

Quarterly Report

Vulnerability and Risk Reduction Through a Community-Based System for Flood Monitoring and Forecasting

APS: Enhanced Disaster Preparedness in South Asia: Through Community- Based and Regional Approaches

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CFIS Quarterly Report October 1 through December 31, 2005

1.0 Introduction

This project is contracted by USAID to the Colorado-based company Riverside Technology, inc. along with Bangladesh-based partners Center for Environment and Geographic Information Services (CEGIS) and the Bangladesh Disaster Preparedness Centre (BDPC). The project is known in short as the *Community Flood Information System*, or CFIS.

2.0 Program Performance

2.1 Summary

The following is a summary of key activities performed during the quarter.

- A leveling survey was conducted by field engineers from 16 November to 10 December 2005 to assess the road and settlement elevation to be used for flood inundation mapping. The survey also encompassed 2004 flood level identification, plinth level of houses and agriculture land elevation and bridge-culvert elevation with participation of the local community.
- A flood assessment conceptual model was developed. Project members will continue to develop and refine the pilot version of the module to interface with WATSURF during project year 4.
- A draft summary interim report was completed describing elements of community surveys and design and activities conducted during 2004 and 2005.
- Conducted a refresher orientation to Upazilla Disaster Management Committee (UDMC) to promote dissemination, public awareness, and expansion of the CFIS methodology to the village of Dhunail.
- A billboard vulnerability-zoning map was developed through an iterative process with direct input from the local community of Dhunail. After the final design was completed, a community meeting was held at Dhunail Primary School for feedback to be incorporated into the map. Two billboards were installed with active participation of the Village Flood Management Committee. Workshops, training, mock demonstrations, and cultural shows were also performed to ensure community and family level involvement and participation in dissemination of early flood warning messages.

- Towards the project goal of building awareness and identifying opportunities for replication, the project participated in meetings, discussions, conferences and workshops. Meetings and conferences attended are described in Table 2 below. In addition to the activities described in Table 2, CFIS members also conducted meetings with community stakeholders to raise awareness and to discuss issues of sustainability. Results of meetings are discussed in separate internal progress reports submitted by CFIS team members and are available on request.
- Completed a draft report addressing the design/feasibility for expansion and replication of CFIS methodology. Project members will continue to refine the document in Year 4.
- The RTi project manager traveled to Dhaka during November 2005 for a series of meetings and working sessions with the CFIS project team. During this period the CFIS team reviewed progress for 2005 with emphasis on the field activities conducted during the monsoon season of June through September 2005 and the CFIS project results. Also, the team reviewed the WATSURF software status and planned for an additional module on flood damage assessment.
- The RTi project manager met with USAID/OFDA in Kathmandu in November to discuss CFIS progress and a proposal for additional funding to compliment approved CFIS activities. The proposal was submitted in December to OFDA/KTM.

2.2 Finances

A summary of project finances is provided in Table 1. The final invoice for Year 3 was yet to be submitted by CEGIS or BDPC by the end of December 2005. However, their work had been mostly completed for Year 3. (Actual invoices for the amounts shown in Table 1, Reference 5 were received by RTi prior to the submission of this report and currently are being processed for payment.)

At the end of this reporting period the CFIS project is approximately 60 percent complete. From Table 1, considering the cumulative invoices submitted to USAID plus the work completed but not yet invoiced, the CFIS project has spent 53 percent of its OFDA budget. Most of the shortfall on project spending has been with RTi; although their invoicing is sometimes delayed, CEGIS and BDPC have been spending at the expected rate.

As for “own costs”, from Table 1 the CFIS team is ahead of the 60 percent estimate and has used 72 percent of the “own costs” obligation. Thus the total budget expended to date is approximately 58 percent versus an expected 60 percent.

3.0 Notification

Per above Section 2.2 Finances, the CFIS project has expended 53 percent of the OFDA costs whereas the project is about 60 percent complete. Much of the delay in spending is due

to the complexity of project reporting, management and requisite time for working closely with partners BDPC and CEGIS on managing their activities and ensuring deliverables are produced with the expected quality and according to schedule. To remedy this situation, RTi will bring in personnel additional to the Project Manager (T. Martin) for improved reporting, management and analysis capacity during Year 4. This will require spending of an additional \$33,000 of project (OFDA) funds as shown in Table 3. At the end of Year 4, this additional spending will put the CFIS project exactly on track with 80 percent of the budget expended (Table 2, line 7). The additional activities will also require spending of “own resources” at about \$19,000 beyond that planned for Year 4. Details of the additional activities planned for Year 4 are shown in Table 3 (line 3) and include the following:

- i) Rivertrak Module for WATSURF. This module will substantially improve the data management and hydrological analysis capability of CFIS and will make WATSURF more easily transferable or replicable.
- ii) CSU Engineering graduate student intern. RTi has committed to hire a civil engineering (water resources) intern for the summer 2006. The intern will assist greatly in organizing and managing the project, and will work closely with CEGIS in data analysis and reporting for monsoon flood season 2006.
- iii) Travel costs for MRC conference. The CFIS team submitted a paper for MRC’s 4th Annual Flood Forum in May 2006. The paper was selected and the conference will be attended by the CFIS project principals T. Martin, A. Hassan and S. Rahman from RTi, CEGIS and BDPC, respectively. It is expected that attending this conference will encourage a dialogue and raise awareness of other organizations in Asia and facilitate replication of the CFIS concept within Bangladesh and in the region.
- iv) Additional management and administration, including improved project reporting, management, invoicing and monitoring to be conducted largely by T. Martin, Project Manager, and Karin Wirthlin, Project Associate.

