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## THE AFRICAN DEVELOPMENT BANK GROUP



### ADDITIONAL FINANCING PROJECT APPRAISAL REPORT SMALLHOLDER AGRICULTURE DEVELOPMENT FOR FOOD AND NUTRITION SECURITY ADDITIONAL FINANCING

## REPUBLIC OF LIBERIA

US\$ 10 MILLION

BOARD APPROVAL DATE: 30-NOVEMBER-2023

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**CURRENCY EQUIVALENTS**

Exchange rate effective 6/30/2023

Currency Unit <sup>1</sup>	Equivalent
1 Unit of Account	222.44 [LRD]
1 United States Dollar	165.13 [LRD]

**FISCAL YEAR**

1 January 2023 – 31 December 2023

**WEIGHTS AND MEASURES**

1 Metric ton	2,204.62 Pounds (lbs)
1 Kilogramme (kg)	2.20462 lbs
1 Meter (m)	3.28 Feet (ft)
1 Millimetre (mm)	0.03937 Inch (“)
1 Kilometre (km)	0.62 Mile
1 Hectare (ha)	2.471 Acres

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<sup>1</sup> Add any additional foreign or local currencies relevant to the project and their currency equivalents.

**ABBREVIATION AND ACRONYMS**

ADF	African Development Fund
AF	Additional Financing
AfDB	African Development Bank
CRFA	Country Resilience and Fragility Assessment
CSP	Country Strategy Paper
EIRR	Economic Internal Rate of Return
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESCON	Environmental and Social Compliance Note
FC	Foreign Currency
FIRR	Financial Internal Rate of Return
GAFSP	Global Agriculture and Food security Program
GHG	Green House Gases
LC	Local Currency
NCO	National Coordinating Office
NPV	Net Present Value
OCB	Open Competitive Bidding
PAR	Project Appraisal Report
PCR	Project Completion Report
PIU	Project Implementation Unit
PLW	People Living with Disabilities
RAP	Resettlement Action Plan
SDG	Sustainable Development Goals
UA	Unit of Account

## PROJECT INFORMATION SHEET

### CLIENT INFORMATION

<b>Additional Financing Project Name</b>	SMALLHOLDER AGRICULTURE DEVELOPMENT FOR FOOD AND NUTRITION SECURITY- ADDITIONAL FINANCING
<b>Original Project Name</b>	SMALLHOLDER AGRICULTURE DEVELOPMENT FOR FOOD AND NUTRITION SECURITY
<b>Sector</b>	Agriculture
<b>Grant Recipient</b>	Republic of Liberia
<b>Project Instrument</b>	Grant
<b>Executing Agency</b>	Ministry of Agriculture

### COUNTRY AND STRATEGIC CONTEXT

<b>Country Strategy Paper Period:</b>	2019 – 2025, extended
<b>Country Strategy Paper Priorities supported by Project:</b>	Priority Area 1 – Economic diversification through improved transport and energy infrastructure; and Priority Area 2 – Improving economic governance and enhancing private sector development.
<b>Government Program (PRSP, NDP or equivalent):</b>	Pro-poor Agenda for Prosperity and Development (PAPD), 2018 Dakar 2 Compact, 2023 Liberian Agriculture Sector Investment Plan (LASIP II), 2018 National Food Security and Nutrition Strategy (FSNS), 2019
<b>Project classification:</b>	High5-(2) Feed Africa High5-(5) improve the quality of life for the people of Africa  SDG 2: End hunger, food security and improved nutrition, sustainable agriculture SDG 5: Gender Equality and Empowerment of women SDG 8: Decent Work and Economic Growth SDG 10: Reduced inequalities SDG 12: Responsible production and consumption  Feed Africa Strategy, Bank’s Jobs for Youth Initiative (“Jobs for Youth in Africa Strategy (2016-2025)) and Skills Development for Industrialization the Gender Strategy (2021-2025)
<b>Country Performance and Institutional Assessment<sup>2</sup>:</b>	3.5 in 2020.
<b>Projects at Risk in the country portfolio:</b>	37% red flagged operations, August 2023

### PROJECT CATEGORISATION

<b>Environmental and Social Risk Categorization</b>	Original Project	Category 2,
	Overall Project <sup>3</sup>	Category 2, July 2023
<b>Does the project involve involuntary resettlement?</b>	Original Project	No
	Overall Project	No
<b>Climate Safeguards Categorization:</b>	Original Project	Category 2
	Overall Project	Category 2
<b>Fragility Lens Assessment:</b>	Original Project	Yes

<sup>2</sup> Obtain CPIA rating here - [Country Policy and Institutional Assessment \(afdb.org\)](https://www.afdb.org/en/knowledge/publications/country-policy-and-institutional-assessment) (VPN required)

<sup>3</sup> Overall Project is the original project + the AF

Gender Marker System Categorization:	Overall Project	Yes
	Original Project	Category 2
	Overall Project	Category 2

#### ADF/ADB KEY FINANCING INFORMATION

Source	Amount (millions)		Financing Instrument
	US		
GAFSP	10 million		Grant
<b>Total Project Cost:</b>	10 million		
<b>Additional Bank Group Financing as percentage of Original Project total cost</b>	115%		
<b>Reason(s) for additional financing (check all that apply)</b>	Scaling Up a project		

#### PROJECT DEVELOPMENT OBJECTIVE AND COMPONENTS

<b>AF Project Development Objective:</b>	The project development objective is to improve food and nutrition security and reduce poverty of targeted rural populations in Liberia.
<b>AF Project Components:</b>	Component 1: Support to enhancing smallholder agricultural productivity & market access [\$6.9 million]
	Component 2: Institutional Strengthening and Capacity Building [\$2.15 million]
	Component 3: Project Mgt, Coordination, M&E & Knowledge Management [\$0.86 million]

#### AF PROJECT PROCESSING SCHEDULE TO BOARD APPROVAL

<b>Appraisal Mission:</b>	June 2023
<b>Planned Board Presentation:</b>	September 2023
<b>Effectiveness:</b>	October 2023
<b>Project Implementation Period:</b>	2023 – 2026
<b>Planned Mid-term Review:</b>	2024
<b>AF Project Closing Date:</b>	March 2026
<b>Original Project Closing Date:</b>	March 2026

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# 1 BACKGROUND

1. On 21st June 2021, the Board of Directors of the African Development Bank approved Global Agriculture Food Security Program grant of US\$ 8.2 million and African Development Fund grant of UA 0.3 million to the Republic of Liberia respectively, to finance Smallholder Agriculture Development for Food and Nutrition Security Project.
2. The original project development objective is to improve food and nutrition security and reduce poverty of targeted rural populations in Liberia. This will be achieved through (i) increased agricultural production and productivity of smallholder farmers (with a focus on food crops such as rice, cassava, and vegetables), (ii) improved smallholders' value addition, market access and income, and (iii) strengthening the capacity of the government institutions, farmers and producer organizations.
3. The key outcomes of the original project are to: a) increase agricultural productivity by increasing the yields of rice and cassava to 3.5 Mt/ha and 25 Mt/ha respectively; and b) Increase availability of food through increasing rice and cassava production by 29,050 Mt and 91,800 Mt respectively. These outcomes will be achieved by strengthening of sustainable crop production and intensification by producing breeder seeds, foundation and certified seeds for farmers cultivating 7,000 ha of land. The project is also supporting value addition and linking farmers and processors to markets through the establishment of 6 post-harvest facilities for primary processing of cassava and rice, with the help of four aggregation centres located near the processing centres. Other expected outputs from the project includes strengthening participatory farmer advisory services, support to national food safety and security, strengthening the capacity of Ministry of Agriculture in investment planning and implementation.
4. The project was supervised in November 2022 and June 2023. The two supervision missions rated the project's overall implementation as satisfactory. The project is on course to achieve its Development Objective (DO). The Development Objective (DO) rating is 3 (Satisfactory). The Implementation Progress (IP) rating is 3 (Satisfactory). The project outputs relating to rice foundation seeds and cassava cuttings multiplication, establishing and equipping food safety and seed laboratories, establishing mechanisation and repair centre demonstrate that it's the project's impact so far has been consistent with the expectations set out in the original Project Appraisal Report.
5. The project is in full compliance with the fiduciary undertakings in the Protocols Grant Agreement and Project Appraisal Report. The financial audit for the year ended 2022 has been submitted to the Bank. The project's current Financial Management performance is rated as satisfactory, and the Financial Management risk rated as moderate. The Financial Management arrangement put in place is considered adequate and performing as envisaged.
6. The procurement records management system of the project has kept satisfactory records for all currently ongoing procurement activities. The various procurements under Bank Procurement Policy and methodology have largely followed the agreed procedures for implementation of the project. The project has completed the environmental impact assessment (ESIA) and developed Environmental and Social Management Plans for all six project counties. The Environmental Protection Agency has issued the environmental permit to the project. The project is, therefore, in full compliance with the Bank's ISTS safeguards requirements.



## 2 ADDITIONAL FINANCING

### A. Rationale

7. The rationale for the additional finance is to implement additional and expanded activities to scale up the development impact of the original project. The additional finance project will scale up the original project activities to increase the number of project beneficiaries.

8. Liberia like many other countries in the sub-region, suffers the impact of the ongoing Ukraine-Russia conflicts, exacerbated by the global pandemic with ongoing and lasting effects that expose the disparities and fragilities in its food systems. These food systems disparities and susceptibilities accentuate the need for immediate actions to ensure that Liberia's food systems are void of external shocks and sustainably resilient to address all aspects of food systems strengthening.

9. The agriculture sector of Liberia has been affected by increases in the prices of imported agricultural inputs. The war in Ukraine, rising energy costs, and the continued fallout from the COVID-19 pandemic were already destabilizing the fertilizer sector. Further escalation in fertilizer prices will be untenable for smallholder farmers. As the supply of fertilizers declines and prices increase, food prices will escalate, making it mandatory for food import-dependent countries, such as Liberia, to maximize efforts to boost local production in a bid to avert the impact on food and nutrition security.

10. The additional finance is to assist the Republic of Liberia increase domestic food production to build resilience against food price shocks arising from the war in Ukraine. The proposed project is anchored on government priorities to improve food security and strengthen livelihood, agricultural transformation, and economic prosperity for all. These priorities are the results of nationwide consultations (National Food Systems Dialogue) and the development partner's crisis response plan to mitigate the crisis and build resilience.

11. The project is designed to respond to policy measures that aim to contribute to an agri-food system that is functional with lasting effects of crisis response measures on vulnerable groups and longer-term options for agri-food system transformation and resilience building.

12. The additional financing satisfies and meets all the general eligibility criteria:

- i. providing additional financing is a better option than starting a new project. The project seeks to scale up existing project activities, hence additional finance saves time in project preparation. The project will augment outcomes and outputs while maximizing efficiency by using the existing implementation structures already in place in the original project;
- ii. the overall project is aligned with the Bank's Country Strategy Paper (CSP) 2019 – 2025 (extended) which aims to support private sector driven economic diversification and strengthen economic governance, and its cross-cutting areas of emphasis (strengthening resilience to fragility, capacity development, gender and women's empowerment, youth economic empowerment, environment and climate change, and regional integration and trade) and the proposed project contributes directly to objectives of the Feed Africa Strategy of the Bank;
- iii. the overall project is consistent with the original project's development objectives. The development objective of the additional financing project is same as the original project;
- iv. the overall project is technically feasible, economically, and financially viable;
- v. the overall project has satisfactory institutional, fiduciary, environmental and social safeguards arrangements;
- vi. the overall project has a satisfactory Quality at Entry (QaE) assessment.

### B. Project description

13. The objectives of the project did not change from the original objectives in the baseline project. The project development objective is to improve food and nutrition security and reduce poverty of targeted rural populations in Liberia. The project components remain three: i) Support to enhancing

smallholder agricultural productivity and market access; ii) Institutional Strengthening and Capacity building; and iii) Project management and coordination.

### **Component 1: Support to enhancing smallholder agricultural productivity and market access**

#### *Sub-Component 1.1. Strengthening of sustainable crop production and intensification*

14. The project will support smallholder farmers through an integrated approach, low-cost and effective climate-smart technologies that support multiple cropping cycles through gender-sensitive interventions. The project will support the expansion of the development of seed supply system for rice, cassava, and vegetables through seed multiplication. This activity will scale up the development of a seed supply system for selected value chains (rice, cassava, and vegetables). The Central Agriculture Research Institute (CARI) will increase the number of seed grower groups and build the capacity of various seed grower groups to produce and distribute the certified seeds in Liberia. Additional 250 tons of foundation seeds are expected to be produced by CARI, and about 17,000 tons of certified seeds will be produced by seed growers. The certified seeds are expected to be cultivated on 30,000 Ha of farmlands. The project will support the rehabilitation and equipping of a seed bank and the enhancement of seed management at CARI to sustain viable storage of germplasm of parent materials. The project will provide seed health and equipment for the seed laboratory. The project will also support training additional seed growers in seed production, processing, and packaging.

15. The project will support smallholder farmers through Integrated Lowland Rice and Fish farming with the development of fish habitats/ponds, purchase of aquaculture inputs (fingerings, feeds, etc.), and provision of training on improved aquaculture management techniques and fish processing. The project will develop 75 Ha of fishponds for the integrated rice/fish farms. Fish farms will use the existing water on the rice farms. This activity will introduce and train farmers on integrated rice and fish farming techniques to enhance farmers' incomes and improve nutrition. Key beneficiaries are existing lowland rice farms, of which 25% of their farms will be integrated with fish farming.

16. The project will support the establishment of small-scale irrigation systems for all year-round farming – climate-smart agriculture in lowland ecologies. This activity will support the installation of at least thirty (30) small-scale systems in the ten counties. The project will deliberately target women-led cooperatives and farmer groups.

#### *Sub-Component 1.2. Value Addition and Market Linkages*

17. Under this sub-component, the project will focus on linking farmers to markets through supporting value chain development for rice, cassava, and vegetables. The project will strengthen the linkages between micro-hubs/SMEs and farmers for processing of rice, vegetables, and cassava for commercial purposes, including activities to increase support and capacity building for contract farming to ensure that farmers have ready markets for produce (e.g., business management support, facilitate contract farming, farmers and micro-processors innovation platform).

18. The project will improve storage to reduce pre-harvest and post-harvest losses by establishing additional aggregation centers (emphasis on vegetables). This will provide cold room storage facilities to vegetable farmers to reduce postharvest losses. The project will strengthen the National Standards Laboratory for food quality and safety testing by procuring additional equipment (Aflatoxin B & G, OTA, Histamine, Metallic, and Pesticide Residues) and capacitate the lab on the effective use of equipment.

19. The project will support farmers with clean energy sources for the processing and preservation of crop produce and fish harvest. The project will procure and supply 50 solar dryer kits for small-scale fish, cassava, and vegetable processing and provide support to Micro-hubs (Equipment and Training) for processing rice and cassava. The project will provide post-harvest equipment/machinery and training to micro-hubs to enhance their capacity for continuous operations.

### **Component 2: Institutional Strengthening and Capacity Building**

*Sub-Component 2.1: Strengthening public and private sector extension services via training the trainers (ToT).*

20. This sub-component will focus on capacity development and systems strengthening of public and private sector extension services by training the trainers to enhance adequate service provision with sustainable measures. This will include close collaboration with CARI, the TAAT compacts for the selected commodities, National Standard Lab, Farmer Based Organizations, Farmer Field Schools, and farmer cooperatives through thematic training, Knowledge exchange and exposure visits, and cross-county learning on best practices and innovations. The project will provide mobility logistics to support the seed certification committee to be able to visit and maintain quality assurance among seed growers before certification. The project will provide two vehicles to support the seed certification committee to enable seed inspectors to visit seed farms to ensure that the right seed protocols are being adhered to and two vehicles to enhance project coordination, including supervision and monitoring missions.

21. The Project will enhance the productive capacity of FBOs by providing mechanized farm equipment (Tractors, Power tillers, Threshers, etc.) to at least 37 FBOs. Four sets of the mechanized equipment will be made available to service the cluster of the FBOs. The project will also support the training of FBOs on the use and maintenance of the equipment. The project will support small farm business development training for FBOs and promote rural enterprise development skills, particularly for women and youth. The project will promote competitive small farm business plan development among the groups and link FBOs with the most responsive business plan to financial institutions.

*Sub-Component 2.2: Strengthening the capacity of the Ministry of Agriculture (MOA) in investment planning and implementation*

22. This sub-component will support the capacity strengthening of the MoA in the planning and implementation of sustainable agricultural investments. About 20 staff of the MoA will be supported to undertake short-term professional training in sustainable agricultural investments including monitoring and evaluation of agricultural projects, Climate Smart Agriculture (CSA) practices, pest and disease surveillance - effective and sustainable data collection, early warning and management. The project will also support the MoA to develop and implement Environmental and Social Management Plans (ESMPs) for the project counties including the additional counties.

*Sub-Component 2.3: Enhance the community-based nutrition promotion activities*

23. This sub-component will expand the community-based nutrition promotion efforts through awareness raising activities, development of peri urban agriculture, home and school gardening promotion that will contribute to the improvement of nutrition status of the target beneficiaries.

24. Proposed additional activities include development of peri-urban agriculture including provision of kitchen gardening demos to peri-urban households; support home-grown school feeding programs for school children; support home and school gardening for nutritional supplements to reduce malnutrition among children, lactating and pregnant mothers; and implementation of community-based nutrition promotion activities. The community journalists will serve as the lead for awareness raising in project operational communities. The project will facilitate the formation of Rural Community Nutrition Clubs (RCN) across the project's operational areas. The RCN will be supported by the project to engage communities and raise awareness of the benefits of nutrition and how to acquire homegrown nutritional balance. The project will support the production of infographics leaflets, nutritional calendars, and jingles across the project's operational areas.

### **Component 3: Project management and coordination**

*Sub-component 3.1: Strengthen the activity of the National Coordinating Office (NCO)*

25. The sub-component will strengthen the capacity of the National Coordinating Office (NCO), focusing on the planning, coordination, management, progress tracking and delivery of cost-effective

project results with the efficiency that enhances project management. This will include supporting appropriate design, monitoring and evaluation, and implementation of activities proposed in components 1 and 2.

26. Proposed additional activities include the recruitment of additional staff to support the current project team. Three key staff and two assistants (i.e., agri-business specialist, communication specialist, aquaculture technician, procurement and finance assistants) will be recruited to support project implementation and to improve project communications and visibility through audio-visual materials.

### C. Revised Project Cost and Financing Arrangements

27. The overall cost of the project is US\$ 19.08 million (UA 14.13 million). The total project cost comprises of GAFSP Grant of US\$ 18.2 million (95%), ADF contribution of UA 0.3 million (US\$ 0.429 million) and GoL contribution of US\$ 0.45 million (2%) in kind. This cost is inclusive of physical and price contingencies estimated at average rates of 8% and 5% respectively. The price contingencies were estimated based on actual and projected levels of local and foreign inflation rates of about 20% and 10% per annum, respectively. The physical contingencies are estimated from 0 to 15%, based on common practices. The total cost of the original project is US\$ 9.08 million while the additional finance is US\$ 10 million. The additional finance is estimated at 110% of the original project total cost. The additional finance will be used to finance the integrated aquaculture/rice farming inputs and production of the additional seeds as well as the establishment of the micro irrigation schemes for vegetable productions. The home-grown school feeding will also be financed by the additional finance. The Government contribution will be in kind contribution of project staff seconded to the National Coordinating Office (NCO) and provision of office accommodation. The project resources shall not be used to finance taxes and duties in the project. A summary of the project cost estimates by components and expenditure accounts is shown in Tables 1 - 4, while details are provided in the Technical Annexes.

**Table 1: Estimated Cost of the Overall Project by Component US\$'000**

Components	Original Project		AF Project		Total	% of Total Project Cost
	Local Currency	Foreign Currency	Local Currency	Foreign Currency		
Support to enhancing smallholder agricultural productivity & market access	2,579.78	2,404.23	1,819.53	3,371.26	10,174.80	52%
Institutional Strengthening and Capacity Building	1,337.05	562.08	2,338.90	1,290.10	5,528.13	28%
Project Mgt, Coordination, M&E & Knowledge Management	1,254.00	87.00	856.00	52.00	2,249.00	12%
<b>Total Base Costs</b>	<b>5,170.83</b>	<b>3,053.31</b>	<b>5,014.43</b>	<b>4,713.36</b>	<b>17,951.93</b>	<b>92%</b>
Physical contingencies	147.32	343.74	34.50	80.50	606.06	3%
Price contingencies	303.97	62.87	293.06	304.15	964.05	5%
<b>Total Project Costs</b>	<b>5,622.12</b>	<b>3,459.91</b>	<b>5,341.99</b>	<b>5,098.01</b>	<b>19,522.03</b>	<b>100%</b>

**Table 2: Overall Project Sources of Financing US\$'000**

Sources of Financing	Original Project		AF Project		Total	% of Total Project Cost
	Local Currency	Foreign Currency	Local Currency	Foreign Currency		
GAFSP	5,219.68	2,980.32	5,165.49	4,834.51	18,200	93
African Development Fund	343.22	85.81	-	-	429	2
Republic of Liberia	453.00	-	-	-	453	2
<b>Beneficiaries</b>	-	-	154.00	286.00	440	2
<b>Total Project Costs</b>	<b>5,622.12</b>	<b>3,459.91</b>	<b>5,319.49</b>	<b>5,120.51</b>	<b>19,522</b>	<b>100%</b>

*Table 3: AF Project cost by category of expenditures*

Category	US\$'000			% of Base Total Cost	% of Total Project cost
	Local Currency	Foreign Currency	Total		
Goods	1,539.93	2,859.86	4,399.79	45	42%
Works	564.00	1,316.00	1,880.00	19	18%
Services	2,144.00	536.00	2,680.00	28	26%
Operating Costs	744.00	24.00	768.00	8	7%
<b>Total Base Costs</b>	<b>4,991.93</b>	<b>4,735.86</b>	<b>9,727.79</b>	<b>100</b>	<b>93%</b>
Physical contingencies	34.50	80.50	115.00	1	1%
Price contingencies	293.06	304.15	597.21	6	6%
<b>Total Project Costs</b>	<b>5,319.49</b>	<b>5,120.51</b>	<b>10,440.00</b>	<b>107</b>	<b>100%</b>

*Table 4: AF Project Expenditure Schedule*

Component	US\$'000			
	PY1	PY2	PY3	Total
Support to enhancing smallholder agricultural productivity & market access	267.66	4,333.14	1,253.60	5,854.40
Institutional Strengthening and Capacity Building	738.50	2,189.10	650.00	3,577.60
Project Mgt, Coordination, M&E & Knowledge Management	336.00	361.00	311.00	1,008.00
<b>Total Project Cost</b>	<b>1,342.16</b>	<b>6,883.24</b>	<b>2,214.60</b>	<b>10,440.00</b>

## D. Project's target area and population

28. The operational area of this project will be in eight counties: River Gee, Maryland, Bomi, Montserrado, Grand Bassa, Grand Gedeh, Bong and Margibi. Targeted counties were selected based on objective assessment against defined criteria; ecology, infrastructure, labor, target group, burden of malnutrition, crop history and presence of a market hub. The additional target population was estimated to be around 18,260 households in addition to the existing 11,740 households of the parent project to reach a total of 30,000 households. There will be additional 15,000 students benefiting from the home-grown school feeding activities. Therefore, the total project beneficiaries are estimated to be about 80,000 people comprising 30,000 farmers benefiting from input support and trainings and 50,000 school going children benefiting from school feeding and nutritional sensitization campaigns.

## E. Implementation Arrangements

29. The Ministry of Agriculture will be the Executing Agency of the additional finance project. The project's implementation arrangements will follow the implementation arrangement for the ongoing original project. The capacity of the existing National Coordinating Office was assessed and found to be acceptable to implement the additional finance activities.

30. The Home-Grown School Feeding component of the project shall be implemented by World Food Program. WFP has for several years implemented school feeding in collaboration with the Ministry of Education and other partners including the Ministry of Agriculture and school communities and has established network of potential partners that can deliver high quality programme. WFP will continue to utilize the expertise of Ministry of Education's School Feeding staff at the national, county and district levels, in delivering to the programme. As a multi-sectoral intervention, which links education, agriculture, nutrition and food security through an integrated approach, WFP will engage from time to time with key stakeholders.

31. The existing Project Steering Committee (PSC) shall be expanded to include representative from Ministry of Education (of not lower than the grade of director). The PSC shall ensure timely

implementation and monitoring of audit recommendations and also be responsible for the overall strategic direction and oversight guidance of the project as well as approve key project documents (including annual work plans and budgets).

32. The project will engage the Water Management Compact of the Bank's Technologies for African Agricultural Transformation (TAAT) led by the International Water Management Institute (IWMI) to provide technical assistance on the integrated rice-fish farming technique.

33. **Procurement:** Procurement of goods (including non-consultancy services) works and the acquisition of consulting services, financed by the Bank for the Project, will be carried out in accordance with the "Procurement Policy and Methodology for Bank Group Funded Operations" (BPM), dated October 2015 and following the provisions stated in the Financing Agreement. Specifically, procurement would be carried out following:

34. Recipient's Procurement System (RPS): Procurement of various group of transactions with low risk may be carried out using RPS informed by its Laws and Regulations (Public Procurement and Concessions Act, 2010 as amended and reinstated) using the national Standard Solicitation Documents (SSDs) agreed during project negotiations for various group of transactions detailed in annexes of this report and the provisions stipulated in the Financing Agreement.

35. Bank Procurement Policy and Methodology (BPM): Bank standard PMPs will be used for the remaining packages using the relevant Bank Standard Solicitation Documents (SDDs).

36. Procurement Risks and Capacity Assessment (PRCA): the assessment of procurement risks at the country, sector, and project levels and of procurement capacity at the Executing Agency (EA), has been undertaken in detail during this project appraisal and the outcome will confirm decisions on the procurement regimes (BPS and Banks PMP) that will be used for the transactions under the project including its stipulation in the procurement plan.

