



PERFORMANCE AGREEMENT

BETWEEN

Secretary and Director General

**DEPARTMENT OF GEOLOGY AND MINES
MINISTRY OF ECONOMIC AFFAIRS**

(July 1, 2019 – June 30, 2020)

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Preamble

The Performance Agreement is entered into between the Secretary and Director General, Department Of Geology And Mines.

The objectives of this Performance Agreement are:

- a) To establish clarity and consensus about annual priorities for the Department Of Geology And Mines consistent with the 11th Five Year Plan of the Ministry, and Government's other priorities;
- b) To provide an objective and fair basis for evaluating the overall performance of the Department Of Geology And Mines at the end of the financial year

The Performance Agreement represents an important accountability mechanism for inculcating a performance based culture at all levels of government.

THEREFORE, the parties hereto agree as follows:

Section 1: Vision, Mission and Objectives

Vision

To contribute to sustainable socio-economic development through geo-scientific studies and scientific management of mineral resources in the kingdom.

Mission

To enable optimal exploitation of the mineral resource in a scientific manner compatible with the social and economic policy of the Royal Government and within the framework of sustainable development, protection of environment, mineral conservation and preservation of the country's precious religious and cultural heritage;

To provide input for national development and social welfare to the citizens of Bhutan by opening up venue for investment and employment;

To apply geo-scientific expertise in prevention and mitigation of natural disasters resulting from geological hazards, thus contribute to the welfare of all Bhutanese citizens leading to Gross National Happiness.

Objectives

- 1) To enhance economic growth through sector diversification
- 2) To strengthen geo-scientific and mining institutional capacity
- 3) To enable legal and regulatory framework for sustainable and environment friendly mineral development
- 4) To reduce risk associated with Geo Hazards
- 5) To enhance mines leasing, inspection and monitoring
- 6) To promote Export
- 7) To enhance employment opportunities
- 8) To institutionalize and strengthen Government Performance Management System
- 9) Percentage of annual budget utilization
- 10) Transparent, accountable & integrity consciousness and culture strengthened

Section 2: Objectives, Success Indicators & Target

Objective	Weight	Action	Success Indicator	Unit	Weight	Excellent [100%]	Very Good [90%]	Good [80%]	Fair [70%]	Poor [60%]
To enhance economic growth through sector diversification	32	To explore mineral deposits	Detailed Exploration of Industrial Grade Marble in and around Dorithasa, Sangbaykha Dungkhag, Haa Dzongkhag completed	Percent	3	25	20	15	10	Less than 10
			Topo-sheet wise geological mapping in 1:50000 scale for Toposheet number 78F01 completed	Percent	4	100	90	80	70	60
			Detailed Exploration of Ferro-Silicon Grade Quartzite at Singkhar Lauri, Samdrup Jongkhar Dzongkhag completed	Percent	3	25	20	15	10	Less than 10
	Non-Hydro Contribution to Economy Promoted		Mining Sector contribution to GDP (Mil Nu)	Nu. (Million)	2	6975	6900	6850	6800	less than 6800
			Timeline by which allocation/auctioning of coal deposit is completed	Date	3	11/30/2019	12/31/2019	01/31/2020	02/29/2020	03/31/2020
			Timeline by which allocation/auctioning of Chunaikhola Dolomite Mine is completed	Date	4	12/31/2019	01/31/2020	02/29/2020	03/31/2020	04/30/2020
			Timeline by which allocation/auctioning of Khothakpa Gypsum Mine is completed	Date	4	02/29/2020	03/31/2020	04/30/2020	05/31/2020	06/30/2020
	Institutional linkage established to enhance knowledge sharing		Timeline by which approval for RIMES membership submitted to Cabinet	Date	3	09/30/2019	10/31/2019	11/30/2019	12/31/2019	01/31/2020

