

DM 2005 Project Implementation PROGRESS REPORT

(04/01/2006)

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 www.developmentmarketplace.org. 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	Benefiting from the Dreaded Janitor Fish (#3765)	
Report Author's Name (if different from Team Leader)		
Total Award	US\$ 143,746.51	
Amount Disbursed to Date	US\$ 79,060.58	(55 % 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
1. Procurement of Equipment Supplies and Materials <ul style="list-style-type: none"> • Mobilization and Site Selection undertaken • Equipment for Fish Meal and Feed Manufacturing designed and fabricated. • Other equipment supplies and materials procured. 	Completed	<p>For the fish meal plant, a boiler or cooking vat with a max cooking cap of 100 kg of fresh janitor fish/batch, a granulator with a max cap of 800 kg/hr of cooked janitor fish, a centrifuge filter with a max spin drying cap of 200 kg/hr of cooked janitor fish, a flash dryer with a max drying cap of 80 kg/hr of cooked janitor fish and a sieve were designed and fabricated. The maximum processing capacity of the fish meal plant is about 700 kg of fresh janitor fish with an output of approximately 112 kg of fish meal per day.</p> <p>For the Feed Mill, a hammer mill with a max grinding capacity of 100 kg/hour and ribbon type mixer with a max mixing cap of 100 kg/batch were also designed and fabricated. It is estimated that 500 kg or half a ton of feeds per day could be produced using said equipment.</p> <p>Other materials that were procured included other raw materials for feed manufacturing e.g. yellow corn, soy bean meal, lysine, DL-methionine etc. Large container bins were also procured for storage of feeds and janitor fish meal.</p>

<p>2. Establishment and operation of demonstration facilities for fish meal and feed manufacturing</p> <ul style="list-style-type: none"> • Demo facilities established and operated. • Hands on Training on feed and fish meal production. • Stocking of piglets to six hog raisers. • Four earthen ponds stocked and operated by the FARMCs. • Establish the feeding value of Janitor Fish Meal in Broiler Production 	<p>Completed</p>	<p>The Fish Meal Plant as well as the Feed Mill have already been established at LLDA Office in Calauan , Laguna, Philippines. These started operating on March 8, 2006 with 5 laborers hired to operate the equipment. Last March 2, prior to the actual operation of the equipment, 20 individuals (fisherfolk and hog raisers) were trained in fish meal production and underwent actual hands on training on the operation of the equipment. (Annex 2 – After Activity Report dated March 8, 2006)</p> <p>The stocking of the pens with the appropriate number of piglets started March 16, 2006 and it is expected that all of the piglets will be dispersed to the hog raisers before the end of the month. (Annex 3- Actual Stocking of Piglets)</p> <p>The study about the feeding value of janitor fish meal in broiler chicken production ended on January 18, 2006. Results show that the inclusion of janitor fish meal to broiler diets improved the growth and performance of chickens. (Annex 4 – Feeding Value of Janitor Fish Meal in Broiler Diets)</p>

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

All of the milestone objectives were achieved.

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

Yes No

If Yes, describe your achievements:

On top of conducting the study on Establishing the Feeding Value of Janitor Fish Meal in Broiler Production, sensory evaluation (meat characteristic evaluation) was also undertaken. The results reveal that even with the inclusion of janitor fish meal, the quality of the chicken meat is not affected in terms of its juiciness, tenderness and desirability or general acceptability which is commonly not true with other commercial fish meal.

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?

Challenges:	Adjustments:
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<p>Results of Laboratory Analysis confirmed that the Janitor Fish samples collected from various parts of the lake exhibited traces of heavy metals beyond acceptable levels for direct human consumption. (Annex 5 – Heavy Metal Analysis Report)</p>	<p>Because of the traces of heavy metals found in the janitor fish samples, a feeding trial for Broiler Production was undertaken and the results revealed that even up to 10% inclusion of janitor fish meal in the broiler diet, no adverse effects were observed on the performance of the chicken. Moreover, an expert from the Institute of Chemistry of the University of the Philippines, is of the opinion that the accumulation of heavy metals occurred only in the inedible parts. To confirm this, meat samples from the chicken fed with diets containing janitor fish meal were brought to a laboratory for heavy metal analysis.</p>
<p>The inclusion rate of janitor fish meal in fish (tilapia) diet is relatively high vis a vis diet for other animal feed, the possibility of heavy metal accumulation in fish body is great.</p>	<p>Traditionally, fish meal has been used as one of the main ingredients in formulating fish diets/feeds hence, incorporating janitor fish meal which has been confirmed as containing high levels of heavy metals, as a substitute for commercial fish meal would be very risky. Considering the distinct possibility of heavy metal accumulation in the fish body, it became necessary to conduct a pre-feeding trial for the intended tilapia culture which was supposed to be managed by the FARMCs and to be set up using the four earthen ponds inside the Calauan Complex of Laguna Lake Development Authority. However, during the said pre-feeding trial for fish, problems pertaining to feed intake refusal and high mortality rate were encountered. Please find attached after activity report re: Status Report of the Janitor Fish Project dated February 09, 2006 as Annex 6. Given the situation, it become necessary to consider Broiler Production of approximately 4000 chicks be done as a replacement for the contemplated Tilapia Fish Culture since the study conducted on Broiler Production clearly established that janitor fish can be an alternative source of protein for animal feed diets.</p>
<p>Costs for the Broiler Production</p>	<p>In the previous progress report, it has been indicated that re-alignment of budget was done to accommodate certain expenses that were very crucial for the implementation of the project. Since, it is foreseen that Broiler production, which is currently being explored, will replace the Tilapia Fish Culture, it is proposed that the budget allocated for the fish production be utilized for the said activity.</p>
<p>Absence of a controlled treatment for pig production which will not only add value to the project by generating necessary information for pig production using janitor fish as ingredient for animal feed.</p>	<p>Since one of the main objectives of the project is to establish the viability of using janitor fish as raw material for animal feed, it is important that the feeds being formulated specifically for the hogs will also be subjected to certain tests and laboratory analyses. Thus, data that will be generated from a controlled treatment in raising pigs will also be very valuable and could serve as guide during the next pig stocking cycle. In relation to this, another student under the guidance and supervision of an expert/professor from the University of the Philippines will again be engaged to do a study on “Effects of Janitor fish (<i>Pterygoplichthys pardalis</i>) Meal on Performance of Growing Pigs”. Costs of the laboratory analyses will be shouldered by said student.</p>