37. **Financial Management:** The Ministry of Agriculture (MOA) which is currently executing the ongoing SADFONS project will execute the Additional financing project. The existing technical implementation of the project will continue under the SADFONS additional financing. However, the existing financial management (FM) system will be reinforced by ensuring full implementation of the recommended FM arrangements in the ongoing SADFONS project. A financial management specialist (who shall be a professionally qualified accountant, with hands-on experience in donor funded projects accounting and financial) will be competitively recruited to head the FM function of the ongoing project and additional Financing. The Project Accountant (at post) will report to the financial management specialist (FMS) and be assisted by an Accounts Assistant (to be seconded for capacity building and sustainability). The respective duties of the FM function staff will be detailed in their appointment letters to ensure adequate segregation of duties. Both the FMS and PA shall be subjected to annual performance evaluations to ensure that they effectively support the recipient's compliance with the Bank's financial management requirements. The FM team will effectively work with the project implementation team at the Ministry of Agriculture, to ensure that the project is implemented successfully and timely. The Additional Financing project will use the existing Financial Management Procedures Manual (FMPM), Tompro accounting software and the chart of accounts to record, process project transactions and prepare financial reports. In harmony with other donor-funded projects and GOL accounting standards, the Additional Financing project will adopt International Public Sector Accounting Standards (IPSAS) Under Financial Reporting Cash Basis framework to prepare project financial statements (PFS). The FMS shall have overall responsibility for the preparation of all project reports. On a quarterly basis the FMS shall ensure the PA generates from the Tompro Accounting software a consolidated (consisting of both the ongoing SADFONS and Additional financing) quarterly un-audited interim financial reports (IFRs), which must be reviewed and approved by the FMS before submission to the Bank within forty-five (45) days after the end of every calendar quarter. At the end of each fiscal year, the FMS shall ensure a draft consolidated project financial statements is prepared in line IPSAS Cash Basis, which must be audited by the General Auditing Commission (GAC) using audit terms of reference (TOR) agreed with the Bank. The audit reports shall be submitted to the Bank no later than six (6) months after the

end of each financial year. The contents of the IFRs and annual financial statements have been agreed and shall be discussed in detail at project launch.

38. The existing internal control and administrative procedures shall be adopted with some modifications to strengthen the overall control environment. The assessment recommends that Internal Audit Agency second an internal auditor to the MOA who shall provide internal the audit function for the project. The seconded internal auditor shall provide internal checks and carry out periodic reviews on the operations of both the ongoing project and the additional finance, to strengthen the control environment. Also, the Bank's procurement rules, financial management and disbursement guidelines would provide additional guidance. The assessment further recommends that the existing project implementation manual (PIM) be customized to include the Additional financing and adopted to guide project implementation and operation. The internal controls section of the PIM will spell out the internal controls and administrative procedures and provide guidance on the day-to-day project financial management issues. The internal control environment will be underpinned by the clear definition of roles and responsibilities allowing for segregation of duties. The existing Project Steering Committee (PSC) will provide oversight governance and approve key strategic document (including annual workplans and budgets) for the project. The internal auditor's reports on the project must be approved by the Director of the IAA before submission to the PSC who will ensure the timely implementation of audit recommendations.

**34. Disbursement:** The following four (4) disbursement methods are used by the Bank in disbursing funds to projects: (i) Direct payments; (ii) Payments through Special Account (SA); (iii) Reimbursement method; and (iv) Reimbursement by guarantee. The Direct payments and reimbursement methods will be used in advancing funds under the Additional Financing project. In line with Bank's guidelines, the special account method will be authorized upon full justification of the special account of the closed Smallholder Agricultural Productivity Enhancement and Commercialization (SAPEC) Project. The Direct Payment method will be for the payments against larger contracts signed between project management and contractors/suppliers/ service providers. As an when authorized, the Special Account (SA) method will be used in paying for eligible recurrent expenses and smaller contracts only under GAFSP funding. This will require the opening of a dedicated USD denominated SA at a Commercial Bank in Liberia acceptable to the Bank. Reimbursements will be made for eligible expenses for goods, works, services and operating expenses already incurred and paid for by the GoL from its own resources. The remaining method (Reimbursement guarantee method) shall also be available for use by the project during implementation should the need arise. All disbursements will follow with the disbursement procedures outlined in the Bank's Disbursement Handbook 2020.

**35. Third Party FM Arrangements:** The third parties will be required to: (i) open a Special Account to receive funds for the project activities from the PIU in a bank and manner acceptable to the Bank, (ii) prepare and submit to the project each year the Annual Work Program and Budget, (iii) Prepare monthly bank reconciliations, and (iv) prepare and submit to the project, with a copy to the Bank, quarterly Financial Statements/Income and Expenditure Accounts for consolidation.

**36. Audit arrangements:** The General Auditing Commission (GAC) of Liberia will audit the consolidated annual financial statements (of the ongoing SADFONS and Additional Financing) projects, in line with the GAC's legal mandate. The consolidated financial statement will disclose both on the face of the PFSs and the notes to the accounts, the respective balances relating to the ongoing and the additional financing projects. The audit will be conducted in accordance with audit terms of reference (TOR) acceptable to the Bank. The audit reports (comprising the audited financial statements with the auditor's opinion and related management letter) must be submitted to the Bank no later than six (6) months after the end of each financial year. The audit cost shall be paid from project resources. The MOA submitted on time its audit report for the ongoing SADFONS project, which was reviewed and accepted by the Bank. Significant internal control issues were raised in the management letter, including inadequate supporting documentation for transactions, unexplained material variances, inconsistencies between payment vouchers and direct credit instructions and inadequate segregation of duties (among others). Albeit the closing audit report for the SAPEC project which closed on 31.08.2022 has not yet been submitted to the Bank by the MOA. The closing

audit report was due for submission to the Bank on 31.01.2023. The submission of the outstanding audit report will be a condition prior to first disbursement.

**35. Conclusion:** The assessment concluded the overall FM risk is rated substantial and to mitigate this further: (i) the MOA should strengthen the existing (Project Implementation Team) with the full complement of technical experts as to implement the technical components of the project; (ii) The MOA will competitively recruit an FMS who shall be a professionally qualified accountant to head the FM function of the project and second an Accounts Assistant (for capacity building and sustainability) (iii) MOA will customize and adopt the existing project implementation manual (PIM) to guide project operations and implementation; (iv) adopt the existing project software, Financial Management Procedures Manual (FMPM) and chart of accounts for recording & processing of project accounting transactions and financial reporting; (v) MOA shall ensure that the ensure that operational budget is approved the Steering Committee before 31 December of each year of operations and (vii) fully implement the FM action plan.

**39. Monitoring and Evaluation:** The basic tool for monitoring and evaluation of this project is the logical framework that details the impact, outcomes and outputs measurement indicators aligned to GAFSP core indicators and their disaggregation requirements. The project monitoring and evaluation officer will be responsible for the monitoring and evaluation of project activities and the implementation of the ESMP. He/she will also be responsible for developing specific tools for planning and data collection and ensure their gender sensitiveness.

40. The NCO will be required to provide the Bank with a quarterly report showing progress in implementing the approved program and annual budget. This report should include the following information for each activity: the physical objectives, the level of achievement and the explanation of any discrepancies, the expected costs and actual costs, and the explanations of any discrepancies, the financial data of the project. The Bank will carry out two (2) supervisory missions per year to assess progress in terms of realization of products and effects as well as administrative and financial performance. The mission will then make recommendations to improve project implementation. A performance status report will be written after each supervision mission.

**41. Sustainability:** To ensure sustainability of the project, the formulation process involved various stakeholders including the farmers and community leaders. The irrigation schemes will be managed by farmers' organizations and technical sustainability will be assured since they will finance the recurrent costs based on generated funds. The group strengthening and capacity development will build the capacity of the farmers' organizations to be able to manage the facilities.

42. Farmers remain challenged when attempting to improve and adapt to productive farming methods, especially when access to improved inputs and markets remains a key issue. In this respect, the project benefits from lessons from past projects by aiming to instil a critical number of master trainer capacity within the selected counties, by training at least two FFS master trainers in each county. This would build a degree of momentum through the FFS approach, to propel farmers into becoming more productive in selected value chains, while becoming custodians of community acquired knowledge and information developed within their groups. Community embedded facilitators will enable the knowledge to remain a perpetual force for learning and discovery among the farming communities, from generation to generation.

43. WFP will always, during the implementation of the project engage with and seek collaboration with Government counterparts, local communities and other stakeholders. The proposed home-grown school feeding seeks to gradually transition school feeding in the medium to long-term to a sustainable nationally owned and managed school feeding programme. Lessons learned from implementing the conventional school Feeding approach (procuring food commodities from the international market and delivering to Liberia for school feeding) since 2010 has proven to be often costly and difficult to maintain by the Government with its competing development priorities low investment in school feeding. Over the period 2022 - 2026, the project will have a phased approach by gradually increasing the number of beneficiaries for the home-grown school feeding as well as the percentage of food to be produced locally and purchased for the school feeding programme.



44. The Government's development plan, the Pro-Poor Agenda for Prosperity and Development (PAPD) recognizes home-grown school feeding as critical intervention to help contribute to achieving its objectives in the agriculture, education and social protections sectors. Hence, facilitating linkages between farmers and markets and embedding the management of the intervention into national and local structures including at community levels will ensure sustainability of the intervention.

45. **Risk Management.**

SN	Identified Risks	Mitigation measures
1	Project benefits captured by local elites due to weak participation / political influence	<ul style="list-style-type: none"> <li>- Publish and publicize selection criteria for transparent beneficiary selection</li> <li>- Publish beneficiary lists in public places and online</li> <li>- Increase beneficiary sensitization on the project</li> </ul>
2	Mechanization centres and irrigation systems are not well maintained or underutilized	<ul style="list-style-type: none"> <li>.-Ownership of machinery will remain with FBOs with sufficient time for oversight of operations by the project team</li> <li>- Build capacity of FBOs in operation and maintenance.</li> <li>-WUAs will be formed to take responsibilities for irrigation infrastructure</li> </ul>
3	Farmers discontinue using inputs after the initial farming cycle	<p>Heightened awareness of the importance of nutrition</p> <p>FFS help farmers to become custodians of local farming knowledge</p>
4	Difficulty in maintaining equipment.	Initiate a cost-recovery model to cover operational and maintenance cost
5	Implementing agencies limited by technical and operational capacities	- Train project staff on project objectives, activities and implementation arrangements among development partners
6	Climate risks: droughts, dry spells, floods, etc.	<ul style="list-style-type: none"> <li>-Promote climate-resilient Agricultural and sustainable land management Practices</li> <li>-Mainstream adaptation to climate change in M&amp;E and extension/advisory system</li> </ul>

46. **Knowledge Building:** Knowledge building will be vital to the success of the Project. Knowledge enhancement is foreseen on the evolving concept of decentralized implementation unit located in the Counties; the role of value chain actors including farmers and farmers' organization, women, youth, private sector, commercial and public sector. Knowledge will be captured using analysis of M&E database, supervision missions, mid-term reports, and periodic impact assessments and field exchange visits of the stakeholders within and outside the production areas. In addition, knowledge would be disseminated by showcasing the Project results using Bank's communication systems (Intranet, short documentaries on the Bank website, etc.). The Farmer Field Schools will serve as sources of innovative knowledge and information sharing learning tools empowering farmers and other actors of the value chain to train their peers, share knowledge and experiences, thus reducing their overdependence on the public extension agents. This will also expand significantly the number of value chain actors having access to the disseminated knowledge and information. The technical assistance support from FAO will introduce and consolidate knowledge and skills and facilitate technology and skills transfer both at the community and national levels.

### 3 PROJECT FEASIBILITY

#### A. Financial and Economic Analysis

47. Based on the objective and component structure, the Project is expected to generate benefits of different nature. Such benefits include: (i) increased yields; (ii) increased resilience to weather variability and shocks; (iii) reduced land degradation and soil rehabilitation; (iv) increased nutritional food availability at the household level from home-gardening activities; (v) additional income obtained from selling farm produce; and (vi) rural poverty reduction. Primary project beneficiaries are: (i) rural smallholder farmers including women and the youth in the selected counties producing rice and cassava, and involved in Farmer Field Schools (FFS); (ii) service providers and Small and Medium Enterprises (SMEs).

48. The additional target population was estimated to be around 18,260 households in addition to the existing 11,740 households (HH) to reach 30,000 households. In order to avoid overlaps and double counting, the project beneficiaries have been disaggregated as follows for the use in the Economic and Financial Analysis: (i) 30,000 households from Component A “Support to enhancing smallholder agricultural productivity and market”; (ii) 15,000 school children from Component B “Institutional Strengthening and Capacity Building”.

49. The period of analysis is 20 years to account for the phasing and gestation of the proposed interventions. Economic benefits from the farm and enterprise models have been aggregated using average incremental net benefits and beneficiaries for each agricultural and agri-business activities under the project interventions and assuming different adoption rates, extracted from the costing exercise. Economic benefits from enterprise models have been aggregated using an expected number of small enterprises to be supported by the project and for the agricultural models for the number of hectares. Benefits are phased-in progressively for all types of interventions.

50. Economic costs associated with improving productivity and agri-business and small and medium enterprises were estimated at US\$ 21.35 million. The economic costs have then been deducted from the overall economic benefit stream to obtain the project’s net incremental benefit stream. The economic analysis shows satisfactory results, with a Net Present Value at US\$ 18.26 million and a 23.7% Economic Internal Rate of Return (EIRR), suggesting that the overall project is economically profitable.

*Table 5: Overall Project Key economic and financial figures (for cost benefit analysis)*

FIRR (base case)	23.7%
EIRR (base case)	21.35%
NPV, (discount rate)	US\$ 18.26 million, (12%)

51. **Sensitivity analysis.** Results were tested for sensitivity to variations in benefits and costs and for various lags in the realization of benefits. A delay of 2 years in the generation of benefits or a decline of 30% relative to the base scenario would reduce the EIRR to 18.5% and 18.8% respectively, substantially above the discount rate. Cost overruns would have very moderate impact, with EIRR falling to 20.2% with a 30% increase. An adoption rate of 70% would decrease the EIRR to 18.8%. All scenarios show robust results under all hypothetical scenarios.

#### *Additional Positive Effects*

52. The school feeding component of the project will have the additional effect of increasing primary school enrolment in the beneficiary project counties.

## **B. Environmental and Social Safeguards**

### ***Environmental***

53. Annex I, Section 6, of the Environmental Protection and Management Law of Liberia (EPML,2002) places the parent project on the mandatory list of activities or projects requiring environmental impact assessment. Chapter IV, Section 4.2, of the Revised EIA Procedural Guidelines (EPA, 2022) classifies the parent project as Category B (medium risk). The AF activities are classified as Category C (FONSI), projects/activities with little or no significant environmental and social impacts and may not require an ESIA but must complete an EPA-approved Environmental Assessment Form through and third-party EPA certified evaluator for approval by the EPA. The AF has been classified by the Bank as Category 3 in line with the Bank's Integrated Safeguards Systems (ISS). The parent project was classified as Category 2 in accordance with requirements of the national environmental legislations as well as the ISS. No E&S instruments are required to be prepared and disclosed before appraisal and board consideration for the AF. The site-specific instruments (06 ESIA reports) have already been prepared by the Recipient, cleared by the Bank, and approved by the competent national authority.

The E&S performance of the parent project is satisfactory. The parent project was taken to Board with an ESMF. Implementation of the ESMF which includes key activities such as recruitment of project E&S officer and preparation of site-specific plans have been satisfactorily completed. The project has completed the recruitment of an E&S officer. The site-specific instruments including 06 ESIA reports have been prepared by the client, cleared by the Bank, and disclosed as required. The project environmental permit has been acquired. The project is current with the submission of its E&S implementation reports.

### ***Involuntary Resettlement***

54. There will be no involuntary resettlement or land acquisition as a result of the project. The interventions will be implemented on existing agricultural systems.

**E&S Compliance:** Based on the foregoing, the project is compliant with E&S for approval by the Board. The Recipient will submit quarterly E&S implementation report, and annual independent E&S performance audit for the parent which will cover the AF activities. The Environmental and Social Compliance Note (ESCON) has confirmed the aforementioned which will be reflected in the financing agreement.

### ***Climate Change and Green Growth***

55. The project is maintained as a Category 2 operation, in line with Bank's Climate Safeguards System (CSS). This means that the project may be vulnerable to climate risks and requires a review of climate change risks and adaptation activities. Practical risk management and adaptation options could be integrated into the project design and implementation plans. Agricultural production in Liberia is vulnerable to the impacts of climate variability and change such as excessive rainfall in the coastal cities and high temperatures in the northern counties. Drought and floods are increasing in frequency and intensity, while average temperatures during the growing season are rising. Crop failures, reduction in productivity and outbreaks of pest and diseases are exacerbated by extreme climatic events. The project will also support technical and institutional capacity development for long-term climate resilience in agricultural sector in Liberia through various trainings on sustainable and climate smart agricultural practices and the mainstreaming of adaptation to climate change in national agricultural M&E and extension systems. This is not limited to government stakeholders, but also key private sector players, building community resilience to climate compatible agriculture and rural livelihoods, and research authorities to work in collaboration with NCO to carry out data collection and research to enhance policy and strategy on climate adaptation and low-carbon agricultural development practices. Overall, the project will facilitate climate resilience along the selected value chains by promoting climate smart agriculture including SRI, Sustainable land management, improved agriculture technologies

### ***Addressing Fragility and Building Resilience***

56. Liberia faces pressures and capacity deficiencies in important sectors that are linked to drivers of fragility in the country. These drivers of fragility include; high incidents of poverty, persistent inequality, youth unemployment, climate vulnerability, and vulnerable health systems. Weak political, economic, judicial, and environmental institutions demonstrate the low capacity for the country to address its fragility pressures according to the AfDB 2021 Country Resilience Fragility Assessment (CRFA) Report. Liberia is endowed with many natural resources but only an estimated 5.2% of Liberia's total land area is arable. It is pertinent to address these drivers of fragility through projects specifically in the agriculture sector considering high food insecurity. The Smallholder Agriculture Development for Food and Nutrition Security (SADFONS) additional financing will complement existing SADFONS project in addressing food insecurity. This intervention will address food insecurity through enhancing smallholder agricultural productivity, market access and linkages by supporting smallholder farmers and producers. Economic diversification that focuses on multi sector including agriculture is very limited. As a result, many lack access to basic critical infrastructure, social services, and poor roads leave many areas inaccessible, particularly during the wet season. SADFONS is therefore, addressing these major drivers of fragility including Economic and Social Inclusiveness, Social Cohesion dimensions of the CRFA based on its development objectives.

57. The Project will build resilience through sustainable support to farmers with requisite production capacity to increase farmers market share and profitability. Therefore, resilience will be achieved through implementation of some core project activities with the involvement of some Implementing Partners like Food and Agriculture Organization (FAO) of the United Nations. The FAO will strengthen the capacity of 400 Farmers Field Schools comprising 10,000 beneficiaries in 6 counties. This will enhance access to agricultural inputs to smallholder farmers to facilitate food production, train Master Trainers in line with the priority value chain (rice, cassava and vegetables). The project will also support home grown school feeding program with estimated beneficiaries of 15,000 school children. These measures will help to build resilience in Liberia and address extreme poverty in an environment where expectations are high, as patience is waning amongst the youth who prefer to undertake quick-cash activities like artisanal mining, transportation and petty trade. Overall, from the fragility and resilience perspective, SADFONS is making agriculture as a business and attractive to the youth and will help to alleviate rapid urbanization of mainly the youth who are migrating from rural to urban areas without requisite skills and education to seek gainful and sustainable employment.

### ***Gender Equality and Women's Empowerment Promotion***

58. The project (original project and additional financing) is categorized 2 according to the Bank's gender marker system (GMS). The project contributes at outcome level to women's economic opportunities, namely increased women's productivity in agriculture value addition, as well as increased market access and income. As a category 2 project, a gender analysis was conducted and the project has a Gender Action Plan, while the project's results framework incorporates gender commitments.

59. The gender analysis for the project is not substantively different from the one conducted for the original project, but presents updated information, where available. The identified challenges include: rural women's restricted access to productive resources (land, inputs, finance and credit, extension services, technology), which in turn limits agricultural productivity; limited access to public services, social protection, employment opportunities, information, innovations, local and national markets and institutions, due to cultural norms and security issues; weight of unpaid care work and gender-based violence, further restricting women's access to employment and market opportunities; low leadership and participation in producer organizations, decision making, local governance; limited inclusion of women's needs and priorities in policies.

60. The project will strengthen its gender measures: it will target 60% women beneficiaries in all rehabilitated lowland areas (instead of 40% in the original project); women's groups/cooperatives

will be direct beneficiaries throughout project activities (for production, processing and marketing in the selected value chains); some activities specifically target women-led cooperatives/farmers, such as the establishment of micro irrigation systems for year-round upland production of vegetables and rice, and the development of peri-urban agriculture for households; at least 50% of women in all capacity-building activities such as the Farmer Field Schools (FFS) and training of women as extension workers for the participatory farmer advisory system; IEC will include gender issues (gender and agriculture, women's participation in local development, GBV) to reduce gender stereotypes and violence; gender sensitive M&E will be ensure. The gender analysis and project gender action plan are presented in detail in Annex 3.3 - Gender Equality and Women's Empowerment Promotion.

## 4 LEGAL INSTRUMENTS AND AUTHORITY

### A. Legal Instrument

61. The legal instrument governing the additional financing is a Grant Agreement between the Republic of Liberia (the "Recipient") and the African Development Bank (the "Bank") acting as a Supervising Entity for the GAFSP Trust Fund.

### B. Conditions Associated with Bank's Intervention

- i. **Conditions Precedent to Entry into Force:** The Grant Agreement for the GAFSP Grant shall enter into force on the date of signature by the Recipient and the Bank.
- ii. **Conditions Precedent to First Disbursement:** The obligation of the Bank to make the first disbursement of the GAFSP Grant shall be conditional upon entry into force of the Grant Agreement.
- iii. **Other Conditions:** The Recipient shall, and shall cause the Executing Agency to, within three (3) months of the first disbursement of the grant or such other period as may be approved by the Bank, submit to the Bank in form and substance acceptable to the Bank:
  - a) evidence of the competitive recruitment of the following consultants, with qualifications and terms of reference acceptable to the Bank: (i) Project Financial Management Officer;
  - b) the submission of the outstanding closing audit report for the SAPEC project funded under GAFSP; and
  - c) the updated project implementation manual (PIM).
- iv. **Undertaking:** The Recipient undertakes to:
  - a. maintain the existence and functioning of the National Coordinating Office (NCO), Project Steering Committee (PSC), County Agricultural Coordinators and District Agricultural Coordinators constituted under the original project in a form and with a composition and terms of reference acceptable to the Bank, throughout the Project implementation period.
  - b. review and operationalise the project implementation manual (PIM) to guide project operations and implementation;
  - c. adopt the existing Tompro accounting software and chart of accounts for recording and processing of project accounting transactions and for financial reporting;
  - d. adopt the International Public Sector Accounting Standards (IPSAS) Cash Basis and the existing Financial Management Procedures Manual (FMPPM) to prepare project financial statements;
  - e. fully implement the financial management action plan;

- f. ensure that the project operational budget is approved by the PSC before 31 December of each year of operation; and
- g. ensure that the internal audit reports shall be submitted to the PSC which will ensure the timely implementation of audit recommendations.

### **C. Compliance with Bank Policies**

- This project complies with all applicable Bank policies.
- There are exceptions to Bank policies.

#### ***African Development Bank Group Independent Recourse Mechanism***

62. Communities and individuals who believe that they are adversely affected by an African Development Bank Group (AfDB) supported project may submit complaints to existing project-level grievance redress mechanisms or the AfDB's Independent Recourse Mechanism (IRM). The IRM ensures project affected communities and individuals may submit their complaint to the AfDB's Independent Recourse Mechanism which determines whether harm occurred, or could occur, as a result of AfDB non-compliance with its policies and procedures. To submit a complaint or request further information please contact: or visit the IRM website. Complaints may be submitted at any time after concerns have been brought directly to the AfDB's attention, and Bank Management has been given an opportunity to respond before reaching out to the IRM.

## **5 RECOMMENDATION**

63. Management recommends that the Board of Directors approve the proposed additional financing GAFSP grant of US\$ 10 million to the Republic of Liberia for the purposes and subject to the conditions stipulated in this report.

