

Chapter-34

Energy and Mineral Resources Division

1.0 Introduction

1.1 As energy is one of the main driving forces of socio-economic development, poverty reduction and industrialization of any country, 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 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 27 such fields have been discovered so far. The last gas field Bhola was discovered in 2018. At present, natural gas is produced about 2700-2750 mmcf/d from 112 wells situated in 20 producing gas fields. Sum of the recoverable proven probable reserves is 27.81 trillion cubic feet, out of which as of December 2019 total 16.44 trillion cubic feet gas was produced leaving 12.54 trillion cubic feet as remaining 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 there in;
- ❖ Administration planning programming and management of programmes related to geological survey.

- ❖ Administration and control of the Geological Survey of Bangladesh, the Bureau of Mineral Development, Department of Explosives, Bangladesh Petroleum Institute, Petrobangla, Hydrocarbon Unit and the Bangladesh Petroleum Corporation.

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 will also benefit 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. Women workers are temporarily employed in field programs/mining activities and hence contributing the human resource development

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

4.1. Energy and Mineral Resources Division is working relentlessly to ensure uninterrupted energy supply as per the requirements of common people of the country. As nearly half of country's population are 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 labour 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 their necessary products. This process is creating employment opportunities for women and also provides them fertilizers for their agricultural production. As a result, women directly or indirectly related with agricultural sector is benefited. Almost 70-75% women members of landless or near landless families of rural areas live as agriculture laborers. During the fiscal year 2017-18, industry and fertilizer sectors

were supplied with about 456.3 and 117.8 million cubic feet per day of gas respectively.

- 4.3. Gas is being supplied to the electricity, captive power and CNG sectors. Almost 69% of the electricity is being 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 and women as well. Reviewing the sectoral use of gas, it is found that use of gas in industrial and domestic sectors increased slightly in FY 2017-18 compared to FY 2016-17. On the other hand, an increase of gas supply in the industrial sector increases the investment as well as job opportunity in the country. As a result, women living both in the city and rural areas will be benefited.
- 4.4. Daily gas production is being increased with the increase of its demand. The daily gas production in January 2009 was 1744 million cubic feet which gradually had increased to 2740 mmcf. Now daily gas supply is 2750 million cubic feet. At present 500 mmcf imported LNG is being added to the national grid through FSRU of EEBL. Additional 500 mmcf LNG will be added to the national grid from April, 2019 by FSRU of Summit LNG Terminal Pvt. Co. Limited. Net addition of gas to the national grid in fact brings several direct and indirect benefits for women.
- 4.5. FY of 2015-16 two compressor stations financed by ADB and GOB has been commissioned at Ashuganj and Elenga. Installation of the stations is completed to necessary supply of gas as well as to stabilize the high pressure in the gas pipes which ultimately will benefit women directly and indirectly.
- 4.6. It will be possible to play a role in the development of women through various training/workshops of geology and through specifying the household fields like - arsenic-free tube wells for safe and pollution-free (arsenic-free) drinking water. Apart from this, opportunities for women are being created in pit, white soil, silica sand and other mineral resources in quarry areas and small industries.
- 4.7. Natural gas and LPG is being used for domestic purpose of the country. Customers can easily purchase LPG cylinder from respective licensee dealers as its supply has considerably been increased. Since license and dealership is being given at root level, as a result women at root level can use LPG cylinder in household activities.

5.0. Priority Spending Areas and Benefits for Women's Advancement

Priority Spending Areas/ Programmes	Impact on Women's Advancement (Direct and Indirect)
1. Gas Exploration & production	Strengthening of Gas exploration activities is necessary to meet the Priority Areas for expenditures/programmes increasing national demand for gas. The energy Security

Priority Spending Areas/ Programmes	Impact on Women's Advancement (Direct and Indirect)
	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 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 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 gas supply is ensured with respect to the demand, through the expansion of the gas network, the remote areas will be industrialized, which will contribute to the economic development. Besides, if optimization of natural gas is ensured, it will induce the socio-economic development for women even in rural areas.
5. 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 indirectly involved in gas use this will have positive impact on women development.
6. LP Gas Bottling Plant	Using biomass as cooking fuel increases health hazard for women at kitchen. LP Gas is better fuel for cooking than biomass. BPC has taken a project to set up LP Gas Bottling Plant having production capacity of 1.00 (one) lakh metric ton per anum at Latifpur, Sitakunda, Chattogram which is an eco-friendly project.
7. License and Lease Activities	Priority expenditures Areas/Programmes of BMD are granting lease and licenses for exploration and extraction of mineral resources other than oil and gas. A large part of workers participating in the activities of the various mining and quarry lease are female workers. As a result,

Priority Spending Areas/ Programmes	Impact on Women's Advancement (Direct and Indirect)
	license and lease activities will contribute to the advancement of women.

6.0 Women's Share in Division's Total Expenditure

(Taka in Crore)

Description	Budget 2019-20			Revised 2018-19			Budget 2018-19			Actual 2017-18		
	Budget	Women Share		Revised	Women Share		Budget	Women Share		Actual	Women Share	
		Women	percent		Women	percent		Women	percent		Women	percent
Total Budget	523190	161247	30.82	442541	136036	30.74	464573	136938	29.48	321861	88441	27.48
Division's Budget	1986	1139	57.36	2290	185	8.08	1985	325	16.37	1113	290	26.05
Development	1916	1097	57.28	2209	135	6.12	1820	260	14.28	862	189	21.92
Operating	70	42	59.47	81	50	61.46	165	65	39.39	251	101	40.23

Source: RCGP database

7.0 Success in Promoting Women's Advancement

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. Besides customer can easily purchase cylinders from respective dealers as its supply has considerably been increased.

8.0 Recommendations for Future Activities

- ❖ By acknowledging the contribution of women in natural resource protection, management and environment security; equal participation of women will have to be ensured in the environment protection policy and programs;
- ❖ Energy and Mineral Resources Division will take necessary measures for the identification of women in energy sector, promulgation of women activity in the savings of energy and ensure supply on priority basis to small scale women entrepreneurs;
- ❖ Ensure usage of LPG to the 70% areas of the country by 2019 in order to saving of time in chores of women. So that, women can use this saved time to other economic activities which will in turn reduce the health risks;
- ❖ Low educated females will be employed in the filling stations of the country;
- ❖ The Department of Explosives will take initiatives to highlight the role of woman for safe use and handling of LPG cylinder.