To enhance economic growth through sector diversification	32	Laws, Policies, Rules and Regulations revised.	Timeline by which final draft of the MMR revision with all annexures completed and presented to the Ministry	Date	4	06/01/2020	-	06/15/2020	-	06/30/2020
			A concept note for "Geoscience Policy" submitted to GNHC	Date	2	01/31/2020	02/29/2020	03/31/2020	04/30/2020	05/31/2020
To strengthen geo-scientific and mining institutional capacity	12	To strengthen technical capacity in the geoscience and mining sector	Number of private individuals trained on scientific mining operation (foreman/Supervisor/Blaster)	Number	3	30-26	25-21	20-16	15-10	Less than 10
			In-house knowledge-sharing seminar on Bhutan Geology, Geosciences, Drilling Technology, Laboratory Analytical Techniques, GIS, Remote Sensing and Mining conducted	Number	2	7	6	5	4	3
		To generate and enhance access to geological, mines and mineral information	Development of Mineral Information Portal completed and users trained	Status of Work	4	Portal developed and staff trained	-	Portal developed	-	Portal still in development phase
			Compliance Module of MAS developed	Status of Work	3	Compliance Module of MAS developed	Development outsourced to vendor	ToR developed	-	ToR still in draft stage

To enable legal and regulatory framework for sustainable and environment friendly mineral development	5	Development of mineral resources Master Plan	Master Plan for Mineral Resources developed	Date	2	06/01/2020	-	06/15/2020	-	06/30/2020
		Implementation on The Revised Taxes and Levies Act of Bhutan, 2016	Revision of Minimum Floor Price (MFP) for levy of Ad Valorem Royalty for export of minerals completed	Date	3	05/01/2020	05/15/2020	06/01/2020	06/15/2020	06/30/2020
To reduce risk associated with Geo Hazards	23	Risk associated with geo-hazard assessed	Number of new intensity meters installed	Number	4	36-41	31-35	26-30	21-25	Less than 21
			Uptime of Earthquake intensity network maintained	Percent	3	80-70	69-60	59-50	49-40	Less than 40
			Number of new national weak motion monitoring system installed/maintained	Number	3	2	1	-	-	Less than 1
			Percentage of macro-seismic hazard map updated	Percent	3	50	45	40	35	Less than 35
			Status of micro-seismic hazard zonation performed	Status of Work	3	Micro-seismic hazard zonation performed, data processed and map generated.	-	Micro-seismic hazard zonation performed, data processed but map not generated.	-	Micro-seismic hazard zonation performed but data not processed.
			Number of new critical landslides assessed	Number	4	1	-	-	-	Less than 1

To reduce risk associated with	23	Risk associated with geo-hazard assessed	Uptime of weak motion station (WM) maintained	Number	3	10-9	8-7	6-5	4-3	Less than 3
To enhance mines leasing, inspection and monitoring	9	Effective monitoring of mines and quarries	Number of mines restoration initiated	Number	3	8-7	6-5	4-3	3-2	1
			Mines Monitoring Tool implemented	Percent	4	100-96	95-91	90-86	85-81	80
			Biannual sampling of industrial minerals carried out and report submitted	Number	2	10	9	8	7	6
To promote Export	2	Non Hydro Export and Investment enhanced	Annual export of mining products	Nu. (Million)	2	3558.31	3550	3525	3500	Less than 3500
To enhance employment opportunities	2	To create meaningful jobs	Number of jobs created in Mining sector (actual number)	Number	2	50	45	40	35	Less than 35
To institutionalize and strengthen Government Performance Management System	5	Strengthen APA Implementation	Timely submission of APA implementation updates	Date	5	On the deadline communicated by GPMD	-	-	-	After the deadline communicated by GPMD
Percentage of annual budget utilization	5	Ensure Annual Budget Utilization	Percentage of annual budget utilization	Percent	5	>94%	90-94%	85-89%	80-84%	<70
Transparent, accountable & integrity consciousness and culture strengthened	5	Enhance integrity system by implementing OIP	Integrity score improved	Percent	5	50% of OIP Implemented	40% of OIP Implemented	30% of OIP Implemented	20% of OIP Implemented	<20% of OIP Implemented

