



## Bangladesh: Supporting Brick Sector Development Program

Project Name	Supporting Brick Sector Development Program		
Project Number	45273-002		
Country	Bangladesh		
Project Status	Approved		
Project Type / Modality of Assistance	Technical Assistance		
Source of Funding / Amount	TA 8197-BAN: Supporting Brick Sector Development Program		
	Clean Energy Fund - Multi-Donor	US\$ 750,000.00	
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth		
Drivers of Change	Governance and capacity development Partnerships Private sector development		
Sector / Subsector	Energy - Energy efficiency and conservation Finance - Small and medium enterprise finance and leasing Industry and trade - Small and medium enterprise development		
Gender Equity and Mainstreaming			
Description	An ADB sovereign loan in the amount of \$50 million complements this government initiative by providing targeted finance (through a credit facility) to build up initial energy efficient brick kiln replacement capacity and help facilitate the phase-out of FCKs. The proposed TA will complement the ADB credit facility by supporting a comprehensive brick sector development program. It will help promote market awareness and generate demand for funds (to construct energy efficient kilns), provide business and brick kiln operational support, minimize negative social impacts from phasing out FCKs, create a long-term brick sector development roadmap, formulate sustainable sector policy and regulation, and advance new building techniques. It will also coordinate with ongoing and planned similar assistance programs from relevant development partners and assess the possibility to establish a Bangladesh national brick technical and information center (center) as a one-stop-shop to meet all the brick sector's development needs. The TA will therefore be critical towards effective and timely implementation of the ADB credit facility (project loan).		

Project Rationale and Linkage to Country/Regional Strategy	<p>Promoting energy efficiency and environmental sustainability is a key part of Bangladesh's sixth five year plan (2011-2015). However, the prevalence of the primitive brickfields throughout Bangladesh has contributed negatively to the country's greenhouse gas emissions (GHG) and fine particulate pollution. The causes are multifaceted. There is a lack of a comprehensive sector policy and development plan. As a result, the brick sector is poorly regulated and ill-informed of the latest technologies. Instead of a small number of highly efficient modern brickfields, a large number of unqualified small businesses operate on the back of outmoded technologies, severe industrial pollution, and poor labor standards. Without intervention, the existing brick sector will continue to burn at least 6.0 million tons of coal and emit at least 9.8 million tons of carbon dioxide (CO<sub>2</sub>) a year, and increase land-use change emissions.</p> <p>There are six basic types of brick kiln in Bangladesh: (i) bull's trench kiln, (ii) fixed chimney kiln (FCK), (iii) zigzag kiln, (iv) vertical shaft brick kiln (VSBK), (v) Hoffman kiln, and (vi) tunnel kiln. From (i) to (vi), bull's trench kiln is the least energy-efficient and most polluting, and tunnel kiln is the most energy-efficient and the least polluting. There are also modified (or improved) zigzag kiln and hybrid Hoffman kiln (HHK), which are based on traditional designs but are more energy-efficient than their prototypes. FCKs can be upgraded to improved zigzag kilns because of the similar mechanical designs. Currently, 92% of the 4,880 brickfields in Bangladesh are using the highly polluting FCK design. Improved zigzag kilns, VSBKs, HHKs, and tunnel kilns are rare because of the general lack of awareness of these technologies and the inadequate market funding support.</p> <p>To improve the environmental condition associated with the brick sector, Ministry of Environment and Forests (MOEF) issued a directive on 15 July 2010, requiring that (i) no annual FCK licenses be renewed after September 2012; (ii) environmental clearance favor more energy-efficient improved zigzag kilns, VSBKs and HHKs; and (iii) all FCKs cease to exist from September 2013. However, there is a lack of corresponding financing scheme and complementary sector development program to support this initiative.</p>
Impact	Improved environmental conditions in Bangladesh
<b>Project Outcome</b>	
Description of Outcome	Expedited brick sector modernization
Progress Toward Outcome	
<b>Implementation Progress</b>	
Description of Project Outputs	<p>Government delivers a long-term brick sector policy, strategy, and action plan for adoption</p> <p>Market awareness for energy-efficient brick kilns and provision of business support to subborrowers improved</p> <p>Effective ADB loan implementation</p> <p>Research and development in advanced building materials promoted</p>
Status of Implementation Progress (Outputs, Activities, and Issues)	Awareness workshops and conferences have been organized and are ongoing. ADB consultants are supporting capacity development to stakeholders on environment and social safeguards, technical verifications, and other ADB loan implementation requirements. The consultants have not delivered brick sector policy and new technology development.
Geographical Location	
<b>Summary of Environmental and Social Aspects</b>	
Environmental Aspects	
Involuntary Resettlement	
Indigenous Peoples	
<b>Stakeholder Communication, Participation, and Consultation</b>	

