

Analysis of Fuel Adulteration Consequences in Bangladesh

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Abstract : In most countries manufacturing, trading and distribution of gasoline and diesel fuels belongs to the most important sectors of national economy. For Bangladesh, a robust, well-functioning, secure and smartly managed national fuel distribution chain is an essential precondition for achieving Government top priorities in development and modernization of transportation infrastructure, protection of national environment and population health as well as, very importantly, securing due tax revenue for the State Budget. Bangladesh is a developing country with complex fuel supply network, high fuel taxes incidence and - till now - limited possibilities in application of modern, automated technologies for Government national fuel market control. Such environment allows dishonest physical and legal persons and organized criminals to build and profit from illegal fuel distribution schemes and fuel illicit trade. As a result, the market transparency and the country attractiveness for foreign investments, law-abiding economic operators, national consumers, State Budget and the Government ability to finance development projects, and the country at large suffer significantly. Research shows that over 50% of retail petrol stations in major agglomerations of Bangladesh sell adulterated fuels and/or cheat customers on the real volume of the fuel pumped into their vehicles. Other forms of detected fuel illicit trade practices include misdeclaration of fuel quantitative and qualitative parameters during internal transit and selling of non-declared and smuggled fuels. The aim of the study is to recommend the implementation of a National Fuel Distribution Integrity Program (FDIP) in Bangladesh to address and resolve fuel adulteration and illicit trade problems. The program should be customized according to the specific needs of the country and implemented in partnership with providers of advanced technologies. FDIP should enable and further enhance capacity of respective Bangladesh Government authorities in identification and elimination of all forms of fuel illicit trade swiftly and resolutely. FDIP high-technology, IT and automation systems and secure infrastructures should be aimed at the following areas (1) fuel adulteration, misdeclaration and non-declaration; (2) fuel quality and; (3) fuel volume manipulation at retail level. Furthermore, overall concept of FDIP delivery and its interaction with the reporting and management systems used by the Government shall be aligned with and support objectives of the Vision 2041 and Smart Bangladesh Government programs.

Keywords : fuel adulteration, octane, kerosene, diesel, petrol, pollution, carbon emissions

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