Section 3: Trend values of success indicators

Objective	Action	Success Indicator1	Unit	Actual Values [FY 2013-14]	Actual Values [FY 2014-15]	Target Values [FY 2015-16]	Projected Values [FY 2016-17]	Projected Values [FY 2017-18]
Percentage of annual budget utilization	Ensure Annual Budget Utilization	Percentage of annual budget utilization	Percent	-	-	-	-	-
To enable legal and regulatory framework for sustainable and environment friendly mineral development	Development of mineral resources Master Plan	Master Plan for Mineral Resources developed	Date	0	1	1	1	1
	Implementation on The Revised Taxes and Levies Act of Bhutan, 2016	Revision of Minimum Floor Price (MFP) for levy of Ad Valorem Royalty for export of minerals completed	Date	1	2	3	4	5
To enhance economic growth through sector diversification	Institutional linkage established to enhance knowledge sharing	Timeline by which approval for RIMES membership submitted to Cabinet	Date	0	1	1	1	1
	Laws,Policies, Rules and Regulations revised.	A concept note for "Geoscience Policy" submitted to GNHC	Date	Submitted to the department within June 2019	Submitted to GNHC through PPD by 31st January, 2020	-	-	-
		Timeline by which final draft of the MMR revision with all annexures completed and presented to the Ministry	Date	0	1	1	1	1

To enhance economic growth through sector diversification	Non-Hydro Contribution to Economy Promoted	Mining Sector contribution to GDP (Mil Nu)	Nu. (Million)	6710	6975	7250	7540	7840
		Timeline by which allocation/auctioning of Chunaikhola Dolomite Mine is completed	Date	0	1	1	1	1
		Timeline by which allocation/auctioning of coal deposit is completed	Date	0	1	1	1	1
		Timeline by which allocation/auctioning of Khothakpa Gypsum Mine is completed	Date	0	1	1	1	1
	To explore mineral deposits	Detailed Exploration of Ferro-Silicon Grade Quartzite at Singkhar Lauri, Samdrup Jongkhar Dzongkhag completed	Percent	0	25	50	75	100
		Detailed Exploration of Industrial Grade Marble in and around Dorithasa, Sangbaykha Dungkhag, Haa Dzongkhag completed	Percent	0	25	50	75	100
		Topo-sheet wise geological mapping in 1:50000 scale for Toposheet number 78F01 completed	Percent	0	1	2	4	5

To enhance employment opportunities	To create meaningful jobs	Number of jobs created in Mining sector (actual number)	Number	50	100	150	200	250
To enhance mines leasing, inspection and monitoring	Effective monitoring of mines and quarries	Biannual sampling of industrial minerals carried out and report submitted	Number	1	2	3	4	5
		Mines Monitoring Tool implemented	Percent	100-96	100-96	100-96	100	100
		Number of mines restoration initiated	Number	0	8	18	26	34
To institutionalize and strengthen Government Performance Management System	Strengthen APA Implementation	Timely submission of APA implementation updates	Date	-	-	-	-	-
To promote Export	Non Hydro Export and Investment enhanced	Annual export of mining products	Nu. (Million)	3482.78	3558.31	3622.82	3709.34	3784.87
To reduce risk associated with Geo Hazards	Risk associated with geo-hazard assessed	Number of new critical landslides assessed	Number	8	9	9	10	10
		Number of new intensity meters installed	Number	61	102	143	184	225
		Number of new national weak motion monitoring system installed/maintained	Number	17	19	19	19	19
		Percentage of macro-seismic hazard map updated	Percent	25	50	75	100	100 %(1)