## 6 RESULTS FRAMEWORK

RESULTS FRAMEWORK					
A PROJECT INFORMATION					
PROJECT NAME AND SAP CODE: <b>SMALLHOLDER AGRICULTURE DEVELOPMENT FOR FOOD AND NUTRITION SECURITY (P-LR-AA0-010/ P-LR-AA0-014)</b>			COUNTRY/REGION: <b>Liberia / RDGW</b>		
PROJECT DEVELOPMENT OBJECTIVE: <b>To improve food and nutrition security and reduce poverty of targeted rural population in Liberia</b>					
ALIGNMENT INDICATOR (S): 1) Number of people receiving direct benefits ; 2) Average yield of main crops					
B RESULTS MATRIX					
RESULTS CHAIN AND INDICATOR DESCRIPTION	RMF/ADOA INDICATOR	UNIT OF MEASUREMENT	BASELINE 2021	TARGET AT 2026	MEANS OF VERIFICATION
<b>OUTCOME STATEMENT 1: Increased agricultural productivity</b>					
1.1: Yield of rice, cassava and vegetables	<input checked="" type="checkbox"/>	Mt/ha	Rice 2.48 Mt/ha Cassava 10.2 Mt/ha	3.5 Mt/ha 25 Mt/ha	Project Reports, MoA reports, Household surveys
1.2 Land area receiving improved production support (hectare) Disaggregation: Area provided with new/improved irrigation or drainage services (hectare)	<input checked="" type="checkbox"/>	Ha	208	30,000	
1.3: Land area where climate-smart agriculture practices are implemented (hectare)	<input checked="" type="checkbox"/>	Ha	208	30,000	
<b>OUTCOME STATEMENT 2: Number of people receiving direct benefits</b>					
2.1: Number of people receiving direct benefits (person) Disaggregation: Of which, the number of females	<input checked="" type="checkbox"/>	Number	0	80,000 (58,000 school going children including at least 30,000 primary school children; 30,000 farming households (e.g., 7,000 peri-urban farmers (at least 80% female) and 15,000 FBOs members at least 40% females)	Project Reports, MoA reports, Household surveys
2.2: Number of smallholders producers/processors receiving productivity enhancement support (person) Disaggregation: Of which, female producers/processors	<input checked="" type="checkbox"/>	Number	0	30,000 HHs (50% female headed households), 10 micro-hubs	
2.3 Farmers that are supported in accessing improved marketing opportunities (farmer) Disaggregation: Of which, number of females	<input checked="" type="checkbox"/>	Number	0	15,000 (40% female)	
2.4: People receiving improved nutrition services and products (person) Disaggregation: Of which, number of females	<input checked="" type="checkbox"/>	Number	0	80,000 (60% female)	
2.5: Number of farmers receiving inputs or service on climate resilient or sustainable agriculture practices (farmer) Disaggregation: Of which, female farmers. Disaggregation: Of which, number of farmers adopting technologies or practices received	<input checked="" type="checkbox"/>	Number	0	30,000 (40% female)	



2.6: Agribusiness companies/enterprises/POs adopting climate resilient or sustainable agriculture interventions in their operations (organization)	<input checked="" type="checkbox"/>	Number	6	10	
2.7: Direct employment created by 5 – 10 SMEs (full-time equivalent)	<input checked="" type="checkbox"/>	Number	0	60 ( 40% female)	
<b>1 OUTCOME STATEMENT 3: Increased volume of agricultural production</b>					
2.1: Production volume of rice, cassava and vegetables	<input checked="" type="checkbox"/>	Mt	Rice - 0 Cassava - 0	59,500 Mt; 183,600 Mt	Project Reports, MoA reports, Household surveys
<b>1 OUTCOME STATEMENT 4: Increased minimum diet diversity</b>					
3.1: Stunting amongst children under five 3.2: Food consumption score	<input type="checkbox"/>	Percentage Percentage	32.1 50	28 70	Project Reports, MoA reports, Household surveys
<b>1 OUTPUT STATEMENT 1: Strengthening of sustainable crop production and intensification</b>					
1.1: Volume of breeder seeds multiplied	<input checked="" type="checkbox"/>	Mt	0	6	Project Reports, MoA reports, Household surveys
1.2 Volume of foundation seeds produced	<input checked="" type="checkbox"/>	Mt	0	250	
1.3 Volume of certified seeds produced	<input checked="" type="checkbox"/>	Mt	0	17,000	
1.4 Mechanization centres set up	<input checked="" type="checkbox"/>	Number	0	5	
1.5 Total land area with improved rice/fish integrated farming	<input checked="" type="checkbox"/>	Ha	0	155	
<b>2 OUTPUT STATEMENT 2: Value Addition and Market Linkages</b>					
2.1 Beneficiaries of credit	<input checked="" type="checkbox"/>	Number	0	400 (40% female)	Project Reports, MoA reports, Household surveys reports
2.2 Number of processing, storage, and market facilities constructed and/or rehabilitated (facility)	<input checked="" type="checkbox"/>	Number	5	10	
2.3 Volume of agricultural production processed	<input checked="" type="checkbox"/>	Mt	0	29,050 Mt (rice); 60,000 Mt (cassava)	
2.4 Number of producer-based organizations supported (organization)	<input checked="" type="checkbox"/>	Number	0	60 (40% women organizations)	
2.5 Contracts signed by off takers	<input checked="" type="checkbox"/>	Number	0	100	
<b>3 OUTPUT STATEMENT 3: Strengthening participatory farmer advisory services</b>					
3.1 Farmer field schools (FFS) established	<input checked="" type="checkbox"/>	Number	0	320	Project Reports, MoA reports, Household surveys
3.2 FFS Master Trainers trained	<input checked="" type="checkbox"/>	Number	0	10 (50% women)	
3.3 Lead farmers (ToF) trained as facilitators of FFSs on climate resilience Agricultural and sustainable land management Practices	<input checked="" type="checkbox"/>	Number	0	160 (50% women)	
3.4 People reached with social behavior change communication (BCC) campaigns	<input type="checkbox"/>	Number	0	80,000	
3.5 Persons trained in nutrition enhancing activities, products and services	<input checked="" type="checkbox"/>	Number	0	80,000 (60 % women)	
3.6 People receiving improved nutrition training	<input checked="" type="checkbox"/>	Number	0	30,000 (school children) (50% women)	



3.7 Persons trained on SRI and other climate-smart agricultural practices	<input checked="" type="checkbox"/>	Number	0	8000 (40% women)	
3.8: Number of children covered by HGSF based programmes	<input type="checkbox"/>	Number	0	15,000 (school children) (50% women)	
<b>4. OUTPUT STATEMENT 4: Support to national food safety and security</b>					
4.1 National Standard laboratory refurbished	<input checked="" type="checkbox"/>	Number	0	1	Project Reports
4.2 Food safety policy frameworks developed/ updated	<input type="checkbox"/>	Number	0	1	Project Reports
<b>5. OUTPUT STATEMENT 5: Strengthening the capacity of MoA in investment planning and implementation</b>					
5.1 Establishment of a unified M&E system at MoA	<input checked="" type="checkbox"/>	Number	0	1	Project Reports, MoA reports, Household surveys
5.2 Agribusiness and investment policy dialogues with private sector partners	<input type="checkbox"/>	Number	0	5	Project Reports, MoA reports
5.3 MoA staff receiving short term training	<input checked="" type="checkbox"/>	Number	0	20	
<b>6. OUTPUT STATEMENT 6: Capacity development of agricultural research institutions</b>					
6.1 Seed laboratory equipped	<input checked="" type="checkbox"/>	Set	0	2	Project Reports, MoA reports

<b>CHANGES TO THE PROJECT RESULTS FRAMEWORK</b>		
<b>Revisions to the results framework</b>		<b>Comments/Rationale for change</b>
<b>PROJECT DEVELOPMENT OBJECTIVE</b>		
<i>Current (PDO)</i>	<i>Proposed change</i>	
To improve food and nutrition security and reduce poverty of targeted rural population in Liberia	<input checked="" type="checkbox"/> No Change <input type="checkbox"/> Revised	
<b>OUTCOME STATEMENTS AND INDICATORS</b>		
<i>Current</i>	<i>Proposed change</i>	
<b>OUTCOME STATEMENT 1:</b> Increased agricultural productivity	<input checked="" type="checkbox"/> No Change <input type="checkbox"/> Revised <input type="checkbox"/> New	
<b>OUTCOME INDICATOR 1.1:</b> Yield of rice, cassava and vegetables	<input checked="" type="checkbox"/> No Change <input type="checkbox"/> Revised <input type="checkbox"/> New	
<b>OUTCOME INDICATOR 1.2:</b> Land area receiving improved production support (hectare)	<input type="checkbox"/> No Change <input type="checkbox"/> Revised <input checked="" type="checkbox"/> New	To aligned outcome indicators with GAFSP core indicators
<b>OUTCOME INDICATOR 1.3:</b> Agricultural/land area where climate resilient or sustainable agriculture practices are implemented	<input type="checkbox"/> No Change <input type="checkbox"/> Revised <input checked="" type="checkbox"/> New	To aligned outcome indicators with GAFSP core indicators
<b>OUTCOME STATEMENT 2:</b> Number of people receiving direct benefits	<input type="checkbox"/> No Change <input type="checkbox"/> Revised <input checked="" type="checkbox"/> New	To aligned outcome indicators with GAFSP core indicators
<b>OUTCOME INDICATOR 2.1:</b> Number of smallholders producers/processors receiving productivity enhancement support (farmer)	<input type="checkbox"/> No Change <input type="checkbox"/> Revised <input checked="" type="checkbox"/> New	To aligned outcome indicators with GAFSP core indicators
<b>OUTCOME INDICATOR 2.2:</b> Farmers that are supported in accessing improved marketing opportunities	<input type="checkbox"/> No Change <input type="checkbox"/> Revised <input checked="" type="checkbox"/> New	To aligned outcome indicators with GAFSP core indicators
<b>OUTCOME INDICATOR 2.2:</b> [Indicate the outcome indicator 2.2]	<input type="checkbox"/> No Change <input type="checkbox"/> Revised <input type="checkbox"/> New Indicate the new/changed in outcome indicator 2.1]	[If you tick the revised or new box, please explain the rationale for change]

## 7 ENVIRONMENTAL AND SOCIAL COMPLIANCE NOTE (ESCON)

A. Basic Information <sup>4</sup>			
Project Title: Smallholder Agriculture Development for Food and Nutrition Security - AF		Project "SAP code": P-LR-AA0-014	
Country : Liberia	Lending Instrument <sup>5</sup> : DI <input checked="" type="checkbox"/> FI <input type="checkbox"/> CL <input type="checkbox"/> BS <input type="checkbox"/> GU <input type="checkbox"/> RPA <input type="checkbox"/> EF <input type="checkbox"/> RBF <input type="checkbox"/>		
Project Sector: Agriculture		Task Team Leader: Mark EGHAN	
Appraisal date: June 19-30, 2023		Estimated Approval Date: 20/09/2023	
Environmental Safeguards Officer: KAMARA SEKOU Abou			
Social Safeguards Officer: xxxxxx			
Environmental and Social Category: 3	Date of categorization: 07/08/2023	Operation type: SO <input checked="" type="checkbox"/> NSO <input type="checkbox"/> PBO <input type="checkbox"/>	
Is this project processed under rapid responses to crises and emergencies?			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is this project processed under a waiver to the Integrated Safeguards System?			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
B. Disclosure and Compliance Monitoring			
B.1 Mandatory disclosure			
Environmental Assessment/Audit/System/Others (specify: NA.			
Was/Were the document (s) disclosed <i>prior to appraisal</i> ?		Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>	
Date of "in-country" disclosure by the borrower/client		[Date]	
Date of receipt, by the Bank, of the authorization to disclose		[Date]	
Date of disclosure by the Bank		[Date]	
Resettlement Action Plan/Framework/Others (specify: NA.			
Was/Were the document (s) disclosed <i>prior to appraisal</i> ?		Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>	
Date of "in-country" disclosure by the borrower/client		[Date]	
Date of receipt, by the Bank, of the authorization to disclose		[Date]	
Date of disclosure by the Bank		[Date]	
Vulnerable Peoples Plan/Framework/Others (specify: NA.			
Was the document disclosed <i>prior to appraisal</i> ?		Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>	
Date of "in-country" disclosure by the borrower/client		[Date]	
Date of receipt, by the Bank, of the authorization to disclose		[Date]	
Date of disclosure by the Bank		[Date]	
If in-country disclosure of any of the above documents is not expected, as per the country's legislation, please explain why: NA.			
B.2. Compliance monitoring indicators			
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?			Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Have costs related to environmental and social measures, including for the running of the grievance redress mechanism, been included in the project cost?			Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Is the total amount for the full implementation for the Resettlement of affected people, <b>as integrated in the project costs, effectively mobilized and secured</b> ?			Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?			Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?			Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input checked="" type="checkbox"/>
A. Clearance			
Is the project compliant to the Bank's environmental and social safeguards requirements, and to be submitted to the Board? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
I. Prepared by:	Name	Signature	Date
Environmental Safeguards Officer:	KAMARA SEKOU Abou		07/08/2023
Social Safeguards Officer:	XXXXXXXXXXXXXXXXXX		
Task Team Leader:	Mark EGHAN		07/08/2023
Submitted by:			
Sector Director :	Damian IHEDIOHA OIC for Martin FREGENE		11/08/23
Cleared by:			
Director SNSC:	Maman-Sani ISSA		18/08/2023

<sup>4</sup>Note: This ESCON shall be appended to project appraisal reports/documents before Senior Management and/or Board approvals.

<sup>5</sup>DI=Direct Investment; FI=Financial Intermediary; CL=Corporate Loan; BS=Budget Support; GU=Guarantee; RPA=Risk Participation Agreement; EF=Equity Financing; RBF=Results Based Financing.

## 8 ADDITIONAL FINANCING CHECKLIST

Eligibility Criteria for AF Due to Project Scaling up	Compliance (Yes / No)	Justification/reference to relevant paragraphs
<p>i. Satisfactory performance of the Project: Scoring of 3 or better on the development objective (DO); (Satisfactory); Scoring of 3 or better on implementation progress (IP); (Satisfactory) ; The outputs/effects and results recorded in the last IPR of the project show that its impact so far has been in line with the expectations set out in the PAR; Key provisions of the loan/grant are largely complied with, including audit, financial management and reporting requirements on environmental and social safeguards; For projects facing fiduciary or environmental and social safeguarding difficulties, or other problems recorded in the IPR, these should have been resolved, or a feasible action plan developed, prior to the assessment of the additional funding; For projects that have experienced implementation difficulties in the past, these should have been resolved and the project should have performed well for at least 6 months prior to the submission of the AF request.</p>	Yes	Refer to paragraph 4 of AFPAR.
<p>ii. Is additional financing for the added or expanded activities the best mechanism to maximize the development impact and results in the relevant area or sector, compared to other lending tools such as a repeater project, a completely new operation, or non-lending instruments? i.e., is providing additional funding a better option than starting a new project?</p>	Yes	Refer to paragraph 12 of AFPAR.
<p>iii. Is the selection of beneficiaries of the scaled-up activities based on objective criteria (as opposed to politically motivated reasons)?</p>	Yes	The selection criteria for the counties is based on high incidences of poverty and malnutrition rates, ecology, infrastructure, labor, target group, crop history, market hubs, and also on the locations of GAFSP-funded processing facilities under SAPEC that require sustained and increased supply of raw materials for production (rice and cassava).

iv. The project is generally aligned with the Bank Group's relevant strategies, priorities and policies and country, regional and sectoral priorities, and the overall environment is conducive to its success <sup>67</sup>	Yes	Refer to paragraph 12 of AFPAR.
v. The project is broadly in line with the development objectives of the initial project <sup>8</sup>	Yes	Refer to paragraph 12 of AFPAR.
vi. The project is technically feasible overall	Yes	Refer to paragraph 12 of AFPAR.
vii. The project is economically and financially viable overall	Yes	Refer to paragraph 12 of AFPAR.
viii. The institutional, fiduciary, environmental and social arrangements for the project as a whole are satisfactory	Yes	Refer to paragraph 6 of AFPAR.
ix. Associated risk mitigation measures are satisfactory for the project as a whole <sup>9</sup>	Yes	Refer to paragraph 42 of AFPAR.
x. The assessment of the quality at entry (QaE) of the project and the assessment of its overall credit risk are considered satisfactory for sovereign operations financed from AfDB resources in ADF-only countries	Yes	Refer to paragraph 12 of AFPAR.
xi. Is the Borrower/Recipient committed to scaling up the project activities? Would preparing an additional loan/grant bring procedural or other cost-effectiveness gains for the Borrower/Recipient, as compared to preparing a repeater or other new project? Can the magnitude or scope of the scale-up project be easily accommodated in the context of the ongoing project, relying on the Borrower/Recipient's existing implementation capacity and other project arrangements?	Yes	The scope of the scale-up project can be accommodated in the context of the ongoing project, relying on the Borrower/Recipient's existing implementation capacity.
xii. Was the project scale-up anticipated at original project PAR? has the borrower/beneficiary provided justification; is the borrower/beneficiary able to make the AF available? has it been able to find other financiers and has it	Yes	GAFSP has provided additional grant of US\$ 10 million.

<sup>6</sup> Original project and additional funding project.

<sup>7</sup> "Region" means any formal grouping of RMCs whose mandate is consistent with that of the Bank Group (Regional Economic Communities, River Basin Organizations, etc.).

<sup>8</sup> Project objectives can be the initial objectives of the project (such as additional funding for cost overruns, funding shortfalls, or project modifications) or revised objectives (as part of a project modification or extension).

<sup>9</sup> Subject to the approval of the Credit Risk Committee with respect to exposure limits and the availability of resources.

provided justification for the request for additional financing from the Bank Group?		
xiii. Is the AF in line with the Policy on Expenditures Eligible for Bank Group Financing?	Yes	
xiv. Are there any implementation delays in completing the activities under the project if AF is provided?	No	
xv. Is the Borrower/Recipient committed/able to quickly process the AF to enable smooth and successful completion of the activities it would support?	Yes	

## 9 CONTENTS OF TECHNICAL ANNEXES

### *Annexes related to the strategic context*

Annex 1-1: Project Classification by High 5, Area of Intervention and SDGs

*“same as in the original project”*

### **Annex 1-2: AfDB’s Current Portfolio in the Country**

Liberia: Approved & ongoing Portfolio as at October 2022							
	Programme Name	Date Approved	Closing Date	Amount Approved (M UA)	Amount Disbursed (M UA)	Financing Source/Instru.	PFI Status
<b>Agriculture and Rural Development</b>				<b>43.11</b>			
1	Smallholder Agriculture Productivity Enhancement and Commercialization Programme (SAPEC)	02.05.2012	30.06.2021	36.43	32.23	ADF Loan GASFP Grant	NPPP
2	Scaling up the Participation of SMEs in the Secondary Wood Processing Industry	14.09.2018	31.03.2022	0.69	0.52	FAPA Grant	NPPP
3	Smallholder Agriculture Development for Food and Nutrition Security	07.06.2021	30.03.2026	5.99	0.00	ADF Grant GASFP Grant	NPPP
<b>Power/Energy</b>				<b>79.99</b>			
4	CLSG-Rural Electrification -Liberia	06.11.2013	30.12.2021	17.96	2.98	ADF Loan TSF Grant	NPPP
5	CLSG Electricity Interconnection Programme	06.11.2013	31.12.2021	8.10	3.21	ADF Loan	NPPP
6	Liberia Energy Efficiency and Access Programme	13.12.2016	30.06.2022	30.93	11.40	ADF/NTF/TSF Loan EU-AITF/GEF Grant	NPPP
7	Renewable Energy for the Electrification of Liberia	31.10.2019	30.06.2025	23.00	0.67	ADF/SREP	NPPP
<b>Social</b>				<b>0.155</b>			
8	Technical Advisory Assistance and Capacity Building support to the Liberia Revenue Authority	05.11.2018	30.06.2021	0.155	0.08	TSF Grant	NPPP
<b>Transport</b>				<b>167.93</b>			
9	Paving Fishtown - Harper Road Phase I	04.09.2013	30.06.2023	42.04	32.13	TSF Grant ADF/NTF Loan	NPPP
10	MRU Road Development and Transport Facilitation Programme – Phase I	18.12.2014	30.06.2022	52.08	39.42	ADF/TSF Loan	NPPP
11	MRU Road Development and Transport Facilitation Programme – Phase I- <i>additional Loan</i>	03.06.2015	31.12.2022	24.80	14.00	ADF Loan	NPPP
12	MRU – Road Development and Transport Facilitation Programme Phase II	19.09.2018	30.06.2023	49.01	5.38	ADF/TSF/ EIB Loan TSF/EU Grant	PPP
<b>Multisector- Governance, Technical Assistance and Capacity Building</b>				<b>19.11</b>			
13	Integrated Public Finance Management Programme Phase II	30.01.2017	30.12.2021	6.26	3.10	ADF/TSF Grant	NPPP
14	Technical and Capacity Building Assistance Programme to the Government of Liberia	13.09.2018	31.12.2021	1.0	0.81	TSF Grant	NPPP
15	Liberia Youth Entrepreneurship and Employment Programme	04.05.2016	30.08.2021	1.70	1.69	TSF/FAPA Grant	NPPP

16	Multi-Country Covid-19 Crisis Response Programme-Liberia	24/07/2020	31/12/2021	10.15	10.15	ADF/TSF Grant	NPPP
	<b>TOTAL (UA million)</b>			<b>310.29</b>	<b>157.77 (50.84%)</b>		

### **Annex 2-1: Theory of Change**

Food security is an important factor that directly influences the state of fragility in Liberia. Growing demand for staple food remains unmatched by domestic supply, as growth in agricultural productivity remains below its potential, while a high reliance on imported staples leaves the country structurally vulnerable to exogenous price shocks along with a high import bill. Conversely, the level of investment in domestic food crops maintains a sector with high production costs, low adoption of technologies and poor integration with commercial markets, while high youth unemployment continues and women remain marginalized in decision-making processes and income generating activities. Against this backdrop and to secure the ultimate result of improving food and nutrition security, reducing rural poverty and improving livelihoods, the project addresses three core themes: (i) higher agricultural productivity and sustainable agricultural production; (ii) strengthened agriculture institutions and improved capacity of smallholder farmers to adopt good agricultural practices and technologies, and (iii) improved market linkages and supply of nutritious foods. To achieve the transformative changes in sustainable agricultural productivity and production, the development of high potential irrigable lowlands and the intensification of farming practices are both important milestones. The proposed investments (in e.g. planting material, advisory services, access to credit, irrigation, roads) are necessary for farmers to realize their farming potential that will in turn provide the incentives for farmers to further invest in their lands, to continue the cycle of production and growth. To achieve higher productivity and increased consumption and sales of quality products by smallholder farmers, the project will implement activities that lead to the adoption of improved agriculture technologies by farmers, improved capacity of FBOs and government institutions to offer better services and value to the farming community (including women and youth), and ensure an enabling policy environment. Better access to inputs, know-how, further processing, micro-credit and finance, lab testing and also better logistics will help establish productive partnerships between the government, membership-driven organizations, local service providers and farmers. Food safety interventions and nutrition awareness will contribute to increased demand for a wider variety of nutritious foods. The school feeding program will promote healthy nutrition among school children. The project design is also based on the assumption that a reliable, nutritious food supply chain is attainable by improving market linkages of smallholder farmers to local and domestic markets. The project will work to ensure margins are maximized through value addition activities and retained as best possible by the smallholder, while linking them with buyers and agro-processors, to reach the ultimate goal of a sustainable, resilient food chain within the realm of improved food security and reduced rural poverty. Women in Liberia's agriculture constitute the majority of smallholder producers and it is estimated that they produce about 60% of agricultural products, carry out about 80% of trading activities in the rural areas, in addition to carrying out daily household responsibilities. Therefore the project will aim at delivery of improved extension to women farmers, focusing on dissemination of gender-appropriate and nutrition-enhancing technologies and access to inputs to improve women's agricultural productivity and enhance household nutrition. Targeted interventions will be developed under the project to ensure that women and youth are among the key beneficiaries of its activities.



## Annex 2-2: Detailed Project Components

### GAFSP Home-Grown School Feeding Project

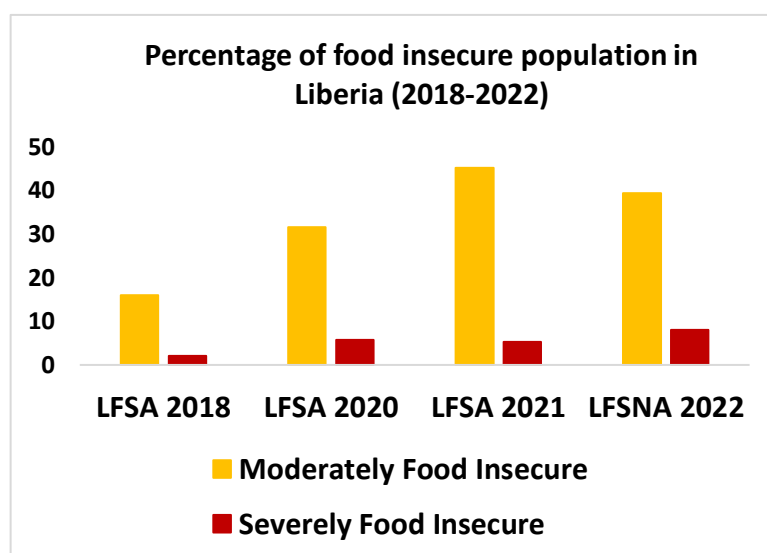
#### 1. Executive Summary

This intervention contributes to the implementation of the ongoing GASFP project the “Smallholder Agriculture Development for Food and Nutrition Security” (SADFONS). The Home-Grown School Feeding to be funded by the GAFSP will be implemented in four (4) counties, namely Bong, Maryland, Montserrado and Grand Bassa . The project will contribute to achieving the Government’s SDG targets with specific focus on SDG 2 End Hunger and SDG 4, Ensure Quality Education. During the remaining four years of the project 2023 to 2026, the project will contribute to increasing local food production through the strengthening of smallholder farmers capacity and ensuring that they have a guaranteed market to sell their crops through the Home-Grown School Feeding programme. As a secondary objective, the intervention will contribute to increasing school enrollment and attendance through the provision of daily on-site school feeding programme in approximately 100 public and community primary schools.

The GAFSP project will allocate US\$1,575,000 million towards the implementation of the Home-Grown School activities. The activities will be implemented in partnership with the Ministries of Agriculture and Education. Other stakeholders of the intervention include the local school communities and the Parents Teachers Association of participating schools.

Additionally, the intervention promotes economic and social inclusion for rural community dwellers in more than 100 communities in the four counties targeted for the implementation of the Home-Grown School Feeding. The targeted smallholder farmers, approximately 60 percent women will also benefit from provision of improved agriculture inputs including tools and equipment for land development and post-harvest management. The farmers will also receive hands-on training in the production, handling and marketing of their produce such as rice, beans, palm oil and other vegetables. It is expected that while farmers will produce commodities to meet the intervention requirement, they will at the same time be supported to increase production and productivity in order to target other markets outside of the school feeding programme thus contributing to the overall growth in the agriculture sector. WFP will build on its extensive experience in implementing school feeding programmes and will leverage on its supply chain capacity to deliver a high-quality programme in a sustainable manner.

**The National Context** Liberia has seen a downward trend in food security levels over the last



three years. The March 2021 Cadre Harmonisé revealed that nearly 0.8 million people were food insecure in Liberia. The Food Security and Post-Harvest Assessment conducted in the same year estimated that 45 percent of the population was moderately food-insecure, and 5 percent estimated to be severely food-insecure representing an 8 percent increase in the level of food insecurity compared to the September 2020 assessment.

