

PROGRAM-FOR-RESULTS SUPPORT OPERATION
FOR
TRANSFORMATION OF AGRICULTURE SECTOR PROGRAM PHASE 4

**Draft Environmental and Social
Systems Assessment (ESSA)**

March 2018



Prepared by the World Bank

List of Acronyms

ESSA	Environmental and Social Systems Assessment
ESIA	Environmental and Social Impact Assessment
ESIM	Environmental and Social Implementation Manual
LAFREC	Landscape Approach to Forest Restoration and Conservation
LVEMP	Lake Victoria Environmental Management Program
LWH	Land Husbandry, Water Harvesting and Hillside Irrigation
MINAGRI	Ministry of Agriculture and Animal Resources
NAEB	National Agricultural Export Board
PAP	Program Action Plan
PAPs	Program Affected Peoples
PforR	Program for Results
PMP	Pest Management Plan
RAB	Rwanda Agriculture Board
RAP	Resettlement Action Plan
REMA	Rwanda Environmental Management Agency
RNRA	Rwanda Natural Resources Authority
RFRDP	Rwanda Feeder Roads Development Project
RPF	Resettlement Policy Framework
RSSP	Rural Sector Support Project
SPIU	Single Project Implementation Unit
WB	World Bank

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Overview

1. An Environmental and Social Systems Assessment (ESSA) was undertaken by the World Bank team for the proposed Program as per the requirement of the Bank's Policy Program for Results Financing. The aim of the ESSA was to review the capacity of existing government systems to plan and implement effective measures for environmental and social impact management and to determine if any measures would be required to strengthen them. Such measures will be spelled out in a Program Action Plan (PAP).

The specific objectives of the ESSA are to:

- a) identify the potential environmental and social impacts/risks applicable to the Program interventions,
- b) review the policy and legal framework related to management of environmental and social impacts of the Program interventions,
- c) assess the institutional capacity for environmental and social impact management within the Program system,
- d) assess the Program system performance with respect to the core principles of the Program-for-Results (PforR) instrument and identify gaps in the Program's performance, and
- e) describe actions to fill the gaps that will input into the Program Action Plan (PAP) in order to strengthen the Program's performance with respect to the core principles of the PforR instrument.

2. Approach and Methodology: This ESSA is an update to the original assessment conducted by the Bank for PSTA3 PforR support to assess the key implementing agencies: Ministry of Agriculture and Animal Resources (MINAGRI), Rwanda Agriculture Board (RAB), National Agricultural Export Board (NAEB), and other relevant stakeholders like Rwanda Environmental Management Agency (REMA), Rwanda Natural Resources Authority (RNRA), the District Technical Expert Teams and private sector representative agencies. The assessment evaluated institutional capacity to achieve environmental and social objectives against the range of environmental and social impacts that may be associated with the Program. The ESSA provides a review of relevant government systems and procedures that address environmental and social issues associated with the Program. The ESSA describes the extent to which the applicable government environmental and social policies, legislations, program procedures and institutional systems are consistent with the six 'core principles' of Program for Results Policy and recommends actions to address the gaps and to enhance performance during Program implementation. National and District level consultations were organized with stakeholders for feedback on the implementation of provisions to enhance transparency and accountability and other related environment and social issues. One of the key purposes of the consultations was to provide detailed local information and views on experiences with transparency and the delivery of services through technology, from the key relevant stakeholders.

3. The core principles of ESSA for this program are to:

1. Promote environmental and social sustainability in the Program design; avoid, minimize, or mitigate adverse impacts, and promote informed decision-making relating to the Program's environmental and social impacts;
2. Avoid, minimize, or mitigate adverse impacts on natural habitats and physical cultural resources resulting from the Program;

3. Protect public and worker safety against the potential risks associated with: (i) construction and/or operations of facilities or other operational practices under the Program; (ii) exposure to toxic chemicals, hazardous wastes, and other dangerous materials under the Program; and, (iii) reconstruction or rehabilitation of infrastructure located in areas prone to natural hazards;
 4. Manage land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement, and assist the affected people in improving, or at the minimum restoring, their livelihoods and living standards;
 5. Give due consideration to the cultural appropriateness of, and equitable access to, Program benefits, giving special attention to the rights and interests of the Indigenous Peoples and to the needs or concerns of vulnerable groups, and
 6. Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes. ESSA notes that the Program does not involve any area with such characteristics.
4. The various steps undertaken in the ESSA process were as follows:
- a) **Baseline Information Collection:** The analysis of information and data covered the environmental and social context of the country, the current status of its Agriculture, Forestry and Rural Development programs, the experience of implementation of the previous Bank supported projects (PSTA3 PforR, LWHP, RSSP, LVEMP and LAFREC) through a review of Environmental & Social Management Frameworks and Plans, ESIA, Resettlement Policy Frameworks, Resettlement Action Plans (RAPs), Resettlement Process Framework, Social Assessment, Implementation Manuals and relevant GoR documents and publications.
 - b) **Field Reviews and Study:** Field reviews on environmental and social effects were undertaken as part of preparation and implementation support missions for Bank supported projects. For example the field observations reflected in the ESSA are based on the visits to the Districts undertaken by the Bank's Environmental and Social staff for similar types of activities under LAFREC, LVEMP, LHW, and RSSP.
 - c) **Consultations:** A formal consultation on the draft ESSA was organized on **XXXX, 2018**, with a view to validate the information presented in the ESSA and elicit inputs from the key stakeholders. A report on this consultation is annexed to this report (Annex 1). The consultation on the original ESSA was held on **XXXX, 2018**. Feedback from the key stakeholders in the GoR has been instrumental in identifying the actions that serve as inputs into the PAP. This feedback was sought both through the formal consultation events as well as through meetings held during the Bank missions.
 - d) **Public Disclosure:** The draft ESSA was publicly disclosed on the Bank's website (InfoShop) and on MINAGRI website on August 26, 2014. The final updated ESSA was also disclosed on the World Bank's and MINAGRI websites on **XXXX**.
5. **Analysis:** The ESSA analysis essentially follows "Strengths, Weaknesses, Risks and Opportunities" approach. The following sections provide further information: (1) Program Description; (2) Description of Applicable Environmental and Social Management Systems; (3) Program Capacity and Performance Assessment; (4) Assessment of Program Systems Relative to Core Principles; (5) Inputs to the Program Action Plan; (6) Recommendation for Program Risk Rating; and (7) Inputs to the Program Implementation Support Plan.

6. **The overall environmental and social risks of the Program are assessed as Substantial.** The overall environmental and social risks potentially associated with PforR support for PSTA 4 activities are

anticipated to be substantial, due to introduction of PPP infrastructure projects that will require agencies either develop new business models or scale up existing approaches. The Program will address this risk by establishing appropriate selection and performance criteria. These actions will be included in the DLI 6 and PAP.

7. **The ESSA concluded** agriculture sector Environmental and Social systems in terms of policies and procedures as adequate for the Program implementation, albeit lacking in human and financial resources, especially for coordination and monitoring of activities at the local level. MINAGRI and RAB will also utilize additional environmental & social expertise and continue capacity building efforts to strengthen the risk management capacity. With diligent management of the environmental and social risks and implementation of the identified actions to address the gaps, the Program implementing agencies can reduce environmental and social risks during implementation of the proposed PforR operation.

1. Program Description

1.1 Government Program Description

MINAGRI's PSTA 4 is the Sector Strategic Plan for Agriculture under Rwanda's National Strategy for Transformation (NST 1)¹. Designed to guide public investments in agriculture during the period 2018-24, PSTA 4 sets out the estimated required resources for the agricultural sector in those 6 years and contributes to the three NST Pillars of economic, social, and governance transformation toward the aspirations of Vision 2050. Vision 2050 emphasizes the importance of agro-processing and technology-intensive agriculture with a commercial focus under its Pillar III: Transformation for Prosperity. Furthermore, the PSTA 4 is the implementation plan for the 2017-2030 NAP, which sets the policy framework for a productive, green and market-led agriculture sector towards 2030. The NAP responds to the rapid changes experienced in the sector and anticipates key trends and concerns including pressure on land, the need to feed the cities², the absorption of rural youth into the labour market and the need to raise productivity of smallholder encompasses agriculture development activities across all relevant institutions and implementing agencies.

MINAGRI's PSTA 4 is a continuation of PSTA 3 and builds on its successes and lessons learned. To better respond to emerging and structural challenges it presents a shift from PSTA 3 in the following ways:

- a. **Stronger role of private sector (including farmers) with government shifting from market actor to market enabler.** PSTA 4 emphasizes the provision of public goods while downsizing the direct government involvement in production, processing, and marketing. Moreover, the GoR will explore new models to engage private sector investment in transformational activities such as infrastructure provision and management, innovation, and improved agricultural markets.
- b. **Focus on farm profitability and commercialization.** PSTA 4 recognizes that limited land resources and growing population requires an increased focus economic land productivity as this will be the key to increased returns on capital and labor. Economic land productivity and incomes will increase by introducing of "land-saving technologies" to: 1) increase yields; 2) improve logistics and diminish post-harvest losses; 3) access new markets; 4) adopt crops and animal products generating higher returns on investment and labor.
- c. **Use 'food systems approach' for enhanced nutrition and household food security.** In the PSTA 4, MINAGRI will collaborate with other stakeholders to improve food availability, accessibility, stability, and utilization. Resilience and risk mitigation strategies for food production systems will continue to be developed, particularly at the household level. Making agriculture and food systems nutrition-sensitive necessitates acting to ensure the nutrient quality of each commodity is preserved and or enhanced throughout the entire value chain.
- d. **Enhance climate smart production.** PSTA 4 seeks to build resilience through on-farm measures and enabling actions to increase productivity. Firstly, maintaining and promoting farmers' practice of mixing crop varieties mitigates certain risks, including the spread of pest and diseases as well as ensuring dietary diversity. Secondly, PSTA 4 emphasizes alternative land management to

¹ The NST follows the Economic Development and Poverty Reduction Strategy 2 (EDPRS 2, ending in June 2018) and will implement the last years of Vision 2020 and the first four years of the Vision 2050.

²The NST targets urbanisation to reach 35 percent by 2024 from 17.3 percent in 2014.

complement terracing with comprehensive climate smart soil and integrated watershed management.

- e. **Focus on diversified higher value agricultural products (horticulture, vegetable, poultry, pork, fisheries).** PSTA 4 focuses on facilitating private sector investment in fruit and vegetable production through upgrading provision of SPS/quality standards as well as supporting demonstration of better technologies such as green houses, hydroponics and other small-scale irrigation solutions.
- f. **Strengthen Innovation and Extension.** Agricultural transformation will require research and innovation at the central level - introducing new varieties, disease mitigation, etc. – as well as farmers’ knowledge and skills to support specialization, intensification, diversification, and value addition. ICT can increase the impact of extension and improve market information, service delivery, financial inclusion, climate risk adaptation, and farmer feedback.
- g. **PSTA 4 seeks to also redefine the way MINAGRI works with key stakeholders in the sector.** Specifically, efforts are focused on clarifying, adjusting or establishing coordination mechanisms that are required for more effective and efficient management of public investments and significant increases in private sector investment.

While MINAGRI and its implementing agencies RAB and NAEB play the central role, other institutions hold significant mandates under the strategy. PSTA 4 is therefore a guiding document for stakeholders beyond MINAGRI and its agencies, as reflected in the focus on joint planning and budgeting for PSTA 4 implementation. The strategy builds on achievements and will introduce new ways of improving crop and animal resources productivity and production to increase the wealth in the agriculture sector.

PSTA 4 is structured around 4 Priority Areas:

- **Priority Area 1: Innovation and Extension** is the knowledge base for Priority Area 2 and 3. The focus is to improve agronomic knowledge and technology in terms of basic research and innovation, development of good extension services, as well as knowledge and information further down the value chain.
- **Priority Area 2: Productivity and Resilience.** The traditional core responsibility of MINAGRI to increase production of crops and animal resources. PSTA 4 will see increased attention to ensuring that production is nutrition sensitive, sustainable, and resilient. Priority Area 2 feeds the value chains in Priority Area 3.
- **Priority Area 3: Inclusive markets and value addition** improves markets and linkages between production and processing. This includes key input markets such as fertilisers, insurance and finance as well as upstream activities such as aggregation, promotion of value addition, market infrastructure and export readiness.
- **Priority Area 4: Enabling Environment & Responsive Institutions** provides the regulatory framework and defines public sector involvement. PSTA 4 aims to improve evidence-based policymaking through better collection and handling of information and enhanced capacity for analysis and policy development, and to improve the planning process, particularly by addressing

coordination between stakeholders.

1.2 PforR Program Scope

The Program Development Objective is *to improve the capacity of national public agricultural institutions, to enable commercialization of agriculture value chains in Rwanda.*

The proposed operation will support the first three years (2018 – 2021) of the six-year strategy of the PSTA 4 (2018-2024). This will allow the possibility of supporting the final three years through additional financing, subject and without prejudice to normal Bank approval procedures. The activities to be supported under the PforR Program correspond to the MINAGRI PSTA 4 agenda.

The strategic focus of the proposed PforR operation will be on strengthening the capacity of MINAGRI to increase private sector investment and to enable the commercialization of key agriculture value chains in Rwanda's agriculture sector. Based on value chain diagnostics (further elaborated in the technical assessment ANNEX 4) and taking into consideration the Bank's comparative advantage with regard to the PSTA 4 Priority areas, the PforR Program is constructed around an organizing framework of the following 4 results areas:

Results Area 1: Policy and Organizational Reform – aligned with PSTA 4 Priority Area 4: The PforR will seek to improve the structure and capability of MINAGRI in order to strengthen sector analysis, associated policy reforms and design/ introduce relevant financing mechanisms/business models for attracting private sector investment. To demonstrate this new capacity by producing a framework document to guide processes that will leverage private sector financing. To establish the foundations for digital data systems to improve management information and enable greater innovation. To establish mechanism that will enable greater interagency coordination and communication.

Results Area 2: Enabling Agric Commercialization - aligned with PSTA 4 Priority Area 4: The second PforR Results Area focuses on specific interventions to improve the quality of public investments in essential value chain services to leverage commercial agriculture. This includes key areas such as infrastructure and research, by introducing new business models that will link public investments to commercial markets and leverage increased levels private sector investments. PSTA 4 advocates for maximizing the effectiveness and efficiency of public investment by leveraging increased private sector investment in service provision and delivery/ management of agricultural infrastructure.

Results Area 3: Delivery of Improved Agric Value Chain Services - aligned with PSTA 4 Priority Areas 3 & 4. The PforR program will support the fostering competitive agricultural value chains requires the public sector to provide critical services to support production, processing, logistics, marketing and the like. This approach is consistent with MFD principles, the public function supported by the program is to introduce and accelerate the expansion of services that de-risk agricultural investments by improving dialogue between private and public actions, increasing the use of private sector service delivery (e.g. out-grower schemes and productive partnerships), and expanding access to information and financial services. These measures will help achieve a key anticipated outcome from PSTA 4 will be improved productivity and inclusiveness of agricultural market systems and increased value addition and competitiveness of diversified agricultural commodities, for domestic, regional, and international markets.

Results Area 4: Efficiency in Public Expenditures - aligned with PSTA 4 Priority Area 4. 6The PforR Program seeks to incentivize the dual approach of supporting: (i) a very specific action that demonstrates improved efficiency in public expenditure of the core delivery agency RAB; and (ii) a more general effort to improve the overall expenditure among the three main agencies that account for the largest share of sector

expenditure. Since RAB is the agency with responsibility for key services, improvements in the budget execution system will be undertaken with the goal of improving their delivery function. Standards for budget execution help to maximize the impact of government spending and the ability to meet such standards signals weaknesses that undermines value for money. It also undermines the argument for additional public resources since there are associated concerns over malfeasance in execution that render MINECOFIN reluctant to allocate additional resources. Previous audits of RAB have not been approved because of non-compliance in several important areas. Prior qualified audits have highlighted in detail where weaknesses lie and both agencies are aware of where improvements are needed.

