

Milling Address: Deputy Director (Planning & PSC)
Hydrocarbon Unit, Energy and Mineral Resources Division
Ministry of Power, Energy and Mineral Resources
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Profile of Mahadehe
Hassan
DoB: June 20, 1978



- 2.0 Core Competencies** :
- PSC and RSC related activities,
 - Providing opinion and suggestion to the Ministry on Production Sharing Contracts (PSCs) and Joint Venture Agreements (JVA);
 - Domestic and Regional energy market monitoring & analysis;
 - To assist the ministry in formulating environmental & energy security policies;
 - To review and monitor activities of Petroleum Refining, storage and Distribution;
 - To assist the ministry in reviewing, monitoring and planning of POL product demand, supply, pricing and trading;
 - Planning, Monitoring of Exploration, Production and Development activities.

3.0 Present Job and Employer :

(a) Title: Deputy Director (Planning & PSC), Hydrocarbon Unit, Energy and Mineral Resources Division

(b) Accomplishments: From May 28, 2016 to Present

4.0 Past Job and Employer :

(a) Title: Assistant Director, Hydrocarbon Unit, Energy and Mineral Resources Division

(b) Accomplishments: From March 16, 2009 to May 27, 2016

(a) Title: Assistant Drilling Engineer, Geological Survey of Bangladesh (GSB), Energy and Mineral Resources Division

(b) Accomplishments: From September 26, 2005 to March 15, 2009

(a) Title: Assistant Engineer, Bakhrabad Gas System Company Limited

(b) Accomplishments: From October 16, 2004 to September 25, 2005

(a) Title: Assistant Engineer, Bangladesh Gas Field Company Ltd

(b) Accomplishments: From December 10, 2003 to October 15, 2004

5.0 Education : **BSc in Mechanical Engineering**
Rajshahi University of Engineering & Technology (RUET), 2000 (held in 2003)
First Class (CGPA 3.25 Out of 4.00)
Merit position 13th

6.0. Membership of Professional Associations: Member of the Institution of Engineer's Bangladesh, (IEB), Membership No-25102.

7.0. Local Training:

Name of Organization	Subject of Training	Time	Duration
GATC, Segunbagicha, Dhaka	Drilling Course	05- 09 August 2007	05 Days
BEISP	EIA Guidelines for Gas Sector (Upstream and Downstream)	22-23 June 2010	02 Days
APO & NPO (Ministry of Industries)	National Dissemination Program on Energy Management Capacity Building	20- 21 December 2010	02 Days
Schlumberger SEACO Inc	Petroleum Systems Modeling	04- 08 December 2011	05 Days
Asian Development Bank (ADB)	Project Accounting and Project Management	17-18 September 2012	02 Days
Department of Environment	Developing CDM Project in Power and Energy Sector	18 -19 November 2012	02 Days
Bangladesh Petroleum Institute (BPI)	Project prepare for Project Management	20-24 November 2016	05 Days

Bangladesh Petroleum Institute (BPI)	Corrosion Control and Cathodic Protection	14-18 May 2017	05 Days
Central Procurement Technical Unit (CPTU)	National e-Government Procurement	03-05 June 2017	03 Days
National Academy for Planning and Development (NAPD)	Environmental Issues of Project Management	06-10 May 2018	05 Days
Bangladesh Petroleum Institute (BPI)	Gas Network Analysis	01-03 February 2021	03 Days
Bangladesh Petroleum Institute (BPI)	Material Engineering Codes and Standards	22-24 March 2022	03 Days
Bangladesh Institute of Management (BIM)	Data Analysis and Management	04 -08 September 2022	05 Days
Bangladesh Institute of Management (BIM)	Project Management	22-24 September 2022	03 Days
Bangladesh Petroleum Institute (BPI)	Gas Metering System	19-23 February 2023	05 Days

Foreign Training:

