



**KINGDOM OF CAMBODIA**

**Nation**

**Religion**

**King**

ព្រះមហាក្សត្រ រាជានុរាជ រាជបណ្ឌិត

*The Royal Government of Cambodia*

**NATIONAL POLICY ON  
MINERAL RESOURCES 2018-2028**

**Prepared by the Ministry of Mines and Energy  
May, 2018**

## **Preamble**

Mineral resources which are non-renewable natural resources require an attentive administration. The needs for development have to be balanced with the needs for conservation to maintain environmental stability and social-economic sustainability. In this regard, the National Policy on Mineral Resources for 2018-2028 has been issued basing on careful considerations of the current economic, political, and social conditions of Cambodia and the future generation of Cambodian people.

Indeed, some mineral resources do not necessarily need to be developed in a risky manner, but all mineral resources are not supposed to left buried unattended without considering national strategic needs, and we must not sacrifice economic opportunities by overturning the whole responsibility of development to the next generations. Thus, national mineral resource inventory is an important foundation to make an objective and wise decision whether to develop or to preserve.

At the same time, the National Policy on Mineral Resources 2018-2028 will address some of the challenges, such as (1) the lack of efficiency in managing mineral resources and in collecting revenue (2) the development activities that impact the environment and the local communities.

In response to these issues, mechanisms for strengthening the role of state institutions have been devised by giving practical responsibilities to enforcement institutions from sub-national to national level. Transparency mechanisms and comprehensive consultation mechanisms with communities, civil societies, and investors in the mining sector, along with environmental, social and economic impact assessments remain the determining factors for decision-making on mineral resource development. In principle, regulatory mechanisms to strengthen the role of state institutions will bring efficiency to the collection of revenue from mineral resources. In addition, the national policy will not focus on increasing royalties on raw materials for construction but to offer the most favorable conditions to speed up the development of construction sector and infrastructure, also to provide value added to the nation and the people.

On behalf of the Royal Government, I would like to commend and appreciate the efforts made by the Ministry of Mines and Energy in elaborating a comprehensive National Policy on Mineral Resources 2018-2028.

Unofficial Translation

I firmly hope that the National Policy on Mineral Resources would help achieving the vision of the Royal Government, which is to develop mineral resources for economic and social benefits by taking into account good governance and environmental responsibility.

Phnom Penh, 29<sup>th</sup> May, 2018

**Prime Minister**

**Samdech Akka Moha Sena Padei Techo**

**HUN SEN**

## Foreword

Cambodia's complete peace in 1998, under the win-win policy of **Samdech Akka Moha Sena Padei Techo HUN SEN**, Prime Minister of the Kingdom of Cambodia, has boosted Cambodia's socio- economic foundation to develop in all sectors, in which, mining sector has shown a fruitful result that we all could be proud of. Mining of raw materials for construction also have played an important role in terms of supplying raw materials, such as crushed stones, gravel, sand and laterite for infrastructure development including roads, bridges, dams, irrigation system, and other constructions across the country. Cambodia used to import the whole supply of cement during the 2000s, but now local made products are substituting imported ones to meet the needs for construction demands and would eventually export to other countries in the future. On the other hand, an international standard gold mining industry will soon come out as well.

The National Policy on Mineral Resources 2018-2028 was formulated basing on the actual situation of the mining sector of Cambodia, and the thoroughly examined lessons and experience of mineral resources development in various countries including advanced mining countries and developing mining countries in the world and in the region. Internationally best practices which are suitable to the situations of the mining sector in Cambodia have been incorporated into the content of the National Policy on Mineral Resources 2018-2028, which focuses primarily on sustainable and responsible development of mineral resources. Three key factors (environment, social and economic) have been taken into consideration. The issues of local community development and minority people in the mining areas, and the women's issues in mining have also been incorporated in this national policy.

Finally, I would like to express my profound gratitude to **Samdech Akka Moha Sena Padei Techo Hun Sen** for allowing the Ministry of Mines and Energy to take in lead developing the National Policy on Mineral Resources 2018-2028, and I also would like to convey my deep thanks to all contributors from line ministries, institutions, development partners, civil societies and mining private sector for their inputs to the formulation of this comprehensive and high quality policy.