The Boundaries of the PforR Program are summarized below in Table 1

Table 1: Government program and PforR Program Boundary Comparison

Item	Government program	PforR Program
Title	PSTA 4	PforR Program
Objective	Transformation of Rwandan agriculture from a subsistence sector to a knowledge-based value creating sector, that contributes to the national economy and ensures food and nutrition security in a sustainable and resilient manner	To improve the capacity of national public agricultural institutions, to enable commercialization of agriculture value chains in Rwanda
Timeframe	2018-2024	2018-2021
Program Cost	US\$ 1.5 billion	US\$ 292.2 million
Activities	<p>Priority Area 1: Innovation and Extension</p> <ul style="list-style-type: none"> • Research and innovation • Improved soil health and fertility • Conservation of biodiversity • Extension and advisory services • Skills Development <p>Priority Area 2: Productivity and Resilience</p> <ul style="list-style-type: none"> • Land husbandry and crop production diversification • Irrigation • Animal resources and production systems • Nutrition sensitive agriculture • Mechanisms for resilience <p>Priority Area 3: Inclusive markets and value addition</p> <ul style="list-style-type: none"> • Market linkages • Market risk and financial 	<p>PforR Program Results Area 3</p> <ul style="list-style-type: none"> • Innovation (partnership agreements with universities and private sector) <p>PforR Program Result Area 2</p> <ul style="list-style-type: none"> • Private sector extension and advisory services <p>PforR Program Results Area 2</p> <ul style="list-style-type: none"> • Land husbandry (focused on links to commercialization) • Irrigation (focused on links to commercialization) <p>PforR Program Result Area 2</p> <ul style="list-style-type: none"> • Market Links (infrastructure for value chain development storage, cold trucks, etc.) <p>PforR Program Result Area 4</p>

	<p>services</p> <ul style="list-style-type: none"> • Quality assurance and regulations <p>Priority Area4: Enabling Environment & Responsive Institutions</p> <ul style="list-style-type: none"> • Agriculture institutional development • Evidence policy and development and regulatory framework • Commercialization of value chains • Planning, coordination and budgeting • Knowledge management 	<ul style="list-style-type: none"> • Agriculture Institutional Development • Evidence policy development • Commercialization of value chains • Planning, coordination and budgeting
Geographic Scope	National	National

The Program boundary for PforR financing will not support the following:

- h. Areas to be covered by proposed financing World Bank investments e.g. Research
- i. general mechanization nor the general distribution of subsidized improved seeds through land consolidation efforts promoted under PSTA 3.
- j. Financing infrastructure for Sanitary and Phytosanitary (SPS)

1.3 Disbursement Linked Indicators and Verification Protocols

An assessment of PSTA 4 identified key bottlenecks that have restricted MINAGRI progress towards becoming a market enabler, these are as follows:

- The MINAGRI (including RAB & NAEB) organizational structure and its various specialties limits the capacity of the ministry to fully fulfil its mandate in policy development, sector coordination, resource mobilization and M&E.
- Access to key infrastructure (irrigation, post-harvest technology, etc.) remains limited. Levels of private sector investment have consistently fallen below targets set by MINAGRI. Input supply system are not sufficiently responsive to the demand of production systems
- The state services/interventions are strongly supply driven. The majority of sector expenditures channelled into production-focused extension tasks delivered by the state. Insufficient incentives for agribusinesses to collaborate with farmer groups.
- Need to maximize the impact of government spending for efficiency and improvements in the delivery of public services budget process (including execution). Standards for budget execution are poor and the inability to meet such standards signals weaknesses that undermines value for money.

These bottlenecks provide a set of priorities that reflect the Bank’s mandate and comparative advantage. In this context, the program has been focused on four Results Areas. These reflect the concept of Maximizing Finance for Development by focusing on the overall policy context (Results Area 1), recognizing that a key element of the new NAP/ PSTA 4 is leveraging private sector investment in the commercialization agenda (Results Area 2), but that there remains a need for the public provision of services alongside the greater use of private sector delivery mechanisms (Results Area 3) and that where public provision remains, improving the effectiveness of those public services – including value chain infrastructure – is key (Results Area 4).

The selected DLIs represent key milestones in the achievement of Program outcomes. Indicators that help to address multiple Results Areas were given priority. In order to keep the number of DLIs manageable, some indicators were consolidated into one DLI.

Table 2: Summary of Disbursement Linked Indicators

Disbursement-Linked Indicator	Definition	Target	Total Amount (US\$ millions)	Responsible
	Results Area 1: Policy and Organizational Reform			
DLI 1: Organizational Development Roadmap successfully prepared and implementation on track	<ul style="list-style-type: none"> Organizational review, including capacity needs assessment of MINAGRI completed and new functional structures in place (year 1) OD Plan for MINAGRI prepared and approved (year 2) Upgrade of HR management function completed (year 3) 	Yes Yes Yes	Total 10 4 4 2	MINAGRI
DLI 2: Improved analytical and policy reform competencies demonstrated	<ul style="list-style-type: none"> Strategy for leveraging Private Investment with Implementation Plan published (year 1) Annual Report by MINAGRI on Public-Private Investment in Agriculture published (year 2) Agricultural input subsidy schemes reviewed, alternative models for increasing efficiency assessed, reforms agreed and implemented (year 3) 	Yes Yes Yes	Total 10 4 2 4	MINAGRI

<p>DLI 3: Digital information platforms designed and operational</p>	<ul style="list-style-type: none"> • A common data warehouse platform is designed and ready for use, whereby existing data in MIS and ALIS I is fully interfaced (at least down to the level of all districts) – (year 1) • The Farmer registration application and ALIS II are fully interfaced with MIS and ALIS I in the common data warehouse platform. Both, Farmer registration and ALIS II, will hold data covering all districts - (year 2) • The Livestock registration application (holding cow data with national coverage) will be interfaced with MIS, ALIS I and II, Farmer registration application in the common data warehouse platform; • Sector Performance Dash Board is in place and publicly accessible online, whereby it provides reports on national agricultural macro indicators, national Indicator of Food Security and PSTA 4 results indicators (year 3) 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>2</p> <p>2</p> <p>2</p> <p>2</p>	<p>Total 8</p> <p>MINAGRI</p>
<p>DLI 4: Mechanism to strengthen Agriculture Public-Private Dialogues (Ag. PPD) and Agriculture Value Chain Platforms designed and implemented</p>	<ul style="list-style-type: none"> • Two mechanisms designed and budgeted: (1) National Agriculture Public-Private Dialogues (Ag. PPD) on themes with strategic relevance (2) Commodity value chain platforms (year 1) • Two national Agriculture PPDs held and at least 3 Agriculture VC platforms established with operating plans (year 2) • Additional 2 Agriculture PPDs held (year 3) • Agriculture VC platforms are fully functional and yielded evidence of satisfactory results (as per M&E of operating plan) (year 3) 	<p>100%</p> <p>100%</p> <p>100%</p>	<p>2</p> <p>2</p> <p>4</p>	<p>Total 8</p> <p>MINAGRI</p>
<p>Results Area 2: Enabling Agricultural Commercialization</p>				
<p>DLI 5: New irrigation and terracing area</p>	<ul style="list-style-type: none"> • # of ha (out of 23,296 ha of total scheme area) identified, developed and put under recognized PPP (year 2) - disaggregated by 		<p>Total 15</p>	

identified, developed and/or managed where commercial viability has been a determining appraisal criterion	<ul style="list-style-type: none"> (i) Irrigation area (ii) Area using radical/progressive terraces <ul style="list-style-type: none"> • # of ha (out of 31,504 ha of total scheme area) identified, developed and put under recognized PPP (year 3)- disaggregated by <ul style="list-style-type: none"> (i) Irrigation area (ii) Area using radical/progressive terraces 	2005			RAB
		1260	5		
		745	2.5		
		3990			
		1680	5		
		2310	2.5		
DLI 6: Volume of private sector investment (in US\$) matching public financing in PPP infrastructure project	Volume of private sector investment (in US\$) matching public financing in PPP infrastructure projects <ul style="list-style-type: none"> • # of US\$ Mil (year 2) • # of US\$ Mil (year 3) 	4.00	7.5	Total 15	RAB and/or NAEB
		7.15	7.5		
	Results Area 3: Delivery of Improved Agric Value Chain Services				
DLI 7: Private sector extension service models designed, launched and achieving positive response	<ul style="list-style-type: none"> • farm households reached by private advisory services (non-outgrower scheme) (year 2) • additional farm households reached by private advisory services (non-outgrower-schemes) (year 3) • new farm household participating in outgrower schemes (Year 3) 	6,000	5	Total 15	RAB
		8,000	5		
		10,000	5		
	Results Area 4: Efficiency in Public Expenditures				
DLI 8: Reform of RAB	<ul style="list-style-type: none"> • Implementation Plan for RAB Restructuring Order prepared and approved by its Board (year 1); 	Yes	4	Total 9	RAB

	<ul style="list-style-type: none"> • Deviation between budget and outturn expenditure 2018/19 (year 2); • Unqualified audit of RAB (year 3) 	0	2	
		Yes	3	

1.4 Proposed infrastructure activities under PforR operation

The proposed infrastructure activities of the PforR operation include: (a) land husbandry activities, including progressive, bench or radical terraces, (b) small-scale irrigation schemes, and (c) small scale agricultural value-chain infrastructure (e.g. greenhouses, seed drying beds, grain mills, etc.). The activities include public and private-public partnership type of interventions.

The site selection process for PforR entails conducting: (1) feasibility studies, including environmental and social screening to exclude sites with high risk, irreversible large scale environmental and social impacts; (2) based on the result of the screening, an ESIA and/or social assessment / resettlement action plan is to be developed, which shall include cumulative impacts considerations and recommendations for climate change adaptation for project design; and (3) findings of ESIA and social assessment are to be incorporated into the project design and, where applicable, a RAP is to be implemented before commencement of civil works on the site.

The type of investments under PPP arrangements to be supported by this PforR in Years 2 and 3 of implementation will be explicitly outlined in the Private Sector Leveraging Strategy that will be developed under DLI2 in Year one of the Program. This Strategy will include sections on the criteria for project selection, contract governance/monitoring arrangements and social and environment conditions. The strategy will draw best practice from across the Government and from assessment systems currently being piloted within MINAGRI, NAEB and RAB. Identification and inclusion of the best practices is envisioned to be incorporated into the Leveraging Strategy. In addition, a negative list of activities will be developed as part of the Leveraging strategy to maintain the proposed interventions in compliance with the Bank PforR policy.

DLI 5 – the share of the total new irrigation and terracing area to be developed under PSTA4, with area eligible for inclusion in the measure to be subject to a PPP (where commercial viability is a key characteristic). Private partner in the PPP can be:

- a commercial farmer serving as a private irrigation operator, or as an outgrower farm scheme manager
- Farmers/Water User Groups/Youth cooperatives formally made responsible for maintaining the tertiary irrigation network or terracing structures
- A private operator that is responsible for operating and maintaining the entire system, and farmers pay a tariff that covers operating and maintenance costs.

And utilize on of the following contractual forms:

- Operation, Management and Maintenance (OMM) contract
- Infrastructure concession
- Farm service agreement
- Hub farm agreement

Formally agreed ‘Productive Alliances’ would also fall under the category of a recognized PPP (see indicator reference sheets of core results indicators for more details).

Under DLI 6, it is anticipated that the GoR will continue to focus on small scale to medium scale PPP agricultural infrastructure projects. The basis for establishing the ‘volume’ of a private sector investment’ is the PPP agreement signed between the private firm and the government and brokered through a competitive financing program (established as per the Private Investment Strategy launched by MINAGRI).

PPP finance refers to a long-term contractual arrangement between a public entity or authority and a private entity for providing a public asset or service in which the private party bears significant risk and management responsibility.

The types of investments will include the following:

- Greenhouses (vegetables and flowers) PPP arrangement
- Hydroponics (vegetative crops: Irish potatoes, cassava, etc.) PPP arrangement
- Construction, rehabilitation, provision of equipment's and maintenance of drying grounds

1.5 Environmental Effects of the PforR Program

1.5.1 Potential Adverse Environmental Impacts

The environmental impacts of the individual program activities are not anticipated to be large scale or irreversible. The results identified in the program do not require any civil works that may have high risks with large scale irreversible impacts on environment. Based on the analysis of GoR regulatory system and previous activities implemented by MINAGRI within the WB-supported portfolio, the program is not likely to have significant impacts on natural habitats or create environmental pollution, with the exception of temporary localized construction phase impacts. The program is not likely to cause negative changes in land use pattern and/or resource use. Positive changes in resource use would be promoted through new sustainable irrigation schemes included in the operation.

With its many hills and rivers, Rwanda has a vulnerable terrain to environmental degradation from soil erosion. Good environmental practice needs to be closely monitored and mainstreamed into soil conservation programmes, watershed management, marshland irrigation schemes and the use of inorganic fertilisers and pesticides. Rural feeder roads must be rehabilitated with use of sustainable practices to minimize impacts from runoff and soil erosion. Climate change is expected to generate more extreme events in the region, including increased temperatures producing droughts and high rainfall producing floods and landslides. It is therefore vital to plan for adaptation measures to address the expected impacts of climate variability in all development investments. MINAGRI extension workers and local level staff need maintain

the focus on, including additional training in sound environmental management in agriculture and related investments.

The Assessment notes that although the individual investments have an average moderate environmental and social risk, each needs to be screened for cumulative effects and potential sensitivities of each proposed investment site. The overall risk of the Phase 2 PforR program is higher compared to the Phase 1, with the increasing role of participation of private sector in land husbandry and irrigation schemes development and implementation. However, such risk can be readily measured given the GoR environmental and social systems in place and diligent attention to monitoring and enforcement of the government policies.

Examples of specific potential adverse environmental impacts include:

- **Water resources:** One of the subprograms under PforR is dedicated to irrigation infrastructure. In addition, the water resources can be negatively affected by other subprograms, such as land husbandry, rural road rehabilitation and application of agro-chemicals. While many of the proposed irrigation structures will include canals, some may include small dams. Such dams financed under PforR will have similar profile to RSSP2-3 projects. As with any irrigation structure, these dams may have safety related risks, which were effectively managed by GoR during RSSP investments preparation. Other potential impacts include water quality and quantity degradation (both surface and ground water), surface water sedimentation, and spread of water borne diseases.
- **Natural Habitats:** Potential impacts include introduction of invasive flora species; loss of high value trees especially those with medicinal value; and potential damage to aquatic habitats. The Program will need to ensure that ecologically important areas are not negatively affected, according to GoR environmental regulations. Such areas of ecological sensitivity include the National Parks (Volcanoes, Akagera and Nyungwe Forest), as well as other protected areas, such as forests (e.g. Gishwati and Mukura), lakes, such as Muhazi, Cyambwe, Rwampanga, Rweru, Nasho, Gisaka, Bugesera, and the Northern lakes (Bulera and Ruhondo).
- **Soil Erosion:** Potential adverse impacts include soil erosion and quality deterioration, resulting in sediment load into the near water bodies change in soil salinity, deforestation. Soil conservation, however, has been identified as a key priority for agriculture sector, based on PSTA3, SEA in Agriculture Sector conducted by EU in 2012 in Rwanda. It has also been an integral part of the agriculture sector projects, such as RSSP and LWH, and is central to the PforR operation.
- **Construction Phase Impacts:** Potential adverse impacts include air pollution from dust and exhaust; noise pollution, and blocking access paths; increased run-off; water and soil pollution from the accidental spillage of fuels or other materials associated with construction works, as well as solid and liquid wastes from construction sites and worker campsites; pathogen breeding ground; borrow pit impacts; deforestation of the construction sites; potential mismanagement of construction site camp; spread of HIV/AIDS due to migrant worker influx; traffic interruptions and accidents; restriction and sometimes loss of access (temporary or permanent) to natural resources; and accidental damage to infrastructure such as electric, wastewater, and water facilities. These types of impacts, however, are generally site-specific and temporary. Experience from RSSP and LWH projects indicates that short-term construction impacts for the most part can be prevented or mitigated with implementation of EMPs and good construction management

practices. Such procedures are usually included in the technical manual, and environmental management plans incorporated into the bidding documents for contractors.

- **Physical Cultural Resources and Sacred Sites:** While large-scale impacts on physical cultural resources are unlikely based on the experience of ongoing Bank projects in Rwanda, the civil works such as terracing and irrigation structures could have an impact on grave sites and sacred sites. The current Bank projects have developed and utilized Chance Find Procedures. In addition, GoR has a well-implemented procedure on handling identification and relocation of graves. Both by law in Rwanda and by requirements of the World Bank ESMF's, projects are screened for impacts on physical cultural resources with mitigation measures included in either EMPs or RAPs, depending on the type of impact.

The expectation is that the program activities, such as land husbandry works and construction of the irrigation infrastructure, will not result in significant adverse cumulative or induced impacts with diligent implementation of the proposed mitigation measures at each site. However, a screening should determine if a potential project site is located in proximity to another site. Examples of cumulative impacts that can potentially develop from the combined impacts of more than one subproject, especially in absence of diligent implementation of project mitigation measures, include:

- Increased use of chemical fertilizers which will have downstream impacts, including water contamination and eutrophication of water sources;
- Reduced water to downstream users due to an irrigation structure, which have not been designed taking into account other irrigation structures in the same watershed;
- Increased sedimentation of the natural water bodies and valley; and,
- Possible contribution of rural roads rehabilitation to soil erosion.

1.5.2 Potential Environmental Benefits

The risk screening suggests that the overall environmental impact of the Program is likely to be positive with potentially significant environmental benefits. The program will include: (i) soil conservation and land husbandry program - contributing to more sustainable land and water management and decreased erosion; (ii) mechanization, soil fertility management and seed and livestock development – improving agricultural practices and increasing food security in the country. The proposed activities would be undertaken within already existing sites of agricultural land use. However, the program may include new irrigation schemes, which are proposed to be similar in scale to RSSP1-3 project sites.

Other environmental benefits include catchment rehabilitation and management; promotion of integrated pest management practices; flood control; water resources conservation; wildlife habitat conservation; improvement of previously waterlogged areas; food security; and provision of fuel wood to discourage use of forests for fuel.

1.6 Social Effects of the PforR Operation

1.6.1 Potential Adverse Social Impacts

There are a few potential social risks such as: chance of physical resettlement and/or land acquisition related to program interventions and difficulty of identifying relocation sites due to the limited land availability, loss of income of land due to demarcation of buffer zones, consolidation of land use, acquisition of land for agro-processing and off farm activities, benefit sharing of commercial farming if land is rented,

male capture of community institutions, obstacles for women and youth participation, difficulty of purchasing agriculture input for the very poor due to limited access to micro finance, conflict over land ownership and use, weak participatory decision making and lack of transparency.