Name of Organization	Subject of Training	Time	Duration
The Energy and Resources Institute (TERI) New Delhi, India	Decentralized Energy Solution- Planning & Implementation	22 October-09 November 2012	19 Days
Thailand International Development Cooperation Agency (TICA), Thailand	Global Warming Mitigation and Adaptation by Sustainable Balancing Energy Management	09-25 July 2014	17 Days
Bangkok School of Management, Thailand	Annual Performance Evaluation and Management	23 July 2017 - 01 August 2017	10 Days
Asian Institute of Technology, Vietnam	Annual Performance Agreement	16 - 26 June 2019	10 Days
University of Greenwich, London, UK	Innovation in Management of Mineral and Energy Resources in Using Modern Explosive Technology	19 January – 28 January 2020	10 Days

8.0. Languages:

Language	Speaking	Reading	Writing
Bengali	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent
Hindi	Excellent	Medium	Medium

9.0 Publication:

Research Paper Published:

- Mahadehe Hassan, 2021** Analysis of the Energy Scenario of Bangladesh in Current, SDG 2030 and Vision 2041; Journal of Energy, Environmental & Chemical Engineering, Volume 6, Issue 3, September 2021, Pages: 45-56, Published: Jul. 22, 2021
- Mahadehe Hassan, 2021**, Analysis of Hydrogen Show That Hydrogen Is the Best Fuel of Future in Bangladesh, Journal of Energy, Environmental & Chemical Engineering, Volume 6, Issue 3, September 2021, Pages: 57-64, Published: Jul. 23, 2021
- Mahadehe Hassan, 2021**, Analysis the Role of Private Entities in the Energy Sector of Bangladesh Journal of Energy, Environmental & Chemical Engineering, Volume 6, Issue 3, September 2021, Pages: 76-87, Published: Sep. 4, 2021
- Mahadehe Hassan, M. Ahmed. 2022** Analysis of Energy Sector of Bangladesh's to Ensure the Route of Vision 2041, International Journal of Energy and Power Engineering, Volume 11, Issue 1, January 2022, Pages: 1-16, Published: January 12, 2022
- Mahadehe Hassan, 2022** Analysis of the Global / Regional Energy to address the Implementing of Bangladesh Vision 2041, Journal of Energy, Environmental & Chemical Engineering, Volume 7, Issue 4, December 2022, Pages: 111-126, Published: November, 4, 2022

6. **Mahadehe Hassan, Md. Mehedi Hasan, 2023** Analysis of Household Energy Consumption and Energy Consumption Cost (Bio-Fuel) in Rural Areas of Dhaka Division, Bangladesh, International Journal of Energy and Environmental Science, Volume 8, Issue 3, May 2023, Pages: 53-66, Published: July 6, 2023

7. Md. Mehedi Hasan, Minhaj Uddin Monir, **Mahadehe Hassan**, Evaluating the energy and mineral resources prospect and future development in Bangladesh: A review Evaluating the energy and mineral resources prospect and future development in Bangladesh: A review, ScienceDirect, Journal of Energy Policy, Published: July 6, 2023

10.0 Computer Skill: MS Word, MS Excel, MS Power point, MS Access, Adobe Photoshop, Adobe Illustrator, Adobe Photo Impact, Hardware & Trouble shooting. E-mail and Internet browsing.

11.0 Hobbies and Interested: Knowing people is my favorite hobby. To read books and articles, Articles writing, Fields of information Technology, Traveling, Rock music, Painting and Thinking

12.0 Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

Name of assignment or Project: The feasibility study for setting up a straddle plant for NGL extraction & fractionation at Ashuganj.

