## INTEGRATED SAFEGUARDS DATA SHEET APPRAISAL STAGE

Report No.: ISDSA4228

## Date ISDS Prepared/Updated: 10-Dec-2013

## Date ISDS Approved/Disclosed: 14-Dec-2013

### I. BASIC INFORMATION

## 1. Basic Project Data

| <b>Country:</b>                             | Pakist   | tan   | Project ID:           | P128307                  |       |   |  |
|---|--|---|-----------------------|--------------------------|-------|---|--|
| Project Name:                               | PK: Sindh Agricultural Growth Project (P128307)  |   |                       |                          |       |   |  |
| Task Team                                   | Tahira   | a Syed  |                       |                          |       |   |  |
| Leader:                                     |  |   |                       |                          |       |   |  |
| Estimated                                   |  |   | Estimated             | 27-Mar-2014              |       |   |  |
| Appraisal Date:                             |  |   | Board Date:           | :                        |       |   |  |
| Managing Unit:                              | SASE   | DA  | Lending               | Specific Investment Loan |       | 1 |  |
|   |  |   | Instrument:           |                          |       |   |  |
| GEF Focal                                   |  |   |                       |                          |       |   |  |
| Area:                                       |  |   |                       |                          |       |   |  |
| Sector(s):                                  | (20%)  | Animal production (30%), Crops (30%), Agro-industry, marketing, and trade (20%), Agricultural extension and research (15%), Rural and Inter-Urban Roads |                       |                          |       |   |  |
|   | and Highways (5%)  |   |                       |                          |       |   |  |
| Theme(s):                                   | Rural services and infrastructure (55%), Other rural development (20%), Rural policies and institutions (15%), Rural markets (10%) |   |                       |                          |       |   |  |
| Is this project p                           | rocess   | ed under OP 8.50 (B   | <b>Emergency Reco</b> | overy) or                | OP No |   |  |
| 8.00 (Rapid Res                             | 8.00 (Rapid Response to Crises and Emergencies)?   |   |                       |                          |       |   |  |
| Financing (In U                             | SD M   | illion)   |                       |                          |       |   |  |
| Total Project Cos                           | st:  | 98.00 Total Bank Financing: 86  |                       |                          | 86.00 |   |  |
| Financing Gap:                              |  | 0.00  |                       |                          |       |   |  |
| Financing Sou                               | rce  |   |                       | Amount                   |       |   |  |
| BORROWER/I                                  | BORROWER/RECIPIENT   |   |                       | 12.00                    |       |   |  |
| International Development Association (IDA) |  |   |                       | 86.00                    |       |   |  |
| Total                                       | 98.00  |   |                       |                          | 98.00 |   |  |
| Environmental                               | B - Partial Assessment   |   |                       |                          |       |   |  |
| Category:                                   |  |   |                       |                          |       |   |  |
| Is this a                                   | No   |   |                       |                          |       |   |  |
| Repeater<br>project?                        |  |   |                       |                          |       |   |  |

## 2. Project Development Objective(s) / Global Environmental Objective(s)

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#### A. Project Development Objective(s)

To improve the productivity and market access of small and medium producers in selected commodity value chains.

#### **B.** Global Environmental Objective(s)

#### 3. Project Description

The SAGP would contribute to more inclusive growth by prioritizing support to small producers with commercial potential. The project would be implemented over a period of five years and would have the following components:

Component A: Capacity Building and Institutional Development: The project will implement through the Directorates of Research and Extension and the Department of Livestock and Fisheries. Consultations with both clients identified several capacity building and institutional development needs, which this component will finance in addition to capacity building of producers. This component will finance activities around technology development, technology dissemination, capacity building, and strategic planning for Sindh's agricultural sector.

Component B: Investment for Agricultural Growth: This component finances actual investments in selected value chains of horticulture, rice and dairy. The component would also finance a demand driven investment fund to support farmers and producers with infrastructure and technology innovations support in the selected value chain. Selection criteria for farmers and producers groups to receive project interventions as well as the detailed procedures for funds transfer and managing contributions will be included in the Operational Manual being developed by the implementing agencies.

