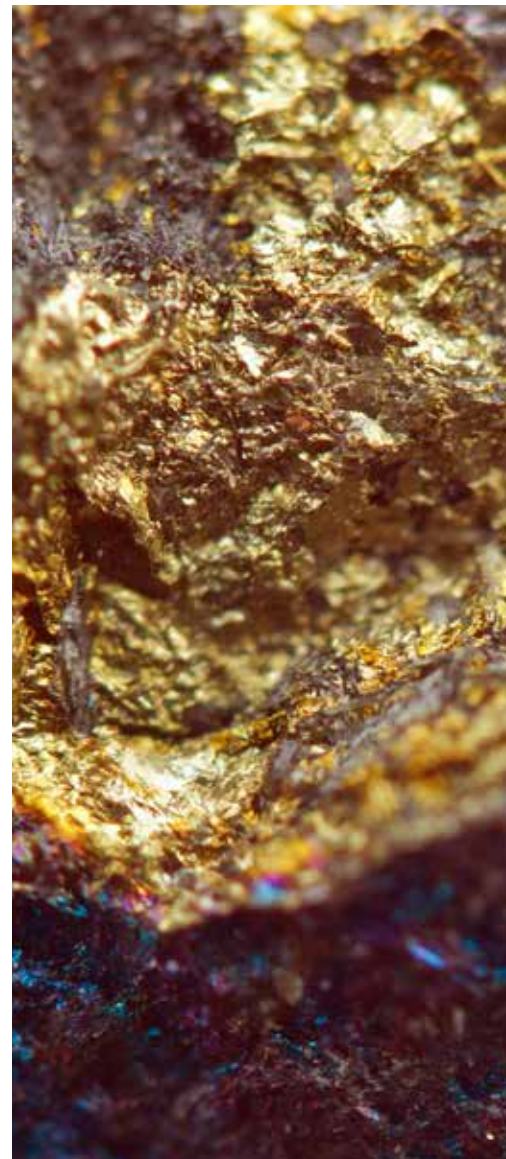
It is important to avoid the pit-falls of the “resource curse” whereby many resource-rich developing states have failed to realise earlier expectations of rapid and balanced development due to the negative impacts of resource development. These include for example (a)

excessive rise in exchange value of national currency making exports uncompetitive (b) excessive investment of capital and skilled labour in the mineral sector restricting growth of other sustainable sectors and (c) excessive non-developmental allocation of profits from minerals by political elites, curtailing the rate of reinvestment required to replace depleted minerals and/or depreciated plants and machinery.

This policy intends to send a clear signal to both the national and foreign investment community that Khyber Pakhtunkhwa mining is open for business. Khyber Pakhtunkhwa supports a competitive mineral regime that is informed by international trends, adheres to international norms, is grounded in local conditions and is accountable to Khyber Pakhtunkhwa and national common interests. Further, this policy focuses on advancing the interests of present and future generations of the people of Khyber Pakhtunkhwa by attracting private investment to facilitate the development of mineral resources. However, investment must be utilised in an optimal manner that links mineral resource development

with related economic linkages such as electricity, transport and education for sustainable local and national growth and development.

(Note: In the following text, the word 'Government', used by itself, refers to the Government of Khyber Pakhtunkhwa Province of Pakistan)



Mineral Policy Principles

The core policy principles are:

1. To establish an internationally competitive, stable and conducive business climate to attract and sustain local and foreign investment for a steady increase in mineral production by lawful means;
2. To give preference to integrated mining operations with linkages to upstream and downstream mining and processing related activities;
3. To formulate a fiscal and regulatory regime that ensures fair value for Khyber Pakhtunkhwa while offering equitable rewards to private investors in minerals;
4. To encourage and facilitate mining by legal means and prevent all illegal mining activities without fear or favour, and to frame stringent laws to deal with illegal mining activities.
5. To ensure predictable mechanisms for the evaluation of competing land, water and other resource-use options;
6. To eliminate and mitigate adverse social conditions and environmental degradation attributed to mining and related activities;
7. To support and enable artisanal and small-scale mining activities that create employment, generate revenues and help reduce poverty, especially in rural areas;
8. To ensure equitable distribution of benefits from mining and related activities to meet current and future public needs;
9. To establish an effective and transparent administration and management of the mineral sector;
10. Give preference to local value addition and processing of indigenous minerals.

This policy seeks to ensure that mineral sector development takes advantage of initiatives and collaboration at regional, national and international levels that ensure best practices and good governance for accelerated growth and development.

Mineral Endowment

Khyber Pakhtunkhwa geology is created by coming together of three moving...

domains of the earth's crust, namely from north to south, Eurasian Plate, the Kohistan Island Arc and the Indo-Pak plate. Plate movements caused the piling up of Eurasian Plate on the Kohistan Island Arc and later the Indo-Pak plate was thrust under the Kohistan Island Arc. These upheavals built the greatest mountains existing on the earth and pushed up rocks, and contained mineral concentrations, from great depths to be accessible to human observation and benefit on or near the earth's surface. Based on survey data collected by generations of geologists and prospectors over the last century, the main Khyber Pakhtunkhwa minerals include, but are not limited to:

Metallic and Sub-Metallic Mineral Resources:

- Antimony
- Chromium
- Copper
- Gold
- Iron
- Lead
- Manganese
- Platinum group elements
- Rare earth elements
- Silver

- Tungsten
- Zinc

Non-Metallic Mineral Resources

- Barite
- Coal
- Dolomite
- Fluorite
- Gemstones
- Gypsum
- Limestone, Shale /Clay
- Magnesite
- Marble, Granite and other dimension stones
- Nepheline Syenite
- Phosphate
- Salt (including Potassic)
- Soapstone
- Sulphur (mainly as Pyrite)

Other resources include hazardous minerals, such as arsenic minerals and asbestos; mining of these is banned and will not be open to private investment in Khyber Pakhtunkhwa. Certain radioactive minerals are reported to occur but are managed by the Federal Government.



Regulatory Framework

The Government of Khyber Pakhtunkhwa promotes fair, timely and transparent award of mineral rights...

through a legal and regulatory framework that includes “first come-first served” and/or tendering for rights in competitive bidding that will be detailed in relevant laws and regulations. “first come - first served” will not apply to bidding competitions.