From October 2020 to March 2021, 59 percent of households resorted to negative coping mechanisms, such as obtaining loans to purchase food. The August 2022 Rapid Food Security, Livelihood Nutrition and Market Assessment (RFSLNMA) revealed that this situation has been further worsened due to the ongoing conflict between Russia and Ukraine, which has led to sharp increase in prices of commodities affecting mostly poor countries. The (RFSLNMA) found that nearly half of all households in the country (47 percent) are food insecure, while the number of severely food insecure population increased by 3 percent from 5 percent in 2021 to 8 percent in 2022, while the percentage of population that is moderately food insecure now stands as 37 percent<sup>10</sup>. The 2022 study also found that rates of moderate and severe food insecurity are higher in rural than in urban communities (55 percent against 42 percent). These figures varied throughout the country, with the highest rates of food insecurity observed in the north central, south central, and south-eastern B regions. The country continues to struggle with price shocks that are straining the purchasing power of households and increasing vulnerability to food insecurity. The COVID-19 crisis led to substantial unemployment and income losses countrywide, affecting one-third of households, and further increasing food prices as a result of domestic food supply disruptions due to stringent containment measures.

## 2. Institutional Capacity

WFP has over 50 years of experience in successfully implementing school feeding programmes and is the world's single largest provider of school meals and humanitarian assistance. WFP has a strong track record of fully handing over school feeding programmes, to national governments who have continued to provide school feeding. WFP currently implements school meals programmes in 59 countries, helping to support the diets of more than 17.3 million children annually, and reaches another 39 million children through related technical assistance to 74 national governments.

WFP has been present in Liberia since 1967, and has the organizational capacity to support school feeding at scale, which it has implemented since the first year of its operation in Liberia. WFP has gradually become the school feeding partner of choice for the Government of Liberia. Over the past two decades, WFP has been a leading contributor to Liberia's national policy and guidance framework for school feeding in the country. WFP is drawing on its extensive experience in hands-on implementation of school feeding in the country, including several years of implementing previous donor funded school feeding programmes providing school feeding to more than 188,000 students in 12 of Liberia's 15 counties between 2013 to 2017. WFP has built strong relationships with key government ministries, including the Ministry of Education, Ministry of Agriculture, Ministry of Health and the Ministry of Gender, Children and Social Welfare.

In Liberia, WFP operates under a five-year Country Strategic Plan with a total budget of USD 106 million. The Country Strategic Plan articulates WFP's engagement from July 2019 to December 2023 in support of the Government's efforts to end hunger (Sustainable Development Goal 2) and to achieve all the Sustainable Development Goals through global partnership (Goal 17). Through this Country Strategic Plan, which will be extended until February 2026, WFP aims to transition from humanitarian assistance towards resilience building interventions with a focus on Home-Grown School Feeding and increased Country Capacity Strengthening (CCS) for the Government and communities to ensure ownership and sustainability. Increased partnerships with national counterparts, development partners, regional and subregional institutions, UN agencies and other key stakeholders remain the cornerstone of WFP's work in Liberia. The strategic shift was informed by the 2017 national zero hunger strategic review, extensive multi-stakeholder and government consultations and lessons learned from past WFP activities.

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<sup>10</sup> Liberia Rapid Food Security, Livelihoods, Nutrition & Markets Assessment (RFSLNMA) - 2022

The wide operational cover of WFP in Liberia is bolstered through strong partnerships with the Government and relevant line Ministries, as well as the staffing capacity within its two WFP offices: the country office in the capital, Monrovia, and one field office in Nimba. WFP's operational presence and capacity was most recently demonstrated during support to the Government of Liberia for the implementation of its countrywide COVID-19 Household Food Support Programme in 2020-21. The COVID-19 response with WFP as the main partner reached 2.5 million food insecure beneficiaries, including welfare institutions and frontline workers with food assistance.

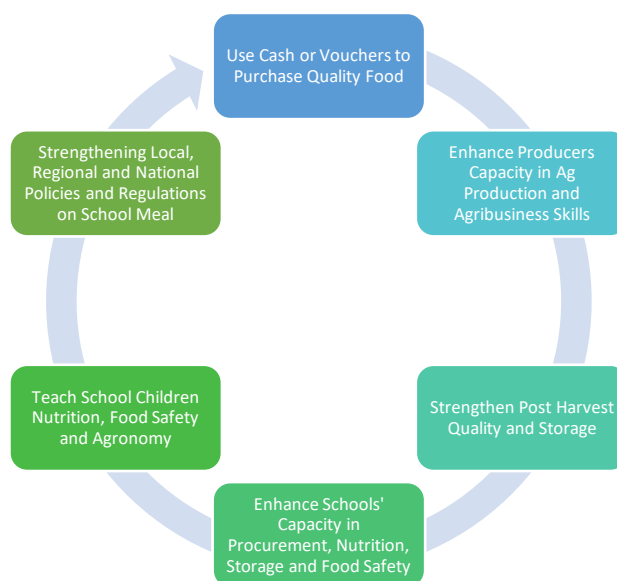
In 2017, the Government of Liberia conducted a comprehensive Liberia Zero Hunger Strategic Review to assess the food security and nutrition situation in order to outline gaps and priority actions to help Liberia achieve zero hunger by 2030. Through this analytic and consultative review, Home Grown School Feeding (HGSF) was identified as a key opportunity to address gaps in food security and nutrition amongst schoolchildren as well as an opportunity to address challenges in the agricultural sector. The Home-Grown School Feeding (HGSF) aims to deliver government-led, cost-effective programme which focuses on using food that is locally grown by smallholder farmers for the school feeding programme and progressively to other consumer markets. This approach to school feeding is a win-win for both education and agriculture sectors whereby children and farmers alike are direct beneficiaries.

The proposed intervention seeks to tackle hunger and improve nutrition of schoolchildren by increasing their access, participation and achievement in school and on the overall supporting local livelihoods and promoting inclusive agricultural growth by supporting production of local food crops including the nation's staple rice. The intervention will contribute to the national goal of reducing hunger and increasing access to education for children in primary grades.

### **Project strategy and main activities**

WFP implemented a Home-Grown School Feeding programme in 2016-2018. Following a lessons learned review exercise which revealed a number of successes achieved during the implementation including contributing to improving food security at household and community levels through the procurement of locally grown commodities from smallholder farmers in school communities for the school feeding programme. The review also noted increase in income for smallholders while there were also increase in financial inclusion at the sub-national level as many smallholders established their own bank accounts. In 2019, WFP undertook another review with the aim of improving the procurement process of commodities at the community level. That review led to the redesign of the Home-Grown School Feeding approach which WFP is now using for the implementation of the GAFSP funded intervention. WFP has in place a school feeding management structure in the four project counties. These county structures comprising of a County Coordinator, District Focal Points and School Food Management Committees. These structures have proven to be effective in the delivery of the school feeding programme and therefore will be maintained during the implementation of the GAFSP school feeding counties.

### **DIAGRAM of HGSF MAIN ACTIVITIES**



### **Project Outcome, Outputs and Activities**

The intervention seeks to leverage on the Home-Grown School Feeding programme demand for locally produce food commodities to increase local production and sale of rice, gari, beans, palm oil and vegetables. The school feeding will serve as a guaranteed market outlet for the listed locally produced commodities. It will also serve as incentive to attract students to school and ensure access to education for vulnerable and underserved school-age children in order to increase enrollment and attendance and improve learning outcome.

**Outcome 1:** Food-insecure populations including school-aged children in targeted areas have access to adequate and nutritious food including food produced locally by 2030

**Output 1.1:** Smallholder farmers and their communities benefit from improved capacities and restored productive assets to sustainably improve their productivity, resilience and access to local markets including through home-grown school meals.

**Activity 1.1.1:** *Increase smallholder farmers production and productivity through promotion of resilient and sustainable agricultural practices and expanded market opportunities through the home-Grown School Feeding Programme*

Through this activity WFP will procure commodities from smallholder farmers for use in the home-grown school feeding programme. WFP will use commodity voucher to procure commodities for programme schools. On a monthly basis, WFP working with the Ministry of Education will verify the school enrollment and will prepare a distribution showing the number of students and the commodity requirement per school. The plan will also contain the cash requirement per school. WFP will transfer the cash requirement to each school using MTN mobile money. The schools will contact WFP and MOE recognized farmers cooperatives who will supply the requirement per school. At the end of each month, the cooperative will invoice WFP based on the quantity of commodities they have supplied to each school.

**Activity 1.1.2:** *Provide training in business development, entrepreneurial and marketing skills to smallholder farmers and farmers cooperatives participating in the programme.*

To ensure that the cooperatives are adequately prepared to supply required commodities to the programme, WFP has assessed and selected cooperatives in the programme counties and

has signed agreements with each cooperative to give them the guarantee that the programme will procure commodities from them for the programme. Prices of commodities will be determined based on the prevailing market price at the time of the procurement transaction. WFP will provide capacity strengthening support to the cooperative in the form of provision of training, agri-equipment, etc.

***Activity 1.1.3: Strengthen capacity of farmers groups and cooperatives through the provision of basic tools and equipment for post-harvest management***

In collaboration with the Cooperative Development Agency (CDA), identify and support new farmers cooperative to complete their registration process and provide them training in business skills and organizational development including record management. WFP will link the newly established cooperatives and existing once to other partners for possible support to set-up Village Savings and Loan Associations (VSLA) for their members. VSLAs are critical to ensuring financial inclusion members of the cooperatives especially for targeting women and youth members of the cooperatives.

***Activity 1.1.4: Train farmers cooperatives in post-harvest management including commodity handling, storing, processing, preserving, food quality control and packaging to reduce post-harvest loss and improve food safety and quality.***

In collaboration with the MOA and other partners, the project will identify and support smallholder farmers and farmers cooperatives in post-harvest management to reduce post-harvest losses by exposing them to new, sustainable, and innovative approaches to post-harvest management. Where possible, the intervention will introduce the use of mini solar dryers to help smallholder farmers dry produce during the rainy season. The intervention will support farmer organizations to construct drying floors that can be used during the dry season to compliment the solar dryer. Opportunities will be provided to smallholder farmers and farmer organizations to participate in knowledge exchange visits across districts and counties to learn from groups that are practicing local methods of preservation that have proven to be successful.

**Output 1.2:** Children attending school receive timely and adequate nutritious meals including take-home rations for adolescent girls linked to local purchase in order to meet their food and nutrition requirements, support school attendance and retention and improve gender parity.

***Activity 1.2.1: Use cash or vouchers to procure food from farmers to be used for providing daily school meals for school children in targeted public and community primary schools.***

Through this activity, WFP will purchase locally produced Rice, Gari, beans and palm-oil from farmers cooperatives and retailer markets using cash vouchers. The programme will be implemented in four counties (Bong, Montserrado, Maryland and Grand Bassa) and will target school children in districts with access to functional markets and potential to increase production of local commodities that are used in the school feeding programme (rice, gari, pulses, and palm oil). WFP will work with food producers and aggregators who will be trained in basic food safety and quality assurance including storage, handling, and pest control. Smallholder farmers and farmers organizations will be targeted to participate in the processing, aggregation and sale of commodities to the targeted school feeding schools. The meals will be prepared on school campuses and served during the regular daily school breaks.

***Ration and composition of daily school meals***

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Food ration / Menu	Rice with cassava broth or beans and dried fish	Gari with beans and dried fish	Rice with cassava broth or beans and dried fish	Gari with beans and dried fish	Rice with cassava broth or beans and dried fish
Gari		120 g		120 g	
Rice	120 g		120 g		120 g
Beans	20 g	20 g	20 g	20 g	20 g
Red Palm oil	10 g	10 g	10 g	10 g	10 g
Vegetables	20g		20g		20g
Iodized salt	2 g	2 g	2 g	2 g	2 g
Total	172g	152g	172g	152g	172g

The menu for the school meals will be based on locally grown food commodities (rice, gari, beans or pulses, palm oil and vegetables) and takes into account the following considerations: the menu will provide a nutritionally balanced meal delivering 30 to 45 percent of the school children daily nutritional requirement and it will be diversified in order to promote good nutrition practices while respecting local food preferences. Additionally, the menu will adapt to the availability of locally grown commodities in view of stimulating food production in the districts and counties where the schools are located as well as in other counties with potential to produce surpluses that can be procured through the programme. Participating schools will be supported to establish and maintain school gardens while community members will be encouraged to supply leafy vegetables, okra, pepper, garden-eggs, etc in support of the programme. WFP will work with the Nutrition Unit at the Ministry of Health (MoH) on the diversification of recipes. The proposed combinations of the main cereals and other commodities in the daily meals are based on acceptable meals consumed in many households in Liberia including the counties targeted for the programme.

**Activity 1.2.2: Conduct school level training for Education Officers, school principals, school food management committees, cooks and PTAs.**

The intervention will provide training to MOE staff, principals, registrars, cooks and PTAs in the implementation of the programme. Two committees (School Food Management Committee-SFMC and the School Procurement Committee – SPC) will be established in each school community. These committees will support the school authorities in the day-to-day implementation and management of the programme. They will be trained in storeroom and commodity management, record keeping and reporting. The cooks in assisted schools will be trained in the use of energy efficient stoves. This will reduce the carbon dioxide (CO<sub>2</sub>) footprint and help to prevent health hazards associated with excessive heat and smoke for those who prepare the school meals.

**Activity 1.2.3: *Support the establishment of school and home gardens***

School gardens have been established in many of WFP assisted schools and are used as platform for the provision of nutrition education to students, teachers, parents and other instructional and support staff in participating schools. Through the school gardens and the accompanying social behavior change communication messages, students, teachers and community members will learn about agriculture and its importance in ensuring food security in the country. The focus of the new model of school gardens will take into account ensuring that the activity does not put any added burden on the already over-whelmed school staff. To this end, WFP will seek to collaborate with the Ministry of Agriculture and other partners including FAO to support the activity. In addition to the school gardens, households in school communities will be encouraged to establish home gardens for the production of vegetables and nutrient-dense crops for diet diversification and income generation and to contribute to the programme by periodically providing leafy vegetables from their home gardens for the

school to contribute to the school meal. This component of the programme will be funded through grants received from other partners.

### **Implementation Arrangement**

WFP has for several years implemented school feeding in collaboration with the Ministry of Education and other partners including the Ministry of Agriculture, NGOs, CBOs, PTAs and school communities and has established network of potential partners that can deliver high quality programme. Lessons learned from these previous engagements have proven that national and field level buy-in and ownership must be ensured, beginning from the project design/planning to beneficiaries' selection, activities planning and project implementation and monitoring. WFP will therefore increase its engagement with the local communities and take on-board lessons learned from previous implementation. Specifically, WFP will continue to utilize the expertise of MOE's School Feeding staff at the national, county and district levels, in delivering to the programme. As a multi-sectoral intervention, which links education, agriculture, nutrition and food security through an integrated approach, WFP will engage from time to time with key stakeholders. WFP will work with the MOE to identify and select programme schools in the targeted counties. WFP will use GAFSP resources to carry out procurement of locally produced food commodities, with deliberate efforts made to procure through smallholder aggregation systems. It is anticipated that the increased market demand generated by the procurement activities will incentivize smallholder farmers.

### **Proposed Food Procurement Strategy and Plan**

One of the critical components of this intervention is the procurement of locally produced food commodities for delivery to assisted schools. WFP has a long experience in planning and carrying out food procurement for projects in Liberia. Through this intervention, WFP seeks to leverage its extensive knowledge in supply chain related services including food procurement to strengthen capacity of smallholder farmers and farmers organizations who will serve as aggregators to support the procurement of locally produced commodities for the home-grown school feeding programme. The intervention will also support the Ministry of Agriculture to address critical market challenges that tend to undermine the development and scaling up of farmers' productive capacity. The proposed activities will support the creation of market linkages between farmers organizations in the various regions and the cooperatives or aggregators networks. Lessons learned from previous interventions have revealed the need to also link the producers to other institutional buyers beyond the school feeding programme so that farmers are able to sell their produce even in the absence of a WFP programme. However, the capacity of the smallholder farmers and farmers organizations is still not adequate to meet programme requirements. To address this, WFP will analyze the production capacity of farmers and develop a procurement plan that will ensure constant supply of commodities to avoid pipeline breaks while aggregators are working with local producers to aggregate commodities for WFP procurement action.

### **Post project sustainability and exit strategy**

Sustainability is a key component of this intervention. Therefore, WFP will at all times during the implementation of the project engage with and seek collaboration with Government counterparts, local communities and other stakeholders. To ensure this is achieved, WFP will ensure community involvement from the design stage of project or at the least in the inception assessment to determine the exact communities to be assisted. The approach will promote complementary activities that will encourage ownership by project beneficiaries. Through this project implementation strategy, there are plans to engage the

local communities and school authorities to begin playing key roles in decision making about the management of the programme. Some of the activities to ensure this is achieved will include the provision of regular training workshops to School Food Management Committee on implementation of the feeding programme; promoting the establishment of school gardens and school farms as a means of improving food security and increasing local contribution to the programme, training PTAs in organizational development and community mobilization and promoting PTAs and communities involvement in creating awareness through PTA and Community-led SBCC activities.

The proposed home-grown school feeding seeks to gradually transition school feeding in the medium to long-term to a sustainable nationally owned and managed school feeding programme. Lessons learned from implementing the conventional school Feeding approach (procuring food commodities from the international market and delivering to Liberia for school feeding) since 2010 has proven to be often costly and difficult to maintain by the Government with its competing development priorities low investment in school feeding. Over the period 2022 - 2026, the project will have a phased approach by gradually increasing the number of beneficiaries for the home-grown school feeding as well as the percentage of food to be produced locally and purchased for the school feeding programme.

The Government's development plan, the Pro-Poor Agenda for Prosperity and Development (PAPD) recognizes home-grown school feeding as critical intervention to help contribute to achieving its objectives in the agriculture, education and social protections sectors. Hence, facilitating linkages between farmers and markets and embedding the management of the intervention into national and local structures including at community levels will ensure sustainability of the intervention. WFP is already investing in strengthening capacity in the key Government ministries and agencies (MOA and MOE) through its existing institutional capacity strengthening initiatives. In the medium to long term, Government's budgetary allocation through the agriculture, education and social protection sectors will be critical to sustaining the intervention. As a starting point, the Government has joined many countries in the world to sign-up to the declaration of commitment for the School Meals Coalition. The School Meals Coalition is an initiative of WFP which seeks to find sustainable and innovative funding sources for school feeding programmes.

## **Strengthening Seed Production and Management Systems for Enhanced Agricultural Productivity in Liberia**

### **Background**

The Liberian agriculture sector plays a crucial role towards the achievement of economic growth, employment creation, attainment of food and nutrition security, poverty alleviation, and overall social cohesion. Greater than 60% of Liberia's population either directly or indirectly source their livelihood/ employment from agro-related interventions and activities along the value chains. The sector comprises four broad sub-sectors: food and horticultural crops (such as rice, cassava, vegetables, mango, citrus, banana and pineapple); tree/plantation crops (mainly rubber, oil palm, cocoa and coffee, and sugarcane); livestock (poultry, small and large ruminants, piggery); and fisheries, which include both marine, fresh waters and farmed fish (aquaculture) resources (Figure 1.2). Liberia has enormous land and water resources as well as suitable climate that can support year-round agricultural production activities and in particular, the cultivation of its staples (rice and cassava) and vegetables as well as cash crops. Cultivable land area in Liberia is estimated at 4.6



million Ha which amounts to about 46%. An estimated 4 million Ha is upland and 600,000 Ha<sup>11</sup> lowlands with irrigation. For irrigated agricultural production, there is an estimated 2,100 Ha for production and a potential area 300 Ha that could be under irrigation, with an average of 237 Ha of land to support double cropping annually. The country lies entirely within the tropical rain forest zone, with the annual rainfall ranging from 1600 mm inland to 4600 mm along the coast<sup>12</sup>, making it one of the countries with highest rainfall on African continent. These natural resource endowments are substantial to promote crop intensification in Liberia.

Despite the fact that Liberia has the highest rice consumption rate in Africa (recording 133kg per capita<sup>13</sup>), about 80% of imported [agriculture-based] commodities is the country's staple, rice (UNFAO Country Brief 5, May 2020) and furthermore, there are more households engaged in cassava production than any other crops, which is due primarily to double cropping practices<sup>14</sup>. Rice cropping in Liberia dominates upland ecology than in the lowland ecology, despite the fact that the country has a comparative advantage in the lowland where water management systems can be assured. Although rice and cassava are Liberia's main staple food crops, the primary cash crops and foreign exchange earners are rather rubber, cocoa, coffee, and timber. Fluctuation in market prices of these cash crops has continuously put the country's smallholder farmers in a disadvantage position. For example, rubber price has been lingering around US\$350.00 – 700.00 per Mt as of recent while prewar price of was US\$2,500.

Growth in Liberia's agriculture sector has been primarily characterized by complex social, political and economic problems that have prevailed over the years. The overall productivity of the sector is comparatively low: food crop yields are low; value chains are poorly developed; and support services extremely limited. Among the contributing factors include unreliable sources/limited access and used of farming inputs (i.e. elite seeds, improved planting materials, livestock and fish breeds, fish seeds and quality fish feeds as well as fertilizers and pesticides), inadequate farm technologies, considerable pre and post-harvest losses, issues of agriculture financing and agribusiness, inadequate infrastructure (irrigation, storage, value addition, and transportation, ICT); limited capacity and poorly organized farmer institutions, weak and underfunded agricultural extension services delivery system, and poor market access. Increasing threats of climate change and insecure land tenure are also constraints in the country.

Liberia agriculture production is characterized by tree crop-based systems in which vegetables and other food crops are produced on a minor scale, mostly in the central belt of the country; root crop-based systems (with cereals) concentrated in the northern region; and fishing and land-based mixed cropping enterprises along the coastal belt. The main structures of production are: (i) large plantations that produce major export crops such as rubber, oil palm, and to a lesser degree coffee and cocoa; (ii) domestically owned, medium-sized commercial farms that are cultivating industrial crops for export and livestock for the local market; and (iii) small household farms that use traditional production techniques and limited improved inputs. Historically, aquaculture production in Liberia started in 1950s with raising tilapia, catfish and carp in earthen ponds. It was later popularized by the Peace Corp Programme with the participation of public, private and communities up to the war in 1990s. Since then, there has been no notable development in aquaculture due lack of quality critical inputs supply such as fish seeds and feeds, services, unknown market potential and accessible finances to smallholder farmers as well as to entrepreneurs.

Agriculture production and productivity has fallen below pre-war level, resulting in huge recorded investments in importation of food and other related commodities. Poor quality of seeds, planting materials, the lack of improved animal breeds and the low economic returns on investments are among their principal contributing factors for low yield and poor productivity in Liberia. Currently,

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<sup>11</sup> Ibid

<sup>12</sup> www.faostat 2016

<sup>13</sup> National Rice Development Strategy of Liberia 2012

<sup>14</sup> USAID-funded Final Report on the agriculture stakeholder consultation in Bong, Lofa, Nimba and Montserado Counties by Mulbah S. Jackollie, Sept. 5, 2020

average rice yield of 1.2 Mt (upland) and 2.0 Mt (lowland) remains far below the genetic potentials<sup>15</sup> of cultivated food crops. The production-consumption gap continues to widen, thereby adding pressure on the country's trade balance and the foreign exchange. Food crops production is largely by small-scale farmers; and in few of the counties (Bong, Nimba, Lofa and part of Grand Gedeh), concerted efforts are being made to increase rice production. Unlike in the upland, rice in the lowland can be cultivated more than one time a year particularly when irrigation systems are intact.

### Project objective

Recently, a wide range of policy, organizational and legislative protocols and recommendations have been formulated to address the existing shortfalls in Liberia's national seed program. The identified challenges related to these formulated recommendations are in their conversion into a functional and practical seed certification system for rice and other major economic crops.

This project aspires to ensure sustainable National Seed Production and Management System (NSPMS) that will support the National Rice Development Program, sustainable quality fish seed supply and improvement of farm-level productivity and as well contribute to marketable surpluses. The project therefore seeks to establish gene bank for rice, and a broodstock management programme for commercially important fish species and a decentralized fish seed supply to promote yield intensification amongst small and medium scale farmers and active involvement of local seed producers in national and international seed trade.

This project will further ensure the establishment of sedentary production sites for two categories of seed (breeder and foundation) for sustainable development and multiplication of national seed production and management systems.

In addition, this project will also incorporate appropriate ICT-based support including warehouse receipt system that facilitate the synchronization of relevant agricultural knowledge and information on seed inputs sourcing, production, quality monitoring, warehouse operations, distribution channel and marketing. Overall, it is hoped that the public and private sector stakeholders will be catalyzed in efforts to turn the seed legislation into a functional and practical seed quality assurance system. The project aims to build on earlier progress made by the MOA/CARI, the USAID, the World Bank (CORAF/WAAPP), AfDB, EU, FAO, JICA, AGRA, BRAC, CRC, and AfricaRice in the rice seed sector investments in Liberia over the years.