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

Yes 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?

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
<input type="checkbox"/> Local: <input type="checkbox"/> National: <input type="checkbox"/> International:	e.g. <input checked="" type="checkbox"/> International: BBC News on Dec. 3-4, 2003 <input type="checkbox"/> Local: <input checked="" type="checkbox"/> National: <input type="checkbox"/> International:

Explain the Award/Recognition or the Media content:

An article on the project was published in a National Tabloid Newspaper. The article was requested by an environmentalist who recognized the effort to control the proliferation of the Janitor Fish in Laguna de Bay (Please refer to attached article published in People’s Journal Tonight, November 30,2005. (Annex 7)

Attach web links/news clips, if available:

http://www.journal .com.ph

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:

<input type="checkbox"/> Local Government: <input type="checkbox"/> National Government: <input type="checkbox"/> NGO: <input type="checkbox"/> Bilateral Development Agency:	<input type="checkbox"/> Multilateral Development Agency: <input type="checkbox"/> Private Corporations: <input type="checkbox"/> Other: e.g. <input checked="" type="checkbox"/> Multilateral Development Agency: Development Marketplace of the World Bank (financial partnership and technical assistance)
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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?

- Yes 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?

The DM 2005 Team as well as the Project Liaison have been very supportive of the project. Release of Grant Funds has been very prompt and timely. The visit of Ms. Keiko Nagai (Annex 8 - Photos) to the project site was a good opportunity for us to share/demonstrate first hand the progress that has been achieved thus far.

Siniloan River Rehabilitation and Management Foundation Inc.
Balance Sheet
March 22, 2006

ASSETS

Cash on Hand	P	84,895.78
Due from PNB-Siniloan Branch		816,934.95
Prepaid Expense -comprehensive Insurance premium		25,000.00
Properties, Plant and Equipment:		
Utility Vehicle		836,000.00
Machineries and Equipment		1,531,000.00
Tools, Implements and other mill equipment		15,160.00
Deferred charges-development, experimental and organizational costs		<u>1,309,617.68</u>
TOTAL ASSETS	P	<u>4,618,608.41</u>

LIABILITIES AND CAPITAL

Accounts payable – non trade	306,200.00
Siniloan River Rehabilitation and Management Foundation, Inc., Capital – 1 st and 2 nd tranche of WB grants	<u>4,312,408.41</u>
TOTAL LIABILITIES AND CAPITAL	4,618,608.41

(see accompanying notes to financial statement)

PROJECTED CASH FLOWS
March 22 – April 22, 2006

Cash on hand	P	84,895.78
Due from PNB-Siniloan Branch		<u>816,934.95</u>
Total		<u>901,830.73</u>

Available funds as of March 22, 2006 were earmarked for the following:

1. Full payment of the remaining balance of the cost of machineries and equipment	P	306,200.00
2. For labor and materials in the construction of poultry house and cages		270,000.00
3. For procurement of raw materials for feed manufacturing;		
Yellow corn whole	2 tons @ 11/kl	22,000.00
Rice bran	2 tons @ 7/kl	14,000.00
Copra cake	2 tons @ 5/kl	10,000.00
Soya bean meal	2 tons @ 17/kl	34,000.00
Molasses	1 ton @ 7/kl	7,000.00
Swine vitamins	.10 ton @ 138/kl	13,800.00
Swine minerals	.10 tons @ 37/kl	3,700.00
Feed additives		20,000.00
Other feed micro raw materials		5,000.00
4. Additional piglets (18 hds) of pre-starter age for the controlled condition		45,000.00
5. Salaries of 2 research assistants and 1 driver March 16 to April 30 (P15,400.00 x 3)		46,200.00
6. Honorarium of project/support staff February, March And April (P86,900.00 x 3)		<u>260,700.00</u>
	P	1,057,600.00