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| <b>Title</b>  | <b>Innovative ways to promote community-based composting</b>   |                   |         |               |   |
| <b>Category</b>                                     | Solid waste management   |                   |         |               |   |
| <b>Strategy</b>                                     | Community related initiatives for urban environmental management   |                   |         |               |   |
| <b>Country/City</b>                                 | Bangladesh/ Dhaka  | <b>Population</b> | No data | <b>Budget</b> | 1,000 sq.meter land provided by the Lion's club, composting plants provided by UNDP |
| <b>Duration</b>                                     | 1995-  | <b>GDP [USD]</b>  | No data |               |   |
| <b>Main stakeholders</b>                            | Local communities<br>NGOs: Waste Concern, PROSHIKA (since 2002)<br>Map Agro Ltd. Bangladesh (a fertilizer company)   |                   |         |               |   |
| <b>Background</b>                                   | <p>A huge and densely populated city, Dhaka faces an acute solid waste problem with daily waste generation of more than 4,000 metric tons of mixed wastes. Due to the shortage in funding, the local government of Dhaka has not been able to effectively collect and dispose the waste properly; majority of these wastes could be seen on streets and drains.</p> <p>A non-governmental organization known as Waste Concern took the initiative to promote community-based efforts to primary collection of waste as well as to encourage composting in order to reduce the quantity of final waste disposal.</p>  |                   |         |               |   |
| <b>Objectives</b>                                   | <ul style="list-style-type: none"> <li>• To create public awareness for waste management;</li> <li>• To provide motivation by providing cash to communities that sells the compost;</li> <li>• To integrate the private sector with communities for improving the quality of compost and to provide marketing at the national level and;</li> <li>• To reduce the quantity of overall solid waste resulting in lower expenditures for local government to collect and dispose of solid waste.</li> </ul>   |                   |         |               |   |
| <b>Actions taken/ Strategies for implementation</b> | <p><b>1: Initial efforts</b></p> <p>Waste Concern conducted a study on the supply and demand aspects of composting and outlined a framework to carry out composting activities. Based on the study, key features of a decentralized composting include (1) labor intensive and less costly, (2) well-suited for the city's waste stream, climate, social and economic conditions; (3) low cost due to readily-available local materials and the use of low-cost technology; (4) an improvement for community participation in waste-source separation; (5) way to reduce the volume of solid waste at source more effectively and (6) a way to enhance income and job opportunities for the poor, socially deprived informal workers and small entrepreneurs of the city.</p> <p><b>2: Pilot project</b></p> <p>Waste concern started the pilot project in 2005 by conducting a preliminary survey for the possible demand of compost products from farmers. The study revealed that there is a good demand for compost in Dhaka as well as adjoining areas. To improve the supply side, a door-to-door waste collection system was introduced to collect the domestic organic waste. Gradually, the number of households participating in the collection increased. Several composting techniques have been experimented however aerobic technique emerged to</p> |                   |         |               |   |

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|  | <p>be the most suitable composting method for the condition of Dhaka.</p> <p><b>3: Process of composting</b></p> <p>The collection and sorting of waste takes place in the composting plant in the community with the aerobic method. The plant contains facilities such as waste delivery, residual removal, active composting, maturing, screening and bagging area, etc. The space for organic farming was also prepared.</p> <p><b>4: Marketing and networking with nurseries and fertilizer companies</b></p> <p>Waste Concern has developed a good network with nurseries and fertilizer marketing companies to sell their compost at a price of TK 2.5 to TK 5.0 per kilogram.</p> <p><b>5: Innovation –partnership agreements with a fertilizer company and PROSHIKA</b></p> <p>The enrichment of the nutrient and countrywide marketing/sale of the compost is the most innovative in the project. An agreement to sell composts with PROSHIKA (the largest NGO in Bangladesh) is also innovative.</p> |
| <b>Outputs and impacts</b>                 | <p><b>Environment:</b> The local government succeeded to reduce a large amount of solid waste and its cost.</p> <p><b>Socio-economic:</b> The partnership between the local government and communities for effective SWM was built. The door-to-door collection system by community-based organizations and separation of waste for composting were developed. Several economic activities were generated along with protecting the soil for higher agricultural yield.</p>   |
| <b>Lessons learned</b>                     | <p>The success of the project spread the awareness among private sectors, civil society, academia, and the local government. Community-based-approach and public awareness are the key factors for replication of the case.</p>   |
| <b>Links to updated info</b>               | <p>JICA. <i>Study on the Solid Waste Management in Dhaka City</i><br/> <a href="http://www.jica.go.jp/bangladesh/activities/01_4_1.html">http://www.jica.go.jp/bangladesh/activities/01_4_1.html</a></p> <p>Dhaka City State of Environment: <i>2005 Solid Waste Management</i><br/> <a href="http://www.rrcap.unep.org/reports/soe/dhaka-soe-05/3-6dhaka-waste.pdf">http://www.rrcap.unep.org/reports/soe/dhaka-soe-05/3-6dhaka-waste.pdf</a></p> <p>UNESCAP. <i>Solid Waste Management in Bangladesh</i><br/> <a href="http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/Best%20practice/Bangladesh.pdf">http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/Best%20practice/Bangladesh.pdf</a></p>   |
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| <b>Case Reviewer/<br/>Information Date</b> | <p>Dr. Mushtaq Ahmed Memon, Research Associate, Urban Environmental Management,<br/> Institute for Global Environmental Strategies (IGES), Kitakyushu Office.<br/> E-mail: mushtaq@iges.or.jp<br/> Information date: 4 April 2003</p>   |