# Rajshahi Participatory Action Plan

#### **WASPA** Asia

Revised November 2008

Prepared by WASPA team after consultation with LA members

#### Vision 1: Improve wastewater management system in RCC area

Two strategies are being followed to achieve this vision:

Strategy 1: Demonstrations for the improvement of wastewater management system in RCC area Strategy 2: Work with communities to improve the condition of the wastewater management system and ensure its proper functioning

Activity 1: Construction of garbage trap within project area

(PAP activity reference: B1.1)

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Objectives	Reduce solid waste entering the storm water drains and reaching the agricultural area
Description of activity and sub-activities	<ul> <li>Come to agreement with Ward Commissioner and RCC officials about the garbage trap as they will be responsible for their operation &amp; maintenance</li> <li>Identify locations for the garbage trap</li> <li>Designing of the garbage trap</li> <li>Construction of the garbage trap</li> <li>Monitoring of operation &amp; maintenance of the garbage trap</li> </ul>
Time frame	Construction complete: Early December  Monitoring till end of December
Cost Breakdown	BDT. 175,000
Remarks	This activity has been beneficial for the farmers as solid waste was clogging their pump sets.  Progress was slow because of agreeing O&M, approval from the RCC etc.
Partners	Ward Commissioners, RCC, farmers
Responsibility	Maksud and Mashiur
Approval by LA	Signed, Dated
Approval by	Signed, Dated
project manager	

Activity 2: Feasibility study of small-bore sewerage and appropriate small-scale treatment (PAP activity reference: B1.2)

Objectives	Reduce the quantity of domestic wastewater entering the storm water drains
Description of activity and sub-activities	<ul> <li>Provide a contract to:</li> <li>Map and quantify the problem of the wastewater (both household and industrial) in the open drains of the Rajshahi City.</li> <li>Provide a preliminary design for a demonstration project that will address the problem, including budget. The demonstration project should be located in either Ward 14 or 16 and needs to be of sufficient size to enable solutions-at-</li> </ul>
	scale in the future.
Time frame	3.5 months from the commissioning of the contract
Cost Breakdown	BDT. 1,300,000
Remarks	The study is in progress and will be completed by December.

Partners	BUET
Responsibility	Maksud and Rizwan
Approval by LA	Signed, Dated
Approval by	Signed, Dated
project manager	

#### Activity 3: Reduction of inflow of solid waste to canals

(PAP activity reference: B1.3)

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Objectives	Reduce solid waste entering the storm water drains and reaching the agricultural
	area
Description of	Identification of causes for solid waste entering the drains through transect
activity and sub-	walks and interviewing people in the communities and officials. The transect
activities	walk will be done with Ward Commissioner together with the opinion leaders in
	the community (teachers, imams, etc)
	Discuss the solid waste issue with the Ward Commissioner to improve the solid
	waste collection system
	Awareness programmes for the members of the local communities
Time frame	None
Cost Breakdown	0
Remarks	This activity is currently not being pursued because discussions with RCC have
	revealed that they do not see this as a priority for the project. They would prefer
	that the project concentrated on other areas such as septic tanks and that they will
	undertake solid waste management as part of their other business. This decision
	can be reviewed in the future with the LA.
Partners	Ward Commissioner, Partner NGOs
Responsibility	None
Approval by LA	Signed, Dated
Approval by	Signed, Dated
project manager	

#### Vision 2: Improve water quality in drains through better management and treatment of wastewater of industries

Two strategies are being followed to achieve this vision:

Strategy 1: Facilitate industries to take greater responsibility for waste water management Strategy 2: Support to authorities to review, improve and enforce wastewater management from industries

