INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

Report No.: ISDSC5226

Date ISDS Prepared/Updated: 03-Sep-2013

Date ISDS Approved/Disclosed: 10-Sep-2013

I. BASIC INFORMATION

A. Basic Project Data

| Country: | Chin | a | Project ID: P144531 | | 531 |
|-----------------------------------|--|--------------------|----------------------------|-----------------|------------------------|
| Project Name: | Climate Smart Staple Crop Production (P144531) | | | | |
| Task Team | Jiang | Jiang Ru | | | |
| Leader: | | | | | |
| Estimated | 10-Jan-2014 | | Estimated | 15-Se | p-2014 |
| Appraisal Date: | | | Board Date | : | |
| Managing Unit: | EASCS | | Lending Instrument | | ment Project Financing |
| GEF Focal Area: | Climat | Climate change | | | |
| Sector(s): | Crops (80%), Agricultural extension and research (20%) | | | | |
| Theme(s): | Climate change (100%) | | | | |
| Financing (In US | SD M | (illion) | | | |
| Total Project Cos | t: | : 30.10 Total | | Financing: 0.00 | |
| Financing Gap: | | 0.00 | | <u>'</u> | |
| Financing Source | | | | Amount | |
| BORROWER/F | BORROWER/RECIPIENT | | | 25.00 | |
| Global Environment Facility (GEF) | | | | 5.10 | |
| Total | Total | | | 30.10 | |
| Environmental Category: | B - F | Partial Assessment | | | |
| Is this a | No | | | | |
| Repeater | | | | | |
| project? | | | | | |

B. Project Objectives

8. The proposed project's Global Environmental Objective (GEO), i.e. its Project Development Objective (PDO), is to promote climate smart and sustainable crop production through identification, piloting, and promotion of low emission and soil carbon sequestration production techniques and practices. The focus of the project will be on the production of three main staple crops of China's and two major crop production systems: the rice-wheat system in Anhui and the wheat-corn system in Henan.

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9. This project will be an integral part of China's efforts to address climate change issues in agricultural sector. Successful implementation of this project will contribute to the country's efforts to reduce China's GHG emissions per unit of GDP by 40-45% by 2020 compared to its 2005 level.

C. Project Description

The proposed project will have four components: (a) Technology Pilots and Promotion; (b) Policy Development; (c) Knowledge Management; and (d) Project Management.

Component 1: Technology Pilots and Promotion. This component will promote identification, piloting, evaluation and promotion of low GHG emission production and soil carbon sequestration technologies, techniques and practices for the production of rice, corn and wheat at the project sites. This project will focus specifically on a systematic design, demonstration and evaluation of these technologies and their joint impacts on emission reduction for a particular crop production system. In general, the project will promote the adoption of climate smart and integrated soil crop management practices under the precondition of maintaining and even improving current crop productivity.

It is expected that for wheat and corn, the project will support CSA practices including (a) selection of improved varieties that are nutrient and water efficient; (b) integrated soil crop system management, including the use of amendments such as biochar; (c) crop residue management and cover crops; (d) change in tillage practices. CAS practices (a), (b) and (c) are also applicable for rice production. In addition, the project will explore crop rotation and improved water management practices for rice production. For all project sites, integrated pest management performed by professional pest management services will be promoted at all project sites. It is expected that smallscale construction and rehabilitation of on-farm agricultural infrastructures such as irrigation channels and farm roads may be supported by counterpart funding to ensure successful implementation of technology pilot activities at the project sites. Actual site investment activities will be determined during project preparation.

Results of technology pilots will be systematically monitored and evaluated based on internationally reputable monitoring and evaluation (M&E) methodologies and/or principles. Based on these on-site results and feedbacks of local farmers, this component will promote wide adoption of successfully piloted technical combinations for the concerned crop systems in the four project provinces.

Component 2: Policy Development. This component will principally focus on developing and promoting policies and strategies for low carbon crop production in China. It will support (a) review and development of technical codes and standards related to applications of agricultural inputs (e.g. fertilizers, pesticides and irrigation water) in wheat, rice and crop production; (b) review and development of technical procedures/ guidelines of demonstrated soil carbon sequestration and emission reduction technologies; and (c) policy studies on incentive mechanisms (including the role of subsidies, institutional factors, and cost effective approaches and alternatives to subsidies such as payment for ecosystem services) to encourage local farmers to apply CSA production technologies. The project will also support MOA to adopt selected policy instruments based on concrete pilot results and findings of these studies.

Component 3: Knowledge Management. This component will support activities to analyze and summarize experiences and lessons learnt from the pilots of climate smart crop production technologies at the project sites. It will create a knowledge base on the elements of CSA technologies and practices for key staple crop production. It will work with agricultural extension services at the

project sites to develop an information dissemination platform using cost-effective technologies such as ICT tools. It will also develop a strategy for scaling up the adoption of demonstrated low-emission technologies in production areasbeyond the pilots. Such activities will enable China to properly manage and disseminate relevant knowledge and information on low emission technologies.

Component 4: Project Management. This component will support the operating costs associated with project management activities.