To reduce risk associated with Geo Hazards	Risk associated with geo-hazard assessed	Status of micro-seismic hazard zonation performed	Status of Work	0	1	1	2	2
		Uptime of Earthquake intensity network maintained	Percent	80-70	80-70	80-70	80-70	80-70
		Uptime of weak motion station (WM) maintained	Number	10-9	10-9	10-9	10-9	10-9
To strengthen geo-scientific and mining institutional capacity	To generate and enhance access to geological, mines and mineral information	Compliance Module of MAS developed	Status of Work	LAN connection to Regional Offices	Monitoring module (MAS) developed	Users Training	MAS operational	MAS operational
		Development of Mineral Information Portal completed and users trained	Status of Work	0	1	1	1	1
	To strengthen technical capacity in the geoscience and mining sector	In-house knowledge-sharing seminar on Bhutan Geology, Geosciences, Drilling Technology, Laboratory Analytical Techniques, GIS, Remote Sensing and Mining conducted	Number	7	14	21	28	35
		Number of private individuals trained on scientific mining operation (foreman/Supervisor/Blaster)	Number	30	60	90	120	150
Transparent, accountable & integrity consciousness and culture strengthened	Enhance integrity system by implementing OIP	Integrity score improved	Percent	-	-	-	-	-

Section 4: Definition of Success Indicators

Success Indicator	Description	Data Collection Methodology	Data Collection Frequency	Data Source
Mining Sector contribution to GDP (Mil Nu)	Mining Sector contribution to GDP (Mil Nu). The contribution is calculated in terms of gross domestic value.	Statistics report produced by NSB.	Annually	NSB
Detailed Exploration of Ferro-Silicon Grade Quartzite at Singkhar Lauri, Samdrup Jongkhar Dzongkhag completed	<p>Detailed Exploration of Ferro-Silicon Grade Quartzite at Singkhar Lauri, Samdrup Jongkhar Dzongkhag.</p> <p>Description of success indicator:</p> <p>25% -Desktop studies, one borehole drilling and core logging completed, detailed geological mapping, topographical survey and sampling carried out and geological report submitted within 30th June, 2020. The geological report includes geochemical analysis results and geological map of the one studied area.</p> <p>20%- Desktop studies, one borehole drilling and core logging completed, detailed geological mapping, topographical survey and sampling carried out but only draft geological report submitted within 30 June, 2020.</p> <p>15%- Desktop studies, one borehole drilling and core logging completed, detailed geological mapping, topographical survey and sampling carried out and geological report submitted after 30th June,</p>	Administrative record	Annually	DGM

	<p>2020.</p> <p>10%-Desktop studies, one borehole drilling and core logging completed, detailed geological mapping, topographical survey and sampling carried out with pending geochemical analysis of samples collected and geological report submitted after 30th June, 2020</p> <p>Less than 10%- Desktop studies completed, detailed geological mapping, topographical survey and sampling carried out but one borehole drilling and core logging not completed with pending geochemical analysis of samples collected and geological report submitted after 30 June, 2020.</p> <p>General comments: The achievements of this activity may be affected by factors such as: Accessibility of the study area; and Timely analysis of the samples that depend on the workload of the Geochemical Laboratory and also on the availability of continuous water supply for carrying out the analysis.</p>			
<p>Detailed Exploration of Industrial Grade Marble in and around Dorithasa, Sangbaykha Dungkhag, Haa Dzongkhag completed</p>	<p>Exploration of minerals that has industrial value.</p> <p>Detailed Exploration of Industrial Grade Marble in and around Dorithasa, Sangbaykha Dungkhag, Haa Dzongkhag.</p> <p>Description of success indicator:</p>	<p>Administrative record</p>	<p>Annually</p>	<p>DGM</p>

25% -Desktop studies, atleast one borehole drilling and core logging completed, detailed geological mapping, topographical survey and sampling carried out and geological report submitted within 30th June, 2020. The geological report includes geochemical analysis results and geological map of the studied area.

