LIVESTOCK WASTE MANAGEMENT IN EAST ASIA PROJECT

Guangdong, China

Semi-annual Progress Report

January-June 2008

I. Project Implementation Status

A. General Assessment

In the first half of 2008, the implementation of GEFLWM (Guangdong) project kept going on well. With the cooperation of the staffs in PMO and the units related, the fulfillments made by the contractors, substantive progress has been made in the components of livestock waste management technology demonstration and project management & monitoring. So far, the first batch of the demonstrated construction sites, which are named Foling pig farm and Mashigang pig farm, have come to the last phrase. The power generators have been procured and installed now come to the test phrase. On the other hand, the 2nd batch of the demonstrated construction sites begin to be constructed, the works might be completed at the end of this year. Also, two more demonstrated counties, where there are four new demonstrated farms, have been enrolled in the project, that would be a great contribution to the project.

In the past months, some progresses have also been made on the other components. Below come the details.

B. Implementation Progress by Component

Comp1. Livestock Waste Management Technology Demonstration

a) The first batch of demonstration farms are going to be completed

The physical constructions on the first two demo farms of the Guangdong project began to be implemented since the construction contracts were signed on May 30, 2007. So far as May 2008, the construction works have been finished, and now the biogas power generators have been installed, after a period of test, the livestock waste treatment systems are expected to work within two month.

b) The biddings of the second batch of the demonstration farms have finished. Because of the different scales of the farms in the 2nd batch, Taimei Pig Farm (Contract NO.W3), Huangtian Pig Farm (W4), Luoxing Pig Farm (W5), Dengdaming Pig Farm (W7) take the bidding method as NCB, and the Xuhui Pig Farm would take the Shopping method.

Huangtian Pig Farm, Luoxing Pig Farm and Dengdaming Pig Farm finished the construction biddings on June 6,2008, the contracts of which were signed with the 2nd Construction Engineering Company or the 3rd Construction Engineering

Company in Boluo County. Taimei Pig Farm finished the bidding on July 1,2008, and signed the contract with the 2nd Construction Engineering Company.

For the farms that are mentioned above, the constructions of Huangtian Pig Farm, Luoxing Pig Farm and Dengdaming Pig Farm have begun, and all the constructions of the 2nd batch will completed at the end of this year. By increasing the investment and using the proprietary technology, the livestock waste management system of Taimei would finally meet the discharge standard for livestock wastewater.

c) Expanding the project area by adding new project counties and demonstration farms

For the purpose of extending the influence of the demonstration farms, and to maintain the enthusiasm of the participants that would like to join in the GEF LWM project, and to keep the balance of the provincial biogas development, we PMO decided to add new demonstration counties in Guangdong Province. After a series of investigation, we decided to take the Dongyuan County and Lianping County in Heyuan City as the candidates of project counties and summit the files to the World Bank for review. The request for inclusion of Lianping county and Dongyuan county in the selected project area was accepted by the Bank in May. At the same time, the Bank has agreed to include the Zhifu Pig Farm and Yujing Pig Farm in Dongyuan County and the Hengchang Pig Farm and Guangnan Pig Farm in the Lianping County as the project demonstration farms.

All the four pig farms would adopt the developed treatment system and would realize meeting the discharge standard. With the participations of the four above-mentioned farms, the influence of the project would be extended to a wider scale.

Comp2. Policy and Replication Strategy Development

a) The development of the Replication Strategy and COP of the pig farms accelerates

The task was taken by the Institute of Environment and Sustainable Development in Agriculture, CAAS. The unit collected the files and analyzed the data, in the past months, some professors have been sent to visit the pig farms of the Guangdong Project and those in other province. The development of the Replication Strategy and COP of the pig farms get faster recently. In June 2008, FAO held the Policy Development Workshop in Thailand, the representatives of the unit made wonderful reports and received high praise from the experts of the FAO. Also, when the workshop held in Guangzhou, Ms. Tao Xiuping of the unit attended the workshop and had discussions with the experts from FAO. The first draft of the two above-mentioned documents would be submitted no later than the end of July 2008.

b) The development of the Spatial Planning and Nutrient Management plan gets faster.