Land requirements are minimal as the construction interventions under the Program are mostly either rehabilitation or requiring small portion of land. The legal/regulatory system and Land Policy in the country includes provisions for compensating for loss of assets at replacement cost and rehabilitation of adversely affected people. As per the Valuation Law, all people affected by expropriation must receive fair and just compensation. The calculation of fair and just compensation must be made by independent valuers. Whilst fair and just compensation is stipulated to be market value for land and other assets, clarification of what this comprises is not made clear in the existing legislation (this is one of the issue that is being considered in the draft amended Expropriation Law). The GoR's approach to land procurement is: (i) to use available public land, or (ii) buy private land at a negotiated market price. Under the PforR operation, it will be the responsibility of the GoR/Ministry of Land and Forestry (MINILAF) to provide land for the program and will follow the sequence of options mentioned above. Preferred method is to identify public land that is free from encumbrances. In case of private land, MINAGRI will purchase the land at 'replacement cost'. Land owned by vulnerable groups, and land with unresolved claims will not be considered

The national policies and laws offer an enabling environment for decentralized decision making. But implementation remains weak as systems are not fully developed and implementing agencies lack capacity in terms of resources. To ensure community participation and inclusion of all sections of community for decentralized decision, the Program will develop an Environmental & Social Implementation Manual adapted from the existing Lake Victoria Environmental Management Project.

The key findings of the ESSA on social impacts are:

a) **Land Pressure:** One of the key factors perpetuating rural poverty is the pressure on land. Rwanda's population of 12.5 million (UN estimated growth based on 2012 census) live in one of the smallest countries in Africa with one of the highest population densities in the world at 507 per square kilometer. As a result, farmer's landholdings are generally small. Smallholders in rural areas hold four to five plots that total a mean land size average of less than 0.59 hectares, with the median value at 0.33. This implies that one-half of the population currently holds less than 0.33 hectares, which significantly restricts both the productivity of the land and the ability of a large proportion of the rural population to escape poverty. By way of comparison, FAO estimates that a Rwandan household requires on average of 0.9 hectares in order to engage in sustainable agriculture that will feed the family without recourse to outside sources of employment.

b) **Food Insecurity:** Increases in agricultural production and productivity over the last decade contributed to both a reduction in poverty and an increase in food security. There remain however many rural households that are food insecure. Poor rural households with very small plots of land are the most food insecure and are also the most vulnerable to shocks that disrupt food production. Food security is largely a function of poverty and low incomes and any measures that contribute to a reduction in poverty will increase food security.

c) **Poverty and landless households:** Poverty is by far highest among households who obtain more than half their income from farm wage work, in other words from working on other people's land, followed by those with diversified livelihoods who obtain more than 30 percent or more of their income from farm wage work. It is clear from this that the vast majority of households that rely mostly or heavily on farm wage labor is poor; this is natural as this is very much a last resort activity for households without land or without sufficient land to meet their needs. The next highest level of poverty is among those that are self-employed in agriculture. However, it should be noted that, in all these groups, including those reliant on farm wage work, poverty has fallen over the period.

d) **Gender:** Rwanda has made great progress in become a gender equal society and in 2008 56 percent of members of parliament were women, the highest in the world (this increased to 64 percent in 2013). Women still however bear an unequal burden of agricultural work. They are under-represented at senior levels in the agriculture sector. Training and extension need to reflect women's needs, for example in the design of appropriately sized agricultural machinery. Looking at other household characteristics, over the past four Household Surveys (EICV 2000 -2014) female-headed households are slightly more likely to be poor than male-headed households, with 44% of female-headed households being poor compared to 37% of poor male-headed households in 2013/14. De facto female-headed households had a higher poverty rate (47%) than other households (EICV 2014). A similar trend can be noticed for extremely poor households. However, the gap between female-headed and male-headed households is reducing. Among female-headed households, widowed household heads are more likely to be poor and extremely poor than other categories. Poor households seem to have more dependents (infants, children and elderly people) than non-poor households and this difference is especially striking in relation to extremely poor households.

e) **Youth Unemployment:** The youth population (14-35 year old) in Rwanda is about 39 percent and mostly landless. Most of the male youths are engaged in agricultural related activities such as, casual labour, contract farming and trading of agricultural produce. Female youths are engaged in homestead income generation activities like poultry, livestock rearing and vegetable production. Both female and male youths also support their incomes through organized group activities like livestock fattening, tree planting, irrigation canal and roof catchment construction or sand, stone and white calcareous soil collection for construction purposes. The youth generally do not find traditional farming attractive and pursue off-farm employment opportunities.

f) **Impacts on vulnerable groups:** In Rwanda, most vulnerable groups are heavily engaged in agriculture. Vulnerable groups are classified in different categories include the following:

- Children in critical situations: child-headed households, street children, etc.
- Genocide survivors in critical situations: seriously injured, physically impaired, and made blind or deaf, including orphans.
- Women: widows, detainees' wives, pregnant women, single mothers, etc.
- Disabled people: mentally impaired, physically impaired.
- HIV/AIDS victims: infected, affected people.
- Extremely poor people: indigent, destitute, poor people, but who happen to cater for themselves.
- Elderly: without descendants or property.

These vulnerable groups have been engaged and integrated into the previous and ongoing agriculture sector investments. In the context of this PforR, MINAGRI and RAB will need to continue application of the current approach of inclusion of these groups into the Program to establish mechanisms for incorporating these groups into project components and monitoring system.

g) **Commercial Farming and Benefit Sharing:** Large scale farming by private investors will require consolidation of land use, mostly from subsistence farmers through rental and or lease. This could potentially lead the household to fall into poverty with no safety net. A process of benefit sharing or safety net must be in place to pre-empt such families falling into poverty. The existing government systems, especially those of RAB and MINAGRI need to be strengthened in terms of staffing and training. Currently RAB, RCA, and NAEB work closely with cooperatives, providing training and extension services, but their training and services are technical and do not include environmental and social risk management.

h) **Capacity at National and District Levels to Implement sub-programs and mitigate adverse impacts:** The GoR has mitigating policies and procedures in place at all levels. Implementation of all services and programs is decentralized putting a tremendous burden on the Districts to perform.

1.6.2 Potential Social Benefits

The assessment of the program reveals that the social impact of the Program is likely to be positive owing to benefits such as increase in productivity and commercialization of agriculture, and improved quality and accessibility of agriculture services thus improving the incomes and overall welfare and quality of life of citizens, especially the rural poor and vulnerable. The proposed operation targets farmer groups, focusing on poverty reduction and increasing food security. No significant change in land use or large-scale land acquisition is expected for the proposed PforR.

MINAGRI has a proven track record in implementing projects ensuring the inclusion of vulnerable households and groups in the project design and implementation, developing projects that target people with disabilities and elderly, youth groups, and women's groups. Learning from the participatory planning process from the existing projects, such as, Rural Sector Support Projects 1-3 and Lake Victoria Environment Management Project, the Ministry has adopted a participatory approach to project design through regular public consultations with the project beneficiaries, including project affected people. The Ministry has an adequate information flow at the District and grass roots levels to ensure a participatory approach to the decentralized planning process to the sub-project design and implementation. In addition, a grievance and redress mechanism is in place at the District level to mitigate complaints from the communities. Further, this PforR will leverage the accountability systems set up under the new Rwanda Governance PforR to strengthen District planning and accountability

The GoR has existing poverty targeting programs that have a strong impact on agricultural production and productivity and which contribute to diversify farm incomes for the poor and vulnerable households, these programs include: land conservation terracing of the small landholdings of the poorest households, 50% subsidy support for agriculture input, such as, fertilizer, lime and seed, easy access to finance because of land titles (that are in the name of both spouses), the "Girinka" one cow per poor family successfully targets poor households, including through mechanisms of joint household ownership of a cow, the small livestock program has similarly targeted poor households for ownership of small stock and the "one cup of milk" per pupil program similarly provides an important nutrition supplement for school children.

As part of the private sector inclusion agenda, PSTA4 is targeting to engage with smallholder farmers who are organized into cooperatives in rural areas in Rwanda. These farmers will benefit directly from this program as cooperatives will be part of the beneficiaries under the PPP arrangement. The participation of cooperatives in the PPP arrangement will ensure that farmers are not exploited or made more vulnerable.

2. Description environmental and social management system applicable to the Program

This section details the assessment of the capacity of government institutions to effectively implement the environmental and social management system as defined in the rules, procedures and implementing guidelines relevant to the PforR operation.

Prior engagement in agriculture sector is demonstrated consistent and sustainable application of the national environmental and social safeguards management systems. Analysis and lessons learned for this program are based on: previous phase of the PforR (PSTA 3 support), Rwanda Land Husbandry, Water Harvesting and Hillside Irrigation project (LWH); Rwanda Rural Sector Support Projects (RSSP) series 1-3; Landscape Approach Forest Restoration project (LAFRECPS); Rwanda Feeder Roads Development project; and the Lake Victoria Environmental Management project (LVEMP).

2.1 Legal and Regulatory Framework Applicable to Program

Rwandan Constitution of 2003. The constitution is the supreme law of the country. Several articles of the constitution cover environmental and social aspects:

- Article 49 states that every citizen is entitled to a healthy and satisfying environment. Every person has the duty to protect, safeguard and promote the environment. The state shall protect the environment. The law determines the modalities for protecting, safeguarding and promoting the environment.
- Article 29 states every citizen's right to private property, whether personal or owned in association with others. Further it states private property, whether individually or collectively owned, is inviolable. However, this right can be interfered with in case of public interest, in circumstances and procedures determined by law and subject to fair and prior compensation.
- Article 30 stipulates that private ownership of land and other rights related to land are granted by the State. The constitution provides that a law should be in place to specify modalities of acquisition, transfer and use of land (expropriation law). The constitution also provides for a healthy and satisfying environment. In the same breath every person has the duty to protect, safeguard and promote the environment. The State shall protect the environment.

2.1.1 Environmental Policies and Legal Framework

Organic Law No 04/2005 of 08/04/2005 determining the modalities of protection, conservation and promotion of environment in Rwanda and advocates environmental impact assessment (ESIA) in chapter IV whereas every project is subject to ESIA before implementation. ESIA procedure is specified in Ministerial order 2008. The Organic Law covers, among other topics, the use agro-chemicals in the country. The Prime Minister's Order N°26/03 (2008) determines the prohibited list of chemicals and other prohibited pollutants. The SEA for agriculture highlighted the development also a proposed draft Organic Law of

Agro-chemicals, which will encompass provisions for the manufacture, distribution, use, storage and disposal of agrochemicals including pesticides and fertilizers for the protection of public health and the environment, false practices in the supply of agrochemicals, injury avoidance during the application and use of agrochemicals, prevention of contamination of food with agrochemicals, protection of the agricultural community from deception and other related matters. It provides scope for designating use of personal protective equipment/clothing and establishment of Maximum Residue Limits (MRL) of chemicals in goods entering trade.

Environmental Impact Assessment: Law no 003/2008 and no 004/2008 August 2008; Cabinet Approval on 14/11/2007 (Pursuant to Organic Law No 04/2005 of 08/04/2005 especially in Article 67, 68, 69 and 70) indicates the list of works that must undergo ESIA studies, that includes land husbandry works, irrigation infrastructure and feeder roads.

The National Policy of Environment was adopted by the Cabinet in November 2003. This policy presents broad categories of development issues that require a sustainable approach. The overall objective is to ensure judicious utilization of natural resources and the protection and management of eco-system for sustainable development. The policy anticipates improved management of environment both at central and local level in accordance with the country's current policy of decentralization. With regard to the protection and management of natural resources and environment, the aim of the Government of the Republic of Rwanda is to see, by 2020, the percentage of households involved directly in primary agriculture reduced from 90 percent to less than 50 percent; effective and updated regulations established which are adapted to the protection of environment and sustainable management of natural resources; the rate of diseases related to environmental degradation reduced by 60 percent; and the share of wood in national energy balance reduced from 94 percent to 50 percent, The application of laws and regulations, the adoption and dissemination of environment friendly technologies will constitute a high priority for the central and local authorities.

Water Law no 62/2008 for use conservation, protection and management of water resources; this policy covers activities like water infrastructure installations and highlights management of water on both demand and supply side. Policy also integrates the other policies on forests, wetland, agriculture and land. According to this law, any institution that needs to develop works and operations susceptible to present dangers for health and the public security, to be harmful to the waters free outflow, to reduce the water resources, to affect its buffer zones, quality of water or the aquatic environment diversity have to submit an application for authorization to the Ministry of Natural Resources. According to Deputy Director General in charge of Water Resources Management MINILAF is in the process of establishing the dam commission and national instruction for dam construction and safety.

Irrigation master plan developed by MINAGRI in collaboration with MINILAF. The Plan partitions the country into six irrigation domains, each domain is defined by the category, availability and accessibility of a given water resource vis-à-vis the biophysical and climatic features that influence its mode of abstraction and utilisation. The domains serve as a general guide for locating the ideal water resources for a given area. Rwanda's irrigation domains are thus categorized as: runoff for small reservoirs, dams, river and flood water, lakes, marshlands and groundwater resources.

National fertilizer policy (June 2014): The objective of this policy is to contribute to increased agricultural productivity, economic returns and incomes through increased and sustainable access and use of fertilizers by i) creating an enabling environment for the development of a privately driven and liberalized fertilizer importation and distribution system that fosters competition and innovation; ii) promoting fertilizer trade by introducing appropriate and effective incentives that encourage investment by the private sector; and iii) establishing an efficient regulatory and monitoring system that is private sector friendly and ensures the sustainable supply to high quality fertilizer products along the distribution chain in a manner that safeguards human health and the environment.

Ministerial order no002/11.30 of 14/07/2016 & no 003/11.30 of 28/10/2016 determining regulations governing agrochemicals: This Order determines regulations governing agrochemicals products including their storage, transport, packaging and manipulation as well as requirements for obtaining business license. This order also provides for disposal of agrochemicals and gives the updated list of authorised and prohibited list of agrochemical products. The second order defines mechanisms for appointing a registrar of agrochemicals and determining her responsibilities.

Law n°16/2016 of 10/05/2016 on plant health protection: This Law determines modalities for plant health protection in Rwanda. It also provides for strategies meant to control and contain the establishment of pests or diseases and matters connected with living organisms.

National Forest Policy (NFP) was established in 2004 and amended in 2010. Under this policy forest commission was established to promote and oversee forestry activities. It also emphasizes to meet the needs of population for wood and other forest products. The policy fixed the target of forest cover at least 30% of geographic area and also to have 85 percent of farmland under agro-forestry by 2020.

Transport Policy: Among the public works, the feeder roads have always been the main activities under the VUP activities given the number of the beneficiaries the program was able to achieve through it. The project will most probably keep the same tendency, and the sector policy and legal framework will always be followed. The National Transport Policy highlights the main objective of the road sub-sector in Rwanda as to Maintain, Rehabilitate and Develop the National Road Network, which is responsible for more than 80% of human and goods traffic in the country. The policy's strategies to meet these objectives are:

- Expanding and improving Rwanda's road infrastructure, protecting existing capital investments, and improving road safety;
- Establishing an appropriate institutional framework for the accelerated development of the road sub sector;
- Financing road maintenance works through multi-year maintenance contracts,
- Renewable under performance evaluation;
- Encouraging community participation in road maintenance through the district
- Development committees;
- Improving the ability and quality of local road infrastructure, thereby enabling the rural community to market its crops;
- Creating an environment conducive to the encouragement of Private Sector Participation in rehabilitating, maintaining, and developing road infrastructure.

Accordingly, a Road Maintenance Fund was established to provide adequate, reliable financing for road maintenance activities; and a Road Maintenance Strategy was formulated to guide the process.

National Development Strategy. Land use management, urban and transport infrastructure development are considered as important pillar among 6 pillars of Vision 2020 and protection of environment and sustainable natural resource management is one of the crosscutting areas of the vision. The other important planning tools are: the Economic Development and Second Poverty Reduction Strategy (EDPRS 2), the National Investment Strategy, Millennium Development Goals (MDGs) and the Medium Term Expenditure Framework. The vision document advocates to the development of economic infrastructure of the country and transport infrastructure in particular. The Government of Rwanda (GoR) developed National Strategies and Action plans for the following:

- **National Biodiversity Strategy and Action Plan (NBSAP)** 2003,
- **National Plan of Action (NAPA)** for climate change adaptation (2006/7), and
- **National Action Plan (NAP)** for combating desertification.

These strategies and action plans reflect national priorities for environmental natural resources sector that are in line with the Rwanda's EDPRS 2 as a medium-term framework for achieving the country's long-term development aspirations as embodied in Rwanda Vision 2020 and the Millennium Development Goals (MDG) priorities.

Inspection Law No 005/2008 and no 007/2008; Ministerial order establishing modalities of inspecting companies or activities that pollute the environment and list of protected animals and plant species.

Biological Diversity and its Habitat: President Order No 017/01 of 18/03/1995;

2.1.2 Social Policies and Legal Framework applicable to the Program: Overview of Rwandan Land Policy and Legislation with regards to Resettlement

Vision 2020 aspires to transform Rwanda from a poor country to a middle-income country from a per capita income of USD 290 in 2000 to USD 900 in 2020. Attaining a productive & high-value agriculture and developing infrastructure with improved transport links are two among the six key pillars of Vision 2020 that will help poverty reduction by achieving a Pro-Poor growth where all Rwandans have the chance to gain from the new economic opportunities. Sustainable environmental and natural resource management with gender equality are identified as crosscutting areas that will always affect the Vision 2020 development goals and therefore important to consider at all times.

