

Chapter-34

Energy and Mineral Resources Division

1.0 Introduction

1.1 Energy is one of the main driving forces of socio-economic development, poverty reduction, and industrialization of any country. For this reason, there is no alternative but to have an effective and modern energy sector. Realizing the necessity of adequate energy supply the government has declared this sector as a priority one. The key objective of Energy and Mineral Resources Division is to ensure energy security for the country through exploration, development, production, import, distribution and sound management of different sources of energy and mineral resources.

1.2 The prime sources for non-renewable energy of Bangladesh are natural gas. At the same time it is also one of the main sources for renewable energy. Natural gas is mainly used for electricity generation, fertilizer production, industrial activities, CNG and household activities. Moreover, almost the entire demand for commercial use of energy is met by natural gas. Thus natural gas is regarded as one of the main driving forces of the economy. Starting from the date of discovering gas field in Sylhet in 1955 as many as 26 such fields have been discovered so far. The last gas field Rupgonj located at Narayanganj was discovered in 2014. At present, natural gas is produced from 112 wells situated in 20 gas fields. Sum of the recoverable reserves is 27.12 trillion cubic feet, out of which, as of December 2016, total 14.38 trillion cubic feet gas was produced leaving 12.74 trillion cubic feet as reserve. Indeed, this division is playing a pivotal role for gas exploration and its smooth distribution.

2.0 Major Functions of the Ministry

- ❖ Formulation of Acts and Rules related to oil natural gas liquid petroleum products and mineral resources;
- ❖ Formulation of policy related to energy gas and different types of minerals except radioactive minerals;
- ❖ Manage Subjects mentioned in the Bangladesh Mineral Exploration and Development Corporation Order 1972 now merged with Petrobangla and government's responsibilities mentioned therein;
- ❖ Administration planning programming and management of programs related to geological survey.

- ❖ Administration and control of the Geological Survey of Bangladesh (GSB), the Bureau of Mineral Development (BMD), the Department of Explosives (DoE), the Bangladesh Petroleum Institute (BPI), Petrobangla, Hydrocarbon Unit and the Bangladesh Petroleum Corporation (BPC).

3.0 Strategic objectives of the Ministry and their relevance with Women's Advancement and Rights

- 3.1 **Ensuring energy security:** All the people of the country are expected to benefit from energy production by being provided energy facilities in line with the increased oil and gas reserve. Women as half of the total population are also benefitted from this. Accelerated development of the economy from the initiatives like capacity building in the exploration, development and production of gas has positive impact on women's development and poverty reduction.
- 3.2 **Ensuring efficient use of energy and its supply throughout the country:** Women are benefitting through the expansion of gas distribution. Supply of fuel according to demand is helping women engaged in agriculture and irrigation sector and also for their domestic consumption.
- 3.3 **Expanded reserve of non-oil and gas mineral resources:** Exploration of mineral resources generates employment that contributes to women's Development.

4.0 Roles and Responsibilities of the Ministry for Women's Advancement and Rights

- 4.1 Energy and Mineral Resources Division is working to ensure uninterrupted energy supply as per the requirements of common people of the country. As nearly as half of country's population is women so they are also the direct and indirect beneficiaries of the interventions provided by this division. This division is assisting women to improve their productivity, increase their participation in labor market and involvement in income generating activities in a number of ways.
- 4.2 Natural gas is widely used as a raw material in various factories and industries. For example, gas is one of the main raw materials for the fertilizer industry. Hence, a continuous supply of gas helps industrialists and factory owners to produce their desired products in a timely manner. This will also enable customers to buy products. This process, besides, creating employment opportunities for women also provide them with fertilizers for their agricultural production. As a result, women directly or indirectly related with agricultural sector benefits. It is worth mentioning that almost 70-75% women - landless or near landless families of rural areas live as agriculture laborers. During the fiscal year 2015-16, industry and fertilizer sectors were supplied with about 426.23 million cubic feet per day and 143.72 million cubic feet per day of gas respectively.