The task was taken by Dr. Liao Xindi, a professor from South China Agricultural University. The first draft of the two plans has been submitted in January 2008. Also in June, Dr. Liao and the experts from FAO discussed and exchanged opinions about the two subjects in the Guangzhou Policy Workshop, and they had agreement on the revising works.

c) The Environmental Monitoring goes on well.

With the construction of the first batch of the pig farm come to the end, the monitoring of the two farms goes to the phrase of the complemented monitoring. At the same time, the constructions of five 2^{nd} batch farms is going to be implemented, and the Soil and Fertilizer Institute of Guangdong Academy of Agricultural Science, the unit that is in charge of the Environmental Monitoring on both 1^{st} and 2^{nd} batch of the pig farms, is planning to pay field visit to the pig farms and to take the samples.

d) The Sanitation Monitoring will begin soon.

The Guangdong PMO has signed the contract with the Fogang Center for Disease Control and Prevention, Guangdong Province, the unit that takes charge in the sanitation monitoring and evaluation of the 3 pig farms of the 2nd batch. Now the participating farms have been selected, they are Luoxing Pig Farm, Huangtian Pig Farm and Dengdaming Pig Farm. The related staffs will go to Boluo for field visiting and decide the sampling sites.

e) Arranged an international study tour to Australia and New Zealand.

In order to learn the developed experiences of Agricultural Environment management abroad, to enhance the project managers' consciousness of environment and to develop the management skills, a study group of 8 members that comprises the members from PMO and PLG has been to Australia and New Zealand for visiting. The study tour began in January and lasted for ten days. The participants mainly studied the legislation and enforcement of the environmental protection laws and also the sustainable development mode of the livestock production.

Australia and New Zealand pay much attention to the environment and natural resources protection. Even though the development modes of the two countries may not be suitable for China, their ideas of the environmental protection are very valuable for our reference. These would also give great contribution to the development and implementation of the project.

f) Planed the National Study Tour and submitted the files to the World Bank for review.

For the purpose of learning the developed experiences from the national livestock farms that have middle or large scale biogas constructions, in order to improve the technical communication and cooperation, develop the large scale biogas constructions in Guangdong Province, a national study tour is being planed. The Study Tour would last for 6 days, and the members of the Study Group would include:

1) Officers and the project technicians of PMO of Boluo County, and ;

2) The managers and technology spreader of the provincial biogas

demonstration area (including the related cities). Totally for 16 persons. The plan has been proved by the bank.

Comp3. Project Management and Monitoring

a) Planed the training of the project and submitted the files to the World Bank for review

For the purpose of enhancing the management of the livestock waste management constructions of the project area and the related areas, to upgrade the technical level, and to extend the experiences of the demonstration sites, a project training will be arranged in September and last for four days in Boluo County. The participants will be totally for 100 persons that include:

1)Managers and the technicians in Boluo County,

2)The managers and technology spreader of the provincial biogas demonstration areas (including the related cities and counties), and

3) The Training organizers.

The plan has been proved by the Bank.

b) Received the World Bank's second supervision mission

In April, the Second Supervision Mission of the World Bank arrived in Guangdong for supervising the project. The objective of the Mission was to support and supervise project implementation activities for the GEF Livestock Waste Management in East Asia Project. During these days, the mission has:

(i) Reviewed the status of project implementation;

(ii) Reviewed the progress and completion of actions that had been agreed upon during the first supervision mission in April 2007 and the technical mission in November/ December 2007;

- (iii) Agreed upon new actions to be taken; and
- (iv) Visited the two constructed and five proposed new project sites.

On the last day of this mission, April 16, the mission wrap-up meeting for China was held successfully in the afternoon in the meeting room of DOA, Guangdong. All the members of the Second World Bank Supervision Mission and FAO Monitoring Mission, the officials of PMO, DOF, EPB of Guangdong, DOPH, WBO (Beijing), as well as Doctor Liao and Doctor Ai attended the meeting. On the meeting, Mr. Zhou pointed out that they were very satisfied with the construction of the project; however, we should be clear that there remain some problems. Aiming at the technology, procurement, monitoring and the implementation of the PHRD Grant, he pointed out some questions and gave many valuable suggestions. Later, Ms. Guo of Beijing WBO, Mr. Rao OF PMO, Ms. Cao of DOF, Ms. Jiang of EPB, Doctor Liao and Doctor Ai also made short speeches on their own standpoints, and answered the questions to the missions by different aspects. At last, Mr. Rao promised that we would do our best to solve the problems remained and carry out the agreements that had been made. With the words Mr. Rao said, the supervision mission came to a successful ending.

c) Arranged the Guangzhou Policy Development Workshop and the DST Workshop of FAO

The workshops were held in the DOA of Guangdong province from June 23 to June 24. The participants include six experts of the FAO, the related Chinese experts and the Guangdong PMO staffs.