The main aims of the regulatory framework are:

- A transparent system of bidding competitions for the grant and issuance of Exploration License (EL) to identify viable mineral deposits and conduct resource assessment. This especially refers to prospective areas offered for investment as pre-delineated mineral blocks for large scale exploration and mining where successful EL holders will be assured of grant of long term Mining Lease (ML)
- An open and transparent system for mineral prospects previously granted but on which the licensee or lessee surrendered the right, or lost the right because of failing to fulfil obligations under the rules
- An open and transparent system for mineral prospects of high value-low volume minerals (gemstones) for which tonnage based royalty collection is not

practicable

- A system of exploration licensing based on “first come – first served” for prospective areas not covered by above four categories. This specifically applies to mineral discoveries made by or known to exploration license applicants
- A licensing system also based on “first come – first served” basis but geared for the needs of ASM to exploit localised near surface mineral occurrences that lack the continuity for large scale mining but are sufficiently rich to merit mining for profit
- Clearly defined rules and regulations that list the type of mineral titles granted and:
 - a. Set out simple and transparent procedures for timely allocation of rights
 - b. Stipulate the conduct of exploration, mining and related activities
 - c. Define the transition from exploration to mining rights and the transfer of these rights
 - d. Regulate the conduct of mining and labour welfare, including mine closure plan
 - e. Guarantee security of tenure and the orderly, uninterrupted carrying out of business

f. Specify penalties for violations of law, license requirements, rules and regulations

g. Ensure exclusivity of specified mineral rights over licensed areas. The mineral title system will follow an 'explore/mine or lose license/lease' policy to encourage active mineral exploration and exploitation but discourage "mothballing" or stalling of development for speculative and/or purposes adversely affecting mineral production. Online application facility will be considered. The Khyber Pakhtunkhwa Government

recognises that funds invested by private businesses in mineral development are scarce and that such funds must be spent on project development rather than wasted in non-development activities such as litigation. As a matter of policy, relevant government officials must respect investments and not disrupt project operations, only and unless there is immediate danger to health, safety and the environment (HS&E). Even then only the section/s posing the risk may be halted, not the entire operation.

A review of international best practices in award of licenses will be conducted and best practices applied in Khyber Pakhtunkhwa as adapted to local conditions.

The Khyber Pakhtunkhwa Government has established a "Working Group on Minerals" (WGM) consisting of independent subject experts and public and private business representatives and chaired by the Minister of Minerals Development. WGM has an independent role to oversee reforms in Minerals Development/DGMM workings. Mining industry representatives may be

inducted in WGM. The Minister may decide to constitute a sub-committee of WGM, chaired by the Minister, to resolve specific disputes if this high-level intervention can help minimise litigation. Any dispute that may arise under or in connection with mineral operations will be resolved in the manner as prescribed by the existing laws, regulations, rules or procedures. However, in order to facilitate smooth running of operations, nothing

in these legal acts will preclude or limit the informal resolution of disputes by mutually-agreeable means.

To ensure coherence in decision-making, the harmonisation will be affected of the Mineral Concession Rules with other statutes, being administered by other institutions, that directly or indirectly affect the development of the mineral sector; particularly the Directorate of Explosives and the Pakistan/Khyber Pakhtunkhwa Environmental Protection Agency. A greater liaison will be established with the Department of Industries to develop detailed Occupational Health and Safety Regulations for mining and associated mineral processing operations.

A Khyber Pakhtunkhwa Mineral Investment Facilitation Authority (Khyber Pakhtunkhwa-MIFA) will be constituted in line with the stipulation in Pakistan National Mineral Policy – 2013. Khyber Pakhtunkhwa-MIFA will be headed by the Khyber Pakhtunkhwa Chief Minister with the Minister of Minerals Development as the Vice Chairman, and members as decided by the Khyber Pakhtunkhwa Government. A review, updating and simplification, to develop a new 'Mineral Act' based on the guidelines in this policy, and through a consultative process, will

be a priority. The review will include harmonisation of the 'Mineral Act' with tax, social and environmental, labour and foreign investment laws to provide smooth liaison among interacting departments.



Fiscal Framework

The Government of Khyber Pakhtunkhwa recognises the need to devise a fiscal regime that assures ...

the province/country of fair value for its resources while ensuring fair and reasonable return to investors. Such a regime should allow the investor to recover exploration, exploitation and mine closure outlays in a timely manner, to achieve an acceptable rate of return commensurate with risk and to meet financial obligations to creditors and suppliers.

The government will institute a well-designed fiscal regime and revenue management system that encourages investment, optimises economic linkages, exemplifies transparency, and captures reasonable and sustained revenue for the people of Khyber Pakhtunkhwa and Pakistan. Key components of revenue management will be: (a) system of tracking operations (b) surface rent/royalty rates and effective collection (c) internationally acceptable accounting standards and (d) local oversight Committees to oversee development funds utilisation.

Fiscal policies geared toward a fiscal environment that caters to the interests of both the government

and the investors, will be implemented for achieving provincial/national fiscal and regulatory economic uniformity. It is essential, since minerals constitute a non-renewable resource, that Khyber Pakhtunkhwa maximises the economic linkages, for example the collection of economic royalties, excise duty for labour welfare and investor contributions to community welfare in compensation for the benefit due to giving up its mineral resources for private sector exploitation. Unlike other concessions where the state asset is returned at the end of the lease with an enhanced value, mineral assets are depleted by exploitation. This leaves the state with a hole in the ground and it is essential that the investor/licensee rehabilitates the project property. The substantial impacts that mineral operations can have on the environment, society and future generations warrant that appropriate policy prescriptions be developed by the government to provide mechanisms to encourage sustainable mineral development, through the facilitation of sustainable ancillary economic activities.

For transparency, Khyber Pakhtunkhwa authorities intend to apply for participation in the Extractive Industries Transparency Initiative (EITI) review operations to reduce opportunistic corrupt practices and conflict of interest. The policies will be based on the rules of the Government of Khyber Pakhtunkhwa and will be in conformity with best international practices in the mineral industries as adapted to local conditions.