Phnom Penh Capital, 08 May, 2018

**Minister**

**SUY SEM**

## Contents

|   |    |
|---|----|
| <b>I. Introduction</b> .....  | 1  |
| <b>II. Vision</b> .....   | 3  |
| <b>III. Goals and Objectives</b> .....  | 3  |
| <b>IV. Strategies and Action Plan</b> .....   | 3  |
| <b>Objective 1: Strengthening Public Institutions in the Management and Development of Mineral Resources:</b> ..... | 3  |
| 1. <i>Laws and regulations</i> .....  | 3  |
| 2. <i>Capacity Building for Officials and Human Resource Development</i> .....                                      | 4  |
| 3. <i>Creation of Mineral Resources Inventory</i> .....   | 5  |
| 4. <i>Good Governance and Management with Accountability and Transparency</i> .....                                 | 6  |
| 5. <i>Investment Promotion</i> .....  | 7  |
| <b>Objective 2: Promoting Sustainable and Responsible Mining Operations</b> .....                                   | 8  |
| 1. <i>Implementation of Sustainable Development Approaches</i> .....  | 8  |
| 2. <i>Environmental Management</i> .....  | 10 |
| 3. <i>Mine Safety Assurance</i> .....   | 11 |
| 4. <i>Maximizing Mining Resource Extraction</i> .....   | 12 |
| 5. <i>Development of Mineral Resources and Natural Protected Areas</i> .....  | 13 |
| <b>Objective 3: Developing Mineral Resources and Community</b> .....  | 14 |
| 1. <i>Community Development</i> .....   | 14 |
| 2. <i>Use of Regional Labor and Gender Work</i> .....   | 15 |
| 3. <i>Indigenous Peoples and Mineral Resources Exploitation</i> .....   | 16 |
| <b>Objective 4: Developing Artisanal and Small-Scale Mining Exploitation</b> .....                                  | 16 |
| 1. <i>Artisanal and Small-Scale Mining Exploitation</i> .....   | 16 |
| 2. <i>Measures and Solutions to Unauthorized Mining</i> .....   | 17 |
| <b>Objective 5: Mineral Resources and Exports</b> .....   | 19 |
| 1. <i>Export Policy</i> .....   | 19 |
| 2. <i>Exportation of Mineral Products with High Value Added</i> .....   | 20 |
| 3. <i>Trade Facilitation</i> .....  | 20 |
| <b>V. Monitoring, Review, and Evaluation</b> .....  | 21 |
| <b>VI. Conclusion</b> .....   | 21 |
| <b>Lexicon</b> .....  | 23 |

## **I. Introduction**

The National Policy on Mineral Resources is designed to pinpoint the vision, objectives, goals and roles of the RGC in developing the precious mineral resources of the nation, and introducing key strategies and action plans to ensure that the development of mineral resources is carried out sustainably, efficiently, effectively and transparently in accordance with the RGC's political platform of the 5th term of the National Assembly which defines " **To develop minerals, oil and gas to transform them into another new source of economic growth for Cambodia** ". The National Policy on Mineral Resources does not cover oil and gas.

Mineral resources are one of the most precious natural wealth such as sea, forest, flora and fauna, but mineral resources are non-renewable. A country which is rich in mineral resources is blessed by the nature with a great wealth. Therefore, exploitation of these natural resources must ensure sustainability, harmony and prosperity to the economy, society and nations as well as minimize the environmental and social impacts.

Cambodia is known to have various mineral resources. The RGC is working step by step to clearly identify the size and quantity of those mineral resources. Geology and mineral resource studies were conducted almost 150 years ago, but having gone through the civil war for nearly 30 years, the recorded data of the period had almost completely disappeared. According to the mineral resources data compiled by the French Bureau of Geological Survey and Mineral Resources (BRGM) in the early eighties of the 20th century and the Atlas of Mineral Resources of Cambodia Volume 10, compiled in 1993 by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and recent studies during the eighties and nineties of the 20th century showed the presence of big potential mineral resources in Cambodia which is a major factor in attracting the attention of businessmen in the mining sector.

After Cambodia gained complete peace, under the win-win policy of **Samdech Akka Moha Sena Padei Techo HUN SEN, Prime Minister of the Kingdom of Cambodia** in 1998, the mining sector began to grow steadily, requiring a set of specific policies aimed at orienting the development to reach full potential of the mineral resources and responding to the limited experience of Cambodia in this sector.

Mining of raw materials for construction have played an important role in terms of supplying raw materials, such as crushed stones, gravel, sand and laterite for infrastructure development including roads, bridges, dams, irrigation system, and other constructions across the country. By the end of the 2017, approximately 260 licenses for open mines and quarrying sites were granted for operating on over 6000 hectare areas,

employing over 5,000 labor force and investing approximately 335 million US dollar investment.

Mining of industrial minerals has also progressed remarkably especially mining of limestone to supply to local cement factories increased substantially. Currently, five cement factories are operating and can supply about 7,000,000 tons of cement annually in response to the need for construction and minimize the import of cement products. Moreover, this limestone business has also been used as a raw material for supplying to coal power plants and to animal feed businesses.

For metallic minerals sub sector, by the end of 2017, 54 Exploration licenses were granted to both domestic and international investors to conduct surveys of metallic minerals, such as iron, gold, copper and bauxite. In particular, 27 Industrial Mining Licenses were granted to investors for mining iron/gold ores, coal and silica, of which one medium-sized gold mining factory is under construction and planned to start production in 2018. The total investment for metallic minerals sub sectors is approximately 733,000,000 US dollars, with over 1,500 employed labor force.

With the reform in 2015 on mineral revenue collecting measure, the revenue in 2016 has increased up to 52 billion riels (13 million US dollar) relative to only 7 billion riels (almost 2 million US dollar) in 2013.

The issuance of the National Policy on Mineral Resources will help (1) orientating the development of mining sector to conform with the vision of the RGC, (2) providing attractive investment climate from both domestic and foreign direct investment and (3) ensuring the sustainable and responsible development of the mining industry by focusing attention on the three main factors, namely economic, social and environment.

The National Policy on Mineral Resources has been developed in tandem with ASEAN Minerals Cooperation Action Plan, AMCAP 2016-2025 to ensure the sustainable development of the mining sector and achieve the ASEAN Economic Integration as planned by 2025, which was approved by the ASEAN Ministerial Meeting on Minerals-AMMin.

The National Policy on Mineral Resources re-affirms the supporting roles and present flexibility of the RGC in promoting the mining industry, mineral based industry and the trade of Mineral Products. This Policy also pays attention on human resource and local community development, uses of local labor force and gender issues in the mining sector. The National Policy on Mineral Resources represents a major breakthrough in the restructuring of the mining industry to become a part of the national economic foundation that will contribute to the development of Cambodian economy, providing prosperity to

the people and achieving poverty reduction in conformity with the strategic objectives of the RGC.