# Activity 1: Investigation of cleaner production (CP) (PAP activity reference: B2.1)

Objectives	Identify whether or not pollution from the BSCIC area is really of concern for the
	farmers and consumers of wastewater irrigated crops
Description of	Discuss with BSCIC and NASCIB
activity and sub-	Review and report on potential for pollution from industries in Rajshahi
activities	If interventions are required then develop a ToR for external CP researcher
	Find external researcher for CP
	Select industries for implementation of CP
	Carry out water quality testing on the basis of the recommendations of the
	external CP researcher, for example focus on oil and grease in wastewater
Time frame	October to December
Cost Breakdown	BDT. 500,000
Remarks	Only once this study has taken place will any further action be decided on regarding
	cleaner production.
Partners	BSCIC, NASCIB, external CP researcher
Responsibility	Priyanka and Maksud
Approval by LA	Signed, Dated
Approval by	Signed, Dated
project manager	

Activity 2: Workshop on regulations, CP and treatment (PAP activity reference: B2.2)

Objectives	
Description of activity and sub-activities	<ul> <li>Prepare participants list and workshop schedule – focus on industries in BSCIC area</li> <li>Venue selection in Rajshahi</li> <li>External CP researcher will conduct workshop on CP. The workshop will be used to share the outcomes of the CP investigations</li> <li>Write and disseminate workshop report</li> </ul>
Time frame	This will be undertaken only when its necessity arises after the CP study.
Cost Breakdown	BDT. 30,000
Remarks	This will only be undertaken if the review suggests that it is necessary and if the LA members approve it.
Partners	BSCIC, NASCIB, external CP researcher
Responsibility	Priyanka and Maksud
Approval by LA	Signed, Dated
Approval by	Signed, Dated
project manager	

## Activity 3: Work with BSCIC & NASCIB on the implementation of pollution reduction measures (PAP activity reference: B2.3)

Objectives	
Description of	Develop implementation strategy with BSCIC & NASCIB
activity and sub-	Facilitate implementation of strategies – implementation will be done by BSCIC,
activities	NASCIB and industries
	Monitor during implementation
Time frame	Continuous
Cost Breakdown	0
Remarks	This will only be undertaken if the review suggests that it is necessary and if it is
	approved by the LA members.
Partners	BSCIC, NASCIB, WASPA Team, IWMI (if possible)
Responsibility	Priyanka and Maksud
Approval by LA	Signed, Dated
Approval by	Signed, Dated
project manager	

Activity 4: Review regulations and their implementation and suggest improvements (PAP activity reference: B2.4)

Objectives	To improve understanding of related policy and mechanisms to increase implementation
Description of activity and subactivities	<ul> <li>Discuss and seek cooperation from Rajshahi University (RU) for these activities</li> <li>Discuss with relevant government authorities</li> <li>Writing and sharing paper addressing possible changes required by RU</li> <li>Hold a workshop to distribute and discuss findings.</li> </ul>
Remarks	Completed
Time frame	September 2008
Partners	Rajshahi University and BELA
Responsibility	Sharfun
Cost Breakdown	RU assignment - BDT 300,000
	Workshop costs – BDT 30,000
	TOTAL – BDT 330,000
Approval by LA	Signed, Dated
Approval by	Signed, Dated
project manager	

### Vision 3: To have wastewater of improved quality for agricultural use as well as improved yields and reduced health risks

Two strategies are being followed to achieve this vision:

Strategy 1: Identify suitable wastewater treatment options for the water flowing into the agricultural area and explore possibilities for implementation by RCC

Strategy 2: Training for farmers on how to improve yields and reduce health risk when irrigating with wastewater

Strategy 3: Provide messages for communities in agricultural area regarding hygiene practices especially in relation to wastewater use and consumption of wastewater crops

Activity 1: Investigation of suitable natural options to improve water quality of Bashuar Beel in Rajshahi City

(PAP activity reference: B3.1)