Component C: Project Management and Monitoring and Evaluation: This component wouldfinance the costs for Project Management Units (PMUs) and the Project Coordinator's office. Financing would be provided for impact evaluation, communications strategy, grievance redressal mechanism (GRM), independent third party monitoring, establishment of a management information system (MIS) and overall monitoring of the implementation of Environment and Social Management Framework (ESMF). The Impact Evaluation, MIS and third party monitoring will be implemented by the Project Coordinator whereas overall monitoring and evaluation, GRM and communication strategy will be implemented by the respective PMUs and the PIUs.

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

The project would focus on horticulture and milk production because they have a small farmer focus, have significant involvement of women in production and processing, and, from a national perspective, Sindh enjoys the greatest competitive advantage in these pro-poor production value chains. The province has fertile irrigated agricultural lands and support wheat-rice on the right bank of the Indus river while wheat-cotton, and wheat-rice are cultivated on the left bank of the river. Sindh being located in the deltaic region has flat lands, slope on average is less than 1 ft per 1 mile and therefore drainage of irrigation return flows remains a challenge in the area. Over the recent past Sindh has also experienced heavy floods and rural population of Sindh suffered significantly due to standing floodwater. Sindh also produces fine quality fruits including mangoes, bananas and dates. Livestock rearing is also major activity in the area. Rural Sindh therefore presents agro-based environmental settings and project interventions could bring positive changes in them.

### 5. Environmental and Social Safeguards Specialists

Simeon Kacou Ehui (SASDA)

Miki Terasawa (SASDS)

Javaid Afzal (SASDI)

Fouad Muhammad Khan (SASDI)

| 6. Safeguard Policies                             | Triggered? | Explanation (Optional)   |
|---|------------|--|
| Environmental Assessment OP/<br>BP 4.01           | Yes        |  |
| Natural Habitats OP/BP 4.04                       | Yes        | The activities under Component B if established<br>in or near sensitive habitats can potentially cause<br>ecological disturbances.   |
| Forests OP/BP 4.36                                | No         | There is no forest cover in the project area and<br>activities will not be conducted in or affect any<br>natural or man-made forests.  |
| Pest Management OP 4.09                           | Yes        | PPest management is triggered because the<br>project activities can potentially alter the scope<br>and intensity of current pesticide usage regime,<br>though the activities would be aimed at reducing<br>pesticide usage. An Integrated Pest Management<br>Plan (IPMP) has been developed for the project to<br>systematically monitor pesticide usage and<br>facilitate reduction in intensity through project<br>activities. |
| Physical Cultural Resources OP/<br>BP 4.11        | No         | There is no evidence of the presence of physical<br>cultural resources in the project area and no<br>project activity shall be conducted within or in<br>the vicinity of any identified physical cultural<br>resources.  |
| Indigenous Peoples OP/BP 4.10                     | No         | There are no known indigenous groups in the<br>entire Sindh province as identified under this<br>policy.   |
| Involuntary Resettlement OP/BP<br>4.12            | No         | No land acquisition is foreseen. All planned<br>project interventions will take place on private or<br>donated land.   |
| Safety of Dams OP/BP 4.37                         | No         | No dams shall be constructed or rehabilitated under this project.  |
| Projects on International<br>Waterways OP/BP 7.50 | No         | Now activity shall be conducted on international waterways.  |
| Projects in Disputed Areas OP/BP<br>7.60          | No         | There are no disputed areas in the provide of Sindh, Pakistan.   |

# II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

# **1.** Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

While most of the sub-projects are expected to be capacity building interventions with no significant social or environmental impacts, some value chain interventions, agricultural machinery usage and pesticide usage associated with the project can have adverse impacts that need to be mitigated at the planning stage. The potential impacts could be impacts related to construction of storage facilities to enhance value chain, construction of artificial insemination center, health and safety incidents resulting from usage of thrashers, tractors and other machinery deployed in agriculture sub-projects.