The National Social Protection Strategy: This National Social Protection Strategy sets out in detail the government's vision and commitments within the sector. It describes how the government builds on commitments already made in the EDPRS2 and demonstrate how the country's vision continues to grow. It takes significant steps to broaden the coverage of social protection to those in need of support from government. At the same time, it gives priority to enabling households to become self-sufficient and graduate from social protection: key to this will be the broadening and strengthening of the VUP Public Works programme as well as measures to establish complementary social development programmes to social protection, such as increasing the access of poor people to financial services. The Strategy has built

on, integrated and extended the cash programmes that are currently part of the Vision 2020 Umurenge Programme (VUP), Genocide Survivors Support and Assistance Fund (FARG) and Rwanda Demobilisation and Reintegration Commission (RDRC).

Vision Umurenge 2020 Programme (VUP): Originally established as a flagship programme within the first Economic Development and Poverty Reduction Strategy (EDPRS 1), From 2008 to 2016, the VUP delivered a combination of social protection services (Direct Support and Public Works), financial services and sensitization. VUP Direct Currently, VUP direct support covers 416 sectors while both classic Public and Expanded Public works components are implemented in 240 sectors and 30 sectors consecutively. It is envisaged that both classic and expanded public works will have been scaled up and implemented in 270 sectors.

National Land Policy: The 2004 land policy emphasizes productive use of land based on suitability of specific land units. It also advocates for and entrenches land rights and tenure security by promoting land registration and titling. For road scheme development, the implications of this policy relate to resettlement and compensation; assessing the suitability of particular areas for road infrastructure; and the influence of infrastructure development on the changing value and use of land.

Land Tenure System and Provisions in Rwanda: The Land Use Master Plan (Land law No 43/2013 of 16/06/2013, article 6) states that all types of land tenure must be in compliance with the designated land use. The Organic Land Law provides two types of formal land tenure: full ownership/ freehold and long-term leasehold. As a result of the recent privatization of State owned lands, many land users don't hold either type of land tenure. The Organic Land Law recognizes existing rights, whether written or unwritten, under both civil law and customary practices through new national land tenure arrangements. Article 7 of the law formalizes land ownership, especially those acquired through customary means. In such cases, populations with customary/indigenous land rights are being encouraged to register their land through decentralized District Land Bureau, Sector Land Committees and Cell Land Committees.

National Resettlement Regulations: Rwanda has numerous legal and policy framework relating to Land and resettlement issues. These include:

- The Rwandan Constitution, promulgated in 2015;
- Land Valuation Law promulgated in 2010;
- Expropriation Law No. 32/2015 of 11/06/2015;
- Law N°55/2011 of 14/12/2011 Governing Roads in Rwanda
- Organic Law N° 43/2013 of 16/06/2013 governing land in Rwanda

Rwanda being a signatory to various international conventions and laws, it is important that national projects are in line with these laws and as such some of the relevant international conventions are also reviewed. This chapter therefore, highlights resettlement objectives and principles, describes national legal and regulatory framework in detail and makes a comparative analysis of Rwandan legislations with the World Bank provisions on resettlement to identify gaps and provide the way forward to seal these gaps. The above legal orders are briefly described as follows:

Constitution of Rwanda: The constitution is the supreme law of the land. Under Article 34 of the Rwanda constitution, it is stated that: “everyone has the right to private property, whether individually or collectively owned”. Furthermore, it mentions private property, whether individually or collectively owned, is inviolable. However, this right can be interfered with in case of public interest, in circumstances and procedures determined by law and subject to fair and prior compensation.

Article 35 stipulates that private ownership of land and other rights related to land are granted by the State. The constitution provides that a law should be in place to specify modalities of acquisition, transfer and use of land (expropriation law). The constitution also provides for a healthy and satisfying environment. In the same breath every person has the duty to protect, safeguard and promote the environment. The State shall protect the environment.

Expropriation Law in the Public interest: The law No. 32/2015 of 11/06/2015 related to expropriation in the public interests determines the procedures relating to expropriation of land in the interest of the public. Article 3 of the law stipulates that it is only the government that has authority to carry out expropriation. However, the project, at any level, which intends to carry out acts of expropriation in the public interest, shall provide funds for inventory of assets of the person to be expropriated and for just compensation on its budget. According to the organic law, no person shall hinder the implementation of the program of expropriation on pretext of self-centered justifications and no land owner shall oppose any underground or surface activity carried out on his or her land with an aim of public interest. In case it causes any loss to him or her, he or she shall receive fair and just compensation for it. The law identifies properties to be valued for just and fair compensation including land and activities that were carried out on the land such as different crops, forests, any buildings or any other activity aimed at efficient use of land or its productivity. However, as per Article 27 of the law No 32/2015 of 11/06/2015, the owner of land designated for expropriation in the public interest shall provide proof of rights to land and property incorporated thereon like land titles or any other documentary evidence showing he/she has property ownership.

Law N° 43/2013 of 16/06/2013 governing land in Rwanda: This is the law that determines the use and management of land in Rwanda. It also institutes the principles that are to be respected on land legal rights accepted on any land in the country as well as all other appendages whether natural or artificial. According to the Law, Land in Rwanda is categorized into two: Individual land and Public land. The latter is subdivided into two categories: the state land in public domain and the state land in private domain. The Article 12 and 13 of the land law stipulates that State land in the public domain consists of all land meant to be used by the general public or land reserved for organs of State services as well as national land reserved for environment conservation. Land occupied by national roads and their boundaries; Districts and City of Kigali roads and that of other urban areas linking different Sectors headquarters within the same District, or those roads that are used within the same Sector with their boundaries; arterial roads that connect Districts roads to rural community centres that are inhabited as an agglomeration with their boundaries is among the State land in the public domain.

Law N° 55/2011 of 14/12/2011 governing roads in Rwanda: This law provides classification of roads and defines responsibilities, management, financing and road development. In the context of this project, public works involving feeder roads fall under the district responsibility. The article 17 of this law stipulates that the widening of a road shall be done after expropriation of the people near the road in accordance with the

law to secure the land needed. The Article 22 and 23 of the Law No 55/2011 of 14/12/2011 governing roads in Rwanda stipulates that the road reserve for Category 2 roads – feeder roads fall under this category- is delineated by two parallel lines at 12 m on both sides of the road from the median line (Article 22).

Law establishing and Organizing the Real Property Valuation Profession in Rwanda: Law No.17/2010 of 12/05/2010 Establishing and Organizing the Real Property Valuation Profession provides conditions for registration of land valuers in Rwanda, establishes the Institute for real property Valuers and sets conditions to exercise the profession. The law also allows the Government to conduct valuation when mandated by their government institutions. Articles 27, 29, 30 and 31 of the law deals with valuation methods. These articles stipulate that price for the real property shall be close or equal to the market value. The valuation could also compare land values country wide. Where sufficient comparable prices are not available to determine the value of improved land, the replacement cost approach shall be used to determine the value of improvements to land by taking real property as a reference. The law also allows the use of international methods not covered in the law after approval from the Institute of Valuers council.

Property laws in Rwanda: Laws on property are found in various legal texts of Rwanda including the Rwandan Constitution which recognizes every person's right to private property (Article 29). Consequently, private property, whether individually or collectively owned is inviolable. Exceptionally, the right to property may be overruled in the case of public interest. In these cases, circumstances and procedures are determined by the law and subject to fair and prior compensation (Article 29).

In addition, the present Organic Land Law sets a legal framework for property law under articles 5 and 6 which provides for full ownership of land and permits any person that owns land (either through custom or otherwise), to be in conformity with the provisions of this law. It is important to observe however that full ownership of land is only granted upon acquisition of a land title issued by the general land registrar authority. Once the efforts to provide proper land tenure documentation are completed, ownership of land without proper documents such as, land title will not be deemed lawful land ownership and thus in event of circumstances like expropriation; one will not be able to benefit from a fair and just compensation package.

Eligibility under Rwanda Law: Eligibility for compensation is enshrined under the Rwandan constitution (Article 29) and the Expropriation Law. The two laws regulate and give entitlement to those affected, whether or not they have written customary or formal tenure rights. The person to be expropriated is defined under article 2 (7) of the Expropriation Law to mean any person or legal entity who is to have his or her private property transferred due to public interest, in which case they shall be legally entitled to payment of compensation.

Compensation entitlement: In case an individual suffers any loss, Article 3 of the Expropriation Law stipulates that he or she should receive just compensation for it, although it is not clear what comprises fair and just compensation, this being left to the judgment of independent valuers. Article 4 of this law also stipulates that any project which results in the need for expropriation for public interest shall provide for all just compensation in its budget. Through mutual arrangement, both parties can determine the mode of payment. Article 22 (2) of the Expropriation Law provides that through an agreement between the person to expropriate and the one to be expropriated, just compensation may either be monetary, alternative land or a building equivalent as long as either option equates to fair and just monetary compensation. In case the

determination of ‘just’ compensation exceeds in value the alternative land given to the expropriated person, the difference will be paid to the expropriated person.

Land Assets Classification and valuation: A land holder whose holding has been expropriated shall be entitled to payment of compensation for land and other assets, plus compensation relating to all activities resulting in any improvement to the land. Land and other assets are classified into two categories: movable and immovable assets, both of which are eligible for compensation. For movable assets, compensation relates to inconveniences and other transition costs caused in the process of relocation. Immovable assets include: crops, forests, any building or other activity aimed at efficient use of the land, the value of land, and the activities thereon that belong to the person expropriated.

The valuation is made considering the size, nature and location of land as well as the prevailing market price. The amount of compensation for property is determined on the basis of the replacement cost of the property. Prior to the 2005 Organic Land Law, as all land was State owned, buying and selling of land was not permitted. Following the recent restructuring of Land legislation, people now have the right to claim ownership and trade in newly-privatized lands. However, the decrees supporting this aspect of the 2005 Organic Land Law are not yet fully implemented, and awareness is currently perceived to be low among the population such that appropriate market prices for land have yet to be established.

Under the new law it is not permitted for MINILAF (former MINIRENA) to provide any valuations for expropriated assets, as was the case previously. Instead, the entity responsible for undertaking valuation of assets is the Land Valuation Bureau. This entity is considered to be independent from the government, and provides accreditation to these independent valuation experts to value all assets affected by expropriation. However, it is not yet clear what the arrangements are for funding valuations by the Land Valuation Bureau.

MINILAF will provide relevant land assessments and information on price differentials according to the location of land to be expropriated, which will form the basis upon which fair and just compensation is to be calculated. The law provides that the valuation for expropriated lands be based on its type, use, location and availability, building on this guidance provided by MINILAF. For the time being, until proper market prices are established, prices are negotiated openly and freely by the buyer and the seller.

Procedures for Expropriation in Rwanda: The law provides for public sensitization on the importance of the project to be established and the need for expropriation. In addition to sensitization, the Expropriation Law requires prior consultative meetings and examination of the project proposal involving expropriation, with a view to avoid eventual prejudice on the person or entity subject to expropriation. Normally, a consultative meeting is held within 30 days after receipt of the application for expropriation. Based on these consultations, the relevant Land Commission or Committee (from the Cell level to the National level) takes a decision to approve the project within a period of 15 days.

Although Rwanda has developed and enacted new land and new expropriation laws that are responsive to land and property especially in case of expropriation, there are some gaps when compared to World Bank OP4.12 on involuntary resettlement. These gaps include the following:

- **Stakeholder Participative and Consultation:** World Bank OP 4.12 requires that persons to be displaced should be actively being consulted and should have opportunity to participate in planning

and design of resettlement programs. The Rwandan law on Expropriation simply stipulates that affected people be fully informed of the expropriation process. The law also conflicts the very purpose of consultation and involvement by prohibiting any opposition to the expropriation program if considered to be under the pretext of self-centered justification which might not be the case.

- **Determining Eligibility for Compensation:** While World Bank considers and allows a wide range of persons eligible for compensation, such as those who do not own land but access to the property and will be displaced, Rwandan legislation only stipulates that compensation be due to property owners (land or other assets). WB OP 4.12 will provide the framework for resettlement for the SP-IPF.
- **Transfer period:** Rwanda expropriation law stipulates a timeframe upon when the property to be expropriated must be handed over which is 120 days after compensation has been paid. WB OP4.12 requires that displacement must not occur before necessary measures for resettlement are in place, i.e., measures over and above simple compensation. Measures pertaining to provision of economic rehabilitation however can and often do occur post displacement.
- **Avoiding Resettlement:** According to OP4.12, resettlement should be avoided whenever possible, while the Article 3 of the new expropriation Law regards expropriation in the public interest as inevitable. No person shall hinder the implementation of the program of expropriation in the public interest on pretext of self-centered interests.
- **Assistance to Resettle the Displaced:** While expropriation laws provides for compensation measures, it is silent on other assistance required for relocation, prior to displacement, and preparation and provision of resettlement sites with adequate facilities, where required. The table below summarizes the deference between the National resettlement requirements and the World Bank OP 4.12 Involuntary Resettlement Policy.

2.2 Experience and lessons from existing projects and initiatives in Rwanda

2.2.1 Program-for-Results Support to PSTA 3

The recent independent evaluation of the Agriculture PforR operation currently under implementation found the Environmental and Social Systems Assessment (ESSA) for Phase 1 PforR Program to provide adequate coverage of the environmental and social effects of the program. The previous ESSA identified five environmental and social risk mitigation measures as inputs into the PAP. These five measures were condensed to into a PAP action which was to develop an Environmental and Social Implementation Manual (ESIM) and conduct training on ESIM at national and district level. The ESIM was developed and endorsed by MINAGRI, which included a section on management of small dams. The training on ESIM was conducted in late 2017 and mainstreaming it into PSTA 3 is underway, under its Subprogram 4.6. In addition, a GRM call center was also established at the national level to respond to queries and resolve complaints. During the World Bank missions, the team observed the call center to be operational.

ESIM was developed as a reference tool for agriculture sector projects, containing links to relevant GOR laws and regulations, serving as one-stop-shop to inform the project preparation, design and ensure compliance with the national legislative framework. The national system is supplemented by a collection of good practices (such as integrated pest management, enhanced documentation on the land acquisition and resettlement, etc) established under prior publicly financed projects, including World Bank projects.

The gap analysis for the initial ESSA consistently indicated that environmental capacity on the ground (at the district level) is relatively strong, while there has been a continuous need to strengthen social capacity throughout the government systems.

During implementation of PSTA4 PforR, the dissemination and training on ESIM should continue for all project implementers and used as a training tool during design of the new projects, especially those using PPP arrangements.

2.2.2 Rural Sector Support Projects 1-3

In the course of the implementation of the RSSP Phases 1 to 3, the projects took a framework approach to environmental and social safeguards management, since the exact subprojects were not known at the time of project preparation. MINAGRI prepared an ESMF, RPF, PMP and Small Dam Safety Guidelines, which were updated for each new phase of the program and re-disclosed to the public. The ESMF contained an environmental and social screening tool for investments that was integrated into the review of the funding requests emanating from communities, District Government officials, and other project beneficiaries. The ESMF also covered potential impacts on Natural Habitats, which was also reflected in the subproject-specific assessments.

The SPIU implementing the project has routinely utilized the frameworks diligently preparing ESIA's and RAPs for all subprojects. For example, RSSP 2 has produced ESIA's and RAPs for the project sites in 9 marshlands: Nyarubogo dam, Nyarubogo irrigation channel, Ntende-Rwagitima irrigation channel, Ntende dam, Kiliba dam, Rugeramigozi dam, Kinyegeyege marshland, Gisaya, Kibaya, Kinnyogo, Muvumba V, Muvumba VIII dam, and Muvumba VIII channels.

Environmental Assessment: the extent of ESIA's adequately covered the project scope and provided a number of recommendations to the project design, which were largely taken into consideration during project implementation. Some of the recommendation included: (a) implementation of land husbandry techniques along the slopes surrounding the marshland; (b) monitoring of water abstraction quantities to avoid water resource depletion is necessary; (c) periodic soil tests to monitor soil, baseline and progressive water quality tests to manage non-point source water pollution; (d) Water User's Association (WUA) for effective management of the marshland development; (e) implementation of capacity building framework for project beneficiaries on modern agricultural techniques and land husbandry, among other relevant issues.

However, some of the recommendations of the environmental safeguards instruments were not fully implemented as part of the project design. For instance, ESIA's call for establishment of a green buffer zone (50 m around reservoirs and 2m around rivers) to promote security and sustainability of the irrigation structures, like reservoirs, canals, etc. The success of establishment of buffer zones varied from project to project, but should be continued as a good practice. As a solution the new sites considered under PforR should evaluate an additional short-term solution for protecting the new irrigation structures, while the green buffer zone is being established. The ESIA's also recommended (a) catchment management plans for individual marshlands, and (b) introduction of fish in the reservoir that feed on mosquito larvae was implemented, but the recent implementation support missions identified that this opportunity was not fully utilized.

Pest Management: In the existing Bank supported portfolio, the rate of agro-chemical use has been limited. IPM approach is promoted by MINAGRI, while use of pesticides and fungicides was limited and used mostly for potato and tomato crops.

Social safeguards: During the process of resettlement and compensation, according to project RAPs, the District Land Bureaus allocated land to the Program Affected Peoples (PAPs) who have lost their land in the marshland due to project activities. The PAPs were given the plots of equal size of land in the same marshland after the works were completed. In addition to land for land, the PAPs also received compensation for their crops and trees based on fair market values. The Districts were also responsible to handle the grievances, with periodic monitoring from MINAGRI, during this compensation process.