20%- Desktop studies, one borehole drilling and core logging completed, detailed geological mapping, topographical survey and sampling carried out but only draft geological report submitted within 30th June, 2020

15%- Desktop studies, one borehole drilling and core logging completed, detailed geological mapping, topographical survey and sampling carried out and geological report submitted after 30th June, 2020

10%- Desktop studies, one borehole drilling and core logging completed, detailed geological mapping, topographical survey and sampling carried out with pending geochemical analysis of samples collected and geological report submitted after 30th June, 2020

Less than 10%- Desktop studies completed, detailed geological mapping, topographical survey and sampling carried out but one

	<p>borehole drilling and core logging not completed with pending geochemical analysis of samples collected and geological report submitted after 30 June, 2020.</p> <p>General comments: The achievements of this activity may be affected by factors such as: Accessibility of the study area; and Timely analysis of the samples that depend on the workload of the Geochemical Laboratory and also on the availability of continuous water supply for carrying out the analysis.</p>			
<p>Topo-sheet wise geological mapping in 1:50000 scale for Toposheet number 78F01 completed</p>	<p>Toposheet wise Geological Mapping in 1:50000 scale to be conducted in southern Bhutan</p> <p>Description of success indicator:</p> <p>100% - Completion of Desktop studies (literature review, planning of traversing and all pre field activities), collection of geological data (geological points, rock samples), chemical analysis of the samples collected, preparation and finalization of map, cross section and geological report submitted within 30th June, 2020.</p> <p>90%- Completion of Desktop studies (literature review, planning of traversing and all pre field activities), collection of geological data (geological points, rock samples), chemical analysis of the</p>	<p>Administrative record</p>	<p>Annually</p>	<p>DGM</p>

samples collected, preparation and finalization of map and cross section but only draft geological report submitted within 30th June, 2020.

80%- Completion of Desktop studies (literature review, planning of traversing and all pre field activities), collection of geological data (geological points, rock samples), chemical analysis of the samples collected, preparation and finalization of map, cross section and geological report submitted after 30th June, 2020.

70%- Successful completion of Desktop studies (literature review, planning of traversing and all pre field activities), collection of geological data (geological points, rock samples), chemical analysis of the samples collected, preparation of map with pending cross section of the geological map and geological report submitted after 30th June, 2020.

60% -Successful completion of Desktop studies (literature review, planning of traversing and all pre field activities), collection of geological data (geological points, rock samples) with pending/incomplete chemical analysis of the samples collected, preparation of map and cross section of the geological map and geological report in draft stage.

	<p>General comments: The achievements of this activity may be affected by factors such as: Accessibility of the study area; and Timely analysis of the samples that depend on the workload of the Geochemical Laboratory and also on the availability of continuous water supply for carrying out the analysis.</p>			
<p>Timeline by which allocation/auctioning of Khothakpa Gypsum Mine is completed</p>	<p>The auction period for Khothakpa Gypsum Mine operated by M/s DrukSatair Corporation Ltd. Expired on 31st December, 2018. After the expiry, the gypsum mine was leased to SMCL for an interim period of 2 years since the re-auctioning of the mine required to acquire additional land. In order to re-auction the mine, a Multi-sectorial team (MST) carried out the feasibility study. The SI includes acquiring of private adjacent land and to outsourcing the environment impact study.</p>	<p>Administrative records</p>	<p>Annually</p>	<p>DGM</p>
<p>Timeline by which allocation/auctioning of coal deposit is completed</p>	<p>The lease period for the coal expires on August, 2019. Before, re-auctioning coal deposits under Samdrup jongkhar, a detailed geological re-assessment has to be carried out. The decision to re-auction the coal deposit has to be made based on the re-assessment report. The SI gives the decision on re-auctioning of the coal deposit after the re-assessment is completed.</p>	<p>Administrative records</p>	<p>Annually</p>	<p>DGM</p>