<b>Budget:</b>	<b>1,500,350 USD</b>
<b>Impact:</b> National Seed Production and Management Systems strengthened to ensure the establishment of a viable seed industry in Liberia	
<b>Outcome:</b> Sustainable System for Smallholder Farmers to access Quality and high yielding seed Developed	
<b>Output 1:</b> (a) Sustainable Seed Production System Strengthened to Intensify productivity	<b>1,060,000 USD</b>
The output seeks to establish protocol for producing categories of quality seeds for regeneration at farmer's field. CARI will produce and multiply breeder seed into foundation seed and enter stocks into seed production network. The project will support strengthening of selected enterprises and agricultural vocational training centers as service providers on seed processing, storage and testing; and as well strengthen market linkages between certified seed producers and marketers. <i>An estimated 100 hectares will be developed/rehabilitated in the five (5) agricultural regions<sup>16</sup> to enhance seed development.</i>	
<p><b>Activity 1a.1:</b> Project inception workshop</p> <p><b>Activity 1a.2:</b> Establish platform for the production of breeder and foundation seeds into certify seed, including germplasm collection and cataloguing and support (technical and human capacity building and funding) to selected local seed producers to increase domestic seed production and farmers' access to quality seeds and planting materials</p> <p><b>Activity 1a.3:</b> Identify and develop 100 Ha of farmland (both upland and lowland ecologies) to intensify production of foundation seed using proven best practices of improved/new production technologies</p> <p><b>Activity 1a.4:</b> Establish or upgrade at least 3 decentralize seed garden</p>	

<sup>15</sup> Ibid

<sup>16</sup> Region 1 (Bomi, Gbarpolu & Grand Cape Mt Counties); Region 2 (Grand Bassa, Montserrado and Margibi Counties); Region 3 (Bong, Lofa and Nimba Counties); Region 4 (Grand Gedeh, River-Cess and Sinoe Counties); and Region 5 (Maryland, River-Gee and Grand Kru Counties)

<b>Activity 1a.5:</b> Procurement and production of logistics/tools/equipment/agro-chemicals/organic and liquid fertilizers	
<b>Activity 1a.6:</b> Develop training materials on innovative and sustainable production techniques of certify seeds for dissemination to national seed growers	
<b>Activity 1a.7:</b> Provide water management techniques on judicious use of water resources for the production of high quality of seeds.	
<b>Activity 1a.8:</b> Establish Farmer-Extension to Research models (demo, manuals, etc.) through which farmers, extension officers, and trainers of trainers' capacity will be boosted in improved production and post-harvest techniques of high standard foundation seeds.	
<b>Activity 1a.9:</b> Provide visibility and communications	
<b>Activity 1a.10:</b> Provide short- and long-term human capacity building in seed science and technology	
<b>Output 1: (b) Sustainable seed quality control service system strengthened to determine quality and certified seeds</b>	<b>131,350 USD</b>
This output seeks to establish or tailor CARI's standard of operation for producing seeds/varieties.	
<b>Activity 1b.1:</b> Seed Quality Control workshop	
<b>Activity 1b.2:</b> Establish or develop protocol for field inspection	
<b>Activity 1b.3:</b> Construct/Renovate storage and processing facilities (drying, packaging and labelling)	
<b>Activity 1b.4:</b> Upgrade CARI seed laboratory facility to include seed testing functionality	
<b>Activity 1b.5:</b> Establish Seed Committee	
<b>Output 1: (c) Sustainable quality fish seed supply system developed to increase aquaculture productivity and production</b>	<b>80 000 USD</b>
This output seeks to demonstrate a decentralized Nile tilapia fish seed supply model with a pilot tilapia out-grower scheme. Decentralized fish seed model is a strategy that makes quality fish seed available locally to support food fish production through farm-based hatcheries, hapa nursing and trading networks. On-farm breeding has proven to be a good catalyst for rural small-scale aquaculture. The model is designed to shift in government hatchery role as a fish seed supplier competing with private sector to genetic conservation of broodstock as it would be more beneficial in the long-term viability of the fish seed industry. The project will strengthen CARI capacity to develop fish seed.	
<b>Activity 1c.1:</b> Strengthen the capacity of CARI (hatchery construction, ponds rehabilitation) to design and implement a Nile tilapia broodstock management programme.	
<b>Activity 1c.2:</b> Local feed formulation for fish.	
<b>Output 2: Gene bank and health center constructed for seed storage and dispensation</b>	<b>229 000 USD</b>
The function for this bank ( <i>ex situ</i> and <i>in situ</i> ) is to serve a purpose for farmers and scientists who work to conserve rare plants species. Researchers or farmers can withdraw samples from these "gene" banks to help rebuild populations of rare plant varieties or to help increase genetic diversity within species	
<b>Activity 2.1:</b> Construct and equip gene bank ( <i>in situ</i> purpose) with standard materials for processing and testing of seeds/planting materials at CARI	
<b>Activity 2.2:</b> Establish gene bank for ( <i>ex situ</i> ) purpose for evaluation	
<b>Activity 2.3:</b> Procurement of a solar system to provide energy source for <i>in situ</i> Gene bank	
<b>Activity 2.4:</b> Procurement and installation of irrigation system for <i>ex situ</i> gene bank	

## Upscaling Integrated Rice-Fish Farming System for Improved Livelihoods, Food and Nutrition Security and Climate Resilience in Liberia

### 1.0. Background

Liberia faces quite several challenges in her agricultural sector. Low production and productivity are mostly attributable to low level of public and private investments, which translates into the lack of quality farming inputs, extension services and the high dependency of agriculture on the vagaries of the weather. Inadequate and unreliable infrastructure (roads, storage, and processing facilities, as well as electricity/power supply and internet connectivity) caused by weathering climatic conditions hampers access to markets and thus the buying and selling of inputs and outputs; these conditions in addition to poor food safety and handling practices also result in high post-harvest losses and

hampers value addition activities. Consequently, income-earning opportunities are undermined, and food security is low. At the local level, farmer-based organizations (FBOs) and community-based organizations (CBOs) have limited organizational capacities that limit their opportunities to improve their living standards and to deal with the impact of climate change. Access to land and secure tenure rights are also issues that hamper investment in agriculture.

Climate change has emerged as a major challenge for agricultural development in Liberia. It poses a great risk to rural livelihoods and threatens food and nutrition security. Dwindling fish catches and low rice yields in and around most lakes, floodplains and inland valley swamps in Liberia, the use of sub-optimal technologies and management practices, weather and climate variability, and gender-related constraints indicate the need for a transition to agricultural systems that use water, land, and other resources/inputs more efficiently. The benefits of integrating fish with rice are two-fold: a) improved livelihoods and incomes of rural people, especially women and youth, and b) increased food and nutrition security as the implementation of integrated rice-fish farming system (IRFFS) increases the resilience to shocks and long-term climate variability.

Rice is an important food crop in Liberia where over 300,000 (mostly smallholder) farmers cultivate 61,000 ha of rice per year. An estimated 85% of the calories consumed by Liberians comes from rice and per capita consumption is amongst the highest in the world. The average size of rice plots is less than 0.5 ha per household. Most rice areas under cultivation are rainfed (85%), yielding 1.0 -1.5 tonnes/ha/y far below its potential.

The remaining 15% are irrigated, yielding *2tons/ha*. With improved rice varieties (NERICA-L19) maturing in 120 days, the DeSIRA-IRFFS project has shown that it is possible to achieve at least 9 tonnes/ ha/yr. At current production levels, rice is not a viable option to mitigate the effects of climate change on rural-poor communities. Nonetheless, there is a window of opportunity to pilot IRFFS as a ‘climate-smart’ option for enhancing productivity, increasing incomes, diversifying diets, and improving the nutrition of rural people in the country. With over 63,000ha of swamps, most counties in Liberia have great potentials for integrating aquaculture with rice production.

## 2.0. Key Drivers of Food Insecurity in Liberia

- i. Low local agricultural productivity - Limited availability of agricultural inputs, mechanized equipment, financial capital, and extension services are all serious challenges.
- ii. Highly dependent on imported staples (especially rice) – Nearly 70% of rice consumed in Liberia is imported making the Liberian table vulnerable to global market price shocks.
- iii. Limited nutritional diversity of local production - Local markets for high nutritional value products are underdeveloped due to constraints on both the supply and demand sides.
- iv. Extreme poverty prevents Liberians from meeting basic food needs - More than 50% of Liberians live below the poverty line (\$1.90/day) and are unable to access sufficient food daily.

## 3.0. Innovations Disseminated to Beneficiaries of the DeSIRA-IRFFS Project

These include:

- i. Improved NERICA L-19 rice variety that mature within 120-130 days growth

- cycle.
- ii. Rice ratooning technology that enables a farmer to harvest twice from the same rice plant.
  - iii. Improve Nile tilapia species that are tolerant to iron in the Liberian water bodies and with good growth performance.
  - iv. Climate smart technologies in rice field preparations and pond construction to safe guide the ponds from erosion through flash floods.
  - v. Locally fabricated agro equipment for production and processing of rice and fish. Such equipment includes power tillers, rice seeders, graders, parboilers, fish feed pelletizer and fish smoking kilns.
  - vi. Improved skills on business plans, farm management and market linkage for products.
  - vii. Capacity building on good agricultural practices (GAP), cooperative registration and management; establishment and operation of rice-fish innovation platform.

#### **4.0. Modest Results from DeSIRA-IRFFS Project**

Results from the DeSIRA-IRFFS project have shown the capacity for further scaling of this farming system with potential increase in adoption rate. Intensive testing and promotion of integrated fish-rice (+ vegetable) food systems took place under the DeSIRA-IRFFS project in Gbarpolu, Grand Gedeh, Margibi, Maryland and River Gee. Analysis of data from the project counties show that the 365 households target for the IRFFS project increased to 377 (103% increase) by 2022 due to the momentum the project gained among farmers. By gender segregation, 186 and 191 of the households are women and men-headed respectively. Rice yield from small-holder farmers in the project increased from 1 MT/ha in 2020 (for local varieties) to 4.5MT/ha in 2022 and 9 MT/ha/yr with two harvests from the same plot for NERICA-L19 variety. The baseline value for fish yield was 0.5 MT/ha in 2020; however, by 2022, the yield increased to 2.15 MT/ha for improved Tilapia (and 4.30 MT/ha/yr for 2 harvests on the same plot). Annual fish production target was 25 MT in 2023. By 2022 the project achieved 26 MT (104%) of Tilapia through the IRFFS. Similarly, annual rice production target was 45 MT for 2023, but 167 MT (371% increase) was achieved by 2022 in the implementing counties. The 30 ha of functional habitats targeted for the project by 2023 in the implementing counties increased by 175% to 52.4 ha in 2022. The average income per household with a baseline of \$142 in 2020 and targeted at \$284 in 2023 increased to \$438 by 2022 indicating 308% increase from the baseline. The documented benefits of integrated rice-fish farming include increased yield of rice and fish, increased household income, weed and insect pest control in rice fields by the fish, promotion of climate smart agriculture by utilizing the low land production approach and growing vegetables on bonds, thereby contributing to food security, improved nutrition, and income generation. These modest achievements were made possible through the improved technologies and technical backstopping adopted by the project in rendering services to the beneficiaries. Despite some obvious challenges such as scarcity of improved rice and fish seeds and logistics, the prospects of IRFFS upscaling in Liberia is bright with a functional research and extension system. These results indicate that the implementation of integrated aquaculture-agriculture systems is closely linked to drought resilience and a reduction in poverty, hunger, and malnutrition.

#### **5.0. Risks in IRFFS Operation**

Persistent droughts and seasonal dry spell are the main risk to the project. A pragmatic national

initiative of agriculture irrigation will be an important driver for the project and will help reduce such risks. No major climate risk factors are envisaged in Liberia. The transfer of established methods and knowledge from DeSIRA-IRFFS and lessons from other developing countries with success stories of IRFFS will reduce the risks related to technology and expertise.

## **6.0. Lessons Learned from and Challenges with the DeSIRA-IRFFS Project**

Some of the lessons learned from the project include:

- i. Aquaculture production should target both commercial and small holders' fishponds for optimal impact. The project gain momentum even outside the beneficiary counties with increase in target 30ha of land under IRFFS usage to 54.5 ha by March 2023. With adequate funding the project has potentials for up scaling in Liberia.
- ii. Investments should focus on increasing the capacity of farmers for the management of the system and support of simple infrastructure and equipment, which is key for the sustainability of the system in the long term.
- iii. When properly managed, both wetlands and seasonal flood plains can provide a source of fish for nutrition throughout the year.
- iv. With adequate expertise, inputs support, improved technologies, and regular capacity building of extension staff and farmers a drastic transformation of productivity can be attained especially for rice and fish through the IRFFS approach. From baseline value of 2 tons/ha/y for rice, the project beneficiaries attain an average of 4.5 tons/ha x 2 harvests per year, resulting in 9 tons/ha/yr. Fish yield increased from a baseline value of 0.5 ha/ha/y to 2 ha/ harvest and for 2 harvests, 4 tons/ha/y.
- v. Regular field supervision and monitoring was pivotal in the operation of the project. A focal person (extension technician) was employed for each project county and motivated to work through prompt payment of salaries, provision of motorcycles to facilitate field visits to farmers. These technicians also had their skills built and updated through in-service trainings.
- vi. Improved technologies (NERICA-L 19 rice variety and Improved Nile tilapia were sourced by the project and supply to farmers. Other necessary inputs such as farm equipment, fish feeds, fertilizers etc were also provided for the project farmers.
- vii. A project steering committee (PSC) consisting of the EU, AfricaRice, national partners, rice and fish farmers federations was in place for periodic review of achievements and challenges of the project.
- viii. Framers were trained on operations and maintenance of farm equipment supplied to their groups by the project. Equipment fabricators were also trained to backstop the farmers especially after the lifespan of the project. Farmers were also trained on cooperative registration, establishment, and operation of innovation platforms; and social and behaviour change communication and nutrition.

Main challenges include:

- i. Scarcity of nutritious fish feeds and good quality fish fingerlings as well as improved rice varieties in Liberia. The fish feed challenge however made the project to innovate by using locally available feed ingredients to compound and

produce pelleted fish feeds for distribution to project beneficiaries with tilapia fish attaining average weight of 400g within 5 months production cycle.

- ii. Logistic issues were encountered, especially the difficulties of accessing Southeast Liberia due to bad roads. This led to delayed implementation of planned activities in Grand Gedeh, Maryland and River Gee.
- iii. There is dearth of institutional capacity for research and extension in Liberia. The Central Agricultural Research Institute (CARI) has not been properly funded to carry out research activities. The extension system needs a lot of rigging with EA: Farmer ratio of 1:35,000 against the FAO/World Bank recommendation of 1:600 with proper motivation. Despite the partnership by AfricaRice with national institutions (MOA, CARI and NaFAA) in implementing the IRFFS project, their abilities to sustain the project momentum (after the lifespan of the project) is in doubt since they don't have adequate funds for their activities.

### **7.0. Goal, Objectives, and Expected Outcomes of the Proposed Project**

The proposed upscaling of the IRFFS project aims to expand rice farming systems to include both fish and vegetables across the counties to increase productivity and incomes, thereby improving food and nutrition security. This can be achieved in collaboration with the national agricultural research and extension systems (NARES), the private sector and other donor-funded projects.

The IRFFS addresses several Sustainable Development Goals (SDGs 1,2, 5, 8) and contributes to Liberia meeting her targets for food security and nutrition as spelt out in various policy documents. The project will increase the availability of and access to essential fish micronutrients protein, vegetables (increasing the dietary diversity and micronutrient contribution) and rice (an energy-rich staple food), reducing hunger and improving nutrition and health, thereby contributing directly to long-term capital development.

**Goal** - The overall goal (impact) of the upscaling project is to improve livelihoods, food and nutrition security, and climate resilience of agro-food systems in Liberia.

#### ***Objectives***

- i. To increase household income from integrated rice - fish – vegetable farming;
- ii. To increase supply of, access to, and consumption of rice, fish, and vegetables; and
- iii. To increase the efficiency of water and land use among rural-poor households through adoption of IRFF systems.

#### ***Expected Outcomes***

- i. Increased participation of women and youth from smallholder farming households in implementing IRFF food systems.
- ii. Increased availability of, access to, income from and consumption of fish, vegetables, and rice in the targeted population groups.
- iii. Improved water management and soil health in targeted geographies, leading to increased adaptive capacity and resilience to the impacts of climate change.
- iv. Increased capacity of local and district actors/institutions to plan, implement and monitor IRFF systems.
- v. Greater understanding of the benefits of IRFF systems through robust, evidence-based assessments.
- vi. Increased understanding of partners and policy makers to guide policies and boost

investments in IRFF food systems at national/regional level.

## **8.0. Direct and Indirect Target Groups**

The upscaling project can directly target 150,000 smallholder farmers in the 10 project counties of Liberia who generally cultivate rice and are willing to extend their range of production to fish and vegetables. Of the target group, 40% will be women, 40% youth (male and female) and 20% men.

Through secondary adoption and outreach activities, especially to neighbouring locations, the project can indirectly target an estimated 50,000 smallholder farmers in each county. Other indirect target groups include other value chain actors e.g., agro-processors, marketers, service providers (i.e., input providers, buyers, and other actors along the IRFFS value chains) and consumers.

## **9.0. Key Activities by Component**

### ***Component 1: Building capacities and resources of smallholder farmers/institutions for the***

#### ***adoption of IRFF food systems***

- a) Develop a context specific approach and a detailed work plan using lessons learnt from the DeSIRA-IRFFS.
- b) Exchange of expertise/personnel/farmers for capacity development and transfer of proven technologies between DeSIRA-IRFFS beneficiary counties and other counties of Liberia.
- c) Train NARES staff and farmers on the implementation of IRFFS models to test new technologies and offer support to ensure better management practices.
- d) Adopt and adapt farmer-to-farmer extension models to fit the Liberian contexts.

### ***Component 2: Developing context specific IRFF food systems for improved productivity, climate resilience, and food and nutrition security***

- a) Develop appropriate technology packages for transforming existing rice production into productive, nutritious, and resilient IRFF systems.
- b) Integrate social and behaviour change communication for women's empowerment, gender equity and nutrition education into capacity development activities to ensure enhanced consumption of fish and vegetables produced for increased nutrient intakes and dietary diversity, especially in women and young children.
- c) Continuous assessment and adaptation of IRFF systems to maximize the measurable benefits.

### ***Component 3: Assessing the benefits of IRFFS to people, productivity and ecosystems***

- a) Assess impact on productivity, incomes, and food and nutrition security of IRFFS.
- b) Identify gender-related constraints on the role of women and youth in current rice farming practices to inform the potential for IRFFS.
- c) Assess water budgeting and soil health in relation to weather variability and adoption of IRFFS.

### ***Component 4: Building strong national collaborations for scaling***



- a) Conduct workshops and meetings at both county and zonal level to boost investments in and promote the uptake of IRFFS.
- b) Adopt and adapt learnings from DeSIRA - IRFFS to strengthen and expand rice-fish food system in Liberia.
- c) Develop policy briefs with government and donor institutions.
- d) Build partnerships and source investments for further scaling of the project in Liberia,

### **10.0. Monitoring & Evaluation, Knowledge Management and Learning Framework**

The project is expected to last 4 years in 10 counties. A monitoring and evaluation (M&E) system must be established for the project to track outputs, outcomes, and impact. The project will set up a novel digital platform during Year 1 that will monitor performance during Years 2-4. Efficient remote sensing technologies combined with physical observations will be used to capture real-time progress at farm level. A technical dashboard will be created and monitored by technical staff who will provide technical support to smallholder farmers in real time. M&E will be conducted by the project management team and reviewed regularly. The reports will review the progress made, including the developments on technical and financial components, and highlight implementation issues. They will additionally provide a list of planned follow-up actions. Reporting guidelines and processes to be followed by staff and partners will be developed during the inception phase.

### **11.0. Linkages and Sustainability Pathway**

The project is strategic to agro-foods system resilience in Liberia. However, linkages can be sought with other partners in Liberia to build a robust network in promoting IRFFS in rice fields across the counties. Universities, Colleges of agriculture and other TVET centres can be integrated into the project at various levels for knowledge and skill acquisition for youth. The project will prepare a manual gathering the main lessons learned and providing technical guidance on how to operate IRFFS in Liberia for technical backstopping to stakeholders.

After the first production cycle, with adequate inputs support, the targeted households will experience the following concrete benefits from the project - improved livelihoods and income; access to diverse and nutritious foods; and resilient use of water and land.

A few factors will lend credibility to the implementation process and benefits of the project, which will lead to sustained scalability. Such factors include the use of focal persons in the project counties; lead farmers, in particular women and youth; capacity building and knowledge generation in the targeted communities; participatory monitoring and evaluation; engagement of research institutions; and promotion of the project interventions and results through different channels, including the media. These demonstrable results will lend credibility to the implementation and benefits of the project which will lead to sustained scalability. The project includes income-generating activities with a focus on gender and age-targeted vulnerable rural communities. Through collaboration with the private sector and NGOs, it will promote value addition, lead to the identification of lucrative markets and improve access to loans through linking producer groups to money lending institutions. In addition, the social benefits of the proposed project will be realized and appreciated by the Government of Liberia, as well as the general population, triggering greater investments. This will stimulate interest and funding for similar projects in Liberia.



## Annex 2-3: Detailed Project Costs

Table 1. Strengthening of sustainable crop production and intensification

Detailed Costs	Unit	Quantities				Unit Cost (US\$)	Totals Including Contingencies (US\$)			
		2023	2024	2025	Total		2023	2024	2025	Total
<b>I. Investment Costs</b>										
<b>A. Support the development of seed supply system for rice, cassava and vegetables through seed multiplication</b>										
<b>1. Production and multiplication of seeds</b>										
MoU with CARI to produce breeder and foundation seeds for certified seeds /a	lump sum	0.2	0.4	0.4	1	1,288,289	257,658	515,316	515,316	1,288,289
Upgrade seed laboratory to include seed testing functionality	ls	-	1	-	1	100,000	-	100,000	-	100,000
Establish or develop Seed Quality Control protocols	ls	-	1	-	1	25,000	-	25,000	-	25,000
Rehabilitate cold storage facilities for nuclear, breeder & foundation seeds	ls	-	1	-	1	180,000	-	180,000	-	180,000
Training of seed growers in seed production, processing and packaging	Groups	-	5	5	10	3,000	-	15,000	15,000	30,000
<b>Subtotal</b>							257,658	835,316	530,316	1,623,289
<b>2. Integrated Rice-Fish Farming</b>										
Establish fish habitat	Ha	-	75	-	75	6,000	-	666,691	-	666,691
Fingerlings	number	-	400,000	400,000	800,000		-	60,000	60,000	120,000
Fish feed	ton	-	600	500	1,100	800	-	480,000	400,000	880,000
<b>Subtotal</b>							-	1,206,691	460,000	1,666,691
<b>3. Establish small scale irrigation systems for upland vegetables and rice production</b>										
Small scale irrigation systems	Unit	-	30	-	30	40,000	-	1,445,400	-	1,445,400
<b>Total</b>							257,658	3,487,406	990,316	4,735,380

<sup>a</sup> 6 tons of breeder, 250 tons of foundation and 17,000 tons of certified seeds

Table 2. Value addition and market linkages

## Detailed Costs

	Unit	Quantities				Unit Cost (US\$)	Totals Including Contingencies (US\$)			
		2023	2024	2025	Total		2023	2024	2025	Total
<b>I. Investment Costs</b>										
<b>A. Strengthening linkages between farmers and micro-hubs for primary processing of cassava and rice</b>										
Business management support & facilitate contract farming	Is	-	0.5	0.5	1	100,000	-	50,000	50,000	100,000
Equipment for Micro-hubs for processing rice and cassava	Number	-	10	-	10	45,000	-	545,738	-	545,738
<b>Subtotal</b>							-	595,738	50,000	645,738
<b>B. Improving storage and reducing harvest and post-harvest losses (Aggregation centers)</b>										
Construction of ware houses, storage centres	number	-	-	1	1	50,000	-	-	83,920	83,920
Supervision of construction of ware houses, storage centres	Is	-	2	2	4	15,000	-	30,000	30,000	60,000
Preservation equipment /a	units	-	-	2	2	28,750	-	-	79,363	79,363
<b>Subtotal</b>							-	30,000	193,283	223,283
<b>C. Expand and equip a Standards Lab for food quality and safety testing</b>										
Laboratory equipment /b	set	-	1	-	1	200,000	-	200,000	-	200,000
<b>Total</b>							-	825,738	243,283	1,069,020

<sup>a</sup> Bagging, Crates, Pallets etc.