The goal is to establish a mineral fiscal regime that:

- (1) is efficient, in that it encourages optimal extraction and avoids selective mining of high grade ore;
- (2) garners an equitable share of the resource revenues for the province and the investor
- (3) uses internationally best-practice finance and market instruments;
- (4) is transparent and competitive and takes account of global trends;
- (5) is coherent, clear and simple to administer
- (6) provides mechanisms that encourage
 - (a) local processing (e.g. value addition)
 - (b) the development of local supplier industries
 - (c) increased training and

- employment of local persons
- (d) technology development (R&D)
- (e) the integration of mining with other economic sectors

A review of fiscal regime for exploration and mining is underway and details of taxes, levies and concessions will be detailed in Rules and Regulations arising from this policy. The fiscal regime, in addition to the above objectives, will seek to:

- (1) establish capacity, procedures and methods to ensure that taxes and other payments owed to Khyber Pakhtunkhwa Government, as a result of mineral license activities, are properly assessed and collected through the development of a “Mineral Revenue Management Plan”. Likewise there will be an

“Allocation of Mineral Revenues Plan” that includes revenue sharing scheme to benefit mining communities and Khyber Pakhtunkhwa citizens. There should be a clear mechanism of financial gain to mining communities that extends beyond jobs. Introduction of Environmental Fiscal Reform (EFR) will be considered as it aims to devolve fiscal powers to local level where utilisation of funds is to take place.

- (2) ensure availability of pertinent information on fiscal policy, the tax regime and other pertinent legislation for mineral operations
- (3) provide mechanisms for a sufficiently stable fiscal regime to provide investors with an adequate time horizon for planning and achieving adequate returns on investment.
- (4) draft financial provisions for templates of Mineral Agreements/Contracts for ease of reference and documentation.
- (5) initiate the development of capital intensive or speciality minerals, where the pace of investment is slowed. This will be done not by investment of public funds only but through

setting up of self-governing Corporate companies by mobilising private or public-private funding, but with private management.

- (6) Ensure fair and transparent royalty collection system.



Land Rights and Land Use Options

Mine projects require the intensive use of land and can adversely affect other land occupants and users.

The Government of Khyber Pakhtunkhwa will establish a framework for the evaluation and management of competing land use options with a view toward maximising the sustainable developmental potential for the province, the nation and future generations. This will involve the legal recognition of the rights of other land users, implementation of Social Impact Assessments and the

development and communication of community protection actions.

Also involved will be development of procedures for identifying and consulting potentially affected communities and persons as well as appropriate compensation principles. Khyber Pakhtunkhwa Government will develop a clear resettlement policy.



Environmental Stewardship and Worker Health, Safety and Welfare

Environment: A key principle set out in this minerals policy is that development should be based on sustainable natural resource use ...

and sound management and also that full environmental and social costs or benefits foregone should form part of public and private sector planning. The policy supports the development of an integrated and multi-sector systems approach to resource and environmental planning. Application of this approach to decision-making relating to the conduct and supervision of mineral operations requires compliance with the environmental protection laws of Khyber Pakhtunkhwa and international best practices in the sustainable use of the natural resources. Mine managements will be required to establish a sound program of sampling and analysis of air, surface water, underground water and mine effluents/emissions, including automatic sampling. Findings will be regularly reported to relevant Government departments, including results of independent expert audits of measures taken. Incidents of permissible limits being exceeded, however slightly, will be minimised by the mine management, at the pain of penalties being imposed. As a matter of policy, Khyber Pakhtunkhwa will look at existing international standards, for

example on equipment quality, exploration/mining methods, safe disposal of waste products (e.g. prevention of Acid Mine Drainage) and recycling of minerals and mineral products for adoption in Khyber Pakhtunkhwa.

The Khyber Pakhtunkhwa counterpart of Pakistan Environmental Protection Agency (Pak-EPA) is central to the formulation and implementation of relevant principles, guidelines and rules. Currently applicable rules are summarised in Pak-EPA (Review of IEE/EIA) Regulations 2000 available on Pak-EPA website. No mining operations will be permitted without an IEE (Initial Environmental Examination Report) or EIA (Environmental Impact Assessment Report), as the case may be, having been compiled, evaluated and approved by Khyber Pakhtunkhwa Environmental Protection Agency (KP-EPA). Plans for mitigating anticipated environmental impacts must be incorporated into the Mine plans and relevant assessment reports. These must, right from the inception of the mining operation, include plans and reserve funding for redressing physical impacts upon closure of the mine as well as for sustaining community

livelihoods thereafter. The closure plans should be updated regularly. Mine management must formulate Emergency Preparedness Plans, in cooperation with communities. This policy endorses international best practices in emergency preparedness and sustainability, such as the APELL Process and IFC sustainability performance standards and requires Government entities to cooperate in emergency response programs. If a mining operation poses an immediate risk to HS&E, this will be one of the few situations where risk generating parts of legitimate running mining operations may be summarily halted after hearing the offending party.

The Government will require mineral exploration/mining entities to provide education, training and equipment to reduce hazards, prevent accidents and create a culture of safety consciousness in their operations.

Worker Health, Safety and Welfare:

The Chief Inspector of Mines is charged with the responsibility of managing worker safety under the Mines Safety Act of 1923. Drafting of new legislation is in progress to replace this outdated Act. Commissioner of Mines is responsible for managing labour welfare activities of the mining labour. Manpower and equipment resources of the above two offices are under review and will be expanded to keep pace with requirements. This policy stands for anticipation and prevention of mine accidents through regular

inspections of mines and ancillary structures against a carefully designed checklist to identify potential hazards. If an accident does occur, investigations will not be confined to determine individual accountability but will extend to the determination of underlying cause/s and steps necessary to prevent recurrence. Mine managements will be required to provide training and supplies for First Aid to an adequate number of their workers to ensure availability in or near all their work places at all hours of operations. Statistics of mine accidents, however minor, will be collected from all over the province, including reports of 'near misses', and analysed to learn lessons for accident prevention. The same approach will be applied to safety in mineral processing plants and ancillary work places.

Likewise, the inadequacies of mine labour welfare facilities are a major Government concern. These include, but are not limited to, health (including sanitation), education, housing,

employment benefits, security of job and collective bargaining rights.

Mine workers are particularly prone to dust inhalation that may cause respiratory diseases, including lung cancer, collectively referred to as pneumoconiosis, that needs regular screening of individual workers for disease prevention.

Government collects cess/excise duty, an amount that can only be used for welfare of workers.

Government has taken note of past reports indicating that this amount was not spent on labour welfare in some years.

