

**INTEGRATED SAFEGUARDS DATA SHEET  
CONCEPT STAGE**

**Date ISDS Prepared/Updated: January 20, 2011**

**I. BASIC INFORMATION**

**A. Basic Project Data**

Country: China	Project ID: P119124
Project Name: CPF-Hebei Livestock Waste Management Project	
Task Team Leader: Jin Liu	
Estimated Appraisal Date: December 31, 2011	Estimated Board Date: Not applicable
Managing Unit: EASCS	Lending Instrument: Carbon Finance Operation
Sector: Renewable energy (80%), Agriculture extension and research (20%)	
Theme: Climate change (P), Other environment and natural resources management (S)	
IBRD Amount (US\$m.):	
IDA Amount (US\$m.):	
GEF Amount (US\$m.):	
PCF Amount (US\$m.):	
Other financing amounts by source:	
Borrower (US\$m):	Approximately US\$ 16 million
CFP (US\$m):	Approximately US\$ 14 million (Certified Carbon Emission Reduction Purchase)

**B. Project Objectives:**

The Project aims to demonstrate the technical and methodological approaches for biogas-based Programmatic Clean Development Mechanism (P-CDM) operation by establishing a sustainable livestock waste management that would significantly improve rural environment and reduce greenhouse gas emissions.

**C. Project Description:**

The WB will support the development and implementation of a biogas-based P-CDM in Hebei Province in order to establish a replicable carbon trade process in the agriculture sector. The pilot program will provide an assurance of a significant, long-term, and stable revenue through enabling credited CER trade process to support the sustainable waste management in the selected livestock farms and build-up institutional capacity in extending the mitigation of greenhouse gas emission efforts as required scale sector-wide. The WB will not finance the project investment,

but the Carbon Partnership Facility (CPF), which is managed by the WB, will purchase ERs from this project up to 2020 and the conservative Emission Reduction (ER) targeted amount is estimated up to 120,000 tons of CO<sub>2</sub> per year. The WB project management experience could be built into project technical design, implementation and management arrangements.

Tentatively, the project would encompass the following components and main activities.

(a) Component one: Construction and Operation of the Improved Biogas Digesters. This component would include the installation of biogas digester to treat livestock manure and produce biogas for heating or power generation for the livestock farms and communities. The project intends to include around 10-20 pig farms with total annual on-stock animal (swine) amount of around 200,000 in Hebei Province. The selection criteria of target farms include:

- *Animal population:* annual on-stock pigs are around/above 10,000 in each farm. The priority should be given to the farms with more than 15,000 pigs on-stock;
- *Baseline situation:* open lagoon to store animal waste for more than 30 days;
- *Management performance:* meeting the most updated standard of livestock farm Management. Standardized livestock farm management specifications need to be indicated and included in the project design documents.
- *Land acquisition:* no land acquisition issue involved as all construction and operation activities will take place inside of existing farm premises;
- *Technology to be applied:* the same technical design will be applied to the biogas generation and the output will be biogas for energy replacement (electricity and heat);
- *Construction/commission period:* the construction and commission should be started after March 2011 which is the target date to publish the Program of Activities (PoA) Design Document in the United Nations Framework Convention on Climate Change (UNFCCC) website, which is in lines with P-CDM rules.
- Farm will participate in the project on a voluntary basis.

(b) Component Two: Technical Services, Monitoring, and Carbon Finance Transaction. This component would provide the technical services and training for the participating farms in order to promote standardized farm livestock waste management practices and build up capacity in biogas operation/monitoring (O&M). This component would also support the project validation, verification, and CERs transaction between Project Entity and the CPF during the project credit period. Since the WB will not finance the project activities, the Hebei New Energy Office (NEO) has agreed to link the relevant provincial technical services and extension programs with the project to ensure that the needed training and technical services will be in place.

**D. Project location (if known):**

It has been proposed that 10-20 farms will be included in the project in Hebei Province.