While the scale of resettlement is not known in the context of PforR support to PSTA 4, especially for Program 1 (land husbandry and irrigation), it can be illustrated based on activities under ongoing and already completed RSSP projects, as the proposed sites are envisioned to be similar in scale. For RSSP 2, prior to project completion, the team developed a Resettlement Completion Report use as an input for the project ICR. During the life of the second phase of RSSP, there were a total of 3,088 people affected by the project activities in the marshlands, all of which were resettled and compensated in accordance with the national laws and the WB OP 4.12. The affected people had activities or houses either in the marshlands where canals were constructed or in the areas to be flooded. The project had constructed 36 houses to manage involuntary resettlement of PAPs. The total amount of compensation paid in the resettlement process was equivalent to USD 668,000. The external impact evaluation of RSSP 2 conducted a beneficiary assessment and found that on average, PAPs felt they were 300-400 percent better off after total compensation from project activities.

2.2.3 Rwanda Feeder Roads Development Project

The RFRDP is also implemented by MINAGRI with support from RDTA. The project also took framework approach (ESMF and RPF), but also prepared a set of ESIA and RAPs for selected roads in 4 Districts (Gisagara, Karongi, Nyamasheke and Rwamagana). In Rwanda, about 66 percent (9,300 km) of the 14,000 km of the overall road network are unclassified roads, which are predominantly earth roads and considered as District roads. According to a road condition survey carried out in 2010, about 23 percent of the District roads are in good condition while 44 percent and 32 percent are in fair and poor condition, respectively. The District and unclassified roads that principally constitute the feeder roads network are in dismal state and are major constraint for the mobility of the rural population. Because of these conditions, the use of large scale services, including motorized vehicle such as trucks and buses remains constrained by the unavailability of maintained roads or poor condition of roads and most farmers carry their produce to market by head loading, bicycles, drawn carts or motorbikes.

2.3 Lessons from the Strategic Environmental Assessment for agriculture sector

In January 2012, the EU Commission financed an SEA for Agriculture sector, which was developed by Consortium SAFEGE (Belgium) for MINAGRI and other stakeholders related to agro-environmental issues in Rwanda and the European Commission. The SEA found the policy and planning framework at national and sectorial level to be comprehensive and consistent, with well-integrated environmental dimension. The SEA confirmed that Rwanda has a solid set of institutions dealing with the environmental aspects of the agriculture sector, including arrangements for inter-sectoral and inter-institutional coordination. The SEA identified that issues of attention are related to the strengthening of capacity, effectiveness of enforcement

of the ESIA regulatory system and the control and management of agrochemical products. The report also noted that while the environmental regulatory framework still requires improvements, advances are gradually made. Another set of improvements is recommended in the area of management of water resources, including generation of adequate baselines for water quality, hydrological balance and effluent discharges. The SEA identified technical and systemic issues, with technical issues including (1) soil and water conservation; (2) soil acidity and nutrient management; (3) crop and variety selection; (4) pest and disease management; and (5) rural feeder roads. Systemic key issues included: (1) monitoring & evaluation; (2) climate variability and climate change; (3) Environmental Impact Assessment system; and (4) local capacities. The ESSA notes that all of the issues identified in the sectoral SEA have been included as part of PSTA 4.

2.4 Institutional Responsibilities

2.4.1 Environment

Two Ministries are responsible for natural resources, the Ministry of Environment which is responsible for the development of environmental policies and procedures (including impact assessments), protection of water resources, environmental legislation, biodiversity, and other environmental aspects and the Ministry of Land and Forest (MINILAF) which is responsible for developing land utilization policies (including surveying, land classification, land laws and land tenure);

Rwanda Environmental Management Authority (REMA)

REMA is the authority in charge of supervising, monitoring and ensuring that issues relating to environment are integrated in all national development programs. Its responsibilities are (i) to closely monitor and assess development programs to ensure compliance with the laws on environment during their preparation and implementation and (ii) to monitor and supervise impact assessment, environmental audit, strategic environmental assessment and any other environmental study.

REMA works at the District level with the Environment officers working within Environmental and natural resources units. They support the implementation of the national Environmental and Natural Resources Strategy and monitor environmental compliance of designated projects on a day-to-day basis. The District Planning Units are expected to coordinate decentralized planning and budgets for environment and natural resources management, as well as collect, analyse and disseminate information for evidence-based implementation and monitoring. At the sector level, the agriculture officer is also the one in charge of monitoring environmental and natural resources.

REMA as part of its duty, provides training and prepare practical tools, guidelines and checklists to be used by environmental officers at the district level. However, environmental compliance monitoring remains a weak service and does not constitute the core responsibility of these district officers. The information flow from RDB to REMA and to the Districts is still requiring additional capacity building.

Rwanda Land Administration and Use Authority (RLMA former RNA)

Rwanda Land Administration and Use Authority (RLMA former RNA) is a key Institution set up to implement the National Land Tenure Reform Program as provided for by the National Land Policy and the Organic Law determining the use and management of land in Rwanda. This program aimed at improving land tenure security by putting in place an efficient, transparent and equitable system of land administration.

The Land Commissions which are operating at National, Kigali City and District Levels, bear the principal responsibility for overseeing the implementation of the Organic Land Law. The National Land Commission is also responsible for overseeing the District land commissions and bureaus and promoting, by advocacy and consultation, public ownership of land policy. District Land Bureaus (DLB) directed by a District Land Officer (DLO), are administratively answerable to the District Authority and to the Department of Lands and Mapping and Office of Registrar of Land Titles. The DLBs are the public notary for land matters i.e. the DLOs certify applications for land, maintain the cadastral index maps and record all land to be registered by sporadic or systematic means on behalf of the Office of the Registrar. Each sector and cell has a land committee which has an important part to play as the first point of contact for land registration and land use planning.

Rwanda Development Board: REMA was initially responsible for reviewing and approving ESIA reports for development projects. However, this duty was reassigned to the recently created Rwanda Development Board (RDB), where a dedicated department of ESIA was created and tasked with review and approvals of all ESIA studies. RDB is a one stop institution bringing together several government bodies in Rwanda focused at promoting investment in Rwanda. RDB has created a dedicated department of ESIA responsible for reviewing all projects ESIA before approval. Recently, RDB has started testing a system for online submission of ESIA and other documentation for review and clearance, which should streamline the information flow and review improve response time.

Rwanda Natural Resources Authority (RNRA) is an authority that leads the management of promotion of natural resources which is composed of land, water, forests, mines and geology. RNRA is responsible for supervision, monitoring and ensuring the implementation of issues relating to the promotion and protection of natural resources in programs and activities of all national institutions.

Rwanda also adheres to several international agreements, treaties and conventions, though management legal tools for compliance with these agreements are not yet well developed. Among conventions ratified by the Republic of Rwanda, the most important ones which have influenced or influence the national policy with regard to environment are:

- i. Convention on Biological Diversity of June 10th, 1992 ratified on March 18th, 1995.
- ii. United Nations Convention on Desertification Control of June 17th, 1991 and ratified on October 22nd, 1998.
- iii. RAMSAR Convention on February 2nd, 1971 on wetlands.

2.4.2 Social

MINILAF, along with environmental management, also governs the implementation and application of the Land Law and the Land Use Master Plan. Whilst they will govern alignment with these Laws at the national level, responsibilities for their implementation locally has been devolved, following decentralization, to Land Commissions and committees at District, Sector and Cell levels. MINILAF is also the key Ministry governing resettlement arrangements in Rwanda. They do this by working directly with the Ministry/Institution developing the land on which resettlement is required. For instance, the implementation of Resettlement Action Plans for the PforR program will involve the SPIU team of MINAGRI and MINILAF. MINILAF will therefore play a critical role in ensuring that appropriate and consistent compensation is provided to all affected persons resulting from the PSTA 4 investments.

Rwanda Natural Resources Authority (RNRA) mentioned above, is also responsible for managing land acquisition, valuation and resettlement activities.

Land Valuation Bureaus: The Land Valuation law was promulgated in 2007 and outlines the role of the Land Valuation Bureaus to provide independent 'fair and just' valuation of land and affected assets in the event of expropriation. Land valuation bureaus are free to be established all over the country, although to date only one has been established in Kigali. In the event that no Land Valuation Bureau exists in the locality of PforR sub-project, independent valuers from the Kigali-based bureau will be used. All private valuers are accredited by the GoR.

District Level Implementing Agencies: The District authority in which investment sites are located will be the coordinating body for the national at the District level using its existing structure, and will allocate the Program funds. As well it will oversee, coordinate and facilitate the implementation process of Program across local governments under its jurisdiction. The District-level departments will provide a review and monitoring role, and provide political and administrative support for the implementation of the RAPs.

District Land Bureaus: The District Land Bureaus (DLBs) will be the executive bodies responsible for ensuring that activities undertaken comply with the National and District level Land Use Master Plans. DLBs are in the process of being set up as a part of the revised land legislation implementation process. They will assess the validity of land tenure rights of affected persons and eventually provide the land use permit for the new activity proposed by the investments. In addition they will be responsible for ensuring effective grievance mechanisms are in place. They will also be used in the design of the RAP as much as possible in order to ensure that community buy in is present at an early stage hence reducing disputes or grievances. Their activities will be monitored by the District authority. The District Land Bureaus will play a major role in RAP implementation by:

- Establishing the sub-project level Resettlement and Compensation Committees at Sector/ Cell level;
- Clarifying the policies and operational guidelines of these Resettlement and compensation Committees;
- Establishing standards for unit rates of affected assets and compensation estimates, according to the standard units, adjusted for local conditions where necessary; and
- Coordinating and supervising implementation by Resettlement and Compensation Committees national/ District guidelines.

The District Responsibilities: The District is represented by a member of each of the key departments and agencies at the various levels of the District government (including the District Land Bureau), and supervises and monitors all activities at the District Level. Given the importance of ensuring proper implementation of investments within the Districts, the District teams will play a crucial role in ensuring alignment of resettlement and compensation arrangements. The District in collaboration with MINAGRI would play a major role during RAP implementation by ensuring that appropriate compensation procedures are followed; and review, sign-off and approval on all documentation (e.g. screening forms, completed RAPs, grievance forms, consultation plans).

Resettlement and Compensation Committees: In keeping with Rwanda's decentralization policy, the responsibility for the development and implementation of the RAPs will be at Sector and Cell level. Once resettlement has been identified via the screening process in relation to this Program interventions, District Land Bureau (DLB) representatives will be responsible for electing members of an investment Resettlement and Compensation Committee. This committee does not currently exist, but is proposed as part of the Program Action Plan, and will operate at sector level. It is proposed to be coordinated by the DLB, due to the executive powers of the DLB. This committee will plan for, coordinate and monitor resettlement, compensation and relocation activities, as well as supervise compensation payments to the recipient project affected parties (PAPs). A large part of their responsibility will be consultation with potential PAPs. The local Resettlement and Compensation Committee would comprise the following:

- Representative from Sector or Cell Land Committee;
- Representative from the Land Adjudication Committee;
- Representative from the District Development Committee (in particular from the Social Department);
- Representative from any other key sector office involved in the resettlement process;
- Key representative from the implementing organization (Farmer cooperative, and local civil society organization);
- A representative PAP; and
- SPIU representative (ideally the Rural Sociologist or Community Development expert)

This committee meets on a regular basis (as determined by the needs of the project) to ensure that resettlement activities are appropriately designed and executed. It is recommended that a representative be elected to act as a coordinator who would act as the key contact with PAPs and therefore facilitate implementation of consultation, public participation and grievance mechanisms. These actors are described in greater detail below and will have the responsibility for:

- validating inventories of PAPs and affected assets;
- allocating land, where required, to permanently affected households;
- supervise the valuation process
- monitor the disbursement of funds;
- guide and monitor the implementation of relocation;
- coordinate activities between the various organizations involved in relocation;
- facilitate conflict resolution and addressing grievances; and
- provide support and assistance to vulnerable groups.

Sector/ Cell Land Committees: The Sector and Cell land committees will be independently mandated as a part of the revised land legislation implementation. These committees are also a decentralization effort of the Government of Rwanda. They report to the District Land Bureau, and are responsible for monitoring the role of the DLB in their relevant Sector/Cell. In particular, they are responsible for providing field information to the District Land Commission and District Land Bureaus relating to land use, approving land expropriation, and approving all land use changes in their particular Sector/ Cell. They also ensure documentation of land tenure at these levels. The members of the Sector and cell land committees include:

- Representative of a farmers' cooperative;

- Representative of sector level local agricultural administration;
- Member of education services i.e., teacher;
- Representatives of individual farmers; and
- Vulnerable groups (preferably women, as according to the Constitution 30 per cent of each committee must be made up of women).

Land Adjudication Committees: The Land Adjudication Committee is responsible for coordinating individual land registration and ensuring appropriate compensation payment is made for individual land expropriated. It will ensure that compensation payments are included in the requests for funds, and that they are allocated accordingly. Land Adjudication committees are a traditional legal institution implemented only when there is conflict over land ownership. Only when disputes are referred to them will they have a role to play, in conflict and dispute resolution. A key role is the management of land ownership conflicts, part of which involves helping vulnerable people to appeal in case of grievances. The members of the Land Adjudication Committee include:

- Farmer elders;
- Representative of Cell agricultural department; and
- Representative of Sector/Cell Land committee.

Farmer Cooperatives: Some of the investments will be managed and implemented by a local community-based organization, in the form of a farmer cooperative, a water user association or a NGO. Support will be provided by central level (SPIU) and/or District specialists to ensure they have the capacity to undertake this implementation role effectively. They will have an important role to play in implementing resettlement activities, which will be specified by the Resettlement and Compensation Committee. Appropriate capacity building and support will be provided by the District expert and/or service provider (local NGO) where necessary.

Village Level Land Committees: At the Village/Umudugudu level, there are village-level mediators (abunzi) whose work is to hear disputes, especially land disputes. The abunzi, or mediation committees, have mandatory jurisdiction over land disputes involving amounts that are less than three million RwF, which means over most land disputes. The Abunzi also have mandatory jurisdiction over succession and boundary disputes involving less than three million RwF. The abunzi will be used in the PSTA program as the first stop for resolving disputes and grievances following land acquisition. They will be involved in the compensation process from the beginning to the end. They will also be used in the design of the ARAP as much as possible in order to ensure that community buy in is present at an early stage hence reducing disputed or grievances.

Consolidated Land Use and Benefit sharing: The experience from the past and on-going project design and implementation in Rwanda suggests a clear policy and practice of community consultation and participation as essential to the assure fairness and sustainability of the projects and programs. This practice has afforded potentially affected community an opportunity to contribute to both the design and implementation of the project activities and reduce the likelihood for conflicts between and among community. The consolidation of land use and administration in Rwanda is based on long standing traditional and cultural practices making public consultation with the rural communities, indispensable. Effective and close consultation with PAPs is a pre-requisite for project success. In recognition of this,

particular attention would be paid to public consultation with potentially affected individuals, households, homesteads when benefit sharing under consolidated land use or resettlement and compensation is involved. Public consultation will take place at the inception of the planning stages when the potential land use is being considered. The participation strategy would evolve around the provision of a full opportunity for involvement. Therefore, as a matter of strategy, public consultation would be an on-going activity taking place throughout the entire project cycle. For example, public consultation would also occur during the preparation of the (i) the socio-economic study, (ii) consolidation of land use and benefit sharing plan, (iii) the resettlement and compensation plan (iv) the environmental impact assessment and (v) during the drafting and reading of the compensation contract.

3. Summary of Assessment of Environmental and Social Systems

The Environmental and Social System Assessment should assess the degree to which the systems are relevant to the Bank’s PforR policy and directive, according to the Policy core principles (described in Section 5 below).

The ESSA concluded that, in general, the rules and regulations of environmental and social management system applicable to the proposed PforR are consistent with the Bank PforR Policy and Directive, but the capacity to effectively enforce certain regulations, especially at the local level could be improved. Thus, several recommendations are made to address these shortcomings and are included in the Program Action Plan or Disbursement Linked Indicators. The summary of the assessments relevant for the activities to be supported under the Program is presented in Table 4.

Table 4 Assessment of Environmental and Social System based on the Bank PforR Policy

1. Promote environmental and social sustainability in the program design; avoid, minimize, or mitigate against adverse impacts; and promote informed decision-making relating to a program’s environmental and social effects.		
Key Elements	National Systems (applicable to both central and district levels)	Key Findings
Operate within an adequate legal framework and regulatory authority to guide environmental and social impact assessments <i>at the programmatic level</i>	Rwanda has developed an adequate legal framework for environmental and social impact assessment, backed by a set of well-defined laws, regulations, technical guidelines and standards, which apply nationwide. The agriculture sector has provided evidence of the informed decision making on the environmental issues in its previous and ongoing programs. Based on assessment, it is concluded that there is an adequate legal and regulatory framework for the environmental and social impact assessment for this program.	Generally consistent. Improvements recommended for capacity building of the key sector organizations, especially at the local level, both in terms of human resources and training, and strong monitoring.
Incorporate recognized elements of	The Rwandan EIA system has well-defined guidelines covering screening, alternative	Generally consistent.