Timeline by which allocation/auctioning of Chunaikhola Dolomite Mine is completed	The auction period for the Chunaikhola Dolomite Mine expires on May 2020. In order to have continuity in business, it is essential that the re-auctioning is being carried out in time. This entails tasks such as extending the area and acquiring any private land, geological reassessment and re-demarcation of the mine area.	Administrative records	Annually	DGM
Timeline by which approval for RIMES membership submitted to Cabinet	RIMES is a Regional Integrated Multi-hazard Early Warning System (RIMES) based in Thailand. Bhutan being prone to geohazards, membership to RIMES is crucial for technical and human resource development in the department including sharing of information on earthquake across the region seamlessly. RIMES as per MoU signed, has supported in establishing 8 real time earthquake monitoring stations which is part of the larger National Earthquake Monitoring Network (NEMN) being implemented by DGM. NEMN is very critical for planning and management for earthquake related disaster.	Administrative records/Approval by the Cabinet	Annually	DGM
Timeline by which final draft of the MMMR revision with all annexures completed and presented to the Ministry	The draft MM bill is deliberated in the parliament. To have smooth transaction of laws, a MMMR will need to be developed in line with the draft MM Bill.	Administrative record	Annually	DGM
A concept note for "Geoscience Policy" submitted to GNHC	A concept note for "Geoscience Policy" submitted to GNHC through PPD.	Administrative record	Annually	DGM

Uptime of weak motion station (WM) maintained	Number of weak motion stations operated in FY.	Administrative records	Annually	DGM
Percentage of macro-seismic hazard map updated	<p>Percentage of macro-seismic hazard map updated</p> <p>50%= Seismic hazard map updated by incorporating the following new information:</p> <ol style="list-style-type: none"> 1. Seismicity data from GANSSER project, ISC and other sources to determine a and b-values of Gutenberg-Richter relationship. 2. Shear wave velocity (Vs30) obtained from USGS. 3. Fault geometry based on recent geodetic and Active fault mapping; Mmax from historical accounts and paleo-seismological studies. <p>45%=Seismic hazard map updated by incorporating the following new information:</p> <ol style="list-style-type: none"> 1. Seismicity data from ISC only. 2. Fault geometry based on recent geodetic and Active fault mapping; Mmax from historical accounts and paleo-seismological studies. 3. No shear wave velocity (Vs30) incorporated into Hazard map. <p>40%= Seismic hazard map updated by incorporating only</p> <ol style="list-style-type: none"> 1. Seismicity data from ISC only. 2. Active fault mapping; Mmax from historical accounts and paleo-seismological studies. <p>35%= Seismic hazard map updated by incorporating only</p>	Administrative records	Annually	DGM

	<p>1. Seismicity data from ISC only. 2. Mmax from historical accounts and paleo-seismological studies.</p> <p>Less than 35%= Seismic Hazard map updating initiated but not completed.</p>			
Status of micro-seismic hazard zonation performed	<p>- Micro-seismic hazard zonation performed in Isuna using Micro tremor survey and geomorphologic mapping and data processed and map generated for use in updating macro seismic hazard map (DGM) and building vulnerability assessment by other agencies.</p> <p>- Micro-seismic hazard zonation performed in Isuna using Micro tremor survey and geomorphologic mapping and data processed.</p> <p>- Micro-seismic hazard zonation performed in Isuna using Micro tremor survey and geomorphologic mapping but data not processed.</p>	Administrative record	Annually	DGM

<p>Number of new intensity meters installed</p>	<p>36-41 – Site verification and installation of new intensity meters completed at 36-41 gewogs. This is part of the target to install intensity meters in all 205 gewogs.</p> <p>31-35 - Site verification and installation of new intensity meters completed at 31-35 gewogs.</p> <p>26-30 - Site verification and installation of new intensity meters completed at 26-30 gewogs.</p> <p>21-25 - Site verification and installation of new intensity meters completed at 21-25 gewogs.</p> <p>Less than 21 - Site verification and installation of new intensity meters completed in less than 21 gewogs</p> <p>21-25 - Site verification and installation of new intensity meters completed at 21-25 gewogs.</p> <p>Less than 21 - Site verification and installation of new intensity meters completed in less than 21 gewogs</p>	<p>Administrative records</p>	<p>Annually</p>	<p>DGM</p>
<p>Uptime of Earthquake intensity network maintained</p>	<p>The SI indicate the uptime of earthquake intensity network for the reported FY.</p>	<p>Administrative records</p>	<p>Annually</p>	<p>DGM</p>