Following are some of the key negative environmental impacts that could arise from project activity. None of these are expected to be large scale, significant and/or irreversible;

• The subprojects under Component B if established in or near sensitive habitats such as protected areas can potentially cause ecological disturbances. This could be caused by changes in land form and habitat, habitat fragmentation, blockage of migration paths, water consumption and contamination. Similarly, the subprojects can potentially cause loss of precious ecological assets, if they are inappropriately located and encroach into forests/swamplands or historical/cultural buildings/areas, disrupt hydrology of natural waterways (including natural drainage particularly in southern Sindh where blockage of natural drainage is a serious issue), regional flooding, and drainage hazards.

• The facilities to be established under the value chain and post-harvest loss management subprojects may generate a wide range of waste effluents. These could include waste water from washing and cleaning operations, oils and oily water generated by machinery maintenance, leaked/ spilled fuels and oils, waste effluent discharges from the processing operation, animal wastes, and others. Uncontrolled discharges of these wastes and other effluents can potentially contaminate the soil, pollute the nearby water bodies and degrade their value for communities and ecology. Depending upon their constituents and extent, these discharges can potentially affect the soil fertility, pollute the drinking water sources, contaminate irrigation water thus affecting the crops, and degrade wetlands thus negatively affecting the ecology of the area including natural flora and fauna.

• The facilities to be established under the value chain and post-harvest loss management subprojects may potentially generate a wide range of solid wastes, including sludge produced by washing and cleaning operations, waste/rotten agriculture produce, animal secreta, wastage from packing operations, workshop wastes, and others. Inappropriate disposal of these wastes can potentially aggravate the solid waste management problems in the area, while also contaminating soil and water.

• The construction of subproject facilities can potentially cause short-term environmental and social issues such as loss of fauna soil erosion, soil and water contamination, noise and air pollution, and safety hazards for the nearby population. These issues in turn can potentially affect the cultivation fields, soil fertility, human health, ecological degradation, and public nuisance.

• Transportation, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation pose health and safety risks for the nearby community. Similarly, accidental release of potentially hazardous substances such as fuels, solvents, acidic and alkaline materials from the subproject facilities may potentially pose health and safety hazards for the nearby population.

• Occupational Health and Safety Hazards: Operation and maintenance of the subproject facilities may potentially cause occupational health and safety (OHS) risks for the workers. These risks may be associated with fugitive dust and gaseous emissions, fire and explosion, exposure to noise, electric shock, working on heights, body injuries caused by process equipment, working in

confined spaces, and other similar aspects.

• Vehicular traffic during facility construction and operation may potentially cause congestion on the local routes, generate noise, and pose safety hazards for the local population particularly for children and elderly people.

• The project may alter the scope and intensity of current pesticide usage regime, potentially reducing the usage intensity, though expansion of farming footprint may cause increase in pesticide usage in some locations.

# **2.** Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

Development of value chains under Component B of the Project may potentially cause intensification of cultivation, thus increasing the usage of crop inputs including irrigation water, fertilizers, pesticides, and herbicides. This in turn can potentially cause water shortage in an already water stressed area as well as soil and water contamination, having negative impacts on people, as well as on natural flora and fauna.

All planned project interventions will take place on individual's own land where the project targets individual producers. In case any minor areas of land will be needed for a project targeting a group of beneficiaries, such as construction of value addition facilities (such as cold storage, collection and processing centers), the land should either be: (a) private land obtained through compensation paid by the community (i.e., transaction between willing buyer and willing seller) or (b) land obtained through private voluntary donations, provided the donation will have minimal livelihood impact on the concerned person (less than 10 percent). Community purchases and private voluntary donations will be fully documented as required by the ESMF.

While the project support will target small and medium farmers, the participation by sharecroppers, tenants, landless, and women may be limited. In enhancing their participation, the project will develop a consultation framework as a part of the value chain development activities, which will help identify current roles and opportunities in the project implementation for these groups. The project's management information system (MIS) will track their level of participation in the project activities.

