## DM 2003 Project Implementation PROGRESS REPORT [03/31/2004]

In order to ensure transparency, accountability, as well as to share lessons learned, we will post this Progress Report on the Development Marketplace website at <u>www.developmentmarketplace.org</u> However, if you would like to share any sensitive information with us, you can do so in section VI. The information provided in this part of the report will be handled as confidential, thereby it will not appear on the DM website.

## I. Background Information

DM Project Number and Title	000407 – Arsenic Biosand Filter: Sustainable Implementation of an Appropriate Household Drinking Water Filter for Rural Nepal	
Report Author's Name	Tommy Ngai & Susan Murcott	
(if different from Team Leader)		
Total Award	US\$ 115,000	
Amount Disbursed to Date	US\$ 0 (0% of the Total Award)	

## **II.** Progress Against Milestones

i) List the milestone objectives in the first column as expressed in the Project Agreement. The second column should indicate the current status of each milestone objective. In the third column, please provide quantitative data and qualitative information describing the status of the project against that particular milestone.

Milestone Objectives (Copy from the Agreement)	Status (Completed/ In Progress)	Descriptive Information on the Status
Recruit and orient staff	Completed	<ul><li>Successfully recruited 15 staff</li><li>Conducted staff orientation</li></ul>
Establish ABF centers (at Kathmandu and Districts)	Completed	<ul> <li>Setup three ABF offices (Kathmandu, Butwal, Birgunj)</li> <li>Information about the ABF can be obtained from the Kathmandu office</li> </ul>
Purchase major equipments (ABF molds, audio-visual equipments, computers, printers, cameras, mobile phones etc)	Completed	<ul> <li>Purchased all necessary major equipment for project implementation</li> <li>The purchase of an ABF mold is delayed because it is not cost effective from the intended manufacturer. Other options are being investigated.</li> </ul>
Develop construction manual, O&M manual, posters, documentary	Completed	• Developed a number of IEC (information, education, communications) materials, including brochures, posters and posters. Thousands of colour copies has been printed.
Visit and monitor installed ABF in 8 districts, select and test of ABF materials (sand, iron nails, etc)	Completed	<ul> <li>Started to visit and monitor installed ABF in 8 districts.</li> <li>Collected and assessed ABF construction materials in Terai, including sand and iron nails quality.</li> <li>Discussed with local materials suppliers and dealers (e.g. Gintex, Gem Plastic) about distribution schemes and prices.</li> </ul>

Identify and negotiate with local entrepreneurs in 11 districts	Completed	<ul> <li>Identified and communicated with 30 local entrepreneurs from 11 districts.</li> <li>Responses from these entrepreneurs have been positive.</li> <li>Local entrepreneurs training workshop (15 participants), planned for March, has been postponed to April due to the unstable political and safety situation.</li> </ul>
Network with water supply implementers	Completed	<ul> <li>Discussed with UNICEF, Nepal Red Cross Society, ITDG, NEWAH, Plan Nepal, etc about the ABF project and potential for collaboration.</li> <li>NRCS and NEWAH expressed interest to distribute ABF in their operating regions.</li> </ul>
Submit a progress report of activities carried out during this period to the Project Liaison	Completed	This is the progress report

ii) If you did not achieve some of your stated milestone objectives, please explain the reasons.

We have completed all of our milestones despite the unstable political and safety situation.

iii) Has your project's overall accomplishments to date exceeded the original plan?

 $\Box$  Yes  $\boxtimes$  No

If Yes, describe your achievements:

## **III. Overall Project Progress**

i) What have been the main challenges of your project to date? What, if any, adjustments have you made to your original business plan in order to overcome the challenges and meet your objectives?

<b>Challenges:</b> Due to unexpected administrative issues between World Bank, MIT, and ENPHO, there has been a delay in signing the Final Contract. Thus, the first payment of \$23,000 (due date January 31, 2004) has not been released yet.	Adjustments: Both MIT and ENPHO have to acquire/borrow funds from other accounts to pay for the activities in this project.
The current unstable political and security situation in Nepal caused unexpected delays and inconvenience in our work. Several times, scheduled meetings and training workshops were cancelled because of the general strike ( <i>bandha</i> ). Field work progress has also been slowed due to the difficulties in traveling to field sites, especially those in the western districts	The project focus has shifted to the Central and Eastern districts where there is less tension and security problems.

ii) Have any of your objectives changed or have you added new objectives since you signed your Project Agreement? If Yes, explain the changes.