- 4.3 Gas is also supplied to captive power plants and CNG sectors for producing electricity. Almost 76% of the electricity is produced by utilizing natural gas. So timely supply of gas to power sector is very essential failure of which ultimately affects the whole economy which would impact all its citizens. Reviewing the sector use of gas shows that its use in power and industrial sectors slightly increased in FY 2015-16. However, it increases significantly in captive power and CNG sector at the same time. The beneficiary of CNG is mostly the affluent class of the society. On the other hand, an increase of gas supply in the power sector increases the investment as well as job opportunity in the country and taking this view into consideration supply of gas has been increased in the power sector by reducing supply in the CNG sector. As a result, women living both in the cities and rural areas will be benefited.
- 4.4 Volume of daily gas production is being increased with the increase of its demand. For example, the daily gas production in January 2010 was 2034 million cubic feet which gradually increased to 2740 million cubic feet up to March 2017. As a result, in last five years daily net 1000 million cubic feet gas has been added to the national grid. Net addition of gas to the national grid, in fact, brings several direct and indirect benefits for women.
- 4.5 Contracts have been signed with International Oil Companies (IOC) for three shallow sea blocks with a view to carrying out exploration. In recent times, BAPEX has been made technically strengthen than ever before for running exploration activities, and this trend will continue in future. BAPEX is conducting 2D seismic survey in different places of the country, continuing 3D seismic for reevaluation of existing fields, and also drilling wells for exploration of oil/gas.
- 4.6 To increase the energy efficiency and to optimize the use of gas, installation of pre-paid meter in domestic sector is underway. Under a pilot project, supervision of Titas Gas T& D Company Ltd. (TGTDC) has installed 4,500 prepaid meters in Mohammadpur and Lalmatia areas. 8600 Pre-paid meters have been installed under a project supported by the Asian Development Bank. A project, with 35th ODA loan from the government of Japan, for installation of 200,000 domestic prepaid meters by TGTDC and 60,000 prepaid meters by KGDCL in Chittagong will be implemented within June, 2018. Both men and women will be benefitted from these initiatives.
- 4.7 Among five coal mines in the country, coal is only extracted from the Boropukuria coal mine. About 1(one) million metric ton of coal is produced per year, and a coal power plant of 250 MW with 2 units of 125 MW each running based on coal from

this mine. Another power plant unit of 27 MW is under construction. Feasibility study on expansion of both the side of north and south side of Boropukuria Coalmine to increase the amount of coal extraction is going on. Moreover, appointment of consultant firm for feasibility study to extract coal commercially from Dighipara coal deposit is under processing. Women are directly or indirectly benefitted for being connected to national Grid.

5.0 Priority Spending Areas and Benefits for Women's Advancement

Serial No.	Priority Spending Areas/Programmes	Impact on Women Development (direct/indirect)
1	2	3
1.	Gas exploration and production	Strengthening Gas exploration activities is necessary to meet the increasing national demand for gas. The energy security of the country will be ensured if new gas fields are discovered. If gas production is increased, energy facility for women will also increase and ultimately, it will raise women's standard of living.
2.	Development of the Coal sector	The existing national gas reserve is depleting gradually. As an alternative energy source the development of the coal sector can help ensure energy security. Huge number of workers is required to extract coal from the coal mine. Therefore development of coal sector will create employment opportunity for women.
3.	Ensuring uninterrupted supply of fuel oil	Uninterrupted supply of fuel is a must for development of agriculture transport industry and the power sector. If Supply of oil can be ensured it can, in turn, benefit women workers working in different areas.
4.	Expansion of gas network and its efficient use	If maximum gas supply is ensured through expansion of the gas network both small and large industries will have impact on Women's Advancement (Direct and Indirect) established in remote areas of the country. This will contribute to the economic development of the country. Besides if we can ensure optimum use of gas, the socio economic development of the country is possible. Women in the rural areas will also benefit through expansion of gas supply.
3.	Reduction of system losses and enhancement of operational efficiency	Government subsidy to this sector can be reduced significantly if revenue collections can be increased through reducing systems losses enhancing operational skills in marketing of oil and strengthening the realization of arrears. As women are directly and

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		indirectly involved in gas use this will have positive impact on women development.

6.0 Women's Share in Ministry's Total Expenditure

(Taka in Crore)

Description	Budget 2017-18			Revised 2016-17			Budget 2016-17		
	Budget	Women Share Women percent		Revised	Women Share Women percent		Budget	Women Share Women percent	
Total Budget	400266	112019	27.99	317174	86586	27.3	340605	92781	27.24
Ministry Budget	2224	365	16.4	1111	230	20.66	1973	883	44.74
Development	2111	358	16.96	1068	224	20.97	1911	877	45.9
Non-Development	113	7	6.05	44	6	13.06	62	6	9.25

Source: RCGP database

7.0 Success in Promoting Women's Advancement

7.1 Gas is being used for domestic purpose in households in this country. Both extraction and use of gas have increased recently. As a result women involved in household activity of urban areas have got some relief. Due to gas use they can finish their cooking within a short period of time consequently it enhances their skill as well as reduces their health related risks. In FY 2015-16 per day 386.61 Million CF gas have been supplied for household Words. Besides, customer can easily purchase cylinders from respective dealers as its supply has considerably been increased.

8.0 Recommendations for Future Activities

- ❖ Recognizing the contribution of women's role in natural resource protection, management and environment security, equal participation of women will have to be considered in the environment protection policy and programs.
- ❖ An effort will be made to identify employment opportunities for women in the Energy and Mineral Resources Sector. This division will take appropriate measures to highlight the role of women in energy savings and will supply gas to small entrepreneurs.
- ❖ Ensure use of LP gas in domestic purpose in 70% area of the country within 2018. To save the working time, reduce health risk and engage woman in the income generating activities and insure the safety livelihood.