Table 1: Reporting Period Financial Summary

Ref	Description	OFDA Cost	Own Cost	Total
1	Total Budget for 5-Year Project	\$541,991	\$178,316	\$720,307
2	Cumulative invoiced thru previous quarter	\$237,168	\$110,708	\$347,876
3	Total invoiced this quarter	<u>\$18,268</u>	<u>\$1,605</u>	<u>\$19,873</u>
4	Cumulative invoiced thru this quarter (2+3)	\$255,436	\$112,313	\$367,749
5	Work completed but not yet invoiced to USAID ^{1/}			
	RTI	\$0	\$0	\$0
	CEGIS	\$27,391	\$16,885	\$44,276
	BDPC	<u>\$5,000</u>	<u>\$0</u>	<u>\$5,000</u>
	Total work completed but not yet invoiced to USAID ^{1/}	\$32,391	\$16,885	\$49,276
6	Cumulative invoiced plus work completed (4+5)	\$287,827	\$129,198	\$417,025
7	Actual cumulative invoiced plus work completed as percent of Total 5-Year Project (6 as % of 1)	53.1%	72.5%	57.9%
8	Target cumulative costs through reporting period	60.0%	60.0%	60.0%

^{1/} Invoices for this completed work were received during Q1 of 2006

Table 2. Conferences and Key Meetings Attended by CFIS Project Members - Funding Year 2005

CONFERENCE/MEETING TITLE	DATE	LOCATION	SPONSER/HOST	CFIS ATTENDEES (NAMES)	OTHER ATTENDEES (AGENCIES /PROJECTS)	CFIS PRESENTATION TITLE & BRIEF DESCRIPTION
Community Based Risk Management	June 7, 2005	Dhaka	CDMP	Ahmadul Hassan	CARE, WV, ActionAID, UNDP, RC, MoFD,	GIS Modeling for Community based Hazard warning system
EMIN Final workshop	Nov 23, 2005	Dhaka	EMIN	Md. Sazedul Karim Chowdhury SE, Processing and Flood Forecasting Circle BWDB	BWDB, CIDA, IWM, BUET, WARPO, DoE, CDMP	Generation of flood forecasting information at national and local level
Meeting with ADB desk officer Mr. Zahir and Farooq on next steps – EWS/Flood	Oct 2005	Dhaka	CEGIS/ ADB	Ahmadul Hassan, Awlad Hossain and Saidur Rahman	IWM, BDPC	Discussion on TOR for the Mission to EWS/Flood funded by ADB and RME
Meeting with CDMP's Technical Advisor and other CDMP professionals	Dec 2005	Dhaka	CDMP	Ahmadul Hassan, Mir Abdul Matin and Awlad Hossain	DMB	Discussion on with Comprehensive Disaster Management Project (CDMP) re CFIS/EMIN activity on EWS
Replication strategy of WATSURF	Nov 2005	Dhaka	EMIN	Ahmadul Hassan, Awlad Hossain, Mir Abdul Matin, Tim Martin	BUP, IWM, WARPO, FFWC, BDPC	Series of meetings re replication strategy of Watsurf tool
RS & GIS Application in Water Management	Nov 2005	Dhaka	BUET	Ahmadul Hassan	IWM	Application of RS in water resources management
Meeting with ICIMOD water resources team and with Director General	Nov 17, 2005	Kath- mandu	ICIMOD	Tim Martin	ICIMOD	Discussion re ICIMOD's recent activities in flood management, forecasting and institutional cooperation in the region
Meeting with USAID/OFDA/KTM	Nov 17, 2005	Kath- mandu	OFDA/KTM	Tim Martin	OFDA/KTM	Discussion re CFIS progress and proposal for additional funds to compliment CFIS approved activities

Table 3. Projected vs. Targeted Cumulative Costs Year 4 of CFIS Project (2006)

Ref	Description	OFDA Cost	Own Cost	Total
1	Total budget for 5-Year Project	\$541,991	\$178,316	\$720,307
2	Year 4 planned activities	\$112,363	\$28,181	\$140,544
3	Additional activities Year 4			
	Rivertrak Module for WATSURF	\$14,700	\$9,000	\$23,700
	CSU Engineering Grad Student intern labor plus travel Bangladesh	\$8,951	\$8,951	\$17,901
	Travel costs conference MRC for RTi, CEGIS, BDPC	\$4,200	\$1,470	\$5,670
	Additional management and administration	<u>\$5,300</u>	<u>\$0</u>	<u>\$0</u>
	Total additional activities Year 4	\$33,151	\$19,421	\$47,271
4	Total anticipated costs Year 4 (2+3)	\$145,513	\$47,602	\$187,815
6	Cumulative costs thru end of Year 4	\$433,340	\$176,800	\$610,140
7	Projected Year 4 cumulative costs as percent of Total 5-Year Project (6 as percent of 1)	80.0%	99.1%	84.7%
8	Target Year 4 cumulative costs	80.0%	80.0%	80.0%