This policy stands for sustained improvement in the quality of life of mine workers by compiling and implementing a "Labour Welfare Program".

Social Responsibility

The Government of Khyber Pakhtunkhwa is committed to nurturing an environment for compliance and enforcement with the highest standards of corporate social responsibility (CSR) by entities involved in mineral operations.

A social impact assessment report will be included as a section of the IEE and EIA reports as discussed above. A company involved in preparing their application for Mining Lease (ML) will consult affected communities and include results of discussion in their application for ML. The investor will be required to ensure that the company's socio-economic plans provide for increasing national presence in mine operations at all levels, if the required competency is available locally. The Government leadership will take increasing responsibility for the physical and social infrastructure as a mine approaches closure to ensure sustained benefits from investment in minerals.

The UN Global Compact asks companies to embrace, support and enact, within their sphere of influence, a set of ten core principles, as reproduced below, in the areas of human rights, labour

standards, the environment and anti-corruption. Khyber Pakhtunkhwa Government will require that mine operators incorporate the ten core values in plans and in conduct of their operations:

Human Rights

- i) Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights
- ii) Principle 2: Make sure that they are not complicit in human rights abuses

Labour

- i) Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining
- ii) Principle 4: The elimination of all forms of forced and compulsory labour
- iii) Principle 5: The effective abolition of child labour

- iv) Principle 6: The elimination of discrimination in respect of employment and occupation

Environment

- i) Principle 7: Businesses should support a precautionary approach to environmental challenges
- ii) Principle 8: undertake initiatives to promote greater environmental responsibility
- iii) Principle 9: Encourage the development and diffusion of environmentally friendly technologies

Anti-Corruption

- i) Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery



Development of an Integrated Mining Sector

Mineral endowment of Khyber Pakhtunkhwa is such that it can accommodate artisanal and small to medium scale as well as Large Scale Mining.

Generally, a mine with annual, actual or projected production, of greater than 500,000 and 1,000,000 tonne of ore, from underground or surface operations respectively, will be categorised as a large scale mine. While the development of Khyber Pakhtunkhwa's mineral resources will generate revenue and provide materials for the market, the sector's contribution to Khyber Pakhtunkhwa/Pakistan development will enjoy a multiplier effect where mining projects are better integrated into the provincial and national economy. In this regard, opportunities to foster upstream and downstream value addition will be strategically pursued.

An assessment of large scale mining potential of Khyber Pakhtunkhwa is ongoing and is intended to use high-yield resource exploitation projects to serve as anchors for the development of infrastructure, that can then underpin the development of other sustainable economic potential

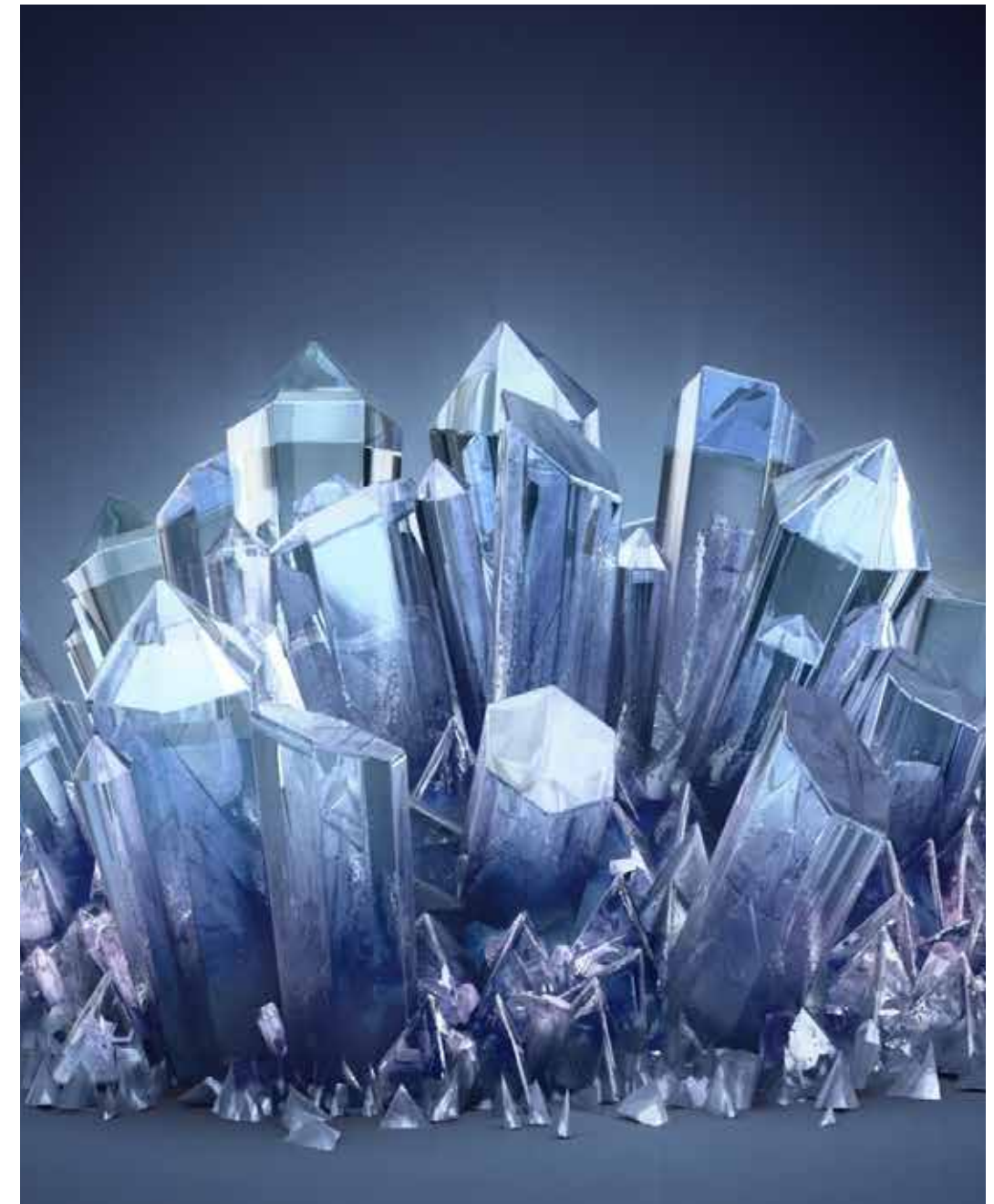
such as agriculture (and agro-processing), forestry (and processing), tourism, etc. and other related ancillary industries and businesses.