<sup>b</sup> Aflatoxin B&G, OTA, Histamine, Metallic, & Pesticide Residue

Table 3. Strengthening participatory farmer advisory services

## Detailed Costs

	Unit	Quantities				Unit Cost (US\$)	Totals Including Contingencies (US\$)			
		2023	2024	2025	Total		2023	2024	2025	Total
<b>I. Investment Costs</b>										
<b>A. Vehicles</b>										
1. Vehicle	number	4	-	-	4	50,000	213,500	-	-	213,500
<b>B. Strengthening the capacity of farmer / agricultural producer organizations /a</b>										
<b>1. Group strengthening training courses /b</b>										
Train farmers on agriculture innovations, technology transfers and Integrated Soil Fertility and Pest Management approaches	number	-	5,000	5,000	10,000	25	-	125,000	125,000	250,000
2. Mechanized equipment for FO/ PC /c	set	-	4	-	4	100,000	-	485,100	-	485,100
<b>Subtotal</b>							-	610,100	125,000	735,100
<b>C. Enhance the community-based nutrition promotion activities</b>										
<b>1. Enhanced consumption of nutritious foods, especially among nutritionally vulnerable groups, through diversifying local food production and nutrition education in peri-urban areas</b>										
Provision of kitchen gardening demos to peri-urban households /d	kits	-	2,000	-	2,000	327	-	654,000	-	654,000
<b>2. Support Home-Grown School Feeding Program for School Children</b>										
Implementation of community-based nutrition promotion activities	Counties	-	4	-	4	25,000	-	100,000	-	100,000
Support home and school gardening for nutritional supplements /e	school	-	150	-	150	2,000	-	300,000	-	300,000
WFP Home-Grown School Feeding Program	school	5,000	5,000	5,000	15,000	105	525,000	525,000	525,000	1,575,000
<b>Subtotal</b>							525,000	925,000	525,000	1,975,000
<b>Subtotal</b>							525,000	1,579,000	525,000	2,629,000
<b>Total</b>							738,500	2,189,100	650,000	3,577,600

/a (in financial management, accounting, business plans development and operations management)

/b Support to the FFS groups to form producer and marketing groups and to provide additional support

/c Tractors, Power tillers, Threshers, etc. including training

/d including the provision of vegetable seeds and fruit tree seedlings, to support dietary consumption at the household level

/e to reduce malnutrition among children, lactating and pregnant mothers

Table 4. Strengthening the capacity of the Ministry of Agriculture (MOA) in investment planning and implementation

Detailed Costs	Unit	Quantities				Unit Cost (US\$)	Totals Including Contingencies (US\$)			
		2023	2024	2025	Total		2023	2024	2025	Total
<b>I. Investment Costs</b>										
<b>A. Strengthening the capacity of Ministry of Agriculture</b>										
<b>1. Short-term training for sector agencies staff</b>										
Train farmers on agriculture innovations, technology transfers and Integrated Soil Fertility and Pest Management approaches	number	20	-	-	20	2,500	50,000	-	-	50,000
<b>B. Development and Implementation of Environmental and Social Management Plan (ESMP)</b>										
Environmental and Social Management Plan	lumpsum	2	2	-	4	25,000	50,000	50,000	-	100,000
<b>Total</b>							100,000	50,000	-	150,000

Table 5. Strengthening Project Implementation Unit

Detailed Costs	Unit	Quantities				Unit Cost (US\$)	Totals Including Contingencies (US\$)			
		2023	2024	2025	Total		2023	2024	2025	Total
<b>I. Investment Costs</b>										
<b>A. Coordination and supervision</b>										
Monitoring and supervision by MoA	lumpsum	1	1	1	3	30,000	30,000	30,000	30,000	90,000
B. Communication and Visibility	Ls	-	0.5	0.5	1	50,000	-	25,000	25,000	50,000
<b>Total Investment Costs</b>							30,000	55,000	55,000	140,000
<b>II. Recurrent Costs</b>										
<b>A. PIU staff</b>										
Aquaculture expert	pers.month	12	12	12	36	4,000	48,000	48,000	48,000	144,000
Agribusiness expert	pers.month	12	12	12	36	4,000	48,000	48,000	48,000	144,000
Financial Management Specialist	pers.month	12	12	12	36	4,000	48,000	48,000	48,000	144,000
Communication Specialist	pers.month	12	12	12	36	4,000	48,000	48,000	48,000	144,000
Admin & Finance Assistant	pers.month	12	12	12	36	2,000	24,000	24,000	24,000	72,000
Vehicle Operations, utililites and other operating costs	year	1	1	1	3	40,000	40,000	40,000	40,000	120,000
<b>Total Recurrent Costs</b>							256,000	256,000	256,000	768,000
<b>Total</b>							286,000	311,000	311,000	908,000

## **Annex 3-2: Project Fragility/Resilience Assessment Note Addressing Fragility and Building Resilience**

The Smallholder Agriculture Development for Food and Nutrition Security (SADFONS) project is addressing food insecurity, a major driver of fragility through enhancing smallholder agricultural productivity and market access and linkages by supporting smallholder farmers and producers. The project is building resilience through sustainable support to farmers with requisite production capacity to increase farmers market share and profitability. According to the AfDB 2021 Country Resilience Fragility Assessment (CRFA) Report, Liberia is endowed with many natural resources but only an estimated 5.2% of Liberia's total land area being arable. This puts significant pressure on the country's access to food and nutrition. Economic diversification that focuses on agriculture that shifts Liberia's economy away from a single income source of extractive toward multiple sources from a growing range of sectors and markets is very limited. As a result, many lack access to basic critical infrastructure and social services, and poor roads leave many areas inaccessible, particularly during the wet season when the shortage of food becomes inevitable. SADFONS is, therefore, addressing Economic and Social Inclusiveness and Social Cohesion dimensions of the CRFA based on its development objectives.

This will be addressed through implementation of some core project activities with the involvement of some Implementing Partners like Food and Agriculture Organization of the United Nations. The FAO will strengthen the capacity of 400 Farmers Field Schools comprising 10,000 beneficiaries in 6 counties. This will enhance access to agricultural inputs to smallholder farmers to facilitate food production, and also, train Master Trainers in line with the priority value chain (rice, cassava and vegetables). This measure will help to address drivers of fragility related to food insecurity in Liberia and extreme poverty in an environment where expectations are high, as patience is waning amongst the youth who prefer to undertake quick-cash activities like artisanal mining, transportation and petty trade. Overall, from the fragility and resilience perspective, SADFONS is making agriculture as a business and attractive to the youth and will help to alleviate rapid urbanization of mainly the youth who are migrating from rural to urban areas without requisite skills and education to seek gainful and sustainable employment.

SADFONS has a very sound and sustainable model based on the mission's assessment of the project's activities and components. For the project to succeed in delivering its development objectives aimed at addressing fragility and building resilience, a thorough supervision is required to first implement SADFONS foundation project as a basis for implementation of the additional financing.

### **Annex 3-3: Gender Equality and Women’s Empowerment Promotion**

The Smallholder Agriculture Development for Food and Nutrition Security project (SADFONS) is categorized 2 according to the Bank's gender marker system (GMS) (both the original project and additional financing). The project contributes at outcome level to women’s economic opportunities, namely increased women’s productivity in agriculture in the selected value chains (rice, cassava, vegetables) and access to opportunities for value addition, as well as increased market access and income. As a category 2 project, a gender analysis was conducted and the project has a Gender Action Plan, while the project’s results framework incorporates gender commitments. The project is aligned to the Bank’s Gender Strategy (2021-2025), specifically pillar 2 - *Empowering women through access to finance and markets*.

#### **Context of gender equality in Liberia**

Liberia scores 0.506 on the Africa Gender Index 2019 (AGI) and ranks 21<sup>st</sup> out of 51 African countries. The scores are highest for the social dimension (0.884), however well below the African average (0.966, where 1 represents women-men parity), reflecting women’s low access to education and reproductive health. Lower scores on other dimensions show that important gaps remain to the disadvantage of women and girls, even if they are above the African average (economic dimension 0.666; empowerment and representation dimension 0.22). Corroborating this, Liberia scores 0.481 on the Human Development Index (HDI) in 2021 (positioning it at 178 out of 191 countries), with a female HDI of 0.447 versus 0.513 for males.

Liberia is progressing in terms of its legal and policy framework on women’s rights. The country scores 83.8 out of 100 on the *Women, Business and the Law Index* (2021) (above the Sub-Saharan Africa regional average of 71). However, discriminatory provisions against women persist (ex. marriage laws influenced by cultural and traditional practices, laws affecting women's work after having children, constraints on women's starting and running a business, gender differences in property and inheritance, etc.). Additionally, statutory and customary law and practices coexist in Liberia’s judicial system. In 2018, the government developed the Lands Rights Act, which includes protecting and providing same land rights status for women and men. Nonetheless, customary land rights still prevail in Liberian society, while overall land rights tend to be undocumented: less than 20% of the total land in the country is registered with a title and, in rural areas, only 4% of women and 7% of men have a title or deed of ownership.

In terms of policy, a National Gender Policy (NGP) exists since 2010 and was reviewed for better alignment with the present country context and national priorities. The PNG (2018-2022) focuses on 7 priority areas, among which *gender and economic sectors (economic empowerment, agriculture, employment)*. The national development plan of Liberia - the Pro-Poor Agenda for Prosperity and Development (PAPD 2018-2023) prioritizes agriculture as central to economic transformation, supporting the development of priority value chains with a specific focus on women and youth. The Liberian Agricultural Sector Investment Plan II - LASIP II (2018-2022) is in line with PAPD priorities and identifies key gender gaps: women’s differentiated access to natural resources, in particularly land rights; social and educational barriers that limit their contribution and participation in the management of natural resources; the burden of women in rural communities associated with the lack of labour-saving devices in agricultural production and unequal access to technologies between men and women. As such, the Plan foresees support to climate change-related activities, education and training for women and youth, promoting proven gender sensitive best practices for natural resource management, providing inputs and labour-



saving devices to address gender inequalities in terms of access to inputs and technologies, while also mainstreaming of gender issues in all agricultural programs and interventions. Additionally, access to finance and credit is a major constraint for both women and men. The Plan commits to collecting sex disaggregated data and monitoring progress towards gender equality and women's empowerment in the agricultural sector.

Nearly half of Liberia's population lives on less than 2 USD a day and women experience lower income earnings and are more affected by poverty, in a context where female-headed households are relatively common (nearly 25% of the population lives in households headed by a female in 2012). Agriculture is the main employer in Liberia, especially for women, and consists mostly of smallholder subsistence agriculture. Women's contribution to agriculture is substantial: they represent the majority of the agricultural labour force (80%) and are responsible for 93% of household food crop production, while also engaged in marketing and trading (mostly small-scale retail and trade informal businesses). At community level, most of the agricultural work is managed by women, while men focus on tasks such as clearing and preparing land, marketing. Women are very present in the cassava value chain, as well as horticulture, while also very significantly present in rice production (66%).

Longstanding patriarchal traditions restrict women's opportunities in rural areas. Gender-based violence (GBV) is one of the distinctive manifestations of unequal power relations, with high rates in Liberia in all its forms, including sexual violence, sexual exploitation, harmful practices and female genital mutilation. Early marriage and teenage pregnancy are both high. Power dynamics also restrict women's participation and decision-making, both at household and community level, while male farmers dominate the decision making in cooperatives, framing groups and farmer's organizations. While women's cooperatives exist, they are not structured enough to ensure their collective voice. As investments in the agricultural extension workforce increases, there is the potential for extension services to contribute to the transformation of these dynamics and improve women's access to services and support. To be noted that in 2020 the Central Agricultural Research Institute (CARI) counts on 45% of women in its agricultural researcher's workforce, an increase from 25% in 2011.<sup>17</sup>

### **Gender gaps identified for the project**

The identified constraints include: rural women's restricted access to productive resources (land, inputs, finance and credit, extension services, technology), which in turn limits agricultural productivity; limited access to public services, social protection, employment opportunities, information, innovations, local and national markets and institutions, due to cultural norms and security issues; weight of unpaid care work and gender-based violence, further restricting women's access to employment and market opportunities; low leadership and participation in producer organizations, decision making, local governance; limited inclusion of women's needs and priorities in policies. To address the above constraints, the additional funding for the SAFONS project relies on the gender sensitivity of the selected value chains (rice, cassava, horticulture), the establishment of targets for the access of women to land, inputs and extension services, markets and credit, and gender responsiveness in the delivery of services.

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<sup>17</sup> Swelam, A., and Mulbah, Q. 2022. *Comprehensive assessment of national agricultural research and extension systems with a special focus on institutional linkages between various actors in Liberia – Analysis and guidelines. Liberia case study*. Rome, FAO. <https://doi.org/10.4060/cc0035en>

## **Gender Mainstreaming in the Project**

The additional funding for the Smallholder Agriculture Development for Food and Nutrition Security project (SADFONS) will complement the gender activities that are already being implemented under the original project, while the initial target for women's access to rehabilitated land has been increased to 60% (original project considered 40%).

The additional funding takes gender into account in all project components and will contribute both to upscale ongoing gender actions and to new lines of action. Namely:

- Increase women's agricultural productivity: with emphasis on support to women's participation at all levels of the value chains and to their access to production factors and markets, though:
  - Upscaling the availability of critical inputs such as quality seeds and fertilizers and know-how for seeds multiplication, processing, packaging.
  - Supporting women-led cooperatives to produce vegetables and rice all year-round through access to micro irrigation systems (water access, equipment, training and support – including in maintenance).
  - Targeting of 40% of women as beneficiaries of the introduction of integrated rice and fish farming in Lowlands.
  - Upscaling linkages between female farmers and micro-hubs for primary processing of cassava and rice (business management support, facilitate contract farming), as well as women's access to aggregation centers and small-scale processing (solar dryers). Women will be implicated in the management of common infrastructures such as warehouses as well as training in maintenance (ex. solar dryers).
  - Expand market access in the context of the Home-Grown School Feeding Program (HGSP) through ensuring that women smallholder farmers are connected to the program as suppliers of food commodities (60%).
  
- Increase farmers' access to gender sensitive farming advisory services:
  - The project will implement a participatory farmer field schools' approach (FFS) and ensure parity at all levels of the process (50% of women in the master trainers, training of lead farmers as facilitators, etc.).
  - Additionally, gender will be mainstreamed in the training curricula to ensure gender sensitiveness of advisory services.
  - Services implementation will be monitored and supported, including in terms of women farmer's access to extension services and FFS activities.
  
- Increase food and nutrition security for women and children:
  - In addition to the girls and boys that benefit from the School Feeding Program and school gardens, take-home rations will be provided to adolescent girls to support their school attendance and contribute to equal opportunities to stay in school.
  - Also, the peri-urban agriculture activity will target 80% of women, considering the importance of home gardening as a nutritional complement.
  
- Ensure gender sensitive project management:
  - Gender-sensitive monitoring (disaggregated baseline, data collection, analysis of achievements) and lessons learned; identification of gender impacts of the project (actual or potential, and their sustainability).
  - Document and disseminate good practices on gender and women's empowerment-

The budget allocated to the project's gender activities of the SADFONS additional finance (as per Gender Action Plan presented below) totals **5.08 million USD**.

### *Gender action plan*

<b>PROJECT TITLE</b>	<b>Smallholder Agriculture Development for Food and Nutrition Security project (SADFONS) (GAFSP Additional Finance)</b>		
<b>GMS CATEGORY</b>	<b>2</b>		
<b>Component / sub-component</b>	<b>Gender mainstreaming activity</b>	<b>Budget USD (additional finance)</b>	<b>Responsibility</b>
<b>Component 1: Support to enhancing smallholder agricultural productivity and market access</b>			
Sub-Component 1.1. Strengthening of sustainable crop production and intensification	<ul style="list-style-type: none"> <li>Ensure women's access to key inputs, such as quality seeds and fertilizers and include women in the seed supply system as seed growers/multipliers (training in seed production, processing, packaging).</li> </ul>	200 000	NCO
	<ul style="list-style-type: none"> <li>Target 40% of women as beneficiaries of the introduction of integrated rice and fish farming in Lowlands.</li> </ul>	550 000	
	<ul style="list-style-type: none"> <li>Target women-led cooperatives/ farmer groups as beneficiaries of the micro irrigation systems for upland vegetables and rice production during the dry season (climate-smart agriculture)</li> </ul>	900 000	
Sub-Component 1.2. Value Addition and Market Linkages	<ul style="list-style-type: none"> <li>Continue to strengthen linkages between female farmers and micro-hubs for primary processing of cassava and rice.</li> <li>Promote women's access to aggregation centers and small-scale processing of fish, cassava, rice, vegetables (solar dryers)</li> </ul>	700 000	NCO
<b>Component 2: Institutional Strengthening and Capacity building</b>			
Sub-Component 2.1: Strengthening participatory farming advisory services	<ul style="list-style-type: none"> <li>Ensure 50% of women in the extension services provision (master trainers, training of lead farmers as facilitators in farmer field schools - FFS)</li> <li>Ensure women's access to extension services and participation in farmer field schools (FFS) activities</li> </ul>	1 000 000	NCO
Sub-Component 2.3: Enhance the community-based nutrition promotion activities	<ul style="list-style-type: none"> <li>Connect women groups / smallholder farmers / farmers' organizations to Home-Grown School Feeding Programme (HGSP) to supply food commodities (60%)</li> </ul>	1 030 000	NCO. Support from County Gender Coordinators / MGCSP for the mobilization of women producers as suppliers
	<ul style="list-style-type: none"> <li>Target 80% of women for the home gardening component/peri-urban agriculture (kits, training)</li> </ul>	700 000	
<b>Component 3: Project management and coordination</b>			
Sub-component 3.1: Strengthen the activity of National Coordinating Office (NCO)	<ul style="list-style-type: none"> <li>Ensure gender sensitive monitoring and evaluation.</li> <li>Document and disseminate good practices on gender and women's empowerment.</li> </ul>		NCO
<b>Total</b>		<b>5 080 000</b>	



## Annex 4-1: Monitoring Plan

### A. Alignment indicators

Indicator name	Definition/description	Source	Baseline and targets (where possible)
Number of people receiving direct benefits	Number of people being supported by project interventions	MoA surveys	Baseline (date): Target (date):
Average yield of main crops	This indicator measures the average amount of agricultural production harvested—yield of a crop—per unit of land area	MoA surveys	

### B. Outcome and output indicators (performance indicators)

Indicator name	Definition/description	Methodology for collection	Responsibility for collection	Frequency of reporting	Results planning		
					Year 1	Year 2	Year 3
1.1: Yield of rice, cassava and vegetables	Mt/ha	Survey	NCO	Annual	2.6	3	3.5
1.2 Land area receiving improved production support (hectare)	Ha	Survey	NCO	Annual	500	15000	30000
1.3: Agricultural/land area where climate resilient or sustainable agriculture practices are implemented	Ha	Survey	NCO	Annual	5000	15000	30000
2.1: Number of people receiving direct benefits	Number	Records	NCO	Quarterly	30000	50000	80000
2.2: Number of smallholders producers/processors receiving productivity enhancement support (farmer)	Number	Records	NCO	Quarterly	5000	15000	30000
2.3 Farmers that are supported in accessing improved marketing opportunities	Number	Records	NCO	Quarterly	5000	10000	15000
2.4: People receiving improved nutrition services and products (person)	Number	Records	NCO	Quarterly	30000	50000	80000
2.5: Number of farmers receiving inputs or service on climate resilient or sustainable agriculture practices (farmer)	Number	Records	NCO	Quarterly	5000	15000	30000
2.6: Agribusiness companies/enterprises/POs adopting climate resilient or sustainable agriculture interventions in their operations (organization)	Number	Survey	NCO	Quarterly	5	10	10
2.7: Direct employment created by 5 – 10 SMEs (full-time equivalent)	Number	Survey	NCO	Quarterly	20	40	60
2.1: Production volume of rice, cassava and vegetables	Mt	Survey	NCO	Annual	10,000	25,000	59,500
3.1: Stunting amongst children under five	Percentage	Survey	NCO	Annual	32	30	28
1.1: Volume of breeder seeds multiplied	Mt	Survey	NCO	Annual	2	4	6
1.2 Volume of foundation seeds produced	Mt	Survey	NCO	Annual	60	120	250

1.3 Volume of certified seeds produced	Mt	Survey	NCO	Annual	6000	11,000	17000
1.3 Area of land under irrigation rehabilitated	Ha	Survey	NCO	Annual	100	150	208
1.5 Mechanization centres set up	Number	Records	NCO	Annual	1	5	5
1.6 Total land area with improved rice/fish integrated farming	Ha	Survey	NCO	Annual	0	80	155
1.7: Number of producer-based organizations provided agro-equipment	Number	Records	NCO	Annual	0	20	37
2.1 Beneficiaries of credit	Number	Records	NCO	Quarterly	200	400	400
2.2 post-harvest facilities, storage centres and market-related installations	Number	Records	NCO	Annual	2	5	10
2.3 Volume of agricultural production processed	Mt	Survey	NCO	Annual	5000	10,000	20050
2.4 Farmer Based Organizations trained	Number	Records	NCO	Quarterly	20	40	60
2.5 Contracts signed by off takers	Number	Records	NCO	Quarterly	6	12	24
3.1 Farmer field schools (FFS) established	Number	Records	NCO	Quarterly	100	150	320
3.2 FFS Master Trainers trained	Number	Records	NCO	Quarterly	10	10	10
3.3 Lead farmers (ToF) trained as facilitators of FFSs on climate resilience Agricultural and sustainable land management Practices	Number	Records	NCO	Annual	160	160	160
3.4 Producer Organizations', including women farmer organizations capacity built	Number	Records	NCO	Quarterly	20	40	60
3.5 People reached with social behavior change communication (BCC) campaigns	Number	Records Records	NCO	Annual	30000	50000	80000
3.6 Persons trained in nutrition enhancing activities, products and services	Number	Records	NCO	Annual	30000	50000	80000
3.7 People receiving improved nutrition training	Number	Records	NCO	Quarterly	10000	20000	30000
3.8 Persons trained on SRI and other climate-smart agricultural practices	Number	Records	NCO	Annual	2000	5000	8000
4.1 National Standard laboratory refurbished	Number	Records	NCO	Annual	1	1	1
4.2 Food safety policy frameworks developed/ updated	Number	Records	NCO	Annual	0	1	1
5.1 Establishment of a unified M&E system at MoA	Number	Records	NCO	Annual	0	1	1
5.2 Agribusiness and investment policy dialogues with private sector partners	Number	Records	NCO	Annual	1	3	5
5.3 MoA staff receiving post-graduate training	Number	Records	NCO	Annual	5	5	5

## Annex 4-2: Risk Matrix

<b>RISK CATEGORY</b>	<b>RISK DESCRIPTION</b>	<b>RATING</b>	<b>MITIGATION MEASURE</b>	<b>RISK OWNER</b>
Sustainability	Project benefits captured by local elites due to weak participation / political influence	Medium	<ul style="list-style-type: none"> <li>- Publish and publicize selection criteria for transparent beneficiary selection</li> <li>- Publish beneficiary lists in public places and online</li> <li>- Increase beneficiary sensitization on the project</li> </ul>	MoA

<b><i>RISK CATEGORY</i></b>	<b><i>RISK DESCRIPTION</i></b>	<b><i>RATING</i></b>	<b><i>MITIGATION MEASURE</i></b>	<b><i>RISK OWNER</i></b>
Sustainability	Mechanization centres and irrigation systems are not well maintained or underutilized	Medium	<ul style="list-style-type: none"> <li>.-Ownership of machinery will remain with FBOs with sufficient time for oversight of operations by the project team</li> <li>- Build capacity of FBOs in operation and maintenance.</li> <li>-WUAs will be formed to take responsibilities for irrigation infrastructure</li> </ul>	MoA
Sustainability	Farmers discontinue using inputs after the initial farming cycle	Low	Heightened awareness of the importance of nutrition FFS help farmers to become custodians of local farming knowledge	MoA
Capacity Of Implementing Entity	Difficulty in maintaining equipment.	Low	Initiate a cost-recovery model to cover operational and maintenance cost	MoA
Capacity Of Implementing Entity	Implementing agencies limited by technical and operational capacities	Low	- Train project staff on project objectives, activities and implementation arrangements among development partners	MoA
Environmental And Social	Climate risks: droughts, dry spells, floods, etc.	Low	<ul style="list-style-type: none"> <li>-Promote climate-resilient Agricultural and sustainable land management Practices</li> <li>-Mainstream adaptation to climate change in M&amp;E and extension/advisory system</li> </ul>	MoA

## **Annex 4-5: Detailed Procurement Arrangements**

The Procurement fiduciary risk assessment review was carried out based on diagnostic information available in the public domain and consultation with various stakeholders using the OECD Methodology for Assessing Procurement Systems (MAPS) tool. The methodology assesses the Country's Procurement System (CPS) through the 4 Pillars and 21 sub- indicators, identified as "critical" (including legislative and regulatory framework; institutional framework and management capacity; procurement operations and market practices; and the integrity of the public procurement system). To assess the conformity of the Borrowers' Procurement System (BPS) with the Bank's fiduciary obligations, the system was evaluated without negative impact on Bank-funded operations in order to allow for the use of BPS. The conclusion of the assessment of these four pillars indicates that the risk associated with the use of the BPS is rated as **Substantial**. The conclusions of assessment for this project as evaluated is based on the following:

### **Procurement Legal and Regulatory Framework**

The procurement law of 2005 has been amended and reinstated in 2010 and the risk for its use in Bank-financed projects is rated **Substantial**.

**Strength:** The Act establishes a reliable and internationally aligned procurement best practices that is anchored on five basic foundations of public procurement: (1) comprehensive, transparent legal and institutional framework; (2) clear and standardized procurement procedures and standard tender documents; (3) independent control system; (4) proficient procurement staff; and (5) anti-corruption measures. The Act applies to all procurement financed in whole or in part from public funds throughout the procurement cycle from the selection to the administration of contracts including disposal of government stores, plant and equipment and all concessions as defined under the law. Notwithstanding this provision, procurement with international obligations arising from any grant or concessionary loan to the government must be in accordance with the terms of the financing agreement.

**Weakness:** In addition, the law does not apply to procurements which are determined to be of strict national defence and security implications or is linked to agreements executed by the Central Bank on monetary policy or procurement related to the production of coins or currency. The implementation mechanisms of this limit regarding the applicability of the law need to be well clarified and monitored since this provision provides an avenue, which can be used to introduce procedures that go against good public procurement practices. Currently the Central Bank use this application to pursue its procurement under its established procedures separate from the Act and this procedure has several gaps akin to that of lapses of the public procurement system. In summary while the current legal framework has improved, the system is still facing the following issues/challenges: (i) there is no evidence of a legal backing to the current regulations of June 2014 (ii) the law does not provide conditions under which state owned enterprises can be eligible for bidding and contract award (iii) the law does include exemptions for the procurement of defense and national security goods as well as procurement related to Central Bank's monetary policy or currency production and this may create an environment for possible use of procurement procedures different from the law that may not follow internationally accepted procurement principles. (iv) there is no obligation for publishing procurement plans (v) the law, regulations as well as the standard bidding documents do not contain adequate definition and coverage of issues related to fraud, corruption and prohibited practices as prescribed and accepted globally, for instance the law does not mention obstructive practices. (vi) there is no requirement for sharing the outcome of procurement audit with the public and in practice procurement audit to be delivered



by the General Audit Commission (GAC) has been highly limited in terms of procurement coverage.

### **National Standard Bidding Documents**

The National Standard Procurement Documents for Goods, Works<sup>18</sup>, and Consulting Services, including General Conditions of Contracts (GCC) for public sector contracts, and the dispute resolution mechanism and enforcement procedures of outcome of the dispute resolution process, have been reviewed and the risk for their use, in general, in Bank-financed projects is rated **Substantial**.

**Strength:** The Liberia public procurement system has some set of bidding documents available to contracting entities.

**Weakness:** However the bidding documents are i) not comprehensive enough to cover most procurement thematic areas and in addition the bidding documents have not been updated since 2005 ii) some of the clauses in the bidding documents are not consistent with model or standard documents; iii) there are discrepancies between the Bank and Liberia's standard bidding documents provisions, where under the General Conditions of the Contract, such clause as Confidential Details; Joint and Several Liability; Fraud and Corruption; Eligibility; Liquidated Damages; Patent Indemnity; Change in Laws and Regulations; Extensions of Time are missing or without safe adequate provisions. This impacts on efficiency, effectiveness, integrity and clarity on the bidding process.

### **Regulatory Function**

The Regulatory body has been assessed to ensure that it is not responsible for direct procurement operations and is free from other possible conflicts of interest in procurement, and the risk for its involvement in general, in Bank-financed projects is rated **Moderate**.