## **II. Vision**

The vision of the RGC for the mining sector is to "**develop mineral resources for economic and social benefits by taking into account good governance and environmental responsibility**".

## **III. Goals and Objectives**

This Policy aims to:

1. Manage and develop mineral resources sustainably.
2. Bring benefit to the people and the local community.
3. Supply raw materials for the development of infrastructure and construction.
4. Create a new source of revenue for the nation.

In order to achieve the above Goals, five Objectives are outlined:

Objective 1: Strengthening public institutions in the management and development of mineral resources

Objective 2: Promoting sustainable and responsible Mining Operations

Objective 3: Developing mineral resources and community

Objective 4: Developing Artisanal and Small-scale Mining

Objective 5: Mineral resources and exports

## **IV. Strategies and Action Plan**

In order to achieve the above-mentioned goals, the RGC has set important strategies for each objective as following:

### **Objective 1: Strengthening Public Institutions in the Management and Development of Mineral Resources:**

#### **1. Laws and regulations**

The role of the state in managing the development of mineral resources is determined by the Law on Mineral Resource Management and Exploitation in 2001. This law gives responsibilities to the RGC, through the ministry in charge of mining sector, for the development of mineral resources from the stages of prospection to production and to



oversee the trade of mineral products. In order to achieve these responsibilities, it is necessary to enact new laws and regulations to complement and harmonize with the existing laws and regulations and the National Policy on Mineral Resources.

**Action Plan:**

- a. Accelerating the formulation of the Code on Mineral Resources which includes provisions on Mining Operation, Mine Safety, and Mine Inspectors and formulates related rules and regulations for law enforcement.
- b. Reviewing the existing regulations related to the mining sector and enact new regulations to ensure effectiveness of the mining sector management and implementation of good governance which is the core of the RGCT's Rectangular Strategy.
- c. Formulating regulations on Geological Data management and geological sample.
- d. Formulating regulations to ensure transparent and effective collection of revenues from the mining sector.

## **2. Capacity Building for Officials and Human Resource Development**

The strengthening of public institutions is closely linked to the capacity building for officials. Strengthening and enhancing the capacity of officials shall follow regular plans to ensure that the officials in the mining sector have both technical capacity and financial skills to effectively execute their tasks.

Human resource development in the fields of geology and mining engineering are needed to serve Cambodia's present and future mining sector. Human resources training will contribute to promote the development of the mining sector, increase productivity, absorb domestic labor force and minimize the use of foreign experts.

**Action Plan:**

- a. Strengthening the capacity of officials to supervise mining companies on both technical and financial aspects;
- b. Strengthening the capacity of mine inspectors on mine safety and health;

- c. Strengthening mechanisms and capacity of officials to mobilize revenues from the mining sector;
- d. Building capacity for officials on geological mapping, environmental geology, and geological laboratory operation skills;
- e. Establishing vocational training center for short and medium term trainings in mining sector;
- f. Establishing a 5-year plan on human resource demand related to mining sector. Cooperating with educational institutions to create curriculum for specialized technicians and engineers;
- g. Cooperating with regional countries and development partners to build capacity for Cambodian experts with long-term training and additional technical skills in order to minimize the use of foreign staff and experts.

### **3. Creation of Mineral Resources Inventory**

To attract foreign and domestic investments, creation of mineral resources inventory is very important to identify the potentials of each mineral resource, which is the step towards the establishment of mineral resources protection zones and mineral resources reserves zones. The mapping of mineral resources area will enable the RGC to set up important measures to protect or preserve areas with high potential of mineral resources, rare metallics or harmful minerals...etc. and to make a prior economic benefits analysis of those mineral resources potential development. Those analysis will be the basis for the RGC to decide on an investment request. Tenders for potential mining areas will be implemented.

#### **Action Plan :**

- a. Accelerating the creation of mineral resources inventory by establishing a data bank and other geological, mineral resources and mineral deposit maps. Mineral resources inventory will be created from four sources.
  - 1. Existing domestic data and information.
  - 2. Recent data received from different mining operators in various phases of mining operation.

3. Obtained data from geological, geochemical and geophysical surveys and other methods done and led by the Ministry in charge of mining sector and from other cooperation projects.
  4. Research and exchange of data with neighboring countries.
- b. Processing, analyzing, interpreting of geo-scientific data and mineral resources assessment.
  - c. Updating mineral resources data, geological maps and mineral resources maps regularly.
  - d. Mapping of mineral resources areas in which there will be protected areas and reserved areas. Protected areas are where mineral indices have been identified or where geological structures have demonstrated the potential availability of mineral resources. Whereas reserved areas are where mineral deposits have been quantified, and mineral resources information and Geological Data have been determined.
  - e. Establishing geological laboratories, mining samples storing facilities, and the National Museum of Geology.
  - f. Creating a Geological Archives to store documents for research purposes.
  - g. Collecting existing geological information and creating 1:500,000 geotectonic maps for the whole country.
  - h. Issuing guidelines to mining companies regarding geological report to provide back to the ministry, to facilitate Geological Data collection for future Exploration.
  - i. Encouraging geological surveys of potential Radioactive Minerals in cooperation with development partners or international institutions.