<p>Number of new national weak motion monitoring system installed/maintained</p>	<p>2 – 2 numbers of weak motion sensors (CMG) installed in the existing Seismic Stations at Samdrup Jongkhar and Trashigang. These additional sensors will enhance detectability of micro-seismic events in the region.</p> <p>1 – Only 1 number of weak motion sensors (CMG) installed in the existing Seismic Station.</p>	<p>Administrative record</p>	<p>Annually</p>	<p>Administrative record, DGM</p>
<p>Number of new critical landslides assessed</p>	<p>Regional scale engineering geological mapping of landslides in Doti-Khola catchment area, Phuentsholing Dungkhang, Chukha Dzongkhag.</p> <p>Description of success indicator:</p> <p>1 - Successful completion of desktop studies (Literature review, planning and Digitization of landslide using google image, satellite images and Landuse Map), Regional scale landslide mapping (geological mapping, identification of critical landslides, geotechnical and engineering geological investigation), collection of samples, geotechnical laboratory analysis of samples collected and final geological report and map submitted within 30th June, 2020.</p> <p>Less than 1 - Successful completion of desktop studies (Literature review, planning and Digitization of landslide using</p>	<p>Administrative records</p>	<p>Annually</p>	<p>DGM</p>

	<p>google image, satellite images and Landuse Map), Regional scale landslide mapping (geological mapping, identification of critical landslides, geotechnical and engineering geological investigation), collection of samples with pending/incomplete geotechnical laboratory analysis of samples collected and geological report and map in draft stage.</p> <p>General comments: The achievements of this activity may be affected by factors such as: Accessibility of the study area; and Timely analysis of the samples that depend on the workload of the Geotechnical Laboratory.</p>			
In-house knowledge-sharing seminar on Bhutan Geology, Geosciences, Drilling Technology, Laboratory Analytical Techniques, GIS, Remote Sensing and Mining conducted	The in-house knowledge sharing forms a part to enhance geoscientific and mining institutional capacity in the department. The session is also aimed to fruitfully engage the staff during the absence of field works.	Administrative records	Annually	DGM
Number of private individuals trained on scientific mining operation (foreman/Supervisor/Blaster)	In order to create employment opportunities in the mining sector, the department has adopted an approach to phase out expatriate workers. To carry out the approach, the department aims to train national to develop their skills for better employment opportunities.	Administrative record	Annually	DGM

Development of Mineral Information Portal completed and users trained	Under the EGPS project funded by World Bank, the department has undertaken the task to develop mineral information portal. The SI includes outsourcing the works. The portal will include the general information and developing an online payment gateway for payment of Royalty and mineral rent for minerals. Once the portal is developed the field staff of Mining Division will need to be trained.	Administrative records	Annually	DGM
Compliance Module of MAS developed	The MAS constitutes of 3 modules namely Information module, revenue module and compliance module. Development of compliance module will be undertaken in the FY 2019-20. A comprehensive database for storing of information, compliance monitoring and providing services (online forms to be submitted by private mining operators) will be developed. The SI includes the task mainly the development of Terms of Reference for the MAS and outsourcing the development of database.	Administrative records	Annually	Administrative records, DGM
Number of mines restoration initiated	There are currently 34 mines that has not been restored and formally closed. For this FY, the department aims to forfeit any available ERB and carry out required restoration works in the abandoned mine. After completion of the restoration, the mine will be formally closed.	Administrative record	Annually	DGM

