



GLOBAL ENVIRONMENT FACILITY
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Naoko Ishii
CEO and Chairperson

July 1, 2014

Dear Council Member:

World Bank as the Implementing Agency for the project entitled: ***China: Energy Conservation, Greenhouse Gas Mitigation and Soil Carbon Sequestration in Staple Crop Production***, has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with World Bank procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by Council in April 2013 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by World Bank satisfactorily details how Council's comments and those of the STAP have been addressed. I am, therefore, endorsing the project document.

We have today posted the proposed project document on the GEF website at www.TheGEF.org. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Naoko Ishii
Chief Executive Officer and Chairperson

Attachment: GEFSEC Project Review Document
Copy to: Country Operational Focal Point, GEF Agencies, STAP, Trustee

**INTEGRATED SAFEGUARDS DATA SHEET
APPRAISAL STAGE**

Report No.: ISDSA8482

Date ISDS Prepared/Updated: 26-May-2014

I. BASIC INFORMATION

1. Basic Project Data

Country:	China	Project ID:	P144531
Project Name:	Climate Smart Staple Crop Production (P144531)		
Task Team Leader:	Jiang Ru		
Estimated Appraisal Date:	30-May-2014	Estimated Board Date:	15-Sep-2014
Managing Unit:	EASCS	Lending Instrument:	Investment Project Financing
GEF Focal Area:	Climate change		
Sector(s):	Crops (80%), Agricultural extension and research (20%)		
Theme(s):	Climate change (100%)		
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?			No
Financing (In USD Million)			
Total Project Cost:	30.10	Total Bank Financing:	0.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			25.00
Global Environment Facility (GEF)			5.10
Total			30.10
Environmental Category:	B - Partial Assessment		
Is this a Repeater project?	No		

2. Global Environmental Objective(s)

The proposed project's Project Development Objective (PDO) and its Global Environmental Objective (GEO) is to demonstrate climate smart and sustainable staple crop production in Huaiyuan County of Anhui Province and Yexian County of Henan Province.

3. Project Description

The proposed project will have four components: (a) CSA Demonstration; (b) Policy Development and Knowledge Management; and (c) Project Management.

Component 1: CSA Demonstration. This component will support (a) demonstration of GHG emission reduction and efficient irrigation techniques; (b) demonstration of soil carbon sequestration techniques; (c) new production technique pilots; (d) technical support for CSA demonstration; and (e) monitoring and evaluation (M&E).

Component 2: Policy Development and Knowledge Management. This component will support (a) development of national CSA policies, strategy and guidelines; (b) domestic dissemination of project knowledge; and (c) promotion of international CSA cooperation.

Component 3: Project Management. This component will support project implementing agencies to manage, implement, supervise and monitor project implementation.

4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The proposed project sites are in 12 villages of two townships of Huiyuan County of Bengbu Municipality of Anhui Province and 28 villages of two townships of Yexian County of Pingdingshan Municipality of Henan Province.

5. Environmental and Social Safeguards Specialists

Songling Yao (EASCS)

Yiren Feng (EASCS)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/ BP 4.01	Yes	
Natural Habitats OP/BP 4.04	No	
Forests OP/BP 4.36	No	
Pest Management OP 4.09	Yes	
Physical Cultural Resources OP/ BP 4.11	No	
Indigenous Peoples OP/BP 4.10	No	Among all 30 project villages, one Hui Minority village in Yexian County was identified during the Social Assessment (SA) process. It was confirmed that the villagers have their own religion and customs different from the dominant society. It was also noted that these villagers share the same political and economic institutions and use the same language (Mandarin) as the dominant society. As such, they are not qualified as Indigenous People per the definition of the OP 4.10. Therefore, OP 4.10 is not triggered.

Involuntary Resettlement OP/BP 4.12	Yes	
Safety of Dams OP/BP 4.37	No	The project will not finance construction or rehabilitation of any dams as defined under this policy, and the project related irrigation activities will not rely on upstream dams or a dam under construction.
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/BP 7.60	No	