Government will encourage greater infrastructure linkages to mining projects which typically require access to suppliers and consumers as well as consume large amounts of electricity and water. Government will ensure that infrastructure needs of large-scale mines are integrated into national and regional economic planning to ensure open access at reasonable prices.

As a matter of policy, the development of local small, micro and medium-scale enterprises (SMMEs), especially in the procurement of goods and services, will be encouraged. The Government of Khyber Pakhtunkhwa will look for possibilities for promoting forward linkages; studies will be undertaken to explore the potential for such

forward linkages in the metal fabrication industry, for development of lapidaries and jewellery industry and to facilitate marketing of the province's mineral resources for import substitution.

Linkages into the local Khyber Pakhtunkhwa-based human infrastructure (skills development, technology transfer, universities, colleges, etc.) will



also be encouraged and facilitated. To pursue viable policies for integration, there is a need to take account not only of the Khyber Pakhtunkhwa economy but also the national and international economic climate. In order to achieve viable markets and critical economies of scale, Khyber Pakhtunkhwa will progressively integrate into the larger markets in terms of both mineral inputs and outputs.

Artisanal and Small-Scale Mining (ASM)

The Khyber Pakhtunkhwa minerals sector needs to be fully integrated into job creation...

and poverty reduction and other national development strategies in order to achieve holistic growth and development. Therefore Khyber Pakhtunkhwa Government will support artisanal and small-scale mining (ASM), overlapping with large scale mining with mutual written agreements. In this way ASM will be able to share benefit of infrastructural development due to large scale mining.

Besides, certain regions of Khyber Pakhtunkhwa have isolated rich pockets of metallic ores but lack any identified mineral deposit/s of sufficient continuity to attract large-scale mining. ASM offers an attractive alternative for such regions.

Environmental Safeguards

However, ASM also has the potential for significant environmental degradation, negative social and health impacts and life-threatening pollution of bio-systems (e.g. mercury from ASM gold recovery operations). Support services will be provided in, but not limited to, extension services such as on-the-spot training and technology, e.g. for

mercury free gold processing. Extension services will be provided through a dedicated work force of Monitors recruited by the Khyber Pakhtunkhwa Government from local communities, and trained to provide technical help and ensure collection of public share of revenues. Irregularities committed by licensed artisanal and small-scale miners will be dealt with according to law, but without stopping work if it affects labour livelihood, unless there is immediate threat to HS&E.

An integrated approach is required in addressing ASM issues. Since ASM is largely a rural activity, any program for it needs to be linked with rural development plans. Consultations will be held with the Khyber Pakhtunkhwa Rural Support Program to benefit from shared experience. Many ASM miners require training in business and technical skills, to assist them to mine sustainably.

The Government of Khyber Pakhtunkhwa will make available extension services to support ASM operations through technical advice and the facilitation of capital (micro-loans) schemes. Loan may

also be given to interested parties for installing plants at mining sites of marble for utilising the dumped waste marble boulders, for making tiles and decoration pieces. Work will be done to identify areas to be designated for ASM support and monitoring. To enable small-scale miners to obtain financial facilities, consideration will be given to enhance the creditworthiness of their operations and license tenure.

Business Support

Small-scale miners need help in procuring lawful access to deposits, to markets and to information about fair prices for their products. A regime for licensing buyers of their products, with an accessible register of persons so licensed will help in this regard. The establishment of assay laboratories for accurate determination of grade can

facilitate fair trade and production of quality mineral products. The development of an internet-based portal for marketing gemstones would also assist the miners to obtain technical and business advice as well as competitive prices. Necessary on-site technical training will be provided to workers and the supervising staff by Minerals Development Department/DGMM to enhance their skills.

Miner's Organisation

The small-scale mining sector could be strengthened by the miners organising themselves into associations and, in some instances cooperatives, in order to improve economies of scale and creditworthiness. In this regard local Mine Owners Association/s will continue to be involved in matters related to ASMs.



Governance of ASM

A separate section will be set up in Directorate General Mines & Minerals, dedicated to regulate and facilitate ASM. The ASM section will promote small scale mining, through the issuance of Prospecting Licenses (PL) that can in time be converted to Mining Lease (ML) in accordance with the rules. ASM Section mandate will include closely listening to miner's association/s and not only regulate the sector but also facilitate it in increasing mineral production in Khyber Pakhtunkhwa. Regulation and facilitation will include, but not be limited to, consideration of the following matters:

- a. Provide on-site technical advice, including advice on choice of mining machinery
- b. Provide free access to data/information on geology of mineral prospects as well as granted areas, through the official website
- c. Link with other mineral organisations such as GSP and academia to share knowledge
- d. Process applications and appeals within reasonable, specified time period
- e. Establish a monitoring force, consisting of educated and physically fit local residents, to
 - (i) Report illegal mining
 - (ii) Assist in recovery of correct production based Government dues

- (iii) Provide basic technical advice to miners on site
- (iv) Provide factual and timely record of exploration/mining activities
 - f. Run an awareness campaign to educate public about the legal rights/obligations of communities vis-à-vis small scale mining
 - g. Discourage opportunistic imposition of demands from "influentials" that adversely affect operations
 - h. Fix fair and predictable rates of compensation for land surface use, in consultation with revenue authorities, mine owners representatives and community representatives. Compensation agreements must include a clause for landowners to refrain from construction in the compensated area
 - i. Allow assignment of PL, on application by the license holder, if the small-scale mine operator is able to engage an investor and substantial financial input is assured
 - j. Insist that each small scale miner retains at least part-time services of a graduate mining geologist or engineer with relevant qualifications/experience to oversee exploration and mining operations
 - k. Likewise, each miner must