Location: Ashugang

Consulting Firm: Pegasus International Sdn Bhd, Malaysia

Client: Strengthening of the Hydrocarbon Unit (Phase-II)

Year: 2009-2010 (09 Months)

Main Project Features:

To conduct a Feasibility Study for setting up a Straddle Plant for NGL Extraction & Fractionation at Ashuganj considering NGL recovery and its potential uses,

Position Held: Junior Process Engineer

Activities Performed :

- Determine both proven and recoverable sources of NGL and estimates of the most likely additional NGL, which may be available as a result of contemporaneous exploration.
- Determine extractable amount of NGL (including ethane) towards preparation of a techno-economic model to determine the feasibility of setting up a straddle plant for NGL Extraction including Fractionation, which could process NGL from extraction plant.
- Prepare conceptual design, cost estimates, economic analyses, and opportunity cost comparisons for Potential uses of NGL for Petrochemical i.e. NGL mix feed ethylene cracker with polyethylene and polypropylene plants, olefins plants, etc.
- Recommend other alternate use of NGL (including aromatics, methanol and derivatives) which may be economically competitive as well as attractive.
- Recommend the best strategic use of the NGL components based on opportunity cost comparison.
- Recommend prices for all products produced considering competing imported products and the potential for export and comment on the economic advantages and disadvantages of applying protective tariff.

Name of assignment or Project: Petroleum Refining and Marketing

Location: Dhaka

Consulting Firm: SOFRECO, France

Client: Strengthening of the Hydrocarbon Unit (Phase-II)

Year: 2009-2013 (04 Years)

Main Project Features:

The objectives of the Refining & Marketing activities are to assist HCU on various issues related to Petroleum Refining & Marketing aspects of the country and in taking needful steps in monitoring, review as well as activity planning involved and related studies.

Position Held: Junior Sales Engineer

Activities Performed:

- To review existing activities of Petroleum Refining, Storage & Distribution system of the country and make comments with suggestions and recommendations.
- To review, demand, supply, pricing, trading of POL products and make comments with suggestions and recommendations.
- Review of Acts, Rules, Regulations, etc and assist in formulating new policies, acts, etc.
- To evaluate the technical and economical feasibility for Balancing, Modernizing, Replacing and Expansion (BMRE) of the only Refinery of the country (i.e. ERL) with an aim to reduce the production cost of refined petroleum products of ERL.
- To evaluate technical and economical feasibility for establishment of new refinery in the country with proper justification of location and other considerations.
- Review of present marketing system of petroleum products and make comments with suggestions and recommendations for up-gradation of the system.
- To assist in development of Petroleum Database.
- To prepare a comprehensive document on Petroleum Refining & Marketing of the country taking into considerations of the following but not limited to:
 - (a) Demand and Supply of Petroleum Products,
 - (b) Procurement of Petroleum Products,
 - (c) Wharf Facilities,
 - (d) Storage of Petroleum Products,
 - (e) Transportation of Petroleum Products,
 - (f) Distribution Channels,
 - (g) Demand forecast of Petroleum Products upto 2015 & 2025,
 - (h) Pricing Policy and fixing of Retail Selling Prices in Bangladesh,
 - (i) Infrastructure Development to meet growing demand of Petroleum Products,
 - (j) Alternative Fuel

Name of assignment or Project: Petroleum Resource Management

Location: Dhaka

Consulting Firm: Gustavson Associates LLC, USA

Client: Strengthening of the Hydrocarbon Unit (Phase-II)

Year: 2009-2013 (04 Years)

Main Project Features:

- The objectives of the Resource Management activities are to:
- Improve capability to exercise regulatory functions;
- Develop policies and strategies to ensure better administration of the petroleum resources.
- Establish procedures for updating and publishing of the resource inventory at regular intervals.
- Make easy access to petroleum data as a basis for technical and economic evaluation on the national level and for investment decisions.

Position Held: Junior Reservoir Engineer

Activities Performed:

- Activity Planning and Promotion of Exploration
- Planning of Field Development and Depletion
- Optimal Gas Utilization
- Resource Classification System, Reporting Regime and Database Model
- Petroleum Resource Assessment.
- Updating the Resource Inventory
- Establish Data Management System

13.0 Certification: I, the undersigned, certify to the best of my knowledge and belief that: This Profile correctly describes my qualifications and my experience.
I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Mr. Mahadebo Hassan Date: 28 October 2023