 $\Box$  Yes  $\boxtimes$  No

iii) Do you have any concerns about meeting your next milestone objectives?

🛛 Yes 🗆 No

If Yes, what are the concerns and how do you plan on addressing those challenges?

We have spent US\$30,000 so far on this project, but we have yet to receive any funds from DM. We are extremely short of cash. We need to borrow funds from other sources to continue our project activities. If we cannot obtain funds soon, we will need to halt all project activities.

iii) Although this is an interim report, are there any development outcomes or results of your activities to date that you would like to call attention to?

iv) Reminder: In accordance with Paragraph 3.1.1 of the Project Agreement, each project team is required to submit a statement of account showing the use of the funds within three months after the last disbursement. As a part of periodical expenditure review exercise, please provide an annex with un-audited summary of expenses during this reporting period.

## **IV. Ancillary Achievements**

i) Have you or has your organization received any awards/recognitions or media attention as a result of your DM-funded project during this period?

🛛 Yes 🗆 No

If Yes, please specify the sources and identify the names.

Award /Recognition Media	
_	e.g. 🛛 International: BBC News on Dec. 3-4, 2003
□ Local:	□ Local:
□ National:	☑ National: <i>various Newspaper, FM radio</i>
□ International:	interview
	□ International:

Explain the Award/Recognition or the Media content:

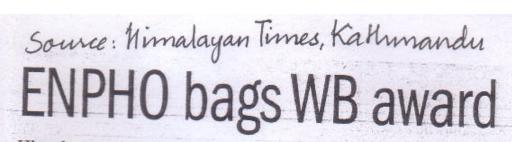
**News clip 1:** December 11, 2003. Himalayan Times, Kathmandu This news clips described that the World Bank have awarded the DM2003 to MIT and ENPHO for the

implementation of the ABF in Nepal News clip 2: December 27, 2003. Annapurana Post, Kathmandu This news clips mentioned that Nepal has received a US\$115,000 award from the World Bank to fight against the arsenic problem News clip 3: December 31, 2003. Samachar Patra, Kathmandu This news clips said that World Bank has awarded ENPHO to fight against the arsenic problem

### FM Radio Sagarmatha: March 5, 2004

The very popular FM Radio station interviewed with ENPHO about the World Bank DM award and about the Arsenic Biosand Filter.

Attach web links/news clips, if available:



# Himalayan News Service

, Kathmandu, December 11, 2003

The Environment and Public Health Organisation (ENPHO), a water and health-related NGO, working for the past 13 years, has bagged the international award Global Development Marketplace physical disability such as stunted for 2003.

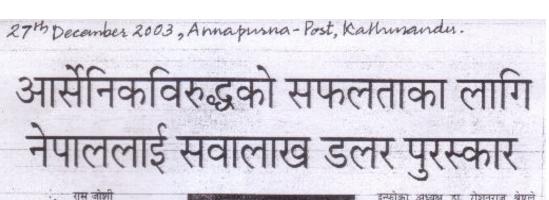
The annual award given away by the World Bank in collaboration with the Massachusettes Institute of Technology contains a purse of \$115,000, according to ENPHO officials.

The ENPHO has won the award for its innovative technology in providing potable drinking water in rural Nepal by installing a new type of household water filter called the Arsenic Biosand Filter (ABF) that removes arsenic and the other Nepali projects that pathogens.

In the Terai, the poorest rural region of Nepal, almost 40 per cent of well water is contaminated by arsenic and pathogens. Villagers who drink this water are estimated to be 90 per cent of the population.

They are susceptible to severe growth and cancer. A filter adaptable to local conditions that can remove poisonous elements will improve the health of the locals of the entire region, thus reducing the incidences of water-borne diseases and permanent physical deformities.