**E. Borrower's Institutional Capacity for Safeguard Policies:**

The proposed project would be implemented by the Hebei NEO, in which a Project Management Office (PMO) will be located. The overall capability to identify safeguard environmental and social issues, as well as implement safeguards measures during the preparation and implementation of the project is considered to be satisfactory. This is due to the strong leadership of the provincial government and the project agencies have adequate staff with the necessary expertise in managing biogas program. However, the project agency has less experience in implementing the WB project and CDM operation, and the necessary institutional capacity would be built up during the project preparation and implementation process.

The project PMOs would be established within Hebei provincial and county NEOs. The PMOs will have overall responsibilities for the project management including the implementation of WB safeguard policies. According to the Chinese CDM Management Regulations, the CDM project owner can only be an independently registered corporation. Hebei NEO proposed Hebei Green Agriculture CO., LTD (HGAC) as the Project Entity on behalf of all participating farms. The HGAC has been involved in a number of design, construction and operation of biogas digester projects and it is one of the more experienced local biogas companies in Hebei. The WB identification mission assessed and agreed the HGAC to be the Project Entity. The task team will further assess and define the institutional arrangements for project implementation with the clear rules and responsibilities for both project PMOs and Project Entity.

It was agreed that Hebei PMO would select and contract Environmental Assessment (EA) Institute satisfactory to the Bank for the preparation of EA/EMP (Environment Management Plan). Such EA Institute should have ample experience with preparing EA for such type of biogas construction project and in line with Bank safeguard policies and requirements.

**F. Environmental and Social Safeguards Specialists on the Team:**

- Mr. Yiren Feng (EASCS)
- Mr. Zong-Cheng Lin (EASCS)

**II. SAFEGUARD POLICIES THAT MIGHT APPLY**

<b>Safeguard Policies Triggered (please explain why)</b>	<b>Yes</b>	<b>No</b>	<b>TBD</b>
<b>Environmental Assessment (OP/BP 4.01)</b>	<b>X</b>		
<p>The project will improve local rural environment conditions and reduce carbon emissions by installing and putting-into operation of the biogas digesters in selected existing livestock farms to replace the traditional open lagoon animal manure treatment system. This will eliminate the animal manure pollution which transfers zoonotic diseases and released noxious and odious gas to the adjacent local communities.</p> <p>Taking consideration of the characteristics of the proposed project, it is expected that the project would bring significant positive environmental and social benefits to the selected rural areas in Hebei Province, as well as generate the global benefit in climate change mitigation by reducing greenhouse gas emissions.</p> <p>Nevertheless, negative impacts might occur if the project is not properly designed or</p>			