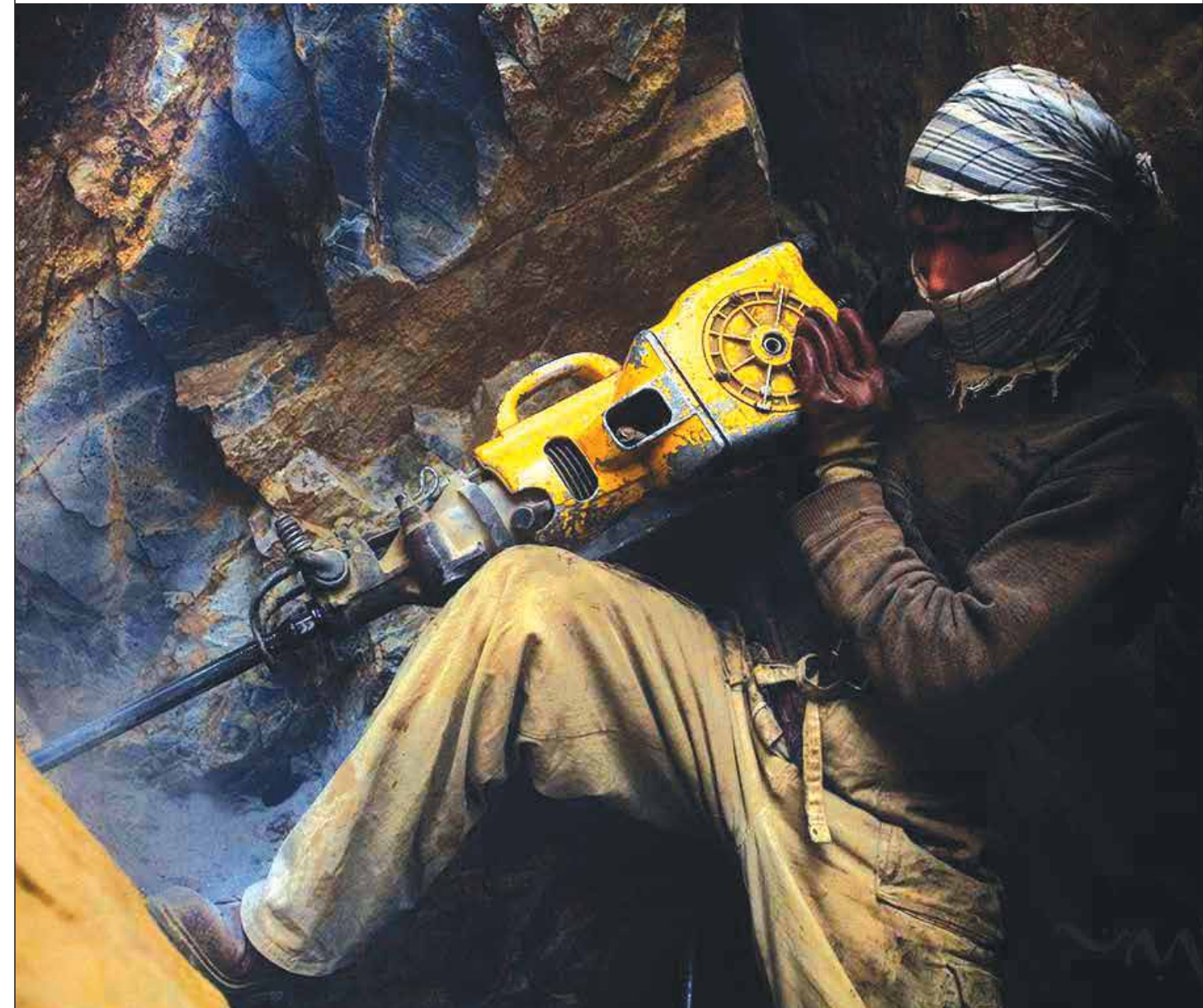
engage a mine surveyor to produce updated survey of all excavations at least on an annual basis

- l. Depute Minerals Development Department surveyor to do random checks to independently verify mine surveys
- m. Sponsor mineral shows and facilitate miners to attend international exhibitions
- n. Establish a mineral development bank to meet financial needs of mineral businesses
- o. Train Magistrates at district level to knowledgeably try mineral related criminal cases
- p. Set up training institutes for diploma level technical education and training to miners
- q. Facilitate issue of explosives to legitimate concessionaires
- r. Facilitate issue of NOC for mining in special areas such as forests
- s. Set up regional offices at district level and hire District Geologist and Mining Engineer cadre
- t. Provide reliable assay, testing and weighing facilities on reasonable payment for services

The relationship between large-scale mining enterprises and the ASM sector need not be an antagonistic one. Small-scale

miners can benefit from technical inputs and advice from the large-scale operators, as well as providing markets for further processing at the large-scale facilities. Small-scale miners may supply large-scale operations with geo-data/information for remote locations

Forms of cooperation can help the large-scale miners reduce policing costs and gain acceptance and credibility in the community.



Quarrying

The Government of Khyber Pakhtunkhwa recognises the need for special procedures to regulate the mining...

of construction materials and gold bearing river sands (“placer”) mining.

There is, however, a growing concern on land degradation/erosion and safety caused by uncontrolled sand and alluvial clay mining. Directorate General Mines & Minerals technical personnel will pay periodic visits and provide counselling and enforce safe and professional practices to the miners on-site.

Alternatives to use of Mercury in Gold Recovery

Of great concern in Khyber Pakhtunkhwa, is the uncontrolled use of mercury in the traditional method of recovery of gold obtained through placer mining. Not only are mining families poisoned by this metal but there is evidence that the entire eco-system along the river course is affected. Alternative techniques are available and Minerals Development Department/Directorate General Mines & Minerals will initiate R&D, in collaboration with experts and research organisations, to find suitable replacement for the use of mercury.

Non-explosive Mining of Marble and other Dimension Stones

Another area of concern is the use of explosives in the mining of dimension stones. The shock waves caused by the use of explosives result in incipient cracks and cause excessive fragmentation during cutting. The yield and quality of valuable slabs of large size is reduced to about 20 percent of mined material. This policy categorically opposes indiscriminate use of explosives. The Khyber Pakhtunkhwa Government will put in place mechanisms to phase out explosives in favour of wire-cutting or other non-explosive mining of dimension stones.