The World Bank has given away the awards to 47 winners from 27 countries. Doko Dai mobile library and reduce land-use conflicts through local incentives are have been awarded.



काठमाडौँ, १२ पंस : भूमिगत जलमा पाइने मानवस्वास्थ्यमा हानिकारक आसेंनिक प्रशोधन गरी हटाउने प्रविधिको विकास गर्न प्राप्त सफलताका लागि नेपाललाई एक लाख १५ हजार अमेरिकी डलरको पुरस्कार प्राप्त भएको छ।

गत मंसिर १७ र १८ गते अमेरिकाको वासिटनडीसीमा सम्पन्न डेभलपमेन्ट मार्केट प्लेस २००३ प्रतियोगितामा भूमिगत पानीलाई आसैंनिकमक्त बनाइन सफल नेपालको सुधारिएको बायोस्यान्ड फिल्टरलाई पुरस्कृत गरिएको थियो।

खानेपानीमा रहेको आसैनिक हटाउन. नेपालले गत तीन वर्षदेखि प्रवास गरेको जानकारी दिंदे खानेपानीविशेषज्ञ हा। रोशनराज श्रेष्ठले हाले मात्र उपयक्त प्रविधि विकास गर्नसकिएको बताठनुभयो। फलामे किला, वालूवा र रोडालाई व्यवस्थित गरी पानी छानेको - खण्डमा पानीलाई आर्सेनिकमुळ बनाउन सकिने र हानिकारक कोटाण नष्ट हुने दाबी डा विश्वबैंकले नेपालको प्रविधि उपयक्त रहेको श्रेष्ठले गर्नुभयो। भूमिगत खानेपानीमा पाइने आर्सेनिक हटाउन विगत एक दशकदेखि नै विभिन्न राष्ट्रिय तथा अन्तर्राष्ट्रिय संघसंस्थाहरू तराइंका विभिन्न क्षेत्रहरूमा स्थारिएको सफ़िय भए पनि पहिलो सफलता नेपालले प्राप्त बायोस्यान्ड फिल्टरको विकास गर्न तथा गरेको छ। आर्मेनिक हटाउन विख्वका विभिन्न आर्सेनिकप्रधावित क्षेत्रको नक्सांकन गर्न गुलुकबाट तीनवटा प्रविधि प्रस्तुत गरिएकोमा उपयोग गरिने जानकारी दिनुभयो।



#### सुधारिएको बायोस्यान्ड फिल्टर

भोषणा गरेको थियो।

डा. श्रेष्टले पुरस्कारम्बरूप प्राप्त सम्पूर्ण रकम

इन्फोका अध्यक्ष डा. रोशनराज श्रेष्ठले विशेषगरी तराईवासीको स्वाम्थ्यका लागि संस्थाले आसेंनिक इटाउन-उक्त स्थानीय-प्रविधिको विकास गरेको जानकारी दिन्भयो। उहाँका अनसार, अधिराज्यका कल २८ हजार नौ सय ५६ वटा भूमिगत पानीको स्रोत परीक्षण गर्दा दुई इजारभन्दा बढी स्रोत आसैनिकयुक्त रहेको भेटिएको छ। सप्तरी, नवलपरासी, सिराहा, रौतहट, कैलाली, कञ्चनपुर, बर्दिया र पर्साको खानेपानीमा अत्यधिक रूपमा आर्सेनिक प्राप्त भएको र कतिपय गाउँमा क्यान्सरका सोंगीसमेत पाइएको जानकारी स्वास्थ्य मन्त्रालयको एक अधिकृतले दिए।! उनका अनुसार, यससम्बन्धमा पूर्ण अध्ययन नभएका कारण आर्सेनिक स्टेयरिङ कमिटीले गरेको अध्ययनलाई नै प्रामाणिक मान्दै आर्सेनिक नियन्त्रणसम्बन्धी प्रयास हुँदै आएको छ। विश्व स्वास्थ्य संघको प्रतिवेदनअनुसार, नेपालको ३३ लाखभन्दा वढी जनसंख्या आरोंनिकबाट उभावित छ भने नेपालको आर्येनिक स्टेरियङ कमिटीका अनुसार, सात लाखभन्दा बढी तराइंबासीहरू आर्सेनिकबाट पीडित छन्। नेपालको तराई र वंगलादेशमा त्याप्र आसैनिकको प्रभाव हटाउन अमेरिकास्थित म्यासाच्य्सेट इन्स्टिच्य्ट अफ टेक्नोलोजी र चातावरण र जनस्वास्थ्य संस्था तीन वर्षअधिदेखि सक्रिय थिए।



ii) Has your organization made any new partnerships as a result of this project during this reporting period?