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

<p>1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:</p> <p>The environmental and social impacts of the proposed project are overall positive as the project will promote climate smart and sustainable crop production techniques and practices. Positive environmental benefits include reduced emission of greenhouse gases, reduced uses and releases of agricultural chemicals into the environment, and improved soil organic matters. In addition to these environmental benefits, successful implementation of CSA demonstrations is expected to generate positive social economic and health benefits to project farmers as these activities will improve crop productivity, reduce the use and release of pesticides and fertilizers, and promote professional crop production and pest management services.</p> <p>Project preparation confirms that (a) there are no sensitive locations and social and environmental issues; and (b) CSA demonstration activities under Component 1 trigger OP4.01 (Environmental Assessment), OP4.09 (Pest Management), and OP4.12 (Involuntary Resettlement).</p> <p>OP4.01 is triggered as some negative and short-term construction impacts may result from rehabilitation and construction of small-scale on-farm infrastructure (such as farm roads and irrigation channels) financed by counterpart fund. The potential impacts (e.g. noise, air, wastewater, solid wastes etc.) will be short-term, temporary, limited and local in nature, and can be readily managed with cost effective mitigations measures.</p> <p>OP4.09 is triggered as the project will promote IPM practices as part of CSA demonstrations and will support the review and development of technical codes and standards related to applications of agricultural inputs (including pesticides). Implementation of the project promoted IPM practices will generate positive environmental and health impacts as such efforts will reduce the use of pesticides.</p> <p>OP4.12 is triggered as the small scale on-farm infrastructure construction may require limited land acquisition.</p>
<p>2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:</p> <p>It is anticipated that successful implementation of this project will cause that climate smart and</p>

<p>sustainable crop production techniques demonstrated under the project will continue in the project area after project completion. Demonstrated positive social, economic and environmental benefits of these techniques will promote wider adoption and replication of these CSA techniques beyond the project area and thus promote sustainability of staple crop production in these areas.</p>
<p>3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.</p>
<p>Not applicable.</p>
<p>4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.</p>
<p>Environment Assessment (OP4.01). The client has engaged the Environmental Assessment Center of China Agricultural University to prepare the ECOPs for the project in accordance with the Bank's requirements. A set of ECOPs were prepared for existing farm road improvements, and rehabilitation of irrigation and drainage infrastructure, leveling of crop lands, installation of power lines and pumping stations, and tree planting around farm lands. The ECOPs will be included into the bidding documents and civil work contracts. ECOPs are prepared based on national norms, proven practices in other Bank financed projects and practices recommended in Environmental Health and Safety Guidelines of World Bank Group. They specify all aspects of environmental management issues during the entire project cycle, including but not limited to, site preparation, construction dust management, air pollution control, noise impact control, water pollution control, solid waste management, public and workers' health and safety, as well as public consultations on the environmental issues. It also includes the reporting and supervision arrangements for the project implementation. With proper implementation of the proposed mitigation measures, the potential adverse impacts will be avoided, eliminated entirely, minimize or mitigated to an acceptable level.</p> <p>Pest Management (OP4.09). The project will promote IPM practices at the project site and will support the review and development of technical codes and standards related to applications of agricultural inputs (including pesticides) for climate smart staple crop production. A PMP has been prepared for the production of rice, wheat and corn in the two project counties. It includes major pest issues, pesticide management methods, monitoring and evaluation activities, and capacity building for project stakeholders. It incorporates the existing good pest management practices from the project areas, outlines IPM based pest control and management methods, and recommends various application approaches under different conditions such as promoting IPM to reduce the use of toxic pesticides (e.g. improvement of pest forecasting, use of bait lamps, crops rotation, pest resistant varieties, and balanced fertilization), training and capacity building for local farmers and governmental agencies, introducing and promoting biological and botanical pesticides, and strengthening monitoring. It also provides a list of pesticides that may be used under the project in compliance with World Health Organization's recommended categories. Implementation of the training and monitoring programs was budgeted in the project cost.</p> <p>Involuntary Resettlement (OP4.12). A Resettlement Policy Framework (RPF) for the entire project was prepared by a team from China Agriculture University, covering detailed procedures on preparation, review and approval of potential land acquisition activities, institutional and financial arrangements, and a monitoring plan for resettlement implementation.</p> <p>MOA has obtained operational experience with Bank policies and procedures from its cooperation with the Bank on the Eco-farming Project (P096556). The MOA department in charge of preparation and implementation of this project has been working with UN agencies in</p>

implementing a GEF operation and an operation under the Montreal Protocol on Ozone Depleting Substances. However, the department has no prior experience with Bank operation. Training on Bank project management, including safeguards, has been provided to the department and its project management office during project preparation. Additional project management (including safeguards) will be provided under project implementation to improve the PMO's capacity to properly implement this project.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Extensive public consultation was performed during the SA, RPF preparation and ECOP preparation processes. During the preparation of ECOPs, consultation, meetings and interviews were arranged with the project's key stakeholders of different genders, socioeconomic and educational backgrounds, social groups, and occupations. In total, about 404 people were consulted in the ECOPs Preparation process. Similarly, during the preparation of SA and RPF, expert consultations, questionnaire survey, meetings and interviews were conducted with the project's stakeholders of different gender, socioeconomic and educational backgrounds, social groups, and occupations. In total, 280 households were surveyed in the process. During these consultations, the project information was disclosed at project villages and government websites.

The majority of consulted stakeholders have expressed their strong support to the project. The ECOPs/SA/RPF have incorporated countermeasures to address the concerns of consulted stakeholders. Such countermeasures (for example, support to farmer field schools to align project training to the farmers' actual needs, support cropland leveling and transformers to improve irrigation efficiency) have been fully incorporated into the project design.