Objectives	To improve the quality of water in Bashuar Beel
Description of	Discuss with RCC
activity and sub-	Develop, in collaboration with IWMI, ToR for external researcher carry out
activities	investigation - the ToR should mention natural treatment system to be part of
	the study. Furthermore, the external researcher should focus on feasible options
	rather than expensive solutions that cannot be implemented.
	Find external researcher
	Carry out study in collaboration with RCC
	Share the report with RCC and the LA
Time frame	2 months to October 2008
Cost Breakdown	BDT. 500,000
Remarks	Completed
Partners	Jahangirnagar University
Responsibility	Maksud and Shafiqul
Approval by LA	Signed, Dated
Approval by	Signed, Dated
project manager	

Activity 2: Agricultural training for farmers to improve yields and reduce costs (PAP activity reference: B3.2)

Objectives	To improve farmers' incomes through more efficient agriculture practices in
	wastewater irrigated areas and to improve the interactions between DAE and
	wastewater farmers.
Description of	Review of existing training programme of DAE
activity and sub-	Discuss possible training contents with DAE and IWMI
activities	If needed develop specific training module for wastewater farmers in consultation
	with IWMI and DAE. This should specifically include issues that were identified in
	the assessments such as fertiliser application, use of pesticides, soil quality, etc
	Conduct training for farmers by DAE and NGOF. IWMI to provide some
	backstopping support
Time frame	June 2008
Cost Breakdown	BDT. 60,000
Remarks	Completed
Partners	Farmers, DAE
Responsibility	Maksud, Shafiqul, IWMI
Approval by LA	Signed, Dated
Approval by	Signed, Dated
project manager	

Activity 2: Hygiene and health awareness training for farmers (PAP activity reference: B3.3)

Objectives	To reduce the health risks associated with wastewater irrigation.
Description of	Discuss possible training contents with DAE, NGO Forum Training Cell and IRC
activity and sub-	If needed develop specific training module for wastewater farmers in consultation
activities	with DAE, NGO Forum Training Cell and IRC
	Conduct training for farmers by DAE and NGO Forum. IRC to provide some
	backstopping support
Time frame	February 2008
Cost Breakdown	BDT. 60,000
Remarks	
Partners	Farmers, DAE
Responsibility	Shafiqul and NGOF training cell
Approval by LA	Signed, Dated
Approval by project	Signed, Dated
manager	

## Activity 4: Community awareness programme (PAP activity reference: B3.4)

Objectives	To reduce the health risks associated with growing, handling and consuming wastewater irrigated crops
Description of activity and sub-activities	<ul> <li>Review current message content and methods of dissemination with Civil Surgeons Office</li> <li>Identify target groups – farming and agriculture labourers' families; and consumers in the city.</li> <li>Plan messages based on discussions with CSO and WHO guidelines.</li> <li>Plan dissemination methods in discussion with CSO e.g. posters</li> <li>Develop street theatre to communicate messages</li> </ul>
Time frame	November 2008
Cost Breakdown	BDT. 800,000
Remarks	Undertaken in collaboration with CSO
Partners	Partner NGOs, NGO Forum Development Communication Cell, Civil Surgeons Office (CSO)
Responsibility	Mashiur and Sharfun
Approval by LA	Signed, Dated
Approval by	Signed, Dated
project manager	

#### Budget

Activity	Planned budget (BDT)	Actual expenditure (BDT)
B1.1 Construction of garbage traps	175000	The actual figure can be
		obtained only once all
		payments are made
B1.2 Small-bore sewerage feasibility	1300000	The actual figure can be
		obtained only once all
		payments are made
B1.3 Reduction of inflow of solid waste to	0	
canals		
B2.1 Investigation of CP	500000	The actual figure can be
		obtained only once all
		payments are made
B2.2Workshop on regulations, CP and	30000	
treatment		
B2.3 Implementation of CP	0	
B2.4 Review of waste management	330000	308113
regulations		
B3.1 Bashuar Beel treatment study	500000	483255
B3.2 Agricultural training for farmers to	60000	58106
improve yields and reduce costs		
B3.3 Hygiene and health awareness training	60000	52332
for farmers		
B3.4 Community awareness programme	800000	The actual figure can be
		obtained only once all
		payments are made
TOTAL	3755000	