🛛 Yes 🗆 No

If Yes, specify type of the organization from the list below and describe nature of the partnership:

□ Local Government:
 □ National Government:
 ⊠ NGO: Nepal Red Cross Society
 □ Bilateral Development Agency:

Multilateral Development Agency:
 Private Corporations:
 Other:

We will collaborate with the Nepal Red Cross Society on arsenic awareness, mass education, training, VDC and ward-level workshops, filter monitoring, and subsidy scheme.

iii) Sustainability and scalability after completion of the DM fund are top of the DM Team's priorities. Has your organization leveraged new funding or secured future funding during this reporting period?

 $\Box$  Yes  $\boxtimes$  No

If Yes, provide the following information.

Funding Sources: Names of the Organizations Amounts Funded/Committed: US\$ 000,000

## V. Requests to the DM

i) Do you have any comments on the overall process and support provided by the DM Team or Project Liaison?

We are disappointed that this "official" progress report format is distributed to us so late. We have already prepared and sent our progress report (our own format) to our liaison weeks before this "official" report format arrives from email. We now have to rewrite this progress report again.

ii) If your contact information has changed, please provide us with the new information.

From now on, please send all project correspondence/information to both Susan Murcott (Principle Investigato) and Tommy Ngai (in-country representative). Contact information for Tommy Ngai is shown below:

Contact Name:	Tommy Ngai
Title:	Lecturer and Researcher
Organization:	Massachusetts Institute of Technology
Primary Email Address:	tommy.ngai@alum.mit.edu
Secondary Email Address:	
Organization's Website	http://ceemeng.mit.edu/~water/index.html www.enpho.org
Phone:	+1-617-306-6548 (US), +977-1-4468641 (Nepal)
Fax:	
Address:	U.S.A. ADDRESS: Massachusetts Institute of Technology Department of Civil and Environmental Engineering Room 1-138 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, USA NEPAL ADDRESS: Environment & Public Health Organization Thapagaon, New Baneshwor, Kathmandu, Nepal. P.O.Box 4102
Postal Code:	02139

## VI. Confidential Report

Please provide, if any, sensitive comments or requests in the box below. Information provided in this section will be handled as confidential and will not be publicly posted on the DM website.

## VII. Next Steps

- □ Send this Progress Report to your Project Liaison via email
  - □ cc to the DM team <u>dmwinner@worldbank.org</u>
- The Project Liaison will review the Report and will either

   approve the Report and authorize disbursement via email with cc to <u>dmwinner@worldbank.org</u>; or
   does not approve (or does not authorize disbursement) but responds with comments, questions, requests for team to address with cc to <u>dmwinner@worldbank.org</u> (in this case, the team would address PLs concern to move to approval)
- □ Once approved, team send signed Request for Payment to DM Team
  - □ via fax +1-202-522-2042
  - □ or scanned document via email to <u>dmwinner@worldbank.org</u>
- □ Upon receipt of the following, the DM Team can process disbursement:
  - a) Progress Report & Expense Addendum in Annex I

- b) Signed Request for Paymentc) Project Liaison's approval of report and authorization of payment

## Annex I. Project Expenses for this Reporting Period (ending March 31, 2004)

	Items	Sub-Totals (USD)
1	Personnel	8,000
2	Materials and Equipment	9,000
3	Training	500
4	Travel	4,000
5	<b>Evaluation/Information Dissemination</b>	1,000
6	General Administration/Overhead	7,000
7	Other	500
	Total Expenses	30,000

	For Internal Use Only	
Progress Report Number		
Approved by Project Liaison		Date
Received by DM Team		Date