**Strength:** This is mainly due to the existence of procuring entities with clear mandates as well as defined roles and responsibilities with no conflict in their functions. Although the provision of the PPCA stipulates that the PPCC is not responsible for direct procurement transactions and its members are not represented in any procurement committees.

**Weakness:** However, the PPCC has also a prior-review function and decisions making responsibility for single source and direct contracting approval (Part V of the Act) involving de facto the regulatory body into direct procurement operations which is not in line with international standard. The PPCC has other additional responsibilities including giving advice and clearance to some level of threshold in procuring and concession entities procurement processes while also have some level of involvement in the administrative review procedures (Part VIII of the Act). The above-mentioned situation gives rise to a situation of conflict of interest as the regulator may for example be in a situation where it will handle complaint on issues on which it was involved. It is argued that, if the PPCC wants to maintain its neutral and unbiased role it has to exclude itself from direct procurement operations and may be provide a general and neutral advice to stakeholders whenever required.

The PPCC is challenged its operations including the following: i) the regulatory body (PPCC) has capacity constraint and inadequate logistics affecting its efficient and effective delivery; (iii) Lack of human resources with adequate technical and procurement capacity as well as inadequate budgetary allocations.

### **Internal and External Controls**

The legal framework, organization, policy, and procedures providing for internal and external control and audit of public procurement, which enforces the proper application of laws,

regulations, and procedures, have been assessed and the risk for its use is rated at **Moderate**. **Strength:** The legal framework that governs the auditing of the public accounts and procurement in Liberia is embedded in Article 89 of the Constitution, General Auditing Commission Act of 2014, Public Finance Management Act of 2009, Internal Audit Agency Act of 2013 and Public Procurement Concession Commission Act of 2010. A number of internal oversight functions are embedded in the Public Procurement and Concessions Act, most prominently the quality control and decision-making function of the Procurement Committees. Besides, the Internal Audit Agency (IAA) was established by the IAA Act of 2013, with the objective to co-ordinate, facilitate and provide quality assurance for internal audit activities of public institutions. The General Auditing Commission Act of 2014 have defined the roles and responsibilities of the Auditor General who is responsible for the external oversight function of government. According to Public Procurement Concession Act (section 137) the Auditor General shall conduct annual audits of the procurement activities of entities and shall furnish copies of reports on the audits to the Commission. He shall also carry out specific audits into the procurement activities of entities and bidders at the request of the Commission. The statutory audit of procurement activities may be relied upon by the Commission to institute measures to improve the procurement system.

**Weakness:** Whilst the General Audit Commission (GAC) conducts external audit annually, the procurement coverage of these audits are limited and generally the recommendations are not implemented timeously or not at all. The lack of political will, absence of effective collaboration between oversight bodies, weak or absence of implementation of recommendations as well as resource constraints in the established structures hamper the effectiveness of the safeguards and control.

### **Complaints Mechanism**

The existing complaints system has been reviewed to ensure that it set out clear specific conditions that provide for fairness, independent and due process, and its use in Bank-financed projects is rated at “Moderate”.

**Strength:** The Complaints, Appeals and Review Panel (CARP) to deliberate on procurement complaints on behalf of the Commission is established and functional. The CARP comprised five (5) members: three qualified and licensed legal practitioners and two other non-lawyers but with considerable experience in procurement or concession process or in matters related to the administration of procurement or concessions contracts. The CARP submits its decisions to the Commission for publication. The decisions of the CARP can only be challenged in a court of competent jurisdiction.

Deadlines for review procedures are specified in the Act, section 125 (2). A complaint must be submitted within 45 days of having knowledge of the event. The procurement entity is supposed to make a decision on the complaint within 15 days. The procurement entity is entitled to suspend the procurement contract for 10 days. Within another 15 days, the complainant can seek administrative review if the procuring entity fails to issue a decision on the matter or the complaint decides to appeal to the CARP on the decision of the procuring entity issued within the stipulated time.

**Weakness:** Although the CARP seems to be independent, given the fact that the duties of the CARP are part of the functions of the PPCC as prescribed under Part II (5-n) and its secretariat is directly linked to the PPCC, doubt may be raised on the independence of the of the CARP.

### **Systemic Prohibited Practices**

The legal provisions, including those relating to the institutions in charge of fighting against prohibited practices (corruption, fraud, conflict of interest, and unethical behavior) in public procurement, as well as those which define responsibilities, accountabilities and applicable

penalties for prohibited practices, have been reviewed and the risk for its use in Bank-financed projects is rated at “**Substantial**”.

**Strength:** The legal provisions have clearly outlined the mandate of Public Procurement and Concession Commission and it also details the expected conduct of the officials in the institutions, responsibilities and penalties of prohibited practices.

**Weakness:** It must however be mentioned that various GAC reports has raised issues of procurement infractions by public officers and no subsequent actions have been taken in terms of surcharging and prosecution beyond the revelations and there is a high public perception of corruption in government structures including institutions established to fight corruption in the country. In recent times action by the executive in the removal of some heads of agencies as a result of corruption allegations has been welcome by anti-corruption groups but they have called for further action beyond removal including further investigations and prosecutions.

### **Conclusion and Recommendations**

Based on the above remaining issues identified within the Liberia Public Procurement System and gaps in the Central Bank’s Procurement procedures, the risk for their use in Bank-financed project is globally rated as Substantial and will not apply for the implementation of this project. The following table (4.5.a) proposes a list of discrepancies identified using the 21 critical sub-indicators and necessary actions to address them to be discussed with the Government as part of the Bank’s continuous dialogue.

**Table 4.5.a: Identified discrepancies and proposed reform actions**

No.	Identified discrepancies	Proposed Reform Actions
1	There is no evidence that the revised Regulations have been legally passed to support the 2010 amended and reinstated Procurement law	The Public Procurement and Concession (PPCC) Commission should ensure that the relevant legal backing of the regulations is in place
2	Absence of conditions under which state owned enterprises can be allowed to bid in competition with others from private sector	Amend the law to include clear framework provisions relating to the participation of SOEs in public procurement whiles ensuring fairness to the private sector
3	Lack of implementation mechanism for specific tender process due to its nature for instance tenders related to defence; security; and monetary policy matters	The Act should be revised to comply with international standards for tenders involving defence, security and monetary policies that do not affect the core of national security or generic to the normal operations of the central Bank
4	Absence of obligation for publishing procurement plans and requirement for sharing procurement audit outcome with the public.	Amend the legal framework to include provisions for publication of procurement plans and procurement audits results
5	Limited coverage and/or inadequate definitions of prohibited practices (i.e: the law does not mention obstructive practices; the definition of corruption is not in line with what is comprehensively covered and agreed at international level)	Extend the coverage of prohibited practices to include among others ‘obstructive practices‘ and ensure that definitions are comprehensive and in line with international standards
6	Involvement of the regulatory body in actual procurement transactions.	The Act should be revised to comply with international standard to withdraw the regulatory body from procurement transactions to avoid

		conflict of interest situations in the performance of its compliance and regulatory functions
7	The PPCC has capacity constraint and inadequate logistics that is affecting its efficient and effective delivery.	Enhance the resource allocation to the PPCC for its operations
8	Contract awards are not effectively and systematically published in practice as required by the law	PPCC should ensure that contract awards publication provisions of the law are complied with by procuring entities.
9	There is some level of inadequacies in contract management processes including delays in payment on contracts that turn to affect the performance of the procurement system.	The contract management and administration process should be enhanced and bottlenecks in payment processing resolved. The capacity of relevant staff on contract management should also be improved.
10	The required procurement audits as required by the law is not undertaken due to resource constraint. However, the General Audit Commission (GAC) as part of its yearly financial audit includes audit of some procurement transactions	The GAC and other institutions including the Internal Audit Agency involved in procurement audits should be adequately resourced to undertake timely audits of procurement transactions.
11	Absence of effective collaboration between oversight bodies and as well as weak implementation of procurement audit recommendations and follow-ups.	The PPCC and GAC as well as the IAA should ensure that measures are put in place for effective collaborations between oversight bodies and an effective framework established for procurement audit and the implementation of its recommendations.
12	The PPCA has provisions for debarment but the system for debarment is not established to effect debarment in the public procurement system.	The PPCC should initiate processes to establish debarment procedures and make effort to operationalize this mechanism since the absence of this is an incentive for procurement actors to escape with several infractions of the law.
13	The system for collecting and disseminating procurement information is inadequate in Liberia. Record keeping and information reporting systems are weak.	Procurement data collection and records management should be strengthened and enhanced.

#### 4.5.2 Procurement Risk and Capacity Assessment (PRCA)

**Country Procurement information Relevant to The Project:** The Bank assessed the borrower's procurement system (BPS) taking into account the context of the implementation of this project in order to identify the level of risk associated with its use for the Project. This assessment helps to identify the level of risk associated with the use of the national system for the acquisitions of this project. The level of risk set for the use of Borrower Procurement System (BPS) at 4.5.1 above is a generic risk that do not take into account the context of a specific project. During appraisal, this Country's generic risk has been revisited in the context of the implementation of this Project and combined with assessment done at the public financial sector level; project level; and the Executing Agency level to determine the overall procurement risk for the project. This overall procurement risk for the implementation of this project is set as Substantial (as indicated at table

4.5.b and c). Hence, although all needs foreseen under this project should be procured in compliance with the procurement policy for Bank group funded operations dated October 2015; each tender process for Goods, works and services will be conducted in line with the Bank Procurement Policy and Methodology (BPM) due its nature, size and associated level of risks.

**(a) The Bank Procurement Policy and Methodology (BPM):**

The following packages will be procured in compliance with the BPM using Bank's Standard Solicitation Documents:

**Goods and related services:** (i) Seed health logistics, processing equipment and agro chemicals at an estimated total cost of UA0.10m (ii) Fish Feeds and Fingerlings at an estimated cost of UA0.75m (iii) Small Scale Irrigation Tools and Systems estimated to cost UA0.90m (iv) Preservation equipment for Warehouses (eg. Bagging, Crates, Pallets etc.) estimated to cost UA0.04m (v) Equipment for National Standards Lab for food quality and safety testing estimated to cost UA0.15m (vi) Solar dryer kits for small-skill fish, cassava, rice and vegetables processing estimated to cost UA0.19m (vii) Equipment for Micro-hubs estimated to cost UA0.38m (viii) Four vehicles estimated to cost UA0.15m (ix) Mechanized Equipment (eg. Tractors, Power tillers, Thrashers, etc. for Farmer/ agricultural producer organizations estimated to cost UA0.36m (x) kitchen Gardening Kits to peri-urban estimated to cost UA0.53m

**Works and related activities:** Works and related activities foreseen under the project among others shall include (i) Rehabilitate of cold storage facilities for nuclear, breeder & foundation seeds estimated to cost UA0.14m (ii) Establishment of Fish habitat estimated to cost UA0.24m and (iii) Construction of two Ware Houses, Storage Centres estimated to cost UA0.08m

**Consultancy Services:** (i) Develop and implement Environmental and Social Management Plans (ESMPs) for additional project Counties estimated to cost USD0.04m (ii) Hire additional staff (aquaculture expert, agribusiness expert, Communication Specialist, Finance Assistant, Procurement Assistant etc) estimated to cost aggregate total UA0.33m and (iii) CARI technical assistance estimated to cost UA1.10m and (v) Technical Assistance to be contracted to World Food Program (WFP) at an estimated cost of UA1.2m

The use of BPM is more appropriate to procure these items due to their threshold, lessons from the Phase I of same operations including bottlenecks in the BPS and other weakness identified in the BPS including substantial delays in the submission of procurement audit reports. The main weakness include among others the following: Absence of conditions under which government owned enterprises can be eligible for bidding without creating unfairness vis a vis private sector; National Standard Biding document with missing important provisions; weak internal and external controls as institutions to enforce these controls have inadequate capacity and the required support; absence of enforcement of complaint decision, absence of any debarment process; weak internal audit in government agencies etc. The review also identified other risks in the proposed EA's system of procurement that may affect the effectiveness of the procurement operations.

## **4.5.2.2 Sector and Market Analysis**

### **4.5.2.2.1 Sector Analysis**

The Bank has reviewed the overall capacity of the sector, with emphasis on the Ministry of Agriculture (MoA) and its associated departments or units, the proposed Executing Agency (EA) of the project has an established Project Management Unit (PMU) with main-stream staff to manage its donor-funded project. The Ministry implemented the Agriculture Sector Rehabilitation Project (ASRP: 2010- December, 2016) – funded by the AfDB and the ongoing Small-holder

Agricultural Productivity and Enhancement Commercialization (SAPEC-2012 to date) Project also funded by the Bank. The EA is also currently implementing the Japan Liberia Food Aid Project and in addition the EA also implemented the Small Tree Crop Revitalization and Support Project (STCRSP: May 2013- November 2018) – funded by World Bank, Small Tree Crop Revitalization and Support Project (STCRSP: 2012- 2018 – funded by IFAD) and the currently ongoing Smallholder Agriculture Development for Food and Nutrition Security Project (SADFONS) of which additional financing is the subject of this operation. The sector receives tremendous support from the donor community and has extensive experiences in the implementation of several project cutting across all development partners.

The sector is characterized by inadequate capacity in developing technical requirements and specifications for ensuring the acquisition of the items that will achieve optimal results and quality of the services or final items to be delivered, this means that it is pertinent to ascertain the technical support that will be required in these specification and technical requirements development for major items and consultancy within projects. However, it must be indicated that the various risks factors and challenges of the sector which might impact on the project have been factored in the entire processing of this project and efforts has been made to mitigate against these identified risks and anticipated challenges in the entire project implementation and specifically the procurement cycle.

#### **4.5.2.2.2 Market Analysis**

Liberia has a competitive market for low value contracts for goods and civil works (including general agriculture implements and crop/animal production consumables, office supplies, office equipment, vehicles, IT equipment, smaller works etc). Although relatively high value contracts are not envisaged in this project, the market is heavily reliant on support from the regional and especially international suppliers, contractors and consultants who have the requisite technical and financial capacity to implement such high value contracts. The market has some level of capacity for general thematic areas of smaller consultancy assignments targeting individual consultants and selection based on consultants' qualifications but usually has limitation for specialized assignments.

Given that the financial and technical capacity of local consulting firms, contractor and suppliers are inadequate, it limits their ability to compete with external industry players. In addition, the submission of proposals and bids in joint venture arrangement (local and international firms) is minimal and even in cases where joint venture is present, the international firms are always leading both in terms of staffing and financial arrangement and there is absence of clearly defined structures for a proper platform for knowledge transfer and growth. The procurement stakeholders led by the PPCC and the Ministry of Finance and Economic Planning should embark on conscious programs to build and enhance the capacity of suppliers, consultants and contractors.

Further, consulting firms exist though limited for non- complex assignments including training assistance, surveys, technical studies, and audit. The competitiveness of the country's market has been enhanced by consistent response to request for expression of interest received from regional and international firms that have obtained local status including recruitment of permanent local agent to manage their activities in the country. The compliance rate of the ethical behaviour of firms operating in this market is estimated to be moderate. This is because although not much evidence of incidence of fraud and corruption has identified, there is a high perception among industry players that the market does not entirely encourages fairness and sometimes the competitive platform it seems to provide for all its participants requires enhancement.

The overall market risk is also rated **Substantial**

#### **4.5.2.3 Project Design and Complexity**

The design and complexity of the project have been reviewed and it is concluded that there is no technical complexity on the design of the project. It is however noted that this project is designed to enhance past interventions by the Bank and other donors. The risks of harmonization and project delivery delays are well mitigated in the project design and this includes the bringing on board of CARI and WFP to provide technical assistance in some key project activities where they have a niche on the implementation delivery based on their expertise and past experiences.

The project design and complexity is rated Moderate

#### 4.5.2.4 Executing Agency/ies (EA) Assessment

The proposed executing institution the Ministry of Agriculture (MoA) will be responsible for the procurement of goods, works, and consultancy services including preparation of procurement plan, standard bidding documents, open and evaluate bids and management of contract executions. The procurement capacity of MoA and its designated PMU was assessed and it was concluded that the established structures under the EA as elaborated in the PMU set-up proposed for the implementation of the subject project is adequate. The PMU proposed for the implementation of the subject project is the same implementing the Phase I of the subject project (SADFONS).

The experience and capacity of the PMU is adequate to discharge the procurement function, however an extra support in terms of another procurement officer is needed to augment the capacity of procurement processes and contract management especially with this additional financing, the extra expert will ensure that the level of procurement capacity become acceptable in managing the procurement responsibility of this project. It must also be mentioned that in spite of the availability of qualified procurement personnel, the Bank has experienced some challenges in its current project due to inadequate coordination within the project team and mis-steps in some procurement procedures. The Bank will therefore need to undertake some initial capacity building and clear interpretation of policy and procedure application to the team at the project inception, and continuous guidance and monitoring of the activities of the designated officers must be vigorously pursued to reduce the delays and stem out any risks in the procurement cycle. In compliance with the applicable procurement regime BPM, the risks mitigation measures are provided in Para. B 5.9. The EA risk rating is Moderate

#### 4.5.2.5 Project Procurement Risks Rating (PPRR)

Procurement Risk Assessments were undertaken for this project by conducting an exhaustive assessment covering the risks associated with the country, sector and project environments as well as the executing Agency responsible for the implementation of the Project's procurement activities. The outcome of assessments provides the justifications to the risks indicated in the Summary of PPRR as shown in the table below:

**Table 4.5.b: Level of risk set by factor**

Risk factor #	Item	Assessment Rating
	Risk factor	Low (L) / Moderate (M) / Substantial (S) / High (H)
	Project Procurement Risk Rating	
	Country Level	
1	Procurement, Legal and Regulatory Framework	Substantial
2	Systemic Prohibited Practices	Substantial
	Sector Level	

3	Capacity of the Sector	Substantial
4	Capacity of local industry	Substantial
	Project Level	
5	Project design risks	Moderate
6	Delivery risks	Substantial
	Capacity Risk of the Executing Agency	
7	Capacity	Moderate
8	Governance & Prohibited Practices	Substantial

\*: Assessment of the system done using the 21 critical sub-indicators but adjusted to the context of the project

Table 4.5.c: risk set at different level

Items	H	S	M	L
Country Risks		Substantial		
Sector Risks		Substantial		
Project Specific risks			Moderate	
Executing Agency (ies) Risks			Moderate	
Overall Project Procurement Risk	Substantial			

The overall Project Procurement Risk Rating (PPRR) at time of Appraisal is Substantial. Most of the issues/ risks associated with the procurement activities for implementation of the project have been identified and mitigation measures have been proffered. These mitigation measures have been discussed and agreed with the Executing Agency and included in the PRCA action plan proposed in Para. 4.5.9. All associated cost related to the implementation of the PRCA action plan are included under the project.

**4.5.3 Details of Procurement Methods & Procedures (PMPs) to be used under the Project**  
 Goods, works and services financed by the Bank under this project will be procured in compliance with the procurement policy for Bank group funded operations dated October 2015 («Bank Policy») and provisions inserted in the financial agreement. In application of this policy and following the various evaluations conducted, the following arrangements were agreed:

**4.5.3.1 Bank Procurement Policy and Methodology (BPM):**

The needs of the project will be carried out using Bank's Procurement Methods and Procedures (Bank's PMPs) in line with the Bank's procurement policy dated October 2015, utilizing appropriate available Bank's Standard Solicitation Documents (SSDs). More specifically these needs will be procured as follow:

**Goods and Non-Consulting**

All Goods to be procured using BPM under the project are estimated to cost **UA 3.55 million** and will all be procured using Open Competitive Bidding (OCB) in compliance with paragraph 8.5 (a) and 8.5 (c) of Bank's procurement policy and as described by the Bank procurement framework.

**Works and related activities**



All Works to be procured using BPM under the project are estimated to cost **UA 0.34 million** and will all be procured using Open Competitive Bidding (OCB) in compliance with paragraph 8.5 (a) and 8.5 (c) of Bank's procurement policy and as described by the Bank procurement framework.

### **Consulting Services**

Consulting services to be procured using BPM under the project are estimated to cost **UA 2.02 million**. The selection of consultant will be compliant with provisions of article 8.6 of Bank's procurement policy using the appropriate procurement methods described by the Bank procurement framework. More specifically the selection will be done as follows:

- (i) All Consultant firms assignments, except the two Technical assistances, will be procured using Consultant Qualification Selection (CQS) methods. This said the Financial Audit assignment may be conducted by the General Audit Commission (GAC) of Liberia at reimbursable cost approved by the Bank;
- (ii) Technical Assistance on seed production and the one on school feeding program will be procured respectively from CARI and WFP for reason detailed under paragraph 4.5.2.2.2 ("Market Analysis") above.
- (iii) All individual consultants will be selected based on comparison of CVs identified following an Expression of Interest published as required by BPM.

#### **4.5.4 Summary of the Procurement Arrangements for the Project**

The procurement arrangements for the various components items, under the different expenditure categories to be financed by the Bank and procured using BPM, are summarized in Table 4.5.d below. The various contracts, estimated costs, oversight requirements, and the timeframe as agreed between the Borrower and the Bank, are documented in the Procurement Plan (Section 4.5.8e)".

**Table 4.5.e Summary of Procurement Arrangements (UA Million)**

CATEGORIES	BPM				BPS	
	OCB(I) UA (Million)	OCB(N) UA (Million)	CQS	Other	OCB(N) UA (Million)	Total UA (Million)
<b>A. GOODS</b>						
Seed health logistics, processing equipment and agro chemicals		{0.10}{0.10}				{0.10}{0.10}
Fish Feeds and Fingerlings	{0.75}{0.75}					{0.75}{0.75}
Small Scale Irrigation Tools and Systems	{0.90}{0.90}					{0.90}{0.90}
Preservation equipment for Warehouses (eg. Bagging, Crates, Pallets etc.)	{0.04}{0.04}					{0.04}{0.04}
Equipment for National Standards Lab for food quality and safety testing		{0.15}{0.15}				{0.15}{0.15}
Solar dryer kits for small-skill fish, cassava, rice and vegetables processing		{0.19}{0.19}				{0.19}{0.19}
Equipment for Micro-hubs	{0.38}{0.38}					{0.38}{0.38}
Four Vehicles		{0.15}{0.15}				{0.15}{0.15}
Mechanized Equipment (eg. Tractors, Power tillers, Threshers, etc. for Farmer/ agricultural producer organizations	{0.36}{0.36}					{0.36}{0.36}
Kitchen Gardening Kits to peri-urban	{0.53}{0.53}					{0.53}{0.53}
<b>B. WORKS</b>						
Rehabilitate of cold storage facilities for nuclear, breeder & foundation seeds		{0.14}{0.14}				{0.14}{0.14}
Establishment of Fish habitat		{0.24}{0.24}				{0.24}{0.24}
Construction of two Ware Houses, Storage Centres		{0.08}{0.08}				{0.08}{0.08}
<b>C. SERVICES</b>						
Develop and implement Environmental and Social Management Plans (ESMPs)			{0.04}{0.04}			{0.04}{0.04}
Aquaculture Expert				{0.06}{0.06}		{0.06}{0.06}
Agribusiness Expert				{0.06}{0.06}		{0.06}{0.06}
Communication Specialist				{0.06}{0.06}		{0.06}{0.06}

Finance Assistant				{0.05}{0.05}		{0.05}{0.05}
Procurement Officer				{0.06}{0.06}		{0.06}{0.06}
Financial Audit			{0.03}{0.03}			{0.03}{0.03}
Engineering Firm for Design and Supervision			{0.04}{0.04}			{0.04}{0.04}
CARI Technical Assistance				{1.10}{1.10}		{1.10}{1.10}
WFP Technical Assistance				{1.20}{1.20}		{1.20}{1.20}
<b>GRAND TOTAL</b>	<b>{2.96}{2.96}</b>	<b>{1.05}{1.05}</b>	<b>{0.11}{0.11}</b>	<b>{2.59}{2.59}</b>		<b>{5.66}{5.66}</b>

**Note:** Others mean Direct Negotiation, Individual Consultant.  
 Figures in parenthesis are the respective amounts financed by ADF

#### 4.5.5 Advertising

The text of a General Procurement Notice (GPN) has been agreed with Ministry of Agriculture (MOA) and it will be issued for publications in Bank's Internet Website, upon approval by the Board of Directors of the Financing Proposal. Specific Notices for tender to be conducted using BPM will be compliant with Bank's procurement policy advertisement rules requirement.

#### 4.5.6 Procurement Oversight under BPM:

All Procurement undertaken through BPM shall be subject to Bank's prior review. In addition, the capacity assessment of the EA has recommended two procurement supervision missions annually.

#### 4.5.7 Award Publication

All contract award publications shall be in accordance with the requirements of the Bank regulations.

#### 4.5.8 Procurement Plan

General: The PP has been agreed between the Borrower and the Bank during the appraisal of the project. The abridged version of the PP is attached to this Annex and its detailed version will be finalized by the MOA immediately after project approval. The final detailed version will also be available in the Project's database and in the Bank's external website. The PP will be updated by the Borrower annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. Any revisions proposed to the Procurement Plan shall be submitted to the Bank for its prior no objection. The Borrower shall implement the PP in the manner in which it has been agreed with the Bank.