# **3.** Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

Under agriculture, the emphasis of the project is on horticulture crops and post-harvest management in rice. However, horticulture, though showing impressive growth in the agricultural sector is a minor contributor to provincial GDP when compared to the four major agricultural crops of wheat, rice, sugarcane and cotton. Alternative design scenarios were considered; these included:

Alternative 1: No investment project. The 'no-project' alternative is not acceptable since in that scenario, no direct investment would strategically promote sectoral growth for agriculture and its subsectors. Additionally, investments in agricultural sector with a focus on reaching to the small and medium farmers have been ad hoc at best. As a result, promotion of horticulture while remains a priority for the GoSindh, few resources are available to address the subsectors many challenges that limit its growth.

Alternative 2: Focus on different horticulture crops. Mangos and bananas are both economically valuable crops in Sindh, and offer a moderate export potential if varietal selection were improved. However, these crops are primarily grown by larger farmers, who are able to access the required investment capital for production units that are economically viable. In addition, both crops have received significant prior support from donors and government and appear to be thriving. Nevertheless, their contribution to the economy of Sindh is lower than that of dates, onions and

### chilies.

Alternative 3: Focus on the major crops. Wheat, rice, sugarcane and cotton are the backbone of the Sindh agricultural economy. However, to make an impact in these crops would need considerable amounts of investment, and would be beyond the scope of the first phase of this program, which was tasked with showing measurable impact in the first six years. A second consideration is that fact that the major four crops all receive considerable government subsidies in one form or another and operate in distorted market following political rather than economic imperatives.

# 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.

An Environmental and Social Management Framework (ESMF) has been prepared to address the potential environmental and social issues that may emerge from project activity. The ESMF provides initial screening criteria to firstly assess which subprojects will not be able to quality for project funding based on safeguards issues. These include projects within the boundaries of any critical natural habitat or potentially affecting such a habitat, large scale linear infrastructure projects and other projects involving extensive environmental and social impacts which are irreversible. For all other relevant project typologies, impacts are identified, mitigation measures are developed and checklists are proposed. For projects involving infrastructure development, a template and sample Environmental and Social Management Plan (ESMP) is included.

The ESMF also includes institutional measures that will be adopted to ensure compliance with the ESMF. This includes nomination of a focal person for safeguards at each of the two PMUs as well as recruitment of an environmental specialist and a social specialist to assist in monitoring and documentation of compliance with the ESMF. A training and capacity building program has also been proposed which will be led by the environment and social specialists.

Further, an Integrated Pest Management Plan (IPMP) has been developed to facilitated use of IPM techniques towards reduction of pesticide usage intensity specially in project related activities, without compromising on agricultural productivity.

Institutional capacity building and human resource measures have been proposed in the ESMF to fill any capacity gaps at the agriculture and livestock departments. The agriculture department extensions have been engaged in other World Bank projects in the agriculture sector within the province and capacity and human resource developed there shall be brought to fore here to assist in ensuring compliance with safeguards policies. There is strong consultant support available in the province in the agriculture and environmental sectors, and they shall be engaged to further enhance departmental capacity especially in monitoring and reporting of environmental compliance.

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

As part of the development of the ESMF consultations have been completed with key stakeholders. Additionally, as part of the investments design for agricultural crops, detailed consultations with the communities, small and medium farmers and producers groups, sharecroppers, tenants, landless laborers, women, middlemen, traders, private sector, NGOs, and donor agencies were held. Feedback from these consultations is used in preparing ESMF. The process of stakeholders' consultations will continue during project implementation in preparing and implementing the actual investment level mitigation plans, where ever required. Purpose of such consultations would be to ensure increased participation of the stakeholders in the planning and implementation of the project activities at the sub-project level.

The ESMF as well as the Urdu and Sindhi translations has been disclosed on the official websites of GoSindh, Agriculture Department, and Livestock Department. Hard copies of these documents

will also be maintained in the PMUs and PIUs as well all regional offices of the client. Copies shall also be sent to relevant stakeholders including the provincial Environmental Protection Agency. In addition, the ESMF has been disclosed on WB InfoShop.