Large-Scale Mining

While small and medium scale mining is generally the domain of domestic investors, large scale mining ...

is expected to attract major corporations, both domestic and international. The Khyber Pakhtunkhwa Government recognises the need to be pro-active in seeking mineral investment rather than waiting for same. A programme of delineating prospective blocks, suitable for large-scale exploration/mining will be undertaken. The blocks will be open for allocation for exploration to prequalified investors through open and transparent competitive bidding. Preference will be given to investors who propose to establish integrated mining/mineral processing operations in Khyber Pakhtunkhwa with significant upstream (power, infrastructure etc.) and downstream (value addition, fabrication etc.) linkages. The Government may consider negotiating and signing a Mineral Development Agreement (MDA) as proposed by an investor within the provisions of relevant laws, rules and regulations. The provisions of National Mineral Policy of Pakistan will be kept in mind when negotiating an MDA with a foreign investor. During exploration, a percentage of exploration expenditure, as agreed at bid stage, will be required to be spent by the EL holder on community welfare. Should the investor find

viable mineral concentration/s in the allocated block/s, a Mining Lease will be granted on application under the rules. Government recognises that foreign companies may face somewhat different realities compared with those faced by local investors that may give rise to security or other special concerns and will work with foreign investors to address such issues.

Dispute Resolution

Dispute resolution provisions of NMP 2013, section 7.9, applicable to the prospective foreign investors states, "Any question or dispute between a foreign mining investor and the Government arising out of or in connection with the terms of an agreement or of a granted mineral title shall be settled amicably where possible. Failing an amicable settlement within a reasonable period, such dispute shall be submitted for sole expert determination or arbitral or other tribunal agreed in a mineral agreement or, where there is no such agreement or such agreement does not specify a tribunal, to the International Centre for Settlement of Investment Disputes (ICSID) or International Chamber of Commerce (ICC) for arbitration. The respective Government will pass

such legislation as is necessary to provide for the effective enforcement in Pakistan of foreign arbitral awards. Disputes between the Government and a mining company of which the majority of the ultimate parent company's shareholders are Pakistani nationals will be settled by arbitration in Pakistan under the provisions of the Pakistan arbitration laws".

In lieu of services provided by the Government to the Investor a share of the net profit, as agreed at the bidding stage, will be paid by the investor to the Government of Khyber Pakhtunkhwa, as and when mining operations generate profit.



Transparency in Mineral Activities

Disclosure of revenue information

The Government of Khyber Pakhtunkhwa is committed to providing information on available revenue and other benefits obtained from mining. To this end, it will adhere to the principles elaborated by the Extractive Industries Transparency Initiative (EITI), especially for large scale mining.

Disclosure of revenue allocation

The Government of Khyber Pakhtunkhwa will ensure that communities adversely affected, or that could be thus affected by mining operations, derive regular and significant benefits from those operations. A predictable formula will be prepared by the Minerals Development Department with stakeholder consultation and put in place to determine such benefits. These will include but not be limited to revenue allocation, access to employment, the provision of infrastructure for local use and resources for local education and skills formation. Mining companies will be encouraged to develop local supply chains for their purchases, thereby integrating their operations into the local economy. The Government of Khyber Pakhtunkhwa will strive to maximise the wider benefits from mining to the regional and national economies in a transparent and equitable manner. To ensure transparency in processing of bids, care will be taken to invite

independent entities, for example media, to witness the bid opening and selection of successful bids.

Disclosure of Exploration and Mineral Rights Information

The Khyber Pakhtunkhwa Government is committed to attracting and enabling large scale private sector investments for the development of mineral deposits and to promote new investments in exploration and exploitation of minerals, particularly metallic minerals. General geological information will be made readily and widely accessible to both small and large scale prospective investors, through a central DATA ROOM and on the Khyber Pakhtunkhwa Government website. A rock and core protocol will be drafted and communicated to miners so that Khyber Pakhtunkhwa develops a good record of its mineral resources. Consideration may be given to outsource data record keeping to reputable data warehouses, as practiced in the oil and gas industry, so that past and newly generated data is stored securely and systematically for utilisation as required. Detailed exploration data will be available to investors for a moderate fee. An accessible web-based mining cadastre information management system will be established that will enhance transparency in the award and monitoring of mineral rights.

Development with Broad Participation

Stakeholder Consultation and Participation

The Government of Khyber Pakhtunkhwa will encourage broad and more direct participation of all stakeholders towards identifying critical issues, and addressing them to ensure that social acceptance of mineral projects is in place. Both project sponsors and Government, working with civil society organizations, have responsibilities for developing and disseminating information and procedures to enhance effective consultation and participation. The facilitation of local equity participation in mining ventures is encouraged.

Khyber Pakhtunkhwa Association and Informational linkages

Khyber Pakhtunkhwa Government will seek access to regional and international geoscientific and mining associations and publications, including, but not limited to, IGF. The Government, in collaboration with the Federal Government and other Provinces of Pakistan, will endeavour to join relevant international organisations, in order to keep abreast of technological advancements and safeguard Khyber Pakhtunkhwa/Pakistan's interest at international fora. Khyber Pakhtunkhwa will share data/information with Ministry of Petroleum & Natural Resources (MP&NR), for example an open access digitized cadastre system, made available on the web.

Inter-Agency collaboration

The mineral policy of Khyber Pakhtunkhwa vis-à-vis Federal Government will be that of bilateral constructive engagement with all counterpart federal ministries, specifically with the Ministry of Petroleum and Natural Resources (MP&NR) and its attached department 'the Geological Survey of Pakistan (GSP)'. GSP is a public service organisation, charged with the crucial task of regional geoscientific mapping. Khyber Pakhtunkhwa mineral policy has been kept in harmony with the National Mineral Policy and both levels of Government will cooperate to provide security of tenure and security of investments in the mineral sector.

Collaboration with Academia

MDD/DGMM management will meet with Academia managements, especially Khyber Pakhtunkhwa earth sciences academic establishments, on an agreed schedule. The main purpose of these meetings will be to

- (a) discuss improvements in syllabi to meet mineral sector needs.
- (b) to synchronise student intake so there is a balance in the number of young men and women that qualify and the number of job positions expected to arise in the industry.
- (c) to discuss/outsource research and development projects to academia as required.