During Project Design	<p>ADB has conducted extensive stakeholder consultations during the processing of the sovereign loan and designing the proposed TA. A series of meetings have been conducted on the program design and implementation details with proposed EAs and IAs and other relevant institutions, including Bangladesh Bank, DOE, MOEF, Ministry of Finance (Bank &amp; Financial Institutions Division, Finance Division, and Economic Relations Department), and MOIND. ADB will also visit the Ministry of Social Welfare, Ministry of Health and Family Welfare, and Ministry of Labour and Employment during the TA fact finding to ascertain their support for the brick sector program to minimize the social impact. ADB has also conducted additional consultation with Bangladesh Brick Manufacturing Owners Association; Britic Wall Material Co., Ltd (Bangladesh); Diamond Auto Bricks Limited/Nestor Consulting; Clean Energy Alternatives; SME Foundation; Women Entrepreneurs Association of Bangladesh (or WEAB); Xi'an Research and Design Institute of Wall and Roof Materials; Eastern Bank Limited and many potential business investors. The purpose is to ascertain local market demand for energy efficient brick kiln technologies; appetite for financing and technical capacity development; need for project implementation support; and need to strengthen environmental and social safeguards, gender, and labor conditions. In addition, ADB has further consulted a number of potential PFIs including Agrani Bank Limited, Infrastructure Development Company Limited (IDCOL), Industrial and Infrastructure Development Finance Company Limited (IIDFC), Mutual Trust Bank, and Sonali Bank Limited.</p> <p>Finally, ADB consulted relevant development partners working in the brick sector in Bangladesh (the World Bank, UNDP, and GIZ), particularly on the donor coordination and the possible establishment of the national brick center.</p>
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#### During Project Implementation

#### Business Opportunities

Consulting Services	Four international consultants (36 person-months on an intermittent basis) and five national consultants (44 person-months on an intermittent basis) will be recruited through a firm. The consultants will be engaged by ADB in accordance with its Guidelines on the Use of Consultants (2010, as amended from time to time).
Procurement	Procurement of goods will follow ADB's Procurement Guidelines (2010, as amended from time to time), and any equipment purchased under this TA will be handed over to the MOEF at the closure of the TA.

Responsible ADB Officer	Anqian Huang
Responsible ADB Department	South Asia Department
Responsible ADB Division	Public Management, Financial Sector and Trade Division, SARD
Executing Agencies	<i>Ministry of Environment and Forest Building No. 6(13th floor), Bangladesh Secretariat, Dhaka</i>

#### Timetable

Concept Clearance	11 Jul 2012
Fact Finding	24 Jul 2012 to 26 Jul 2012
MRM	-
Approval	22 Oct 2012
Last Review Mission	-
Last PDS Update	04 Mar 2015

#### TA 8197-BAN

Milestones					
Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
22 Oct 2012	31 Mar 2013	31 Mar 2013	31 Dec 2014	31 Dec 2015	-

Financing Plan/TA Utilization							Cumulative Disbursements	
ADB	Cofinancing	Counterpart				Total	Date	Amount
		Gov	Beneficiaries	Project Sponsor	Others			
0.00	750,000.00	0.00	0.00	0.00	0.00	750,000.00	22 Oct 2012	186,326.56

Project Page	<a href="http://www.adb.org/projects/45273-002/main">http://www.adb.org/projects/45273-002/main</a>
Request for Information	<a href="http://www.adb.org/forms/request-information-form?subject=45273-002">http://www.adb.org/forms/request-information-form?subject=45273-002</a>
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