#### **4. Good Governance and Management with Accountability and Transparency**

Good Governance and Management with Accountability and Transparency are keys to building investors' trust and public acceptance. The Ministry in charge of mining sector, along with other relevant ministries, must efficiently deal with the problems arising from mining development.

The principle of public consultation with stakeholders, including mining companies, local community and sub-national administration, will provide opportunities to all parties to share constructive feedbacks to address issues of common interests. This will ensure smooth Mineral Resources Operations with the supports of all stakeholders in the mining sector.

**Action Plan:**

- a. Applying Good Governance from the beginning of prospecting to exploitation.
- b. Setting key principles of Good Governance, including reporting, inspection, public communication and stakeholder consultation procedures.
- c. Managing, collecting, and using mineral revenues in a transparent manner in compliance with the principles of laws.
- d. Creating a comprehensive mechanism for mobilizing mineral resources revenues, which is an essential mechanism to implement this policy with transparency and accountability. This comprehensive mechanism requires the mining inspectors to have qualification of judicial police to fine and/or to file a court case on mineral resources offence that affects the environment, society, and national revenue.
- e. Establishing a consultative mechanism to ensure transparency and opportunities for participation from the people in the affected communities. The consultation shall be done before issuing each Mineral Resource License. The consultation aims to get constructive feedback, to solve possible problems, and to collect inputs as basis for decision making on issuing Mineral Resource Licenses.
- f. Developing mechanisms to disseminate mineral information to the public through social media and through regular mineral bulletins.

**5. Investment Promotion**

Promoting investment is the main objective of the RGC in mining sector development. The Law on Investment of the Kingdom of Cambodia is most favorable for domestic and foreign investors, allowing foreign companies to own 100 percent of their shares in business operations, including the mining sector. The RGC has considered the private sector as an important economic development partner in promoting national economic

growth, absorbing domestic labor, and contributing to the poverty reduction of the people. In this context, the RGC, by all means, will facilitate both domestic and foreign investors to seek investment opportunities in Cambodia and increase investors' trust in investing in the mining sector. The RGC will set up an internationally competitive special tax regime to promote and develop the mining sector. This special tax regime will not impede the development of the mining sector, but will further promote the development of the sector.

**Action Plan :**

- a. Providing primary data through hard copy supports and websites to attract mining investors and facilitate investors in the initial stage of the Reconnaissance or Prospecting.
- b. Providing data and detailed information to potential Investors on payment basis.
- c. Applying the principle of First Come First Served.
- d. Guaranteeing Exploration Licensee the entitlement to Industrial Mining License, in accordance with the laws and regulations relating to the mining sector.
- e. Establishing a special tax regime for the mining sector based on fair and transparent principles to maintain stable revenues and competitiveness with particular attention to the use of mineral resources as a raw material for domestic industry and processing of Mineral Products to increase value added. Developing procedures for collecting royalties and for determining the rates of royalties in accordance with each type of mines.

**Objective 2: Promoting Sustainable and Responsible Mining Operations**

**1. Implementation of Sustainable Development Approaches**

The primary objective of mineral resources development is to ensure that the sector develops sustainably and responsibly. Economic, social and environmental matters are determining factors to decide on an investment request. The integration of these three matters are essential before making decision to avoid prior problem to sustainable development.

Investing in the mining sector is a high risk investment. Of 100 prospecting projects, only one mining project that can lead to Exploration, and of 1,000 prospecting projects, only

one project that can lead to exploitation of mineral resources. Before mining production can take place, the sector has to expend huge capital in addition to many years of Exploration. Another key challenge of the mining sector is the Cyclical Nature of Commodity Markets, which is a risk factor in the global economy.

As a result, the RGC will set a number of basis including a Responsive Approach, Infrastructure Development Plan, Non-Regulatory Roles, and Pollution Prevention Mechanisms, in order to minimize the risk of the above-mentioned challenges.

**Action Plan:**

- a. Making decisions by integrating environmental, economic and social matters to ensure the sustainable development of mineral resources.
- b. Developing a Responsive Approach in which timely remedial mechanism must be set to respond to the requests of stakeholders (company, people in the mining area, and sub-national administration) and the issues that arise in Mining Operations.
- c. Establishing the Infrastructure Council to ensure consistency between the plan for the development of the mining sector and the plans for infrastructure development including roads, railways, electricity, water, etc.
- d. Setting Non-Regulatory Role to become an effective alternative to achieve sustainable and responsible development. This role is important in complementing the incomplete regulations or gaps, such as Codes of Practice, Guidelines, and other Voluntary Initiatives that are not stipulated in the Regulations.
- e. Encouraging or compelling the use of advanced technology in mining activities. Accurate delineation of mine deposits depends on the use of modern and scientific Exploration methods. Safe mining and environmental friendly extractions require the application of advanced engineering in combination with advanced equipment and technology as well.
- f. Supporting the concept of environmental pollution prevention based on principles of environmental protection in Mining Operations from the Exploration stage to mining closure stage passing by extraction, processing stage. The utilization of tools, equipment, energy, tailing system, and waste disposal also needs to follow the environmental protection principle.

## **2. Environmental Management**

Good environmental management practices reflect the responsible development of mineral resources, which is the duty of all stakeholders. Poor environmental management will affect ecosystems, including animals, plants, soil layer, water and air, which will add to the burden of higher environmental costs, resulting in less state revenue. In serious cases, this environmental impact will force the closure of the affecting mining site and the affected area over a long period of time to repair the damaged environments.