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

The proposed project sites are in the rural areas of Huiyuan County of Bengbu Municipality of Anhui Province and Yexian County of Pingdingshan Municipality of Henan Province. The project locations will be confirmed during project preparation.

E. Borrowers Institutional Capacity for Safeguard Policies

MOA is working with the Bank on the Eco-farming Project (P096556) and has obtained operational experience with Bank policies and procedures. The MOA department in charge of project preparation and implementation is working with UN agencies in 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, will be provided to the department and its project management office during project preparation to improve its capacity to properly implement this proposed project.

F. Environmental and Social Safeguards Specialists on the Team

Songling Yao (EASCS) Yiren Feng (EASCS)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

| Safeguard Policies | Triggered? | Explanation (Optional) |
|------------------------------|------------|--|
| Environmental Assessment OP/ | Yes | The proposed project's impacts on the |
| BP 4.01 | | environment are expected to be positive as the |
| | | project by design is to promote climate smart |
| | | and sustainable crop production techniques and |
| | | practices that will (a) reduce emission of |
| | | greenhouse gases; (b) reduce the use of |
| | | agricultural inputs and thus reduce the releases |
| | | of excessive such inputs into the environment; |
| | | and (c) improve soil organic matters. |
| | | The GEF grant financed activities will focus on |
| | | improvement in crop production techniques and |
| | | thus will not include any civil work and |
| | | physical construction activities. However, the |
| | | counterpart fund may be used to construct or |
| | | rehabilitate small size on-farm agricultural |
| | | infrastructures such as irrigation canals and |
| | | farm roads. Such construction activities may |
| | | potentially lead to small-scale adverse |

| | | environmental impacts. These potential impacts will be temporary, limited and site specific in nature, and can be readily managed with available mitigations measures. Environmental Code of Practice (ECOP) will be prepared to address the impacts from the construction and rehabilitation of the different typologies of rural infrastructure that will be supported under the project. Based on the above and the fact that the project will promote integrated pest management (IPM) practices at the project sites, the Task Team (TT) proposes Category B for this project. Social impact assessment will be performed as part of the project's feasibility study to identify and address potential social issues. Proper measures will be incorporated into the project design. |
|--|-----|--|
| Natural Habitats OP/BP 4.04 | No | The project will be implemented in rural areas with intensive crop production activities. No natural habitats are in or near the project areas. The project will not affect any protected areas, known natural habitats, or established or proposed critical natural habitats. In addition, the project will not result to expansion of agricultural production that could affect natural habitats. Therefore, this policy is not triggered. |
| Forests OP/BP 4.36 | No | The project will not finance any activities related to forests. In addition, the project will not result to expansion of agricultural production that could affect natural habitats. As such, this policy is not triggered. |
| Pest Management OP 4.09 | Yes | This policy is triggered as 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. A Pest Management Plan (PMP) will be prepared for the rice, wheat and corn in the project sites. |
| Physical Cultural Resources OP/ BP 4.11 | No | The project is located in rural areas with intensive agricultural activities. According to the preliminary screening, the proposed sites are not in or close to any physical cultural heritage. |

| | | This policy is not triggered. However, chance finds during minor on-farm construction activities may occur and relevant clauses will be included in all bidding documents and construction contracts. |
|---|-----|---|
| Indigenous Peoples OP/BP 4.10 | TBD | The project sites are in two core crop production areas of China where limited indigenous people (IP) communities exist. IP issues will be closely examined after the final project sites are confirmed in the two counties. An IPPF, if OP 4.10 is found triggered, will be prepared. |
| Involuntary Resettlement OP/BP 4.12 | Yes | As the project's counterpart funding may finance on-farm and small scale physical construction activities, there may be small size land use issues. As such, the OP 4.12 is triggered. A RFP will be prepared to handle any possible land issues, guiding RP preparation as needed during project implementation. |
| Safety of Dams OP/BP 4.37 | TBD | The project will not finance construction or rehabilitation of any dams as defined under this policy. As the final project locations are yet to be decided, it is unclear at this stage whether project related irrigation activities will rely on upstream dams or a dam under construction. As such, whether this policy is triggered will be determined during project preparation. If the policy is triggered, dam safety evaluation will be conducted by an independent dam safety expert. |
| Projects on International Waterways OP/BP 7.50 | No | The policy is not triggered as the project does not involve trans-boundary water bodies. |
| Projects in Disputed Areas OP/BP 7.60 | No | The policy is not triggered as the project does not involve any disputed areas. |

III. SAFEGUARD PREPARATION PLAN

- A. Tentative target date for preparing the PAD Stage ISDS: 15-Aug-2014
- **B.** Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing¹ should be specified in the PAD-stage ISDS:

No specific safeguard related studies are expected.

IV. APPROVALS

| Task Team Leader: | Name: Jiang Ru |
|-------------------|----------------|
| Approved By: | |

| Regional Safeguards Coordinator: | Name: | Date: |
|-------------------------------------|----------------------------|-------------------|
| Sector Manager: | Name: Mark R. Lundell (SM) | Date: 10-Sep-2013 |