Focus on the subjects of the DST and policy development, the experts exchanged the ideas and discussed on the software exploitation of the Livestock Waste Management and the means of collecting data. At the same time, the participants compared the advantages and the disadvantages between the different waste management technologies. What's more important, after the discussions, the experts had the agreement that which technology is suitable for Guangdong project and which one is not at this moment.

d) Try our best to cooperate with the Bureau of Auditor

On June 25,2008, under the authorization of the National Audit Office, the auditors from Guangdong Provincial Audit Office came to the PMO to audit the account of the project. By the guidance of Mr. Rao, we PMO have good cooperation with the auditors. On July 24th and 25th, the audit staffs and the PMO members also went to Boluo County for field visiting. This work would be finished recently.

Comp4. Regional Support Services

Attended the Policy Development Workshop of FAO in Thailand

In June, a Policy Development Workshop was held in Thailand by FAO. The participants were from the three countries that took part in the GEF LWM Project in Asia: China, Thailand and Vietnam. The workshop lasted for 3 days, the Guangdong PMO members, the policy development experts Dr. Dong Hongmin and Dr. Tao Xiuping, and the project expert Dr. Liao Xindi took part in the meetings and had speeches on the workshop. The research and the progress of the policy development in China received high praises from the FAO experts and the colleagues from the other two countries.

II. The disbursement of the project

A. In the first half of the year 2008, it has been 3 times that PMO draw the disbursement from the GEF Grant.

Item No.	Date	Brief Description	Disbursement
			(USD)
1	Jan 8,2008	Monitoring for environmental indicators for 1st	22,130.01
		demo sites.	
2	Jan 9,2008	Season 's payment and draft document of DSS	5,281.69
		and Spatial Planning and Nutrient Management	
		Plan	
3	May 4,2008	Reception of the Second Supervision Mission of	2,251.3

	World Bank And FAO Monitoring Mission	
Sum		29,663

B. Besides, in the later days, we would disburse

a) Two seasons' payment of the consultant fee to Dr. Liao Xindi (about 3704 USD);

b) The first payment of the Contract of the Monitoring for environmental indicators for 2nd demonstration sites (about 7407 USD);

c) 25% of the expense of the construction of the first batch of the demonstration sites (about 66090 USD).

III. Next steps of the second half

A. Finish the construction of the first batch of the demonstration site and draw the disbursement from the World Bank

At present, the power generators of the first batch of the farms have been installed and now they are being monitored. Once the power generators are proved to run well, the constructions of the waste treatment system on the first two farms have been finished. And PMO will draw the 25% of the cost from the World Bank for the payment.

B. The constructions of the second batch of the demonstration sites

Now the constructions of Luoxing Pig Farm, Huangtian Pig Farm and the Dengdaming Pig Farm have started, and the constructions of the Taimei Pig Farm and Xuhui Pig Farm would start soon. All the constructions that mentioned above are expected to finish at the end of this year.

C. The constructions of the third batch of the demonstration sites

Approved by the World Bank, we PMO have enrolled the Dongyuan County and the Lianping County of Heyuan City as the new demonstration counties. One pig farm in Dongyuan County named Zhifu Pig Farm has also been approved as one of the third batch of demo farms, the construction of the Zhifu Pig Farm might begin on August, and the other three farms in the two counties would also start soon.

D. Draft out and Revise the Spatial Planning, Nutrient Management plan, Replication Strategy and COP.

In the next six months, we are planning to keep revising the four documents above, after the complementation, the documents would be submitted to the World Bank and the FAO. The consulting experts would perfect the documents according to the requirements of the World Bank and the FAO.

E. The Environmental Monitoring and the Sanitation Monitoring of the project After monitoring the livestock waste management systems, we would analyze the

data and evaluate the situation so that the implementation of the project could receive more scientific support.

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