In general, environmental impact of mining exploitation depends on the scale of the mine. This is the reason to compel the mining companies to set up a specific implementation plan to protect the environment in different phases of mining development, namely (a) Exploration phase; (b) extraction phase; and (c) rehabilitation of mine closure phase.

Proper environmental management with clear environmental protection plans will avoid, minimize or timely remediate possible serious damage to the environment. This will help contributing to the sustainable development of mineral resources.

### **Action Plan :**

- a. Setting basic environmental protection standards for mining companies to comply with at different development phase.
- b. Setting standards for the management and use of water, surface water and underground water.
- c. Setting standard of waste management and disposal of liquid waste, of which attention must be paid over the re-use of wastewater.
- d. Determining the standards for waste management to ensure that all infrastructures, such as waste dumps and tailing system, are properly built and operated in accordance with mining best practices, during the operation phase as well as the closure.
- e. Ensuring that the mine rehabilitation plan meets the standard, be regularly updated and implemented after the closure. For short-life mining exploitation, rehabilitation plans have to be updated more often than those with long-life. There must be a mechanism to secure the sufficient fund for the execution of rehabilitation plan after the closure. This fund has to be available since the beginning of mining Exploitation Phase.

### **3. Mine Safety Assurance**

Mining Operations are a type of high risk business activities. Often the accident occurred and resulting in fatalities and injury or disabilities to those who are involving in that activity. Therefore, efforts to increase work safety will help to minimize the potential risk in Mining Operations, which is the obligation and the responsibility of all stakeholders. Considerations for the health of those involved in Mining Operations and the people living near the mining area also require great attention.

A separate principle for mine safety and health must be established based on mine safety and health provisions for each type of mineral resources exploitation to mitigate the risks. The mine safety and health provisions will be set out in the Code on Mineral Resources. Based on each principle of mine safety and health, mining companies shall issues their own principles of mine safety and health in accordance with the company's situation and the practical internal rules on mine safety and health for all activities of their Mining Operations. No mining company can conducts Mining Operations without the principles of mine safety and health nor practical internal rules.

On regular basis and when needed, the Mining Inspector must pay on-site visit to assure the compliance with the laws and the principles of mine safety and health. Criteria for appreciating compliant operators or mining companies are to be developed. At the same time, there must be educational measures, fine or other punishments according to the laws against operators or mining companies who disregard or neglect in pursuing the principles of mine safety and health.

#### **Action Plan :**

- a. Strengthening the capacity of mining inspectors to enforce provisions on Mine Safety and Health by providing short- and medium-term training for them. Particular attention should be paid to provide basic skills together with on-site training to relevant sub-national officials to enable smooth monitoring and responsive to any eventual incidents.
- b. Establishing the principle for mine safety and health for each type of Mineral Resources Exploitation. There are two types of Mineral Resources Exploitation: open-pit mining type which includes quarries, rock cutting, coal mining; and underground mining type which includes metal mining, non-metal mining, etc.



- c. Requiring mining companies to establish the principle for mine safety and health based on actual type of Mining Operations and situation of their mining sites.
- d. Requiring mining companies to develop mine safety and health management system that incorporates risk management and operations that ensure safety and good health of the people who may be affected by Mining Operations. Mine safety and health management system requires auditable document. It is a part of the management system, including organizational structure, action plans, responsibilities, operations, operational procedures, and resources for capacity building, implementation and review.

#### **4. Optimizing Mining Production**

In order to exploit mineral resources efficiently and effectively, exploitation of mineral resources must pay attention on optimizing the mining production to ensure no wasteful loss of natural resources and increase national revenue.

Metallic minerals always contain the presence of associated minerals combined with primary minerals. Therefore, for every mining exploitation, companies must thoroughly test and analyze the rates of those associated minerals and to process them in accordance with the standards (regulations) defining the minimum rates to process.

Cut-Off Grade is the minimum grade required in order for a mineral or metal to be economically mined. Although the initial Cut-Off Grade is set in the feasibility study report, it will largely depend upon the actual mineral reserve and the market conditions. Therefore, the institution in charge of the mining sector shall regularly conduct a proper assessment of the Mineral Resource Estimation and the exploitation cost to set or re-evaluate the Cut-Off Grade. The studies and the forecast of commodity prices are also crucial to determine the Cut-Off Grade.

The use of advanced technology in mining will also optimize mineral exploitation and minimize the environmental impact.

##### **Action Plan:**

- a. Setting the standards (regulations) defining the minimum rates of associated minerals to process. Requiring mining companies to appraise associated minerals contained in the primary mineral.
- b. Defining and regularly evaluating the Cut-Off Grade based on comprehensive economic assessments.

- c. Promoting the use of advanced technology and encouraging the use of scientific methods for exploiting mineral resources.

## **5. Development of Mineral Resources and Natural Protected Areas**

One of the main purposes of the RGC is to determine the mineral potential from indices to reserves of mineral resources, throughout Cambodia including natural protected areas. Understanding the potential mineral resources in the natural protected areas would help the RGC to make a sound decision on whether to preserve the natural protected areas or to develop those mineral resources based on responsible development principle in the natural protected areas.

In general, Prospecting and Exploration of mineral resources do not cause serious impact on the environment. However, these activities in the natural protected areas warrant specific procedures, unlike in other areas. Prospecting and Exploration of mineral resources that can be carried out by the Ministry in charge of the mining sector, the private sector, or international partners, have to involve with the line ministries and the sub-national administrations relevant to the natural protected areas.