In accordance with the Bank's information disclosure policy, on April 24, 2014 the ECOPs and PMP were made available in the project areas and on the websites of the local government agencies, and are accessible at PMO and PMUs. The ECOPs, PMP, SA and RPF were disclosed at the World Bank InfoShop on May 8, 2014.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	10-Apr-2014
Date of submission to InfoShop	08-May-2014
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
China	24-Apr-2014
<i>Comments:</i>	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	11-Apr-2014
Date of submission to InfoShop	08-May-2014
"In country" Disclosure	
China	24-Apr-2014
<i>Comments:</i>	
Pest Management Plan	

Was the document disclosed prior to appraisal?	Yes
Date of receipt by the Bank	11-Apr-2014
Date of submission to InfoShop	08-May-2014
"In country" Disclosure	
China	24-Apr-2014
<i>Comments:</i>	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment	
Does the project require a stand-alone EA (including EMP) report?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, then did the Regional Environment Unit or Sector Manager (SM) review and approve the EA report?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
OP 4.09 - Pest Management	
Does the EA adequately address the pest management issues?	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>] NA [<input type="checkbox"/>]
Is a separate PMP required?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, has the PMP been reviewed and approved by a safeguards specialist or SM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
OP/BP 4.12 - Involuntary Resettlement	
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, then did the Regional unit responsible for safeguards or Sector Manager review the plan?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]

Have costs related to safeguard policy measures been included in the project cost?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]

III. APPROVALS

Task Team Leader:	Name: Jiang Ru	
<i>Approved By</i>		
Sector Manager:	Name: Iain G. Shuker (SM)	Date: 26-May-2014

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: PIDA6086

Public Disclosure Copy

Project Name	Climate Smart Staple Crop Production (P144531)
Region	EAST ASIA AND PACIFIC
Country	China
Sector(s)	Crops (80%), Agricultural extension and research (20%)
Theme(s)	Climate change (100%)
Lending Instrument	Investment Project Financing
Project ID	P144531
GEF Focal Area	Climate change
Borrower(s)	People's Republic of China
Implementing Agency	Ministry of Agriculture
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	22-May-2014
Date PID Approved/Disclosed	23-May-2014
Estimated Date of Appraisal Completion	30-May-2014
Estimated Date of Board Approval	15-Sep-2014
Decision	

Public Disclosure Copy

I. Project Context

Country Context

1. As a major country contributing to, and being seriously affected by, climate change, China has strived to integrate climate smart development actions into its emerging green growth strategy. In doing so, the Government has developed the National Program on Climate Change (2007), the White Paper on China's Policies and Actions for Addressing Climate Change (2011, the White Paper) and most recently the Work Plan for Greenhouse Gas Emission Control during the Period of the 12th Five-Year Plan for National Economic and Social Development (2011, the 12th FYP). Consistent with these frameworks, the Government specified in the Action Program on Climate Change for Agriculture (2008, the Action Program) that it would develop sustainable crop production systems to increase crop yields and farmers' incomes while reduce greenhouse gas (GHG) emissions and improve climate resilience of crop production systems. In this regard, the Government has emphasized the importance of promoting sustainable crop production technologies and establishing scientific monitoring and evaluation (M&E) methods to ensure effective GHG emission reductions from its crop production sector and improve the sector's capacity to adapt to a changing climate that is expected to be hotter nationwide, drier with more droughts in Northern China, and wetter with more floods in Southern China.

Sectoral and institutional Context

2. The agriculture sector of China has supported 22% of world population with only 9% of world's arable land. To achieve food security, China has developed an intensive crop production system that relies heavily on high consumption, but low utilization rates, of fertilizers, pesticides and irrigation water. As a result, China's crop production has significant GHG emissions. Heavy reliance on synthetic fertilizers has also stressed China's limited arable land. China's low productivity cropland accounts for over 70% of the total arable land area, and soil organic carbon (SOC) in typical cropland of China is 30% lower than the world average, and over 50% lower than that of Europe. This situation is further aggravated by unsustainable crop production practices which often include flood irrigation, monocropping with limited crop rotation, excessive tillage, straw burning, and low rates of organic residue return to soil. These practices has not only led to the high GHG emissions from crop production but also reduced climate resilience of the country's crop production systems.

