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Analysis of energy consumption and indicators of energy use in Bangladesh

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Natural gas has so far fuelled more than 90% of the power plants of the country. Hydro-electricity contributes only 3% of the total energy supply in Bangladesh. More than 90% of the oil and petroleum products are imported. The country has a substantial potential for coal, most of which has yet to be explored. Overall energy intensity increased approximately twofold from 1980 to 2005. The findings of the study show that change in energy intensity is due to structural effect, while increase in aggregate energy consumption is due to both the activity effect and structural effect. Renewable energy sources will largely mitigate the dire energy crisis in rural areas of Bangladesh. Over 400,000 Solar Home Systems (SHSs) have been installed so far, benefiting over 4 million rural people. More fiscal and other incentives should be included in the recently formulated Renewable Energy Policy to investors for rapid development of clean energy. In addition, regional cooperation should be enhanced specially in case of hydro-power and natural gas. Finally, coal based power plant should be set up as early as possible.

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t = price (Taka/mcm) of natural gas in year t, and $(Q_{\{gcon_{t}\}})$) = natural gas consumption in year t.

- Solar home systems consist of a PV panel that catches sun rays as directly as possible, converts solar energy to electricity and charges a storage battery (Balint <u>2006</u>).
- 3. Clean Development Mechanism (CDM) is a flexible mechanism under the Kyoto Protocol. CDM gives industrialized nations the opportunity to finance greenhouse gas mitigation projects in developing nations with the aim of contributing to sustainable development while also helping industrialized nations meet their reduction commitments (UNFCCC 2002).

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BBS (1975–2006) Statistical Year Book of Bangladesh. Bangladesh Bureau of Statistics (BBS), Dhaka

BER (2007) Bangladesh Economic Review 2007, Ministry of Finance and Economic Affairs, Government of Bangladesh, pp. 113–133

BGMEA (2007) The Bangladesh Garment Manufacturers and Exporters Association. <u>http://www.bgmea.com.bd/</u>

Dincer I, Dost S (1997) Energy and GDP. Int J Energy Res 21:153–167

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Centre (IIFC), Ministry of Energy, Government of Bangladesh

Hossain I, Tanim M (2005) Energy and sustainable development in Bangladesh, HELIO International, Dhaka, Bangladesh

IDCOL (2005) IDCOL Renewable Energy Program, Infrastructure Development Company Limited, Dhaka

IDCOL (2007) IDCOL Renewable Energy Program, Infrastructure Development Company Limited, Dhaka

IEA/OECD (2004) Renewables Information 2004. International Energy Agency,

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Khan NH (2002) Current debate on gas and oil exploration in Bangladesh. Quarterly Bangladesh Foreign Policy Survey, BIISS, Dhaka

Google Scholar

Khan AR, Hossain M (1989) The strategy of development in Bangladesh. Macmillian, UK, pp 31–66

Google Scholar

Khan AMA, Imaduddin M (1999) Midterm Gas Demand-Supply Scenario and Gas Reserve of Bangladesh paper presented in the 2nd Petroleum Engineering Symposium 1999, organized by Petroleum and Mineral Resources Engineering Department, BUET, May 24–25, 1999

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Issues in Energy Development of Bangladesh Conference and Workshop paper, International Conference and Workshop on Critical Issues in Energy and Development Challenges for the OIC Countries, Organized by Islamic Institute of Technology, Gazipur, Dhaka, 20–23 November'2000

Nurul IM (2001) Energy Security and Sustainable Human Development: Bangladesh Perspective paper presented in Regional Conference on Human Security in South Asia, jointly organized by Institute of Peace and Conflict Studies (IPCS), New-Delhi, India and Bangladesh Institute of International Strategic Studies (BIISS), Dhaka, Bangladesh, 10–11 January'2001, New-Delhi

OGJ (2005) Oil Gas J. Website: <u>www.ogj.com</u>

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Samrina N (2004) Energy security for Bangladesh: prospects and strategic implications of natural gas. Program in Arms Control, Disarmament, and International Security (ACDIS) occasional paper. <u>http://www.acdis.uiuc.edu/</u>

Sarkar MAR, Ehsan M, Islam MA (2003) Issues relating to energy conservation and renewable energy in Bangladesh. Energy Sustain Dev II:77-87

Google Scholar

Smith KR (1999) Fuel emission, health and global warming. Wood Energy News 14(3)

Subrata Kumar B (2003) Natural gas of Bangladesh: consumption pattern and its

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Uddin SN, Taplin R (2006) A sustainable energy future in Bangladesh: current situation and need for effective strategies. The 2nd Joint International Conference on Sustainable Energy and Environment (SEE 2006) 21–23 November 2006, Bangkok, Thailand

Uddin SN, Taplin R, Xiaojiang Y (2006) Advancement of renewables in Bangladesh and Thailand: policy intervention and institutional settings. Nat Resour Forum 30:177–187

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