After the potential of the mineral resources is determined in a natural protected area, and economic efficiency is assessed, the Ministry in charge of mining sector has to submit all the results for consultation with the line ministries then compile the recommendation and submit to the RGC for final decision. In case of favorable recommendation for development, it shall include the procedures to grant license, the conditions for environmental protection including forests and biodiversity protection; and when it is necessary to establish the processing factory in the natural protected area, specific conditions shall be included in the recommendation.

In order to protect the environment and to minimize the adverse effects on the environment, there shall be a special monitoring mechanism ensuring strict compliance with the existing laws and regulations or international best practice.

### **Action Plan :**

- a. Developing a separate procedure for Prospecting and Exploration of mineral resources in the natural protected areas with due regard to environmental impacts on forests, ecosystems, biodiversity, flora and fauna.
- b. Developing a separate procedure to grant mining license in the natural protected areas and setting necessary measures for protecting the environment,

ecosystems, biodiversity, flora and fauna. Using up-to-date technology of mineral exploitation to minimize environmental impact.

- c. Setting the separate conditions for establishing Mineral Processing factory in the natural protected areas.
- d. Establishing an effective monitoring mechanism that includes periodic inspections and without prior notification inspections to assess the Mining Operations and take timely responsive measures.

### **Objective 3: Developing Mineral Resources and Community**

#### **1. Community Development**

The RGC's desire to maximize revenues from the mining sector is to allocate those revenues to other economic and social sectors. But in addition to direct revenues received, the RGC is also focusing on community development in areas where mineral resources are being exploited and in the adjacent areas to the mining area, as the people who are living in these areas must be the primary beneficiaries of national natural wealth.

Good community development with a clear plan would help sustaining development of mineral resources and would gain supports from the people who are living in those communities. The public awareness on mineral resource development process, its benefit to the state and the community, its impacts on the environment and the people, and its mitigation measures is required for the people living in the mining concessional areas.

Public forum with local community and acceptance of community's reasonable requests would help stakeholders, including the state, the sub-national administration, and especially the mining companies, to mitigate social risks in the Mineral Resources Exploitation and create harmony among stakeholders.

#### **Action Plan:**

- a. Requiring the industrial mining companies, when applying for industrial mining licenses, to have Corporate Social Responsibility Plan as a part of their feasibility study report. This plan shall include, in general case, the development of public infrastructure for the local community, and in particular case of remote areas, the plan shall also include education, water supply, and primary healthcare for the people in the community.

- b. Encouraging the industrial mining companies to create Social Development Fund for local community. The management and use of this fund shall be set in the statute between the Company and the community. The financial source of the fund is derived from a part of corporate profits and a part of royalties at a fixed rate. The statute should also include the principle and the means for dispute resolution.
- c. Establishing a Mining Fund to Support Local Community Development which is contributed by the mining companies at a proportional rate to the mineral production. This fund will be used for the benefits of local communities where Mining Operations are located or where they are directly or indirectly affected by the Mining Operations.
- d. Mainstreaming public awareness of the mining development project to people living in the development areas. This public awareness-mainstreaming activities should include the representatives from sub-national administrations and the community.
- e. Establishing community development mechanism which is a key for social equity in sharing benefits from mining revenues to local communities and in making decision to develop their own community. This mechanism shall also be opened for competent associations or civil society organizations to coordinate and support the local community development project.

## **2. Use of local labor and gender Work**

Mineral resources operations start from Prospecting, Exploration, mining, construction, and Mineral Processing. All of these activities demand labor, commodities, and services. Urging mining companies to use more the labor force in the local community is a priority that mining companies must provide to the community to contribute to the improvement of livelihood of the people in the mining area. Parallel to short or medium-term on-job training preparation plan, mining companies shall also prepare long-term training plans for the young unskilled member of the community, in order to secure the professional place in the mining area where they live.

Gender issue also requires mining companies to consider the use of women labor without discrimination in the mining activities. In general, mining professions are male-dominated work, but due to advanced technologies in mining and women's skills improvement, the use of women's labor force in the mining sector is no longer a barrier for mining companies. Therefore, mining companies must encourage women to directly

or indirectly participate in the mining activities by providing appropriate jobs and special healthcare to women.

**Action Plan:**

- a. Setting the principles to encourage mining companies to employ local labor and services.
- b. Encouraging mining companies to develop capacity building for the community.
- c. Encouraging the use of women's labor in all mining activities except in high risk areas, as well as providing special healthcare for women.

**3. Indigenous Peoples and Mineral Operations**

Some mineral deposits are located in the areas where indigenous people live. Therefore, Mineral Operations in those areas must not affect the rights, freedoms, traditions, customs, beliefs, and religions of indigenous peoples in the area. Violations of indigenous worship sites are prohibited. Mining companies need to understand the traditions, customs, culture, beliefs and religions of each indigenous group in their mining area to avoid any infringements thereof.

**Action Plan :**

Providing protection to indigenous peoples in the mineral resource development areas by preserving their rights, freedoms, customs, traditions, cultures, beliefs, and religions of indigenous peoples in accordance with state policies and laws.

**Objective 4: Developing Artisanal and Small-Scale Mining**

**1. Artisanal and Small-Scale Mining**

Artisanal and small-scale mining (ASM) are indispensable in developing countries. ASM are widely dispersed and mined by unskilled miners for all type of minerals. They contribute to national economy, supply raw materials for domestic consumption, absorb local labor force and in particular, they make use of small mineral deposits that have no economic potentials for industrial exploitation.