<p>environmental and social assessment good practice, including: (a) early screening of potential effects; (b) consideration of strategic, technical, and site alternatives (including the “no action” alternative); (c) identification of measures to mitigate adverse environmental or social impacts that cannot be otherwise avoided or minimized; (e) clear articulation of institutional responsibilities and resources to support implementation of plans; and (f) Responsiveness and accountability through stakeholder consultation, timely dissemination of Program information, and responsive grievance redress measures.</p>	<p>analysis, impact assessment, mitigation measures, management plan, and consultation.</p>	<p>Capacity to effectively enforce certain regulations can be improved, especially at the local level:</p> <ul style="list-style-type: none"> - Comprehensive e&s capacity building is to be provided to District level environmental and social staff and any new RAB/MINAGRI staff.
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2. Avoid, minimize, and mitigate against adverse impacts on natural habitats and physical cultural resources resulting from the Program.

Key Elements	National Systems (applicable to both central and district levels)	Key Findings
<p>Includes appropriate measures for early identification and screening of potentially important biodiversity and cultural heritage areas.</p>	<p>The EIA guidelines provide guidance on identification and screening of sensitive environmental and cultural resources, including survey of environmental baseline information. There is an established procedure for protection of physical cultural resources by Ministry of Youth, Sport and Culture, which includes protection of Genocide sites.</p> <p>The program will work in non-sensitive environmental and social context, with sites located in the areas already under agricultural use.</p>	<p>Consistent.</p>
<p>Supports and promotes the conservation, maintenance, and</p>	<p>The national environmental protection system emphasizes the protection, maintenance and rehabilitation of natural habitats through a set of</p>	<p>Consistent. The activities supported</p>

rehabilitation of natural habitats; avoids the significant conversion or degradation of critical natural habitats, and if avoiding the significant conversion of natural habitats is not technically feasible, includes measures to mitigate or offset impacts of the Program activities.	laws, regulations, guidelines and standards. Avoiding such sensitive areas is the top priority of the ESIA, and where inevitable, special assessment is mandatory and necessary mitigation or offset measures are to be developed in the environmental management plan.	under the Program do not take place on sensitive environmental sites/areas.
Takes into account potential adverse impacts on physical cultural property and, as warranted, provides adequate measures to avoid, minimize, or mitigate such effects	The Policy on Cultural Heritage, under Ministry of Youth, Sport and Culture, provides adequate legal framework and procedures for protecting cultural property. If any physical cultural resource is impacted, action to secure the property is required and protection measures should be defined in consultation with the Ministry of Youth, Sport and Culture.	Consistent. The requirement to have the chance-find procedures are note specifically defined in the law, however, there is a well-established practice for management of any chance finds, including graves.
c. Protect public and worker safety against the potential risks associated with (a) construction and/or operations of facilities or other operational practices developed or promoted under the Program; (b) exposure to toxic chemicals, hazardous wastes, and otherwise dangerous materials; and (c) reconstruction or rehabilitation of infrastructure located in areas prone to natural hazards.		
Key Elements	National and Provincial Systems	Key Findings
Promotes community, individual, and worker safety through the safe design, construction, operation, and maintenance of physical infrastructure, or in carrying out activities that may be dependent on such infrastructure with safety measures, inspections, or remedial works as appropriate.	Rwanda adopted National Policy on Occupational Safety and Health consistent with ILO standards. This system ensures the screening of safety issues, assessment of work safety during project preparation, design and construction supervision. Based on the assessment, it is noted that OSH issues are routinely included into the environmental monitoring process during implementation of agriculture sector programs.	Consistent.
Promotes the use of recognized good practice in the production, management, storage, transport, and disposal of hazardous materials	The Program activities do not involve production, management, storage, use, transport or disposal hazardous materials, including pesticides.	On integrated pest management, good practices routinely applied in the sector, based on international best practice, however,

<p>generated through the Program construction or operations; promotes the use of integrated pest management practices to manage or reduce pests or disease vectors; and provides training for workers involved in the production, procurement, storage, transport, use, and disposal of hazardous chemicals in accordance with international guidelines and conventions.</p>		<p>no specific regulation yet developed in the country.</p>
<p>Includes measures to avoid, minimize, or mitigate community, individual, and worker risks when the Program activities are located within areas prone to natural hazards such as floods, hurricanes, earthquakes, or other severe weather or climate events.</p>	<p>Rwanda has put in place risk assessment systems for projects to identify areas prone to flood and natural hazards, with well-established implementation mechanism.</p> <p>National small dam safety guidelines were developed by MINAGRI, and will be applicable to the Program.</p>	<p>Consistent.</p>
<p>d. Manage land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement, and assist the affected people in improving, or at the minimum restoring, their livelihoods and living standards;</p>		
<p>Key Elements</p>	<p>National and Provincial Systems</p>	<p>Key Findings</p>
<p>Avoids or minimizes land acquisition and related adverse impacts; identifies and addresses economic and social impacts caused by land acquisition or loss of access to natural resources, including those affecting people who may lack full legal rights to assets or resources they use or occupy.</p>	<p>The effort of avoid or minimize land acquisition is achieved through technical designs in order to minimize loss of private land. No significant change in land use or large-scale land acquisition is expected for the proposed PforR. MINAGRI has a proven track record in implementing projects ensuring the inclusion of vulnerable households and groups in the project design and implementation, developing projects that target people with disabilities and elderly, youth groups, and women’s groups. Learning from the participatory planning process from the previous projects MINAGRI has adapted a participatory approach to project design through regular public consultations with the project beneficiaries, including project affected people. The Ministry has an adequate information flow at the district</p>	<p>Generally consistent.</p> <p>The process of compensation payment could be enhanced with better documentation and regular monitoring, which are included in the program action plan. For PPP arrangements, the issues of land acquisition and compensation shall be handled by the public sector.</p>

	and grass roots levels to ensure a participatory approach to the decentralized planning process to the project design and implementation. In addition, a grievance and redress mechanism is in place at the district level to mitigate complaints from the communities.	
Provides compensation sufficient to purchase replacement assets of equivalent value and to meet any necessary transitional expenses, paid prior to taking of land or restricting access.	<p>The legal/regulatory system and Land Policy in the country includes provisions for compensating for loss of assets at replacement cost and rehabilitation of adversely affected people. As per the Valuation Law, all people affected by expropriation must receive fair and just compensation. The calculation of fair and just compensation must be made by independent valuers.</p> <p>The GoR's approach to land procurement is: (i) to use available public land, or (ii) buy private land at a negotiated market price. Under the PforR operation, it will be the responsibility of the GoR/Ministry of Land and Forestry (MINILAF) to provide land for the program and will follow the sequence of options mentioned above. Preferred method is to identify public land that is free from encumbrances. In case of private land, MINAGRI will purchase the land at 'replacement cost'. Land owned by vulnerable groups, and land with unresolved claims will not be considered</p>	Generally consistent
e. Give due consideration to the cultural appropriateness of, and equitable access to, Program benefits, giving special attention to the concerns of vulnerable groups		
Key Elements	National and Provincial Systems	Key Findings
<p>Undertakes free, prior, and informed consultations if Indigenous Peoples are potentially affected (positively or negatively) to determine whether there is broad community support for the Program.</p> <p>Ensures that Indigenous Peoples can participate in devising opportunities to benefit from exploitation of customary resources or indigenous knowledge,</p>	<p>The 2003 post genocide constitution prohibits all forms of discrimination based upon ethnicity, while guaranteeing all people equal rights. Article 11 states "Discrimination of whatever kind based on, inter alia, ethnic origin, tribe, clan, color, sex, region, social origin, religion or faith, opinion, economic status, culture, language, social status, physical or mental disability or any other form of discrimination is prohibited and punishable by Law".</p>	Consistent.

the latter (indigenous knowledge) to include the consent of the Indigenous Peoples.		
Gives attention to groups vulnerable to hardship or disadvantage, including as relevant the poor, the disabled, women and children, the elderly, or marginalized ethnic groups. If necessary, special measures are taken to promote equitable access to the Program benefits.	<p>The legal/ regulatory system is robust enough to promote decentralized planning, implementation and social accountability. In addition, special provisions exist to safeguard the interest of the vulnerable and provision of subsidies to the vulnerable households.</p> <p>The Program will directly benefit smallholder farmers as cooperatives are included as beneficiaries under the PPP arrangement. The participation of cooperatives in the PPP arrangement will ensure that farmers are not exploited or made more vulnerable.</p>	Generally consistent.

4. Program Capacity and Performance Management Assessment of Adequacy and Identification of Gaps

Ministry of Agriculture and Animal Resources (MINAGRI). The proposed PforR operation is designed as a programmatic results-based approach in the agriculture sector. The Program is based on well-functioning Government fiduciary systems and practices, including contract and financial management, governance and anti-corruption systems, social and environmental regulations and systems, and technical capacities as demonstrated over the last 13 years in implementing World Bank supported projects/programs in the sector.

Additionally, MINAGRI has demonstrated strong monitoring and reporting against results and indicators in the Bank-financed operations. The PforR operation also is designed to reinforce and strengthen the Government’s own systems for delivery of key agriculture services, while putting in place processes to expand the role of the private sector in service provision.

To ensure sustainable implementation of activities under the PforR program, MINAGRI must ensure a dedicated staff is assigned to serve as an Environmental and Social Safety Officer (EO), who will work with the Districts and will provide oversight of environmental and social aspects of the construction contracts, including the enforcement of all monitoring requirements. Presence of such designated safeguards staff has been a key factor in successful environmental and social risk management under the ongoing LWH and RSSP projects. The Districts will be supported by the ministries at the central level (MINAGRI, RTDA). The Environmental Officers of the Districts under the Environment and Water Resource Management Units are responsible for environmental and social safeguard aspects of development projects, but due to capacity limitation their engagement is restricted to minor community level development actions.

The previous section described the existing environmental and social management system of GoR in the agriculture sector including the policy and legal framework, the key sector institutions and the country's environment and social management procedures. This section analyses the performance of the key institutions with regard to the provisions of the legal and regulatory framework and highlights the challenges therein. It also describes the challenges and needs with respect to the capacities of the key sector institutions.

The central government, through MINAGRI, provides policy, coordination and financing leadership for PSTA 4 program. Implementation approaches vary with a mix of national, district, community, and private program delivery.

The Program implementing agencies operate within a well-defined regulatory system for safeguarding environment and water resources and ecologically significant areas from degradation. The system includes protection of groundwater sources from interference, excluding activities that are likely to have significant adverse impacts on eco-sensitive areas, coastal areas and wetlands. For the schemes that are to be located on forested lands, and near protected areas, there is a well-defined procedure that involves seeking permission from the Forest Department. The procedure with respect to schemes in the proximity of sites with historical or archaeological value (protected monuments) is involves seeking permission from the Ministry of Sports and Culture. However, the implementation of the existing provisions faces challenges due to insufficient capacity for implementation and monitoring and overstretched regulatory authorities.

The state's approach for enhancing source sustainability in scheme planning includes source selection based on technical assessments and community consultation. There is a need for mainstreaming this approach of sustainability planning in all schemes.

The proposed PforR operation will rely on existing institutional and implementation arrangements for PSTA 4. The PSTA 4 is focused on interventions strictly within the remit of the MINAGRI and its associated institutions RAB and NAEB. While MINAGRI is the principle policy making organ for agriculture in Rwanda, RAB and NAEB have primary responsibility for service delivery.

Rwanda Agriculture Board (RAB) has the general mission of developing agriculture and animal husbandry, promote and conduct research on modern crop and animal production methods, support agricultural extension and education and training of farmers in new technologies. Among its responsibilities is to examine, verify and issue certificates authorizing imports of domestic animals, semen, fertilized eggs, seeds, plants and cuttings and other agricultural and animal husbandry products.

The new law governing RAB was passed on May 1, 2017, anchors ongoing reforms and reconfirms their status as non-commercial public institution and reasserts its broad mandate. The Law renames RAB the Rwanda Agriculture and Animal Resources Development Board (while retaining the original acronym). Importantly, the new Law confirms that RAB does not fall strictly under the supervisory authority of MINAGRI but that "a Prime Minister's Order determines the supervising authority of RAB". The decision was reached that the environmental and social experts currently working in MINAGRI will be transferred to RAB, providing an opportunity to retain knowledge and experience and assist with onboarding of new staff.

National Agriculture Export Development Board (NAEB) has similar roles and responsibilities but is committed to the development of agricultural and livestock products for export. There are no dedicated environmental and social staff on the Board, which will be relying on RAB/MINAGRI to provide support in any required environmental and social risk management.

Local level systems: The Government is increasingly seeking to transfer responsibility for delivery to district-level authorities although the existing evidence indicates a trend of deconcentration rather than decentralized decision-making. The institutional assessment reported stakeholders' views that district authorities were better placed to provide solutions to farmers' problems. Yet the AgPER concludes that PSTA 3 devolved largely peripheral functions to districts and that "decentralized expenditures [have] little discretionary or devolved content, despite official policy to the contrary and evidence that districts can take on greater responsibilities".

Farmers' organizations are registered as cooperatives through the Rwanda Cooperative Agency RCA which was established under the Law n° 50/2007 of 18/09/2007 determining the establishment, organization and functioning of cooperative organizations. The RCA has among its responsibilities to register cooperatives and assigning to them legal personality; regulating and supervising them, setting standards and formulate professional ethics for prudent management of cooperative organizations. Today 2033 agriculture cooperatives and 1087 animal husbandry cooperatives are registered, most of them organized in 10 agriculture and animal husbandry federations at the national level (including the maize federation, Irish potatoes, rice, coffee, tea, wheat, cassava, beekeeping, fishing and Livestock).

RCA, RAB and NAEB work closely with these cooperatives, providing training and extension services but their training and services are technical and do not include environmental and social management subjects and none of them have any environmental and social officers as part of their staff.

Lessons from the previous PforR operation have been applied to the implementation arrangements for the current Program. Specifically, the PforR Program seeks to incentivize the processes of organizational development, increasing capacity building and implementing a robust monitoring and evaluation framework. The PforR Program also has a narrowed implementation arrangement are under the influence of MINAGRI and its supporting agencies.

MINAGRI SPIU, which gained more than a decade of experience implementing similar projects with a great level of success, will be transferred to RAB, however, will retain its composition and function. It will still have the responsibility for delivery of majority of environmental and social functions under the PforR interventions. The SPIU will work with the District authorities responsible for environmental management and social aspects, including those related to resettlement and compensation, to ensure that the relevant policies are properly applied across all relevant subprojects. Its initial role will be to undertake screening and assessment of potential subprojects to determine whether resettlement and/or compensation will be required. The SPIU will provide capacity building and technical support in all aspects of the project, including resettlement. It will work closely with the District authorities to ensure that funds are allocated as per the approved RAPs.

Private sector participation. At the time of the ESSA preparation, specific private sector organizations have not been identified yet. Based on the budgetary allocations and targets for the Program DLIs, the

Assessment makes an assumption that the private sector participation will be focusing on small to medium scale enterprises. To facilitate the assessment of environmental and social capacity of the potentially participating private sector organizations, the Assessment used the current (although limited experience of private sector involvement in the agriculture sector). Private Sector Federation (PSF), which will play a key role in providing input into the design of PPP investments, along with Ministry of Trade and Industry, confirmed that neither PSF, nor the vast majority of the private sector entities have dedicated environmental and social safeguards staff, and rely on the government systems for environmental and social risk management and on specifically on RAB for training and capacity building.

In general, as part of licencing process, the initial E&S assessment of the private sector entities is conducted by Rwanda Development Board.³

In addition, MINAGRI is piloting additional assessments to new investments, including environmental and social aspects. One example of an existing public-private partnership is rice mills. In such projects, the government manages the activities during construction while private investor remains with supervising role. This includes government managing environmental and social risk management, specifically land acquisition with related compensation, social inclusion, providing employment opportunities for the vulnerable community members, livelihood restoration and payments to the community. It is proposed that the similar practice is scaled up under the PforR during the design and implementation of the PPP investments.

The PAP will review the quality and impact of MINAGRI's current engagement with the private sector and related environmental and social screening and assessment procedure and, if appropriate, enhance and incorporate them into the new Leveraging strategy.

This Assessment highlights several challenges that will need to be addressed during Program implementation, which include:

- (a) Insufficient capacity for monitoring and evaluation for MINAGRI and RAB, especially at the local level. LWH and RSSP projects implementation has benefited from a team of experienced safeguards staff, who has worked in the project team for a number of years. These projects also benefitted from joining of the two separate PIUs into a joint team. However, the LVEMP and RFRD projects have witnessed a high staff turnover and lack of experienced personnel in the implementing entities, which is a risk of significantly impacting the timely delivery of ongoing operations. Lack of capacity and limited exposure to managing projects supported by development partners will require essential staffing and skills to manage the added responsibility under the PforR program to be able to effectively manage the environmental and social risks.
- (b) Design of the PPP interventions requires MINAGRI and RAB to scale up existing approach and potentially develop new models to effectively collaborate with the private sector on environmental and social management of projects. Each PPP infrastructure project should start with an appropriate selection and performance criteria consistent with current GOR project implementation best practice. Any aspects of land acquisition and compensation shall remain under government responsibility. A private sector

³ RDB One-Stop-Centre: <http://rdb.rw/one-stop-centre/#environmental-impact-assessment>

organization shall demonstrate the use of an Environmental and Social Management System consistent with the GoR regulatory framework, which features the following aspects:

- Identifying the organization’s environmental aspects and associated impacts
- Developing and establishing programs to mitigate risks associated with the threats and opportunities
- Identifying objectives and goals associated with programs
- Identifying compliance obligations
- Monitoring and measuring progress in achieving the objectives
- Ensuring employees’ environmental awareness and competence
- Reviewing progress of the ESMS and making improvements

(c) Insufficient regulatory framework in at least two areas that were identified as impacts for the Program: use of agro-chemicals and safety of irrigation structures:

- i. Irrigation infrastructure: Most of investments in irrigation dams involving similar risks have been mostly implemented by GoR together with development partners applying international standards and regulations, rather than relying solely on national systems.
- ii. Agro-chemicals: While the management of agro-chemicals is governed by the Organic Law and the list of prohibited chemicals and pollutants, there remains a need for implementation and monitoring framework to support the current legislation. As per Sectoral EA recommendation, such framework should be managed by REMA, rather than MINAGRI.