<b>Safeguard Policies Triggered (please explain why)</b>	<b>Yes</b>	<b>No</b>	<b>TBD</b>
<p>implemented. To meet the Bank's safeguard requirements, one Environmental Management Plan (EMP) with standard Environment Codes of Practices (ECOPs) will be prepared in accordance with China's Environmental Impact Assessment Law and other relevant national policies/regulations as well as the Bank's safeguard policies/requirements.</p> <p>More specifically, the EMP will include:</p> <ul style="list-style-type: none"> <li>(a) Relevant Chinese regulations, environmental standards, and sections of WBG Environment, Health, and Safety Guidelines need to be in compliance with;</li> <li>(b) The ECOPs will include good engineering and environmental management practices to mitigate potential negative impacts from: (i) construction, operation, and maintenance of the bio-gas digesters; (ii) the collection and storage of animal waste before feeding into the bio-gas digesters; and (iii) storage, transportation, and disposal of digested sludge;</li> <li>(c) Procedures need to be followed to address and mitigate any additional site-specific impacts that are not covered by the ECOPs;</li> <li>(d) Monitoring and reporting the environmental performance of bio-gas digesters, which will be integrated with the emission reduction verification process;</li> <li>(e) Institutional arrangements for the implementation of the EMP;</li> <li>(f) Estimating budget for implementing the EMP; and</li> <li>(g) Site-specific remediation measures are needed for the closure of existing traditional open lagoons, if any.</li> </ul>			
<b>Natural Habitats (OP/BP 4.04)</b>		<b>X</b>	
The proposed candidate livestock farms are not located in any nature habitat and the biogas digester facilities will be installed within the selected existing farms.			
<b>Forests (OP/BP 4.36)</b>		<b>X</b>	
The project will not finance any activities related to forests.			
<b>Pest Management (OP 4.09)</b>		<b>X</b>	
The project will not use any pesticides.			
<b>Physical Cultural Resources (OP/BP 4.11)</b>		<b>X</b>	
The proposed livestock farms are not located in any physical cultural habitat and the biogas digester facilities will be installed within the selected existing farms.			
<b>Indigenous Peoples (OP/BP 4.10)</b>		<b>X</b>	
The project identification mission conducted the primary screening of the Indigenous Peoples Policy. There are no ethnic minority groups around the project areas. Although there are a few Hui ethnic minority communities dispersed throughout the Hebei Province, they do not meet the criteria of Indigenous Peoples as defined in OP4.10. In addition, the selected farms in which this project might propose biogas structures are not located in those areas. Therefore, the OP4.10 does not apply to this project.			
<b>Involuntary Resettlement (OP/BP 4.12)</b>		<b>X</b>	
All the proposed project activities, including the construction of biogas pools and facilities, will take place on the existing livestock farms, and on farm land which has been legally rented from local villages to farms (or in a few cases, individual farm households). There will be neither land acquisition nor temporary land occupation for this project. This policy therefore is not triggered for the project.			

<b>Safeguard Policies Triggered (please explain why)</b>	<b>Yes</b>	<b>No</b>	<b>TBD</b>
<b>Safety of Dams (OP/BP 4.37)</b>		<b>X</b>	
The project will not finance construction or rehabilitation of any dams as defined under this policy.			
<b>Projects on International Waterways (OP/BP 7.50)</b>		<b>X</b>	
There are no known project components involving international waterways as defined under the policy.			
<b>Projects in Disputed Areas (OP/BP 7.60)</b>		<b>X</b>	
There are no known project components involving international waterways as defined under the policy.			

**Environmental Category:** B - Partial Assessment

### III. SAFEGUARD PREPARATION PLAN

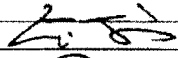
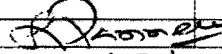
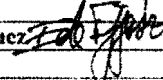
- A. Target date for the Quality Enhancement Review (QER), at which time the PAD-stage ISDS would be prepared: *March 31, 2011*
- B. For simple projects that will not require a QER, the target date for preparing the PAD-stage ISDS: *Not applicable.*
- C. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing<sup>1</sup> should be specified in the PAD-stage ISDS:

The specified SA that will be conducted would inform the project design on the land use situations of each participating unit (livestock farm) even though there is no land acquisition. In addition, the social relationships and interactions between the project units and surrounding village communities will be assessed and the local communities and households will be informed and consulted on the impacts that the project might bring to local communities. The mitigation measures will be put in place if any negative impact is identified by the SA.

The EA/SA processes have been started in early January 2011 and should be completed by the end of March 2011. At that point all the relevant documentation related to safeguard policies will be available in their draft stage for the WB preparation mission review.

<sup>1</sup> Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in-country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.

**IV. APPROVALS**

<i>Signed and submitted by:</i>		Date
<b>Task Team Leader:</b>	Name: Liu Jin 	01/20/2011
<i>Approved by:</i>		
<b>Regional Safeguards Coordinator:</b>	Name: L. Panneer Selvam 	01/21/2011
<b>Comments:</b>		
<b>Sector Manager:</b>	Name: Ede Jorge Ijjasz-Vasquez 	1/21/2011
<b>Comments:</b>		