The non-licensed ASM have seriously affected the environment and society, especially gold and gem mining which requires strict management measures.

Taking into account the importance of ASM, the RGC will identify mineral deposits and set basic principles for ASM practice. The RGC will facilitate the development of ASM with good practice of mining that guarantee safety, sustainability, avoid impact to the environment and produce positive outcome to the national economy.

**Action Plan :**

- a. Identifying appropriate ASM mineral deposits and its reserve.
- b. Educating ASM miners through short courses or vocational training to understand the rules, the risks caused by the use of hazardous substances, the risk avoidance and management. Education and training must also focus on health, safety, environment and economic feature of the concerned businesses as well.
- c. Providing broad technical support to ASM through research and development, by offering advanced technology appropriate to ASM.
- d. Simplifying the procedure to grant permits. At the same time, delegating power to sub-national level to grant permits over non-hazardous and short-term mining, such as quarrying, sand or dirt mining.
- e. Encouraging the clustering or forming community of ASM to facilitate management, training, consultation, loan and mineral trading with sound business principles.
- f. Facilitating ASM to have a fair commercial relationship with large mining companies or domestic industries.

**2. Measures and Solutions to Unauthorized Mining**

Unauthorized mining is the mining activities without license from the Ministry in charge of the mining sector or from the entity that the Ministry in charge of mining sector has delegated the power to. Unauthorized mining has serious consequences to the environment, society, and health of humans or animals that live nearby, shortly thereafter, and continue to the long-term future if there is no improvement of the environment. Unauthorized mining has damaged mineral deposits because, whether large or small, they would benefit the nation and society.

Most of the current ASM in Cambodia are yet to receive proper licenses. The enforcement of laws and the supervision of ASM in Cambodia is currently limited. Besides unauthorized mining of construction materials, illegal gold and gems mining within the licensed areas, public and private lands in western and northeastern provinces are taking place gradually.

Unauthorized mining will be eliminated. The RGC will effectively put in place preventive and educational measures to redirect them by reviewing a case by case basis. The measures taken by the RGC are to improve the quality of life of unauthorized miners and those who are directly or indirectly affected by such unauthorized activities. These measures also aim to improve sustainable development in a responsible manner of the mining sector in Cambodia.

The prevention and education oriented towards unauthorized mining require the participation of civil society and the citizens. In this regard, civil society and citizens can exercise their legal rights in order to assist the RGC in eliminating unauthorized mining.

**Action Plan:**

- a. Preventing unauthorized mining activities is the first and foremost necessary measure to be taken. The involvement of all sub-national administrations with the responsible spirit in preventing unauthorised mining is the most effective measure contributing to the conservation of mineral resources for the benefits of the state, and contributing to sustain environment and society. Municipal and Provincial Committees for Preventing Unauthorised Mining, comprising of relevant institutions and provincial departments will be established. A regular implementation mechanism will be set out to prevent unauthorized mining activities under their jurisdiction.
- b. Studying the extent of the current unauthorized mining throughout the country, especially gold mining, by determining locations, number of unauthorized miners, mode of mining (self-work or working for middlemen), and the impact.
- c. Educating the dangers of using explosives and chemical substances which include mercury, cyanide, or other chemicals that are harmful or have serious effects on health and the surrounding environment.
- d. Diversifying the careers of unauthorized miners by cooperating with mining companies in offering employment and creating new careers in agricultural sector, animal raising, sewing etc. for supplying or servicing to mining companies.

- e. Forming communities and legalizing those unauthorized mining in public and private land where the areas do not have mineral resources potential suitable for large mining industries.
- f. Identifying gold and precious stones deposits, in public or private land, which are not economically potential for industrial scale but sufficient for ASM and redirecting unauthorized miners to conduct legal ASM.
- g. Promoting the participation of all stakeholders in the prevention of unauthorized mining.
- h. Setting the roles of civil societies in collaboration with the RGC to prevent unauthorized mining. Setting an approach for the civil society to report actual information on unauthorized mining activities, to provide constructive suggestions, to participate in providing training and job alternative to illegal miners.

## **Objective 5: Mineral Resources and Exports**

### **1. Export Policy**

Along the vision of maximization of economic income from mineral resources by increasing economic activities, tax revenues, and offering employments to the people, the RGC has also to consider the Rational Approach of mineral export policy, which requires in-depth cost-benefit analysis, technical aspect of Mineral Processing and other important factors. Ensuring export of comparative advantaged Mineral Products is a key factor in the decision to allow investment, especially foreign direct investment in the mining sector.

The RGC only allows exportation of Mineral Products that have a positive assessment of economic comparative advantage and social and environmental benefits.

To assess economic, social and environmental benefits, the RGC will consider the following factors:

- The short-term and long-term economic benefits from Mineral Products exportation are larger than the benefits from domestic processing or re-processing.



- Domestic processing or re-processing of Mineral Products leads to severe negative impact on the environment and society.
- Mineral Products are much larger than demand for domestic industrial supply.

**Action Plan:**

- a. Preparing regulations on the management of Mineral Products exportation by considering the balance between benefits from exportation comparing to further processing, re-processing of mineral products, or use them as raw materials for domestic industries, such as Mineral Products obtained from industrial mines, metals ores, non-metal ores, and Mineral Products for construction.
- b. Dressing up a list of different types of Mineral Products that can be exported based on economic comparative advantage assessment and social and environmental benefits. This list needs to be updated at least once for every three years.