### **B.** Disclosure Requirements

| Environmental Assessment/Audit/Management Plan/Other  |                                   |  |  |  |
|---|-----------------------------------|--|--|--|
| Date of receipt by the Bank   | 17-Jul-2013                       |  |  |  |
| Date of submission to InfoShop  | 24-Sep-2013                       |  |  |  |
| For category A projects, date of distributing the Executive<br>Summary of the EA to the Executive Directors |                                   |  |  |  |
| "In country" Disclosure   |                                   |  |  |  |
| Pakistan  | 18-Sep-2013                       |  |  |  |
| Comments:   |                                   |  |  |  |
| Pest Management Plan  |                                   |  |  |  |
| Was the document disclosed prior to appraisal?  | Yes                               |  |  |  |
| Date of receipt by the Bank   | 14-Sep-2013                       |  |  |  |
| Date of submission to InfoShop  | 24-Sep-2013                       |  |  |  |
| "In country" Disclosure   |                                   |  |  |  |
| Pakistan  | 18-Sep-2013                       |  |  |  |
| Comments:   | · · ·                             |  |  |  |
| If the project triggers the Dest Management and/or Dhysical   | Cultured Degeneration alising the |  |  |  |

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 [×]          | No [ | ] | NA [ | ] |
| If yes, then did the Regional Environment Unit or Sector<br>Manager (SM) review and approve the EA report?  |                  | No [ | ] | NA [ | ] |
| Are the cost and the accountabilities for the EMP incorporated in the credit/loan?  | Yes [×]          | No [ | ] | NA [ | ] |
| OP/BP 4.04 - Natural Habitats   |                  |      |   |      |   |
| Would the project result in any significant conversion or degradation of critical natural habitats?   | Yes [ ]          | No [ | ] | NA [ | ] |
| If the project would result in significant conversion or<br>degradation of other (non-critical) natural habitats, does the<br>project include mitigation measures acceptable to the Bank? | Yes [ ]          | No [ | ] | NA [ | ] |
| OP 4.09 - Pest Management   | 1                |      |   |      |   |
| Does the EA adequately address the pest management issues?  | Yes [ × ]        | No [ | ] | NA [ | ] |
| Is a separate PMP required?   | Yes [ $\times$ ] | No [ | ] | NA [ | ] |

| If yes, has the PMP been reviewed and approved by a safeguards specialist or SM? Are PMP requirements included   | Yes $[\times]$ | No [ | ] | NA [ | ] |
|--|----------------|------|---|------|---|
| in project design? If yes, does the project team include a Pest  |                |      |   |      |   |
| Management Specialist?   |                |      |   |      |   |
| The World Bank Policy on Disclosure of Information   | I              |      |   |      |   |
| Have relevant safeguard policies documents been sent to the<br>World Bank's Infoshop?  | Yes [×]        | No [ | ] | NA [ | ] |
| Have relevant documents been disclosed in-country in a public<br>place in a form and language that are understandable and<br>accessible to project-affected groups and local NGOs? | Yes [×]        | No [ | ] | NA [ | ] |
| All Safeguard Policies   |                |      |   |      |   |
| Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?                        | Yes [×]        | No [ | ] | NA [ | ] |
| Have costs related to safeguard policy measures been included<br>in the project cost?  | Yes [ × ]      | No [ | ] | NA [ | ] |
| Does the Monitoring and Evaluation system of the project<br>include the monitoring of safeguard impacts and measures<br>related to safeguard policies?                             | Yes [×]        | No [ | ] | NA [ | ] |
| Have satisfactory implementation arrangements been agreed<br>with the borrower and the same been adequately reflected in<br>the project legal documents?                           | Yes [ × ]      | No [ | ] | NA [ | ] |

# **III. APPROVALS**

| Task Team Leader:               | Name: Tahira Syed              |                   |  |
|---------------------------------|--------------------------------|-------------------|--|
| Approved By                     |                                |                   |  |
| Regional Safeguards<br>Advisor: | Name: Francis V. Fragano (RSA) | Date: 11-Dec-2013 |  |
| Sector Manager:                 | Name: Simeon Kacou Ehui (SM)   | Date: 14-Dec-2013 |  |