(d) On social management aspects, the challenge for the sector institutions under the Program is to ensure that the decision making at the District level, transparency and accountability is institutionalized to enhance sustainability of investments. This will require capacity building of all the stakeholders at all levels in all districts.

For the PforR program the issue of sufficient capacity is a critical success factor, which can be resolved by utilizing provision of technical support, institutionalizing the capacity development and streamlining project management tasks in the functional units of the Districts. This will help the GoR to create a critical mass of human resource for decentralized rural infrastructure management.

5. Analysis of Program Environment and Social System Relative to ESSA Core Principles

Overall, the existing system in Rwanda is consistent with the core principles of WB Program-for-Results Policy. However, implementation needs to be strengthened. This section presents the environmental and social benefits, risks and impacts of the Program. The risks have been identified using the Environmental and Social Risk Screening Worksheet and cover the likely environmental and social effects, the environmental and social context, the Program strategy and sustainability, the institutional complexity and capacity, and the reputational and political risk.

Core Principle # 1: Promote environmental and social sustainability in the Program design; avoid, minimize, or mitigate adverse impacts, and promote informed decision-making relating to the Program's environmental and social impacts

Strengths:

- a) Informed decision making relating to the environmental issues in the Agriculture sector is evident in the GoR's policies and programs.
- b) The GoR has well-defined legal/regulatory systems for safeguarding the community interests and ecologically significant areas from pollution.
- c) The GoR's approach for enhancing sustainability in Agriculture investment planning is based on technical assessment and community consultation.
- (d) The revised and updated National Agriculture Policy includes sections on protection of genetic diversity. Productive diversification will actively be supported as a pathway to enhancing market- and climate-resilience, to furthering soil fertility and biodiversity, and to broaden nutritional diversity. Promotion of the adoption of enhanced genetic material in crop and livestock production is consistent with this approach and will be pursued through intensified local development and efforts to promote heightened mutual recognition of seeds and breeding material with regional trading partners. However, this policy discourages the use and transfer of genetically modified organisms, based on pre-cautionary principles and in absence of regulatory, diagnostic, and logistical capacities. Yet, this policy encourages the elaboration of a legal frame for research, development, use and support for scientific, technical or economic purposes, especially also considering property rights applicable to seeds.

Gaps:

- a) The implementation of the existing legal/regulatory provisions faces challenges (due to weak monitoring, overstretched regulatory authorities, multiple regulations, etc.).
- b) The implementation is further challenged by the lack of human and financial resources at the Districts and lower levels of implementation, including uncertainty in E&S capacity of private sector entities.

Opportunities:

- a) The state has experience of integrating rules and procedures for environmental and social management in individual Agriculture investments – for example, Phase 1 PforR, LVEMP, LWHP, RSSP and LAFREC projects. Strengthened environmental and social management rules and procedures have been developed by GoR to manage the impacts of the above-mentioned projects.
- b) There is a need for continuous mainstreaming an approach for inclusion, equity and sustainability through community involvement in planning and designing of all Program investments to support the sustainability of the Program investments.
- c) RDB, MINAGRI and RAB will need to scale up the existing approach to selection, screening, and assessment of private sector organizations to participate in the Program to establish a rigorous procedure towards environmentally and socially sustainable PPP investments.

Risks:

- a) Addressing the environmental management needs in a national program depends on capacity building of the key sector organizations both in terms of human resources and training, and strong monitoring.
- b) Poor implementation of the strengthened environmental and social management rules and procedures, especially at the local level, is a possible risk.

Core Principle # 2: Avoid, minimize, or mitigate adverse impacts on natural habitats and physical cultural resources resulting from the Program

Strengths:

- a) ESIA procedure applied to all civil works is well known to all project stakeholders.
- b) There is an established procedure for protection of physical cultural resources by Ministry of Youth, Sport and Culture. In addition, the Genocide sites are protected, conserved and managed by Rwanda National Commission for the Fight Against Genocide.

Gaps:

- a) Weak institutional capacity at the local level to adopt and enforce routine screening for ecological sensitivity and coordination with relevant authorities.
- b) Assessment of indirect and cumulative impacts is an emerging field requiring additional capacity, as more project sites will be supported by PSTA4.

Opportunities:

- a) Climate change issues have been mainstreamed into the activities in PSTA 4 during its formulation. In addition, a new set of climate and environment mainstreaming indicators will be agreed with REMA for MINAGRI, linked to NST (sustainable agriculture) and Vision 2050.
- b) The good practice ESIA's developed for the prior agricultural projects portfolio incorporate assessment and mitigation measures for social risks and impacts. RDB certification procedure includes assessment of coverage of social risks within ESIA's. The Program investments provide an opportunity for continuing a good practice of balanced inclusion of environmental and social risks and corresponding mitigation measures to improve project design and sustainability.

Risks:

- a) Several subprograms, including land husbandry, irrigation infrastructure, and value-chain infrastructure were identified to have potential impacts on natural habitats and physical cultural resources. The risks are related to potential inability to apply practical and operationally feasible early screening practices for environmentally sensitive areas and chance finds or physical cultural resources during construction of civil works, which may lead to adverse impacts on ecologically sensitive areas and physical

cultural resources. The risk is deemed to be minor if the Borrower applies appropriate site scoping and screening procedures in the early screening practices for site selection. This can be supported through the planned Bank implementation support program for the PforR.

Core Principle # 3: Protect public and worker safety against the potential risks associated with: (i) construction and/or operations of facilities or other operational practices under the Program; (ii) exposure to toxic chemicals, hazardous wastes, and other dangerous materials under the Program; and, (iii) reconstruction or rehabilitation of infrastructure located in areas prone to natural hazards

Strengths:

- a) The GoR’s regulations include provisions for public and worker safety (for example, regulations on use of explosives, provision of barricades at construction site, use of personal protection gear by workers, disposal of construction debris and waste water, preventing creation of conditions conducive to disease vectors, etc.).
- b) The state has also issued guidelines/regulations on aspects concerning public and worker safety risks from construction/operation of facilities.
- c) The legal/regulatory system in the country includes provisions for safeguarding water resources and ecologically significant areas from pollution and is thus applicable to regulating the disposal of toxic chemicals, hazardous wastes, etc.
- d) Rwanda has developed “Small Dam Safety Guidelines”, providing support to projects undertaking construction of small irrigation structures. The guidelines were published under LWH project in 2009 and updated in 2012.
- e) As part of the action plan under PSTA3 PforR MINAGRI developed Environmental and Social Implementation Manual as a reference guide for all program implementing agencies.

Gaps:

- a) Implementation capacities need to be strengthened to monitor and supervise the safety and protection provisions.

Opportunities:

- a) Adoption at the sectoral scale of the good Environment & Social Management practices developed as part of MINAGRI preparation of RSSP and LWH Projects, which includes references to technical guidelines on dam safety, waste management, and public and worker safety relevant to PSTA 4.
- b) Adoption of Environmental and Social Implementation Manual and Small Dam Safety Guidelines for all projects involving small irrigation structures, and other infrastructure within MINAGRI, RAB for public and PPP projects.

Risks:

- a) Systematic implementation of these provisions requires enhancing awareness in the key sector organizations and strengthened monitoring.
- b) Resources availability for implementation of ESMPs.

Core Principle # 4: Manage land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement, and assist the affected people in improving, or at the minimum restoring, their livelihoods and living standards.

Strengths:

- a) The legal/regulatory procedures and policies for expropriation of land in the country adequately respond to the relocation and compensation for loss of assets, services, homes and land.

Gaps:

- a) There is a lack of human and financial resources to mitigate and monitor the involuntary resettlement.

Opportunities:

- a) The experience from the existing projects in MINAGRI and other rural development projects offer examples of good practice, lessons and guidance to mitigate involuntary resettlement and restoration of livelihood.

Risks:

- a) There is a risk of insufficient capacity to ensure the fair process in assigning compensation and providing benefits of the program to the vulnerable households.

Core Principle # 5: Give due consideration to the cultural appropriateness of, and equitable access to, Program benefits, giving special attention to the rights and interests of the Indigenous Peoples and to the needs or concerns of vulnerable groups

Strengths:

- a) The 2003 post genocide constitution prohibits all forms of discrimination based upon ethnicity, while guaranteeing all people equal rights. Article 11 states “Discrimination of whatever kind based on, inter alia, ethnic origin, tribe, clan, color, sex, region, social origin, religion or faith, opinion, economic status, culture, language, social status, physical or mental disability or any other form of discrimination is prohibited and punishable by Law”. Article 14 further states “The State shall, within the limits of its capacity, take special measures for the welfare of the survivors who were rendered destitute by genocide against the Tutsi committed in Rwanda from October 1st, 1990 to December 31st, 1994, the disabled, the indigent and the elderly as well as other vulnerable groups”. Thus, Rwanda has ensured that ethnic affiliation does not trump the rule of law.

- b) In order to expedite the delivery of justice, the Rwandan Government has returned to the traditional “Gacaca” Court system. The local Gacaca courts, meaning ‘justice on the grass’, combine traditional local justice with modern jurisprudence, with the aim of achieving truth, justice, and reconciliation. The Gacaca

courts have been the most thorough process in bringing the rank and file of genocide to justice and to resolve any other local conflict.

c) The legal/ regulatory system is robust enough to promote decentralized planning, implementation and social accountability. In addition, special provisions exist to safeguard the interest of the vulnerable and provision of subsidies to the vulnerable households.

Gaps:

a) Weak capacity to implement provision of the legal, policy and regulatory provisions and lack of system to disseminate information, promote social accountability and address grievances at village level.

Opportunities:

a) To on-going effort of GoR to deepen and strengthen decentralized decisions making and planning process and fiscal decentralization will support and empower the District governments to move towards a more demand driven approach and respond to the needs of the people and especially the vulnerable at Cell levels. The decentralized planning process will facilitate community planning in preparation, implementation and supervision of the PSTA investments and services.

b) The decentralized planning and empowered districts could potentially strengthen transparency & accountability and a more responsive and efficient Grievance Redress system.

Risks:

a) The decentralized planning may encourage bottom up approach, but the central control of budget for implementation may erode the trust between the districts and the communities.

Core Principle # 6: Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes

The history of genocide in the country has led the GoR to ensure equality for all as citizens of Rwanda setting aside ethnicity. There are no conflicts or territorial disputes in the project area.

6. Recommendations for Risk Rating

Based on ESSA findings and agreed-upon mitigation and improvement measures, the overall environmental and social risks of the Program are assessed as Substantial. The Program involves a number of physical activities and a new set of implementers. While most activities are envisaged have moderate risk with limited potential environmental and social impacts, the level of risk is higher due to unknown capacity to manage E&S risks by the private sector organizations. MINAGRI and the environmental and social staff at the District level will have a responsibility to fully participate in the design and implementation of PPP activities to ensure appropriate management of the environmental and social risks, enforcement of the Government policies and regulations, application of best practices and capacity building for private sector organizations to improve their E&S management systems.

Table 3: Program environmental and social risk ratings

Risk	Assessment
<p>Associated or Likely Social and Environmental Effects (This section describes the potential benefits, impacts and risks that are likely to be associated with the Program.)</p> <p>Environmental effects:</p> <ul style="list-style-type: none"> • Potential loss or conversion of natural habitats? • Potential pollution or other project externalities? • Changes in land or resource use? <p>Social effects:</p> <ul style="list-style-type: none"> • Nature/scale of involuntary resettlement or land acquisition required? • Potential impacts on vulnerable communities? • Changes in resource access? 	<p>The proposed Program’s high level strategic objectives include, per PSTA 4: “support to intensification and commercialization of the Rwandan agricultural sector” and “focus on both increased production of staple crops and livestock products, and greater involvement of the private sector to increase agricultural exports, processing and value addition”.</p> <p>Key activities: Increasing soil conservation and land husbandry, irrigation and water management, agrochemical use, markets and seed development, nutrition, extension, strengthening farmer cooperatives and organizations, entrepreneurship and facilitate market access, development of priority food and export crop value chains, agricultural finance, and market-oriented infrastructure for post-harvest.</p> <p>The overall proposed program has potentially significant environmental benefits. The program may include: (i) soil conservation and land husbandry program - contributing to more sustainable land and water management and decreased erosion; (ii) mechanization, soil fertility management and seed and livestock development – improving agricultural practices and increasing food security in the country. The proposed activities would be undertaken within already existing sites of agricultural land use. However, the program may include new irrigation schemes, which are proposed to be similar in scale to RSSP1-3 project sites.</p> <p>The environmental impacts of the program are not anticipated to be large scale or irreversible. The results identified in the project do not require any individual civil works that may have significant negative impacts on environment. Based on the previous activities implemented by MINAGRI within the WB supported portfolio, the program is not likely to have an impact on natural habitats or create environmental pollution, with exception of temporary localized construction phase impacts for any proposed infrastructure activities. The program is also not likely to cause negative changes in land use pattern and/or resource use. Positive changes in resource use would be promoted through new irrigation schemes included in the operation.</p> <p>Social. The positive social effects of the proposed program are potentially significant, as the main objective of the program is to increase the productivity and commercialization of agriculture and improve quality and accessibility of agriculture services and thus improve the incomes and overall welfare and quality of life of citizens, especially the rural poor and vulnerable. The proposed operation targets farmer groups, focusing on poverty reduction and increasing food security. No significant change in land use or large-scale land acquisition is expected for the proposed PforR. MINAGRI has a proven track record</p>

	<p>in implementing projects ensuring the inclusion of vulnerable households and groups in the project design and implementation, developing projects that target people with disabilities and elderly, youth groups, and women's groups. Learning from the participatory planning process from the existing projects, such as, Lake Victoria Environment Management Project, the Ministry has adapted this participatory approach to project design through regular public consultations with the project beneficiaries, including project affected people. The Ministry has an adequate information flow at the district and grass roots levels to ensure a participatory approach to the decentralized planning process to the project design and implementation. In addition, a grievance and redress mechanism is in place at the district level to mitigate complaints from the communities.</p> <p>The program activities are not likely to change land use as it will be focused on intensifying production within the existing agricultural lands.</p> <p>Risk Assessment: Moderate.</p>
<p><i>Environmental and Social Context</i> (This section describes the geographical coverage and scope of the Program and environmental and social conditions in the Program area that may have significance for Program design and implementation.)</p> <p>Environment:</p> <ul style="list-style-type: none"> • Does the environmental setting of Program pose any special challenges that need to be taken into account? • Program activities in or near sensitive habitat areas? • Potential cumulative or induced effects? <p>Social: Area of social sensitivity; vulnerable groups?</p> <ul style="list-style-type: none"> • Potential cumulative or induced effects? 	<p><u>Environment:</u> Based on the experience within the existing WB supported portfolio and Rwandan legislative framework, the PSTA 4 activities are not likely to affect sensitive natural habitats, such as national parks and other protected areas. At the same time, the program needs to ensure the investments are selected and implemented to ensure that (1) ecologically sensitive sites are not negatively affected; (2) to the program activities are designed taking into account potential cumulative negative impacts on the environment; and (3) the climate change risks are incorporated into the technical designs.</p> <p><u>Social:</u> The proposed program targets vulnerable households, such as, female, child and elderly headed HH, unemployed youth and the genocide victims. No significant change in land use or large-scale land acquisition is expected for the proposed PforR. MINAGRI has a proven track record in implementing projects while incorporating vulnerable groups into the project design, developing projects that target people with disabilities and elderly, youth groups, and women's groups. The Ministry has adapted participatory approach to project design through regular public consultations with the project beneficiaries, including project affected people. The Ministry has taken decentralized approach to project implementation, ensures timely grievance resolution and adequate information flow to project stakeholders.</p> <p>Risk Assessment: Moderate.</p>
<p><i>Program Strategy and Sustainability</i> (This section situates the Program, and its environmental and social management</p>	<p>The PforR responds to GoR's national strategy for stimulating rapid and sustainable economic growth and</p>