**2. Mineral Product Exportation with High Value Added Requirement**

Mineral Product for exportation shall contain as high added value as possible by using up-to-date technology to process and to meet international market demand. The aim is to maximize advantage from foreign trade.

**Action Plan:**

- a. Encouraging Research and Development to improve productivity.
- b. Encouraging the processing of mineral resources and Mineral Products prior to export.
- c. Following up regularly the prices of Mineral Products on international markets to make strategic decision on mineral resources exportation.
- d. Studying and forecasting the fluctuation of demand for Mineral Products.

**3. Trade Facilitation**

The RGC pays attention to develop export procedures by facilitating trade and export formalities. At the same time, the RGC will take into account the reasonable requests of

investors in accordance with the relevant laws and regulations on the basis of mutual interests.

**Action Plan:**

- a. Setting trade-facilitated mineral product exportation procedures.
- b. Establishing an inter-ministerial Prakas between relevant institutions and Ministry of Mines and Energy on trade-facilitated mineral product exportation procedures, if necessary.

**V. Monitoring, Review, and Evaluation**

To ensure effective implementation of the national policy on mineral resources, the RGC has tasked the Ministry in charge of mining sector to develop monitoring and evaluation mechanism to follow up the progress and the challenges in implementing this policy.

The Monitoring and Evaluation Committee for the Implementation of the Policy will be established by a decision of the RGC.

Detailed action plan shall be reviewed and revised every three years, following consultation with relevant ministries, institutions, sub-national administrations, civil societies, and mining companies.

The Ministry in charge of mining sector must report annually to the RGC.

**VI. Conclusion**

The National Policy on Mineral Resources is a roadmap for Mining Operations to maximize economic value and minimize environmental and social impacts, as development has more or less negative impact on the environment and the society. A comprehensive consultative mechanism, monitoring and feedback systems, environmental and social impact assessment mechanism, and responsible responsive approach together with the commitment of the RGC will minimize negative environmental and social impacts.

Through the above action plans, strategies, and goals, the RGC will achieve its main objectives in sustainably managing and developing mineral resources, benefiting the people and the community, and supplying raw materials for infrastructure and construction development. In addition, the development of mineral resources industry

Unofficial Translation

would create new sources of revenues for the nation and create new domestic products to substitute import.

In fact, the Mineral Resources Exploitation has not yet reached the industrial scale, but the preparation for this upcoming industry will help Cambodia to reduce the challenges that other industrial mining countries have experienced. Lessons learned, experiences, including the best practice of advanced industrial mining countries as well as those newly industrial mining countries will also become a roadmap for Cambodia to ensure that the development of our mineral resources are sustainable and deliver progress to the economy, society, and the people.

The RGC is committed to successfully implement this National Policy on Mineral Resources, and believes that the participation of all stakeholders will be an important driving force in achieving the effective implementation of all objectives that have been outlined.

## **Lexicon**

**Exploration** refers to researches/studies to discover, mineral Indices testing, to determine the potentials, the extent, the quality, the quantity, and the economic viability of exploitation through prospecting, geological search, geological images and geological chemistry, digging, drilling, transporting, analysis of soil, sludge, water, rock and all mineral specimens.

**The Initial Phase of Study** refers to the early stages of mineral resource studies in order to understand the general geographical and geological attributes of any specific region in order to determine the likelihood of the presence of mineralization.

**Exploitation Phase** refers to the stage in which mining resources are dug, transported, traded, sold or exported for commercial purposes.

**Mineral Processing** refers to the process of operation of mineral resources from ore crushing to refining and purification.

**Non-Regulatory Roles** refer to some guiding rules which are not legal binding.

**Geoscience Data** refers to data derived from geological studies.

**Geological Data** refers to all earth-related data.

**Radioactive Minerals** refer to mineral resources containing Uranium (U) or Thorium (Th)

**Mine Reclamation** is the transformation of a closed mine for better living conditions and to return back to the ordinary environment.

**Prospect** refers to the initial Exploration on the earth's surface area by using simple tools and having little impact on the surface area to determine commercially valuable mineral deposits and that can be used as a ground for applying for Exploration and exploitation licenses.

**Mining Operations** refer to the activities of prospecting, exploring and exploiting of mineral resources.

**Mineral Products** refer to all types of products extracted out of a mine, or that have gone through different levels of processing, ranging from the stages of ore crushing to metals.

**Plan for Corporate Social Responsibility** refers to a plan that contributes to social work by contributing a share of profits from mining business.

**Tectonic Map** refers to a map illustrating the structure of earth crust and reflects the major stages of the evolution of the earth crust.

Unofficial Translation

**Geological Map** refers to a map which illustrates the types, the ages, and locations of the rock, as well as the appearance of the rock layers.

**Environmental Geology** refers to the science that uses geological principles or information to study the transformation of the earth environment.

**Mineral Specimens** refer to mineral samples used for testing, quantitative and qualitative analyses, or keep them as samples

**Geological Samples** refer to all types of samples of Earth products, including samples of rock, solids, liquids, fossils, etc.

**Rational Approach** refers to reasonable method based on reasons or logics.

**Mineral Resources Exploitation** refers to the operations mineral resources mining, including taking out mineral resources from mineral deposits, then process, transport, trade, or export for commercial purposes