Biannual sampling of industrial minerals carried out and report submitted	In order to ensure effective utilization of industrial minerals, the SI entails bi-annual sampling of minerals from captive mines under Samdrupjongkhar, Gelephu and Wangdue Regions.	Administrative record	Annually	DGM
Mines Monitoring Tool implemented	The SI indicates the compliance monitoring done at active mines in the country. The compliance monitoring will be carried out by the Regional Offices which will also include the restoration of mines under the particular region. The compliance will be done in line with the approved Mines Monitoring Tool.	Administrative records	Annually	DGM
Master Plan for Mineral Resources developed	With assistance from JICA, the department will be developing Master Plan for Mineral Resources.	Administrative records	Annually	DGM
Revision of Minimum Floor Price (MFP) for levy of Ad Valorem Royalty for export of minerals completed	In line with the Revised Taxes and levies Act of Bhutan 2016, the department is required to come up with Minimum Floor Price for minerals at least once a year. The SI will require undertaking of market study for export of minerals.	Administrative record	Annually	DGM
Annual export of mining products	Annual export of all the mining products from mines and quarries. The Minimum Floor Price (MFP) will be considered as the value of the mining product.	Annual Reports of NSB, RMA and MoEA	Annually	DGM, MoEA, RMA and NSB
Number of jobs created in Mining sector (actual number)	The SI measures the actual numbers of jobs created in Mining sector with baseline of 1265 jobs as of June, 2018. Actual new jobs created by the sector will be the 50 for the FY	Administrative records	Annually	DGM

Timely submission of APA implementation updates	This SI shall be evaluated based on the following parameters: 1. Timeline by which “monthly issue/no issue reported on GPMS. 2. Timeline by which “timeline SIs and other achieved SIs are verified and evidence submitted.” 3. Timeline by which “MYR and year-end self-assessment report is submitted to GPMD.” 4. “Timely action taken on all the MYR directives.”	Review of administrative data/documents/records	Quarterly	GPMD
Percentage of annual budget utilization	This indicator measures the variance between the Revised Budget and the Actual Expenditure at the end of the FY.	Assessment of variance between annual budget and expenditure	Annually	Department of National Budget
Integrity score improved	This indicator measures the implementation status of Organisational Integrity Plan (OIP) as determined as Anti-Corruption Commission.	Survey and Field Monitoring of OIP implementation by ACC	Annually	Administrative report by ACC

Section 5: Requirements from other Departments & Secretariat Divisions

Organisation Name	Relevant Success Indicator	Requirement from the Organisation	Justification for the Requirement	Requirement detail	Impact (If Not Met)
CABINET SECRETARIAT	Timeline by which approval for RIMES membership submitted to Cabinet	Approval (entails annual membership fee)	Submission to parliament requires Cabinet approval	Approval for RIMES membership	<ul style="list-style-type: none"> - Bhutan's absence from a very important Regional collaboration. - Our NEMN not integrated with regional network. All countries in the region are members to RIMES. - Large scale disaster (earthquake) requires regional scale planning and collaboration. Technical collaboration, support and information sharing is therefore critical, which may not be forthcoming. - Bhutan will not be part of the decision making process in the RIMES council

				<p>which will impact disaster management in Bhutan. - RIMES membership also covers disasters related to weather and climate change and also compromises representation from NCHM.</p>
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Whereas,


I, the Director General, Department Of Geology And Mines, commit to the Secretary and the Minister, Ministry Of Economic Affairs to deliver the results described in this Annual Performance Agreement.

I, the Secretary, commit to the Director General, Department Of Geology And Mines to provide necessary support for the delivery of results described in this Annual Performance Agreement.

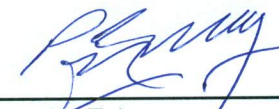
SIGNED:




Secretary



Date



Phuntsho Tobgay
Director General



Date