3. High inputs and low efficiency in their utilization and low SOC content imply that there is a high potential for China to undertake climate change mitigation and adaptation actions to improve economic and environmental performance of its crop production. Recognizing the potential, China is implementing on its own and in collaboration with international organizations, including the World Bank, a program to pilot low GHG emission and soil carbon sequestration technology such as precision fertilization and crop residue retention in the field to avoid and/or minimize agriculture emissions. In addition, China continues to improve its irrigation infrastructure and promote water-saving irrigation, stress-resistant crop varieties and diversification of cropping systems to improve climate resilience of its crop production systems. A key focus of China's initiatives is to introduce to farmers technologies and practices (e.g., precision fertilization and no-till land preparation) that can promote efficiency of GHG intensive synthetic inputs, improve soil productivity and achieve sustainable crop yields. These actions comply with the principle of climate smart agriculture (CSA), which seeks to increase productivity in an environmentally and socially sustainable manner, strengthen the resilience of cropping systems to climate change, minimize the agricultural sector's contribution to climate change by reducing GHG emissions and sequester soil organic carbon.

4. The Ministry of Agriculture (MOA) has identified a number of factors limiting the uptake of climate smart crop production technologies in China such as: (a) limited public support to the screening and assessment of agricultural technologies; (b) inadequate demonstration on the ground; (c) limited awareness of farmers and local governments; (d) lack of policy incentives; and (e) low capacity of extension services to disseminate advisories to farmers. To address these challenges and promote continuous identification and adoption of context-specific climate smart production technologies, MOA requested the Bank's support to prepare and implement this project financed by a grant from the Global Environment Facility (GEF).

II. Proposed Development Objectives

The proposed project's Project Development Objective (PDO) and its Global Environmental Objective (GEO) is to demonstrate climate smart and sustainable staple crop production in Huaiyuan County of Anhui Province and Yexian County of Henan Province.

III. Project Description

Component Name

CSA Demonstration

Comments (optional)

This component will support (a) demonstration of GHG emission reduction and efficient irrigation techniques; (b) demonstration of soil carbon sequestration techniques; (c) new production technique pilots; (d) technical support for CSA demonstration; and (e) monitoring and evaluation (M&E).

Component Name

Policy Development and Knowledge Management

Comments (optional)

This component will support (a) development of national CSA policies, strategy and guidelines; (b) domestic dissemination of project knowledge; and (c) promotion of international CSA cooperation.

Component Name

Project Management

Comments (optional)

This component will support project implementing agencies to manage, implement, supervise and monitor project implementation.

IV. Financing (in USD Million)

Total Project Cost:	30.10	Total Bank Financing:	0.00
Financing Gap:	0.00		
For Loans/Credits/Others			Amount
Borrower			25.00
Global Environment Facility (GEF)			5.10
Total			30.10

V. Implementation

Institutional arrangements for project implementations have been established at the national, provincial and project county levels. At the national level, a National Project Steering Committee (NPSC) led by MOA has been set up with participation of key national stakeholders to guide overall implementation of the project. MOA has designated a National Project Director (NPD) and established a Project Management Office (PMO) to manage project implementation with technical support from a National Expert Group (NEG). At the provincial level, a Provincial Leading Group (PLG) led by the Department of Agriculture (DOA) of each of the two project provinces has been established to oversee project implementation in the respective province with support from a Project Management Unit hosted in the DOA. At the county level, a County Leading Group (CLG) led by a deputy head of the county government has been set up to oversee project implementation in the project county with support of a county PMU hosted by the Agriculture Bureau of the respective county.

MOA has adopted a Project Implementation Manual (PIM) to guide project implementation. The Manual provides detailed information on (a) the project objective, project activities and financing arrangements; (b) roles and responsibilities of the PMO, county PMUs and other entities involved in project implementation; (c) financial management, disbursement, procurement, safeguards arrangements; (d) steps and procedures for project implementation; and (d) monitoring and evaluation, reporting and information disclosure arrangements.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04		x
Forests OP/BP 4.36		x
Pest Management OP 4.09	x	
Physical Cultural Resources OP/BP 4.11		x
Indigenous Peoples OP/BP 4.10		x
Involuntary Resettlement OP/BP 4.12	x	
Safety of Dams OP/BP 4.37		x
Projects on International Waterways OP/BP 7.50		x
Projects in Disputed Areas OP/BP 7.60		x

Comments (optional)**VII. Contact point****World Bank**

Contact: Jiang Ru
 Title: Senior Environmental Specialist
 Tel: 473-8677
 Email: jru@worldbank.org

Borrower/Client/Recipient

Name: People's Republic of China
 Contact: Yao Licheng
 Title: Director, International Dept., Ministry of Finance
 Tel: 861068553284
 Email: yaolicheng@mof.gov.cn

Implementing Agencies

Name: Ministry of Agriculture
 Contact: Wang Yanliang
 Title: Deputy Director General, Science, Tech & Education Dept
 Tel: 861059193208
 Email: wangyl1234@sohu.com

VIII. For more information contact:

The InfoShop
 The World Bank
 1818 H Street, NW
 Washington, D.C. 20433
 Telephone: (202) 458-4500
 Fax: (202) 522-1500
 Web: <http://www.worldbank.org/infoshop>