#### 4.5.9 Procurement Risk and Capacity Assessment (PRCA) Action Plan

The Bank and the Borrower have discussed and agreed on a Procurement Risk and Capacity Assessment (PRCA) action plan which proposes a series of actions and measures to be carried out during the project implementation in order to mitigate the risks identified following the assessments of procurement risks at the country/sector/project levels and procurement capacity and the level of the executing agency (ies). The following PRCA action plan will be monitored during the project cycle and adjusted accordingly to ensure proper execution of the project and procurement arrangements:

**Table 4.5d: Actions plan of mitigation measures for the implementation of the project**

N°	Risks identified	Mitigation Measures	Responsibility	timing
1	Weaknesses in BPS covering the country system and CBL procurement guidelines	The project will only use BPM for all its procurements	MOA/Bank	Throughout the project period
2	Delays leading to avoidable extensions of contracts in projects and possible cost-overruns	Adequate due diligence, market and cost analysis of any items that surfaced in the course of contract execution as well as close monitoring of contract performance timelines for both Supervision and works contracts	MOA	Throughout the project period
3	Non- availability of capacitated service providers for large and complex contracts	International Suppliers and service providers will be leverage using international processes under BPM	MOA	Ongoing

4	Weak contract management practices	Project Team awareness on effective contract management should be heightened. Bank to organize a contract management module training for the project team at project launch.	MOA/Bank	Prior to project commencement
5	Weak capacity in developing designs, specifications and technical requirements for works	Recruitment of a design and supervision firm to support the Ministry	MOA	Immediately after project approval
6	Inadequate coordination within the project team and mis-steps in some procurement procedures	Effective communication of thematic teams and procurement unit on scheduling of planned activities and regular consultation with Bank team in the event there is any doubt on any procurement issue	MOA	Through out the entire duration of the project
7	Weak capacity in monitoring works contract and know-how to verify the activities of the supervision consultant	An extra support in terms of another officer is needed to augment the capacity of procurement processes and contract management. It is expected that the Project Engineer will be tasked to bridge this gap	MOA	On Project inception
8	Delay in delivery due to lack of Technical Expertise to produce seeds and the school feeding program.	Foresee Technical assistances on seed production and school feeding from CARI and WFP	MOA	On project inception
9	Inadequate capacity in developing technical requirements and specifications	The supervision consultant and the project engineer should be tasked to bridge this gap	MOA	On project inception

**Table 4.5.e Procurement Plan for SADFONS Additional Financing**

<b>Procurement System<sup>19</sup></b>	<b>Package No.</b>	<b>Package Description</b>	<b>Category<sup>20</sup></b>	<b>Lot No.<sup>21</sup></b>	<b>Lot Description<sup>22</sup></b>	<b>Estimated Cost (Unit of Account (UAmillion))</b>	<b>Procurement Method</b>	<b>Pre-or Post-Qualification</b>	<b>Procurement Oversight<sup>23</sup></b>	<b>Planned SPN Publication Date</b>
<b>BPM</b>	<b>GDS1</b>	Seed health logistics, processing equipment and agro chemicals	<b>Goods</b>	<b>Lot1</b>	Seed health logistics, processing equipment and agro chemicals	0.10	<b>OCB-N</b>	<b>Post</b>	<b>Prior</b>	<b>November 2023</b>
<b>BPM</b>	<b>GDS2</b>	Fish Feeds and Fingerlings	<b>Goods</b>	<b>Lot1-2</b>	Fish Feeds and Fingerlings	0.75	<b>OCB-I</b>	<b>Post</b>	<b>Prior</b>	<b>November 2023</b>
<b>BPM</b>	<b>GDS3</b>	Small Scale Irrigation Tools and Systems	<b>Goods</b>	<b>Lot1</b>	Small Scale Irrigation Tools and Systems	0.90	<b>OCB-I</b>	<b>Post</b>	<b>Prior</b>	<b>November 2023</b>
<b>BPM</b>	<b>GDS4</b>	Preservation equipment for Warehouses (eg. Bagging, Crates, Pallets etc.)	<b>Goods</b>	<b>Lot1-4</b>	Equipment for Warehouses	0.04	<b>OCB-N</b>	<b>Post</b>	<b>Prior</b>	<b>November 2023</b>
<b>BPM</b>	<b>GDS5</b>	Equipment for National Standards Lab for food quality and safety testing	<b>Goods</b>	<b>Lot1-3</b>	Equipment for National Standards Lab for food quality	0.15	<b>OCB-N</b>	<b>Post</b>	<b>Prior</b>	<b>November 2023</b>

<sup>19</sup> Insert Procurement systems used under the project (Recipient Procurement System and/or Bank's Methods & Procedures and/or Third Party)

<sup>20</sup> Indicate: Goods/Works/Consulting Services/Non-Consulting Services

<sup>21</sup> If applicable

<sup>22</sup> If applicable

<sup>23</sup> Indicate (Procurement Audit / Post Review / Prior Review)

Procurement System <sup>19</sup>	Package No.	Package Description	Category <sup>20</sup>	Lot No. <sup>21</sup>	Lot Description <sup>22</sup>	Estimated Cost (Unit of Account (UAmillion))	Procurement Method	Pre-or Post-Qualification	Procurement Oversight <sup>23</sup>	Planned SPN Publication Date
					and safety testing					
<b>BPM</b>	<b>GDS6</b>	Solar dryer kits for small-skill fish, cassava, rice and vegetables processing	<b>Goods</b>	<b>Lot1-3</b>	Solar dryer kits for small-skill fish, cassava, rice and vegetables processing	0.19	<b>OCB-N</b>	<b>Post</b>	<b>Prior</b>	<b>November 2023</b>
<b>BPM</b>	<b>GDS7</b>	Equipment for Micro-hubs	<b>Goods</b>	<b>Lot1-2</b>	Equipment for Micro-hubs	0.38	<b>OCB-I</b>	<b>Post</b>	<b>Prior</b>	<b>December, 2023</b>
<b>BPM</b>	<b>GDS8</b>	Four Vehicles	<b>Goods</b>		Four Vehicles	0.15	<b>OCB-N</b>	<b>Post</b>	<b>Prior</b>	<b>November 2023</b>
<b>BPM</b>	<b>GDS9</b>	Mechanized Equipment (eg. Tractors, Power tillers, Threshers, etc. for Farmer/ agricultural producer organizations	<b>Goods</b>		Mechanized Equipment (eg. Tractors, Power tillers, Threshers)	0.36	<b>OCB-I</b>	<b>Post</b>	<b>Prior</b>	<b>December, 2023</b>
<b>BPM</b>	<b>GDS10</b>	Kitchen Gardening Kits to peri-urban	<b>Goods</b>		Kitchen Gardening Kits to peri-urban	0.53	<b>OCB-I</b>	<b>Post</b>	<b>Prior</b>	<b>November 2023</b>
<b>BPM</b>	<b>WKS1</b>	Rehabilitate of cold storage facilities for nuclear, breeder & foundation seeds	<b>Works</b>	<b>Lot1</b>	Rehabilitate of cold storage facilities for nuclear, breeder & foundation seeds	0.14	<b>OCB-N</b>	<b>Post</b>	<b>Prior</b>	<b>November 2023</b>
<b>BPM</b>	<b>WKS2</b>	Establishment of Fish habitat	<b>Works</b>	<b>Lot1</b>	Establishment of Fish habitat	0.24	<b>OCB-N</b>	<b>Post</b>	<b>Prior</b>	<b>November 2023</b>

Procurement System <sup>19</sup>	Package No.	Package Description	Category <sup>20</sup>	Lot No. <sup>21</sup>	Lot Description <sup>22</sup>	Estimated Cost (Unit of Account (UAmillion))	Procurement Method	Pre-or Post-Qualification	Procurement Oversight <sup>23</sup>	Planned SPN Publication Date
BPM	WKS3	Construction of two Ware Houses, Storage Centres	Works	Lot1	Construction of two Ware Houses, Storage Centres	0.08	OCB-N	Post	Prior	November 2023
BPM	CS1	Develop and implement Environmental and Social Management Plans (ESMPs)	Services	N/A	ESMP	0.04	CQS	Post	Prior	November 2023
BPM	CS2	Aquaculture Expert	Services	N/A	Aquaculture Expert	0.06	ICS	Post	Prior	November 2023
BPM	CS3	Agribusiness Expert	Services	N/A	Agribusiness Expert	0.06	ICS	Post	Prior	November 2023
BPM	CS4	Communication Specialist	Services	N/A	Communication Expertise	0.06	ICS	Post	Prior	November 2023
BPM	CS5	Finance Assistant	Services	N/A	Finance Ass.	0.05	ICS	Post	Prior	November 2023
BPM	CS6	Procurement Officer	Services	N/A	Procurement Expertise	0.06	ICS	Post	Prior	November 2023
BPM	CS7	Financial Audit	Services	N/A	Audits	0.03	CQS	Post	Prior	November 2023
BPM	CS8	Engineering Firm for Design and Supervision	Services	N/A	Design and Supervision	0.04	CQS	Post	Prior	November 2023
BPM	CS9	CARI Technical Assistance	Services	N/A	CARI TA	1.10	DC	Post	Prior	November 2023
BPM	CS10	WFP Technical Assistance	Services	N/A	WFP TA	1.20	DC	Post	Prior	November 2023



## **Annex 4-6: Detailed Financial Management and Disbursement Arrangements**

**Introduction:** A full Financial Management capacity assessment was carried out on the Ministry of Agriculture (MOA) designated as the executing agency for the Smallholder Agriculture Development for Food and Nutrition Security Project Additional Finance (SADFONS Additional Finance). The FM capacity assessment was carried out by SNFI2 in accordance with the Financial Management Policy of the African Development Bank Group Financed Operations (2014) and the Financial Management Implementation Guidelines for Bank Group Operations (2019). The objective of the assessments was to ascertain whether the MOA as the Executing Agency has an acceptable Financial Management (FM) arrangement capable of; (i) accurately and completely record all project transactions and balances; (ii) facilitate the preparation of regular, timely and reliable financial statements; (iii) safeguard the project's assets (as applicable); and (iv) be subjected to auditing arrangements acceptable to the Bank.

This FM assessment was done during the month of June 2023 as part of the appraisal mission. The results of the assessment and the agreed FM, disbursement, and auditing arrangements for the proposed Additional Financing to the Smallholder Agriculture Development for Food and Nutrition Security (SADFONS) Project are documented below.

### **Executive Summary**

**Financial Management:** The Ministry of Agriculture (MOA) which is currently executing the ongoing SADFONS project will execute the Additional financing project. The existing technical implementation of the project will continue under the SADFONS additional financing. However, the existing financial management (FM) system will be reinforced by ensuring full implementation of the recommended FM arrangements in the ongoing SADFONS project. A financial management specialist (who shall be a professionally qualified accountant, with hands-on experience in donor funded projects accounting and financial) will be competitively recruited to head the FM function of the ongoing project and additional Financing. The Project Accountant (at post) will report to the financial management specialist (FMS) and be assisted by an Accounts Assistant (to be seconded for capacity building and sustainability). The respective duties of the FM function staff will be detailed in their appointment letters to ensure adequate segregation of duties. Both the FMS and PA shall be subjected to annual performance evaluations to ensure that they effectively support the recipient's compliance with the Bank's financial management requirements. The FM team will effectively work with the project implementation team at the Ministry of Agriculture, to ensure that the project is implemented successfully and timely. The Additional Financing project will use the existing Financial Management Procedures Manual (FMPM), Tompro accounting software and the chart of accounts to record, process project transactions and prepare financial reports. In harmony with other donor-funded projects and GOL accounting standards, the Additional Financing project will adopt International Public Sector Accounting Standards (IPSAS) Under Financial Reporting Cash Basis framework to prepare project financial statements (PFS). The FMS shall have overall responsibility for the preparation of all project reports. On a quarterly basis the FMS shall ensure the PA generates from the Tompro Accounting software a consolidated (consisting of both the ongoing SADFONS and Additional financing) quarterly un-audited interim financial reports (IFRs), which must be reviewed and approved by the FMS before submission to the Bank within forty-five (45) days after the end of every calendar quarter. At the end of each fiscal year, the FMS shall ensure a draft consolidated project financial statements is prepared in line IPSAS Cash Basis, which must be audited by the General Auditing Commission (GAC) using audit terms of reference (TOR) agreed with the Bank. The audit reports shall be submitted to the Bank no later than six (6) months after the end of each financial year. The contents of the IFRs and annual financial statements have been agreed and shall be discussed in detail at project launch.

The existing internal control and administrative procedures shall be adopted with some modifications to strengthen the overall control environment. The assessment recommends that Internal Audit Agency seconds an internal auditor to the MOA who shall provide internal the audit

function for the project. The seconded internal auditor shall provide internal checks and carry out periodic reviews on the operations of both the ongoing and SADFONS, to strengthen the control environment. Also, the Bank's procurement rules, financial management and disbursement guidelines would provide additional guidance. The assessment further recommends that the existing project implementation manual (PIM) be customized to include the Additional financing and adopted to guide project implementation and operation. The internal controls section of the PIM will spell out the internal controls and administrative procedures and provide guidance on the day-to-day project financial management issues. The internal control environment will be underpinned by the clear definition of roles and responsibilities allowing for segregation of duties. The existing Project Steering Committee (PSC) will provide oversight governance and approve key strategic document (including annual workplans and budgets) for the project. The internal auditor's reports on the project must be approved by the Director of the IAA before submission to the PSC who will ensure the timely implementation of audit recommendations.

**Disbursement:** The following four (4) disbursement methods are used by the Bank in disbursing funds to projects: (i) Direct payments; (ii) Payments through Special Account (SA); (iii) Reimbursement method; and (iv) Reimbursement by guarantee. The Direct payments and reimbursement methods will be used in advancing funds under the Additional Financing project. In line with Bank's guidelines, the special account method will be authorized upon full justification of the special account of the closed Smallholder Agricultural Productivity Enhancement and Commercialization (SAPEC) Project. The Direct Payment method will be for the payments against larger contracts signed between project management and contractors/suppliers/ service providers. As an when authorized, the Special Account (SA) method will be used in paying for eligible recurrent expenses and smaller contracts only under GAFSP funding. This will require the opening of a dedicated USD denominated SA at a Commercial Bank in Liberia acceptable to the Bank. Reimbursements will be made for eligible expenses for goods, works, services and operating expenses already incurred and paid for by the GoL from its own resources. The remaining method (Reimbursement guarantee method) shall also be available for use by the project during implementation should the need arise. *All disbursements will follow with the disbursement procedures outlined in the Bank's Disbursement Handbook 2020.*

**Third Party FM Arrangements:** The third parties will be required to: (i) open a Special Account to receive funds for the project activities from the PIU in a bank and manner acceptable to the Bank, (ii) prepare and submit to the project each year the Annual Work Program and Budget, (iii) Prepare monthly bank reconciliations, and (iv) prepare and submit to the project, with a copy to the Bank, quarterly Financial Statements/Income and Expenditure Accounts for consolidation.

**Audit arrangements:** The General Auditing Commission (GAC) of Liberia will audit the consolidated annual financial statements (of the ongoing SADFONS and Additional Financing) projects, in line with the GAC's legal mandate. The consolidated financial statement will disclose both on the face of the PFSs and the notes to the accounts, the respective balances relating to the ongoing and the additional financing projects. The audit will be conducted in accordance with audit terms of reference (TOR) acceptable to the Bank. The audit reports (comprising the audited financial statements with the auditor's opinion and related management letter) must be submitted to the Bank no later than six (6) months after the end of each financial year. The audit cost shall be paid from project resources. The MOA submitted on time its audit report for the ongoing SADFONS project, which was reviewed and accepted by the Bank. Significant internal control issues were raised in the management letter, including inadequate supporting documentation for transactions, unexplained material variances, inconsistencies between payment vouchers and direct

credit instructions and inadequate segregation of duties (among others). Albeit the closing audit report for the SAPEC project which closed on 31.08.2022 has not yet been submitted to the Bank by the MOA. The closing audit report was due for submission to the Bank on 31.01.2022. The submission of the outstanding audit report will be a condition prior to first disbursement.

**Conclusion:** The assessment concluded the overall FM risk is rated substantial and to mitigate this further: (i) the MOA should strengthen the existing (Project Implementation Team) with the full complement of technical experts as to implement the technical components of the project; (ii) The MOA will competitively recruit an FMS who shall be a professionally qualified accountant to head the FM function of the project and second an Accounts Assistant (for capacity building and sustainability) (iii) MOA will customize and adopt the existing project implementation manual (PIM) to guide project operations and implementation; (iv) adopt the existing project software, Financial Management Procedures Manual (FMPM) and chart of accounts for recording & processing of project accounting transactions and financial reporting; (v) MOA shall ensure that the ensure that operational budget is approved the Steering Committee before 31 December of each year of operations and (vii) fully implement the FM action plan.

## **Detailed Financial Management Assessments of the Executing Agency**

### **Summary Project Description**

Summary Project Description: As part of development partners' support to the Government and people of Liberia, an integrated crisis response plan was developed to assist the Government and people of Liberia to plan, coordinate, and deliver targeted response and services to strengthen national capabilities. For instance, the Government provided funds to the World Food Program for emergency food distribution to rural population mainly vulnerable population. In addition, farming inputs (e.g., equipment/tools including water pumps, power tillers, etc.) distributed to producer groups. These crisis response mechanisms were designed to minimize the socioeconomic impact of the pandemic on households, communities, vulnerable groups while enabling people to cope with and comply with mitigation measures put in place by the government. Accordingly, the project is designed to respond to policy measures that aim to contribute to an agri-food system that is functional with lasting effects of crisis response measures on vulnerable groups, and longer-term options for agri-food system transformation and resilience building. The GAFSP funding of the project will help to bridge the funding gap of almost US\$100million in the sector. The project to a large extent will (a) safeguard livelihoods of communities/households through good hygiene and nutrition promotion campaigns and build resilience with emergency crop and vegetable seeds and agricultural inputs to restore and improve their crops and vegetables yields, household income, food security and nutrition status; (b) provide technical and financial support to gender-sensitive productive services that is climate-smart and sustainable using integrated approaches.

The project components remain three: i) Support to enhancing smallholder agricultural productivity and market access; ii) Institutional Strengthening and Capacity building; and iii) Project management and coordination.

Objectives: The project development objective is to improve food and nutrition security and reduce poverty of targeted rural populations in the Republic of Liberia. This will be achieved through (i) increased agricultural productivity and production of smallholder farmers (with a focus on food crops such as rice, cassava, and vegetables), (ii) improved smallholders' value addition, market access and income, and (iii) strengthening the capacity of the government institutions, farmers and producer organizations.

## **Use of Country Systems**

The latest Country Fiduciary Risk Assessment (CFRA) carried out in February 2023, during the CSP (2019-2023) update concluded that the overall country fiduciary risk of Liberia remains substantial (consistent with previous CFRA risk rating in July 2021). The 2020 PEFA report confirmed an overall basic performance for the PFM sub-systems in Liberia. The progress in PFM reforms is underpinned by the passage of the PFM 2009 Amendment Act (in October 2019) and various ongoing reforms initiatives supported by development partners (including the World Bank, AfDB, EU and others). The PFM 2009 Amendment Act resulted in significant improvements in the accounting and financial reporting with the creation of the Comptroller and Accountant General's Department (CAGD) in March 2020. The CAGD has the overall responsibility for Government of Liberia (GOL) accounting and financial reporting (including production of quarterly and annual financial reports on the Consolidated Fund accounts, annual Ministries and Agencies (M&As) accounts, and annual public accounts). The Comptroller and Accountant General (CAG) submits the Consolidated Fund (CF) financial reports to the Audit General (AG) for auditing. The GOL fiscal year has changed beginning 1 January 2022 to align with major partners and other countries to improve planning. The CAG has been able to clear the backlog of accounts up to 2020 and the 2021 accounts have been audited and yet to be issued whilst the 2022 accounts draft accounts is being finalized for transmission to the AG for audit. In addition, the timeliness and accuracy of the financial reports has improved due to wider deployment of Integrated Financial Management Information System (IFMIS) to about 90 M&As (out of 107), the introduction electronic data management system (EDMS) and electronic funds transfer (EFT), which will further improve efficiency and transparency of government expenditure reporting.

There had been an enhancement of the Liberia Revenue Authority (LRA) and upgrade of the revenue and customs systems, the acquisition of a new Integrated Tax Administration System, introduction of Natural Resources Tax Section (NRTS) and capacity building for tax officers. A solid foundation was laid in Information Technology (IT) based modernization, automating some key PFM systems with either deployment of IFMIS, Civil Service Management System (CSMS), establishment of the Treasury Single Account (TSA), the Standard Integrated Government Tax Administration System (SIGTAS), and the Automated System for Customs Data Administration (ASYCUDA) deployed at various tax and customs collection centers across the country. There are improvements in budgeting areas especially, with the creation of Liberia Revenues Authority (LRA) (under the LRA Act 2013), improving budget Predictability and control as well as various efforts to expand the tax net. Further reforms included the finalization of the Medium-Term Expenditure Framework (MTEF) manual, which was developed in 2016, technical assistance provided by the IMF to improve the quality of fiscal outturns, as well as the Medium-Term Fiscal Framework paper and development of a new PFM Strategy and Action Plan to cover the period from 2023 to 2026. The Internal Audit Agency continues to function in line with its mandate and focused on tightening the general control environment. Its professional staffing strength currently stands at 230, of which about 55 are deployed to MDAs, less than 50% in the counties and the remaining staff working in other areas. There have been improved collaboration among internal and external audits and the Public Procurement and Concessions commission (PPCC) for synergies and improved monitoring of controls. Audit recommendations implementations are currently being tracked and reported on by the IAA, although actual implementation of the audit recommendations remain low due to weak legal framework and capacity constraints.

External audits and Legislative scrutiny have seen enhancement regarding coverage and quality of reports issued as well as follow-up on audit findings, although the timeliness submission remains

an issue. The General Auditing Commission (GAC) audits the CF and all public funds in accordance with the PFM Act 2009 and GAC Act 2014, with consistent application of international standards of supreme audit institutions (ISSAIs). The audit coverage had always been above 80% of total government expenditure. Financial independence of the GAC has improved with increased budget allocations in recent years and good DP support to ensure the Auditor General delivers in line with his mandate. The AG has been able to clear the backlog of audit reports and the 2021 audit report of the consolidated fund is being finalized for issue to Legislature. However, there have been previous delays in the execution and issuance of audit reports culminating in late submissions to Legislature. The deliberations on these audit reports by the public accounts committee (PAC) have been experiencing unexpected delays. The implementation of PAC recommendations by the executive had been slow. The GAC currently does four types of audits including financial, compliance, performance and IT audits, which further improve the control environment. The GAC also carries out donor funded projects audits including Bank financed projects. Nonetheless, there have been some critical challenges militating the PFM reform agenda including constraints in logistics, human capacity challenges, inadequate financial resources, non-adherence to laid down controls, and challenges in internet connectivity, bandwidth and data storage. Despite the above challenges of the PFM system, the GoL is committed to address these challenges through a framework of reforms and initiatives underpinned on the new PFM strategy and action plan (being developed), anchored on the national development agenda.

### **Harmonization with Other Donors**

The proposed project will harmonise with earlier and ongoing projects managed by the Ministry of Finance and Development Planning PFMU funded by the Bank and other development partners (especially the World Bank, EU, USAID among others). Specifically, it will use same financial management arrangements including accounting software, chart of accounts, financial management and procedures manual and internal controls (including internal audit function) under the oversight function of the PFMU Director to manage the fiduciary arrangements of the proposed project.

### **Executing Agency**

The MOA currently the executing the ongoing Smallholder Agriculture Development for Food and Nutrition (SADFONS) Project, will be the executing agency of the Additional Financing Project. It is the GoL ministry responsible for the governance, management and promotion of agriculture. MOA is responsible for the oversight of agronomy, animal husbandry and other agriculture industries, the economic organization of the agriculture and food industries, and national food security. It is divided into sectors of livestock production, agricultural chemicals and crop production.

**Summary of assessed financial management arrangements:** The assessments of the various FM elements in the above executing agencies are summarised below:

*(i) Budgeting System:* The existing formalized GOL budgeting system for budget planning, formulation, execution, and monitoring will be used for the Additional Financing Project. The PIU ensures that budgeting process is participatory and comprehensive, capturing inputs/ data are from all technical units of the project. The annual budget and work plan will be drawn from the approved global workplan and budget. The annual budget, workplan and procurement plan must be submitted to the Project Steering Committee for scrutiny and approval before submission to the Bank for its 'no objection'.

**(ii) Accounting:** The current project accounting team will be reinforced by ensuring that the MOA fully implements the FM recommendations during the appraisal of the ongoing SADFONS project. A Financial Management Specialist (FMS) will be competitively recruited to head the FM function of the project. The FMS (to be hired) shall be an experienced seasoned chartered accountant, knowledgeable in donor funded project accounting and financial reporting, with practical application International Public Sector Accounting Standards (IPSAS) Cash Basis Accounting and skilled in the usage of accounting software. The FMS will use the project existing Tompro accounting software and chart of accounts record and process project accounting transactions and prepare financial reports. The FMS will be assisted by the current Project Accountant and an Accounts Assistant (to be deployed for capacity building and sustainability). Their respective roles within the project will be detailed in their contracts/ appointment letters to ensure adequate segregation of duties. The project will adopt and implement the existing financial management Manual (with minor modifications) to streamline financial management practices within the project. The FMS will have the overall responsibility for the fiduciary management of the project. On a quarterly basis, the FMS will ensure the Project Accountant generates from the Tompro accounting software quarterly un-audited Interim Financial Reports (IFRs), which must be reviewed, and approved by the FMS before submission to the Bank within forty-five (45) days, after the end of every calendar quarter. The project will also adopt International Public Sector Accounting Standards (IPSAS) Cash Basis, for the preparation of annual project financial statements (PFS), in harmony with accounting standards applied by the GoL and donor funded projects in the country.

**(iii) Financial reporting:** The project FMS will ensure the exiting Tompro accounting software and accounting policies detailed in the existing financial management manual are used to prepare both quarterly interim financial reports and annual financial reports. In accordance with GoL accounting standards and PFM Act 2009, the additional project will adopt IPSAS Cash Basis reporting framework for the preparation of project financial statements. The FMS will ensure timely production of quarterly interim unaudited financial reports for the benefit of the government of Liberia, and copies shared with the Bank no later than 45days after the end of every calendar quarter. The annual draft annual draft project financial statements prepared (consolidating with the ongoing SADFONS project), must be audited by the General Auditing Commission (GAC) or an independent external private audit firm competitively recruited by the GAC, (with the approval of the Bank). The signed audited project financial statements and related management letter must be submitted to the Bank within six (6) months after the end of the year audited. The content of the project financial statements was discussed with the MOA and will be greed during project negotiation. At a minimum the content shall include: (i) a statement of receipts and payments; (ii) a statement of comparison of budget to actuals (iii) Notes to the accounts comprising, significant accounting policies and other explanatory notes; (iv) statement of disbursement reconciliation; and (v) comprehensive listing of all assets acquired using project resources.