<p><i>systems, within the country's broader development strategy, with particular emphasis on identification of factors that may impede successful Program management over time.)</i></p> <p>Strategic context: What is the long-term vision of this Program in relation to the country's development strategy?</p> <p>Does it include explicit environmental and social management objectives?</p> <p>Do Program activities commit, constrain or alter decisions of future generations?</p> <p>Are there any potential roadblocks to ensuring the environmental and social sustainability of the Program after implementation?</p>	<p>reducing poverty as articulated in <i>Vision 2020</i>, the national vision and policy framework with key priorities for the country's development by the year 2020, and further laid out in the Second Economic Development and Poverty Reduction Strategy Paper (EDPRS 2) delineates the agriculture sector as a key sector and a significant engine of growth for the country.</p> <p>The proposed PforR is designed as a programmatic results output-based agriculture sector-wide approach. The program is based on well-functioning Government fiduciary systems and practices including contract and financial management, governance and anti-corruption systems, social and environmental regulations and systems and technical capacity as demonstrated over the last 15 years in implementing World Bank supported programs in the sector. The PforR is also designed to reinforce and strengthen the Government's own systems for delivery of key agriculture services.</p> <p>The Program commits to the needs of the future generation. With a strong impact on agricultural production and productivity the program will contribute to diversify farm incomes, especially important for targeting the youth and very poor.</p> <p>If the land and expropriation policy which has been updated and approved by the Cabinet is not legislated by the parliament by the end of the year, it could potentially pose a roadblock during implementation.</p> <p>Likewise -The designation of National Parks, demarcation of buffer zones for the protected forests and the demarcation of protection zones for rivers and lakes is underway. The unclarity of these buffer and protection zones can potentially be a roadblock.</p> <p>The last mission was assured that these exercises will be completed by the end of the year, ahead of the implementation of the project.</p> <p>Risk Assessment: Moderate.</p>
<p><i>Institutional Complexity and Capacity</i> <i>(This section describes organizational, administrative and regulatory structures and practices, as they relate to environmental and social assessment, planning and management.)</i></p> <p>Does the Program involve multiple jurisdictions or implementing partners?</p> <p>Capacity or commitment of counterpart to implement regulations and procedures?</p> <p>Is there a track record of commitment and implementation experience on environment and social aspects?</p>	<p>PSTA 4 is implemented by the Ministry of Agriculture and Animal Resources (MINAGRI), Rwanda Agriculture Board (RAB), and National Agriculture Export Board (NAEB), four Single Program Implementation Units: World Bank, IFAD, African Development Bank and Belgium Technical Cooperation, and 30 districts. The program also focuses on expanded participation from private sector organization, whose capacity cannot be assessed at this point.</p> <p>The central government provides policy and financing leadership for the program, but implementation responsibilities rest with the task forces, RAB, NAEB, SPIUs, Districts and private sector. Implementation approaches vary with a mix of national, district, community, and private program delivery.</p> <p>MINAGRI, leading the program implementation, has a proven track record of commitment and expertise</p>

<p>Are there any known institutional barriers that would prevent the implementation of this Program?</p> <p>Is there sufficient institutional capacity to address the environmental and social impacts of this Program?</p>	<p>implementing projects with environmental and social risks. The Ministry has completed two phases of the RSSP program and has two more projects (RSSP3 and LWH) under implementation. All WB supported portfolio has consistent satisfactory ratings for environmental and social management. MINAGRI SPIU working with WB projects has experienced full time staff members focusing on E&S aspects of project implementation. These staff members have been an integral part of the overall implementation team, proactively managing E&S risks, while promoting benefits of the projects. The SPIU has successfully collaborated with the District staff that has continuously assisted the projects in achieving compliance on E&S matters.</p> <p>The Ministry is organized by single project implementation units (SPIUs) that work with different development partners. All SPIUs, aside from meeting the financing requirements from the DP, comply with the national legislation on environmental and social matters.</p> <p>Risk assessment: Substantial</p>
<p>Reputational and Political Risk Context (This section describes environmental and social issues, trends or other factors that may cause the program, the country, or the Bank to be exposed to significant reputational or political risk.)</p> <p>Potential governance or corruption issues</p> <p>Are there any political risks associated with this sector or proposed Program?</p> <p>Is the sector or Program known to be controversial?</p>	<p>The program does not present reputational and political risks. MINAGRI can further reduce the program risks, especially on the social side, if the Program adopts proactive documentation and public disclosure similar to its practice under DP sponsored projects.</p> <p>The GAC expert will be assessing governance and corruption issues.</p> <p>There are no political risks associated with the sector and proposed program.</p> <p>No.</p> <p>Risk assessment: Low</p>
<p>Overall Assessment: (This section describes the overall risk profile for the Program, based on the team's subjective weighting and aggregation of all factors identified above. Environmental and social risk factors should be summarized separately).</p> <p>Is the proposed Program suitable for PforR or would it be better suited to a specific investment loan?</p>	<p>Majority of the environmental and social risks potentially associated with PforR support for PSTA 4 activities are anticipated to be moderate, however, there is a potential for program to have cumulative negative effects, if individual investments are not screened and assessed to identify environmental and social risks.</p> <p>The overall environmental and social risks potentially associated with PforR support for PSTA 4 activities are anticipated to be substantial, due to introduction of PPP infrastructure projects that will require agencies either develop new business models or scale up existing approaches. The Program will address this risk by establishing appropriate selection and performance criteria. These actions will be included in the DLI 6 and PAP.</p> <p>Overall risk assessment: Substantial</p>

7. Inputs to Program Action Plan to Address Identified Risks and Gaps

Overall, the ESSA shows that the MINAGRI and RAB Environmental and Social systems, including those at the local level, are generally adequate for the Program implementation, with application of actions to address the gaps and to enhance performance during Program implementation. However, the adequacy of the environmental and social management systems of the potential private sector entities remains unidentified. Drawing upon this background, this section identifies the specific actions that are to be implemented in order to address the identified risks, gaps/challenges and needs.

7.1 Actions to Address Identified Environmental Risks and Gaps

Summary of key environmental impacts, risks and gaps: The key environmental impacts, risks and gaps identified in the preceding sections are summarized below:

- a) Potential Negative Impacts: impacts on ecologically sensitive sites, construction phase impacts during civil works, occupational health and public safety risks, dam safety issues, impacts on water resources due to increased use of agrochemicals. Certain hotspot areas are likely to present more risk with respect to these impacts.
- b) Challenges in implementation of the existing legal/regulatory provisions due to multiple regulations and insufficient human resources at regulatory authorities requiring strengthening of the capacity of the implementing agencies to comply with the relevant regulations and stronger monitoring of the implementation of procedures at the District levels.
- c) Need for mainstreaming the approach to sustainability planning with community involvement into all Program schemes.

Identified Actions: In order to address the identified environmental impacts, risks and gaps the following key actions have been identified:

- (a) **Exclusion of high-risk interventions:** Activities that are judged to be likely to have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people, and activities that involve procurement of works, goods, and services under contracts whose estimated value exceeds specified monetary amounts (high-value contracts) and require mandatory review by the Bank's Operations Procurement Review Committee (OPRC) are not eligible for Program-for-Results financing, and are excluded from the Program.

Table 4. Suggested criteria for ineligible infrastructure for financing under the PforR

Infrastructure	Characteristics
Irrigation infrastructure	Schemes that involve construction or rehabilitation of dams which fall under International Commission on Large Dams (ICOLD) definition of large dams (15m or higher; and/or dams of 5-15m height with >3 million m ³ reservoir volume) or schemes with high population density downstream (e.g. a

	settlement) ⁴ from the dam; groundwater-based schemes in overexploited and critical basins that do not integrate source sustainability measures; and schemes involving highly polluted surface water sources.
Natural Habitats	Investments with significant negative impacts on ecologically important areas, according to GoR environmental regulations. Such areas of ecological sensitivity include the National Parks (Volcanoes, Akagera and Nyungwe Forest), as well as other protected areas, such as forests (e.g. Gishwati and Mukura), lakes, such as Muhazi, Cyambwe, Rwampanga, Rweru, Nasho, Gisaka, Bugesera, and the Northern lakes (Bulera antabled Ruhondo).

(b) **Strengthening the existing GoR system for environmental management:** The Program Action Plan includes measures on strengthening the GoR’s procedures and capacity for environmental management of the Program. This action is – ‘Implement strengthened environmental management rules and procedures for the Program, supported by necessary capacity building measures to the sector institutions’.

(c) **Inclusion of ESIA,** cumulative impact assessment and other environmental due diligence aspects into the project lifecycle.

The following are the implementation modalities of these actions:

7.2. Implementation of Program Action Plan - Environment

MINAGRI has an existing set of Environmental Management tools (e.g. ESMFs, ESIA, SESA, ESMPs) have been incorporated into the Environmental and Social Implementation Manual describing strengthened procedures and providing technical guidance for environmental management of PSTA 4 PforR interventions. The key elements of the strengthened environmental rules and procedures are described below:

- a) A Compliance Checklist to ensure that activities that are not legally permissible are not undertaken and that requisite permissions are taken before any scheme/intervention is financed.
- b) Environmental and Social Impact Assessment (ESIA), which is a systematic process of identifying potential impacts and mitigation plan for schemes/interventions that pose environmental risk by virtue of their location, scale or nature. The interventions identified as requiring an ESIA include:
 - Program 1: construction of irrigation infrastructure and agrochemicals use and to lesser extent land husbandry activities;
 - Program 2: indirect impacts of agricultural research;

The risks are related to potential inability to apply practical and operationally feasible early screening practices for environmentally sensitive areas and chance finds or physical cultural resources during

⁴ Based on Organic Law (2005) implementation there are no settlements in the marshlands, however, should a significant settlement be identified downstream from the irrigation structure, such site should be excluded from the PforR program. As population density in Rwanda is the highest in Africa(416 people per km2, in 2012), a presence of a settlement downstream from the dam would increase its risk profile.

construction of civil works, which may lead to adverse impacts on ecologically sensitive areas and physical cultural resources.

c) As part of public-private partnership design, the participating private sector entity should develop and disclose their environmental and social management system, which should be independently assessed as part of screening of eligibility for this private organization participation in a PPP investment. Such a system shall outline management processes and procedures that allows an organization to analyse, control and reduce the environmental impact of its activities, products and services, and operate with a greater efficiency and in compliance with the national environmental and social laws and regulations.

d) Technical guidelines on good environment management practices concerning siting, design, operation, maintenance, etc., of schemes/interventions.

e) Documentation and disclosure practices for all environmental and social reports to ensure transparency and timely and proactive information sharing with all Program stakeholders.

e) Monitoring arrangements on environmental management that include internal and third-party monitoring of the environmental performance of the Program (with additional emphasis on the identified environmental hotspots) twice during the Program duration. The key indicators on environmental management to be tracked through the monitoring are:

- Indicator 1: Number of interventions for which ESIA have been prepared and integrated into the detailed scheme reports/plans and contract documents as a percentage of schemes/interventions identified as requiring the same.
- Indicator 2: Percentage of schemes/interventions that are in compliance with the legal/regulatory requirements on environment.

f) Capacity building and technical assistance on environmental management through strengthening of human resources, and through training is part of the Program Action Plan that includes the following elements:

1. **Human resources:** The human resources to be positioned in the key sector institutions starting from the first year of the Program are:

- i. Environment Management Specialists (including any additional staff, as required) at the SPIU level in MINAGRI and RAB.
 - ii. Identified District-level staff that will be working with environmental management staff from REMA and RDB.
 - iii. Positions to support sector-wide capacity building: adoption of Environment Management within the PSTA4 program context at the national level, including RAB.
- i. As part of PPP activities design: (a) environmental and social specialist(s) shall be appointed in the private sector organization.

2. **Training:** As part of Technical Assistance and Institutional Capacity building, training programs on national legislation requirements and good environmental management practices and procedures will be organized for staff of the District, Sectors and Cells. The implementation will be on the basis of a detailed training calendar starting from the first year of the Program.

7.3 Actions to Address Identified Social Risks and Gaps

Summary of key social impacts, risks and gaps

The assessment identified gaps in capacity for implementation and monitoring, social accountability and grievance redress at village level and weaknesses in terms of capacity for effective management of demand responsive approach and accordingly identifies actions to address the gaps, captured in the integrated Program Action Plan along with environmental actions.

Identified Actions:

The agreed actions to mitigate/ manage identified social risks are as follows:

- a) Application of the Environmental & Social Implementation Manual (developed under PSTA3 PforR support) to inform Program implementing organizations about key aspects of social aspects such as: resettlement, equity and benefit sharing, social inclusion processes and procedures, roles and responsibilities of all stakeholders and sub-program cycle to facilitate planning, implementation and post implementation. The Ministry has a Resettlement Policy Framework and Process Framework prepared for other Agriculture projects which will remain relevant for this Program.
- b) Establish systems to promote social accountability. Social audit function will be assigned to the existing Cell level committees to audit plans to ensure that they are in compliance with inclusion, community consultations, land acquisition, benefit sharing and provision of services to vulnerable groups and households.

The following are the implementation modalities of these actions:

Implementation of Program Action Plan - Social

102. The key elements of social risk management rules and procedures include the following:

- a) Community Sub-project Cycle: dissemination and application of the Environmental & Social Implementation Manual to address social impacts & development management to inform the implementing partners about the processes and procedures, roles and responsibilities of all stakeholders and sub-project cycle to facilitate planning, implementation and post implementation. The broad elements of the sub-project cycle are:
 - orientation of implementing partners on the ‘guiding principles’ – inclusion, participation, transparency, and accountability and on their roles and responsibilities
 - rapport building and awareness through communication program
 - community consultation and planning processes to strengthen cell/village level planning;

- consultative process of women to facilitate prioritization of their needs to be reflected in district/cell plans
 - selection and training of resettlement and social audit committees on roles and responsibilities
 - establishing grievance mechanism
 - disseminating information on the findings of social audit committee and settlement of grievances at the community/village level
- b) Systems to promote social accountability. Local committees with the social audit function will ensure that they are compliant with inclusion, participatory processes and access to benefits by the vulnerable groups.
- c) Capacity building and technical assistance on social management through strengthening of human resources, and through training and IEC. The key elements are as following:
- Strengthening communication program for dissemination of information. The IEC program will be prepared as a comprehensive communication strategy to disseminate complete information about the program, implementation and post implementation to enable Districts and communities to take informed decisions.
 - Deepening decentralized decisions making process. The District technical teams will facilitate mobilize and prepare plans at Cell/village level and consolidate at District/National. In addition, these technical teams will further assist to ensure that informed consultations are organized for proposed investments in the districts/cells that have dominant female headed households and vulnerable groups.
 - Monitoring the progress on implementation of strengthened social management rules and procedures for the Program including review of the land requirement and practice and procedure adopted to ensure availability of land, fairness of compensation and benefit sharing under commercial farming.
 - Strengthening of staffing. A comprehensive training plan will be developed for different implementing partners to strengthen capacity of MINAGRI/RAB/Districts to provide training on environmental and social management.

The following Table presents the implementation plan of the environmental and social actions of the PAP with time lines. The Plan of Action includes the agreed-upon measures that will be periodically monitored by the World Bank team during Implementation Support Missions. Other inputs to Implementation Support Plan specific to Environmental and social effects include:

- Reviewing implementation progress and achievement of Program results and DLIs;
- Working with the client to resolve any identified implementation issues;
- Assist the client to carry out institutional capacity building;

- Monitoring the performance of Program systems, including the implementation of agreed E&S strengthening measures in the Program Action Plan; and
- Monitoring changes in Program risks as well as compliance with the provisions of legal covenants.

Table 5: Implementation Plan Actions – Environmental and Social Effects

Sub-action description	Deadline	Responsible party	Completion measurement
Staffing and Capacity Building: Hire supplementary staff and develop a continuous capacity building and training program on ESIM to improve the understanding and application of the GOR E&S policies, and adoption of good sector practices on environmental and social risk management and social accountability, at the National and District level. The audience should include any private sector entities participating in the program.	Before effectiveness	RAB, MINAGRI	Increase in trained staff at the national and district levels.
A Compliance Checklist to ensure that activities that are not legally permissible are not undertaken and that requisite permissions are taken before any scheme/intervention is financed	Before effectiveness	RAB, MINAGRI	The Checklist should follow the criteria for ineligible infrastructure for financing under the PforR, presented in the ESSA
As part of preparation of the Private Sector Leveraging Strategy, establish the selection and performance criteria for participating private sector entities, consistent with the ESIM and overall national environmental and social government regulations. For selected private sector organizations, require adequate quality ESMS (as specified in the section 4 above) ⁵ to be developed and adopted as a prerequisite to their participation in the Program	Before effectiveness	RAB, MINAGRI	Mechanism for selection of private sector entities with sufficient capacity for diligent environmental and social management. Increase capacity of other private sector entities participating in the implementation of the program.
Private Sector Leveraging Strategy to include conditions for PPP design, such as land acquisition and compensation management to be done by public sector (continuing the good practices established under publicly financed MINAGRI projects). In preparation of	First year, DLI 2 deliverable.		Design model for PPP investments that reduces potential negative environmental and social risks and continues good practices established by the Districts

⁵ Environmental and Social Management System shall be consistent with the GoR regulatory framework, and feature the following aspects: Identifying the organization’s environmental aspects and associated impacts; Developing and establishing programs to mitigate risks associated with the threats and opportunities; Identifying objectives and goals associated with programs; Identifying compliance obligations; Monitoring and measuring progress in achieving the objectives; and Ensuring employees’ environmental awareness and competence;

the Strategy, review the quality and impact of E&S assessments of the existing private sector investments and provide recommendations on the scope of their inclusion into the Private Sector assessment process.			under MINAGRI publicly financed projects.
PPP Agreement to include a requirement to comply with ESIM through implementation.	Year 1	RAB	Establish a legal requirement to comply with established sectoral Environmental and Social risk management practices.
Conduct an audit to assess application of the private sector screening procedure and conduct a training course for RAB, MINAGRI and NAEB staff.	Year 3	RAB, MINAGRI	Assess effectiveness of the private sector screening to establish the quality and application of the environmental and social system of the participating private sector entities.

Annex 1: Summary of Public Consultations

1. Scheduled to be conducted in April 2018.