Building Capable Institutions

In recognition by the Government of Khyber Pakhtunkhwa that relevant institutions, whether of governance....

facilitation, promotion or training are not sufficiently equipped or staffed to implement a modern mineral sector, as a matter of policy Government is committed to institutional strengthening. For example,

- i) rehabilitation and upgradation of Mineral Testing Laboratory is a priority
- ii) training of gem miners on quality conservation and control
- iii) training of dimension stone miners in non-explosive mining techniques
- iv) introduction of computer aided 3D geological and mine modeling
- v) Minerals Development Department /Directorate General Mines & Minerals acting as a custodian of exploration data and core library of Khyber Pakhtunkhwa
- vi) Developing sufficient in-house capacity to negotiate terms and conditions of MDA's, supplemented by independent third party expertise where necessary
- vii) Increasing Surveyor establishment by filling available vacancies, from all over Pakistan if necessary, with a line of career progression and

providing them with necessary software and hardware to perform their jobs.

- viii) Likewise, to increase GIS establishment, including assignment to regional offices, and provide them with a line of career progression and necessary equipment

The Government of Khyber Pakhtunkhwa will allocate a portion of the revenue generated from mineral resources to strengthen the capacity of relevant monitoring and promotion institutions.

Administrative restructuring of mineral related departments is essential with a view to providing a 'one window' interface to facilitate investment. Hiring and development of high calibre officers is also essential, especially in the core disciplines of geology and mining engineering directly involved in mineral production, as well as supporting administrative manpower. A system of job description, objective performance assessment and relating training, salary increases and promotion to performance will be introduced to develop and retain a competent and motivated work force. Training will be targeted towards removing

weaknesses or to update knowledge and may consist of short courses, online course work or mid-career study leaves.

Liaison will be developed with Academia to bring their courses in line with international best practices and to hire young professional interns.

Government has already planned to legislate for the registration of geoscientists and self-regulation of geoscientific professionals to develop a body of professionals committed to international standards of competence, ethics and scientific truth.

Government of Khyber Pakhtunkhwa will seek to provide training facilities for the establishment and growth of private sector, including small scale mining entities to underpin a vibrant mining sector in areas such as finance, services, training/skills development, suppliers and consumers of minerals. Special attention will be paid to maximising benefits from relatively expensive overseas trips by nominating delegates that transfer technology on return and continue to do so for sustained periods after return.

The core competencies, namely geology and mining engineering, will be hired in numerical balance, with adequate numbers assigned to field duties, and given due role in decision making, taking into account incontrovertible field

evidences. Khyber Pakhtunkhwa Government recognises that the two competencies are complementary and not interchangeable.

The allocation of resources to strengthen the institutions with oversight responsibilities is a critical part of the Government program. The relevant institutions will be encouraged to consult and develop understanding among themselves as to their respective roles in and contributions to decision-making that impacts on the mineral sector.



Investing for the Future

Mineral resources are finite. The wealth generated from mineral resources must be strategically...

harnessed to ensure a platform for development and growth well after the resources are exhausted. Revenue accrued from the province's mineral resources will also be invested in other forms of capital, especially human and social infrastructure, as well as social assets. It calls for prudence in investment decisions, fiscal discipline and the effective monitoring of disbursements and expenditure. Mine Programs will be compiled by a consultative process, either by mineral category or by provincial areas, to indicate priorities for development for 3, 5 and 10 years.

The Government intends to establish warehouse/s of machinery and equipment and adopt measures to seek franchise for indigenous manufacture of mining machinery. For Research and Development (R&D) enhancement the Government will encourage mining companies to jointly set up an R&D coordination organisation that can arrange R&D into problems that are common to many companies, thereby

distributing cost of R&D. Such organisations have been successfully launched by major mining jurisdictions such as Canada (e.g. Canadian Mining Industry Research Organisation – CAMIRO).



Identifying and Monitoring Policy Outcomes

The expected outcomes of sound mineral development in Khyber Pakhtunkhwa, on the broad provincial development goals, will be assessed in terms of its contribution to...

- | | |
|--|---|
| (1) revenue and foreign exchange earnings | the requisite infrastructure, especially through development of Large Scale Mining |
| (2) the creation of inclusive sustainable employment | (6) avoidance of environmental damage and positive impacts on the environment and local communities |
| (3) the provision of minerals and mineral products for downstream businesses, industries & national construction | (7) development of sustainable ASM operations as well as the communities |
| (4) the improvement in social and physical infrastructure, | (8) improvement in human infrastructure (skills formation & knowledge creation) |
| (5) industrial and business development (up-side & down-stream linkages) and the stimulation of new economic activity through the provision of | (9) technology transfer and development |



Policy Implementation

Minerals Development Department is the responsible Khyber Pakhtunkhwa Government agency for the implementation of this Policy.

The immediate first step is to appoint a senior officer of Directorate General Mines & Minerals to act as a focal person (Director Mineral Policy Implementation – DPI) and to coordinate all activities on policy implementation. The next step is to draft a Mineral Act of Khyber Pakhtunkhwa, in the light of the guidance provided by Khyber Pakhtunkhwa Mineral Policy 2014, to replace the outdated existing Mineral Acts that date back to 1923 and 1948. This legislative documentation will be followed by a review of existing mining concession rules (MCR) to bring these in line with the new Mineral Act of Khyber Pakhtunkhwa.

An independent mechanism will be put in place and a score card formulated to enable Khyber Pakhtunkhwa Government to monitor the implementation of Khyber Pakhtunkhwa Mineral

Policy 2014, and its expected positive impact on mineral production. WGM will also be given a permanent role for independent oversight and monitoring of the implementation of this policy and enforcement of rules based on this policy.

ACRONYMS

ABBREVIATION	DETAIL
APELL	Awareness and Preparedness for Emergencies at Local Level
ASM	Artisanal and Small-Scale Mining
CSR	Corporate Social Responsibility
DPI	Director Mineral Policy Implementation
DGMM	Directorate General of Mines and Minerals
EL	Exploration License
EITI	Extractive Industries Transparency Initiative
EIA	Environmental Impact Assessment
GDP	Gross Domestic Product
GIS	Geographical Information System
GSP	Geological Survey of Pakistan
HS&E	Health, Safety and Environment
IEE	Initial Environmental Examination
IGF	Intergovernmental Forum on mining, minerals, metals and sustainable development
MDA	Minerals Development Agreements
MCR	Mining Concession Rules
ML	Mining Lease
MP&NR	Ministry of Petroleum and Natural Resources
Pak-EPA	Pakistan Environmental Protection Agency
PL	Prospecting License
R&D	Research & Development
SMME	Small, Micro and Medium-Scale Enterprises
UN	United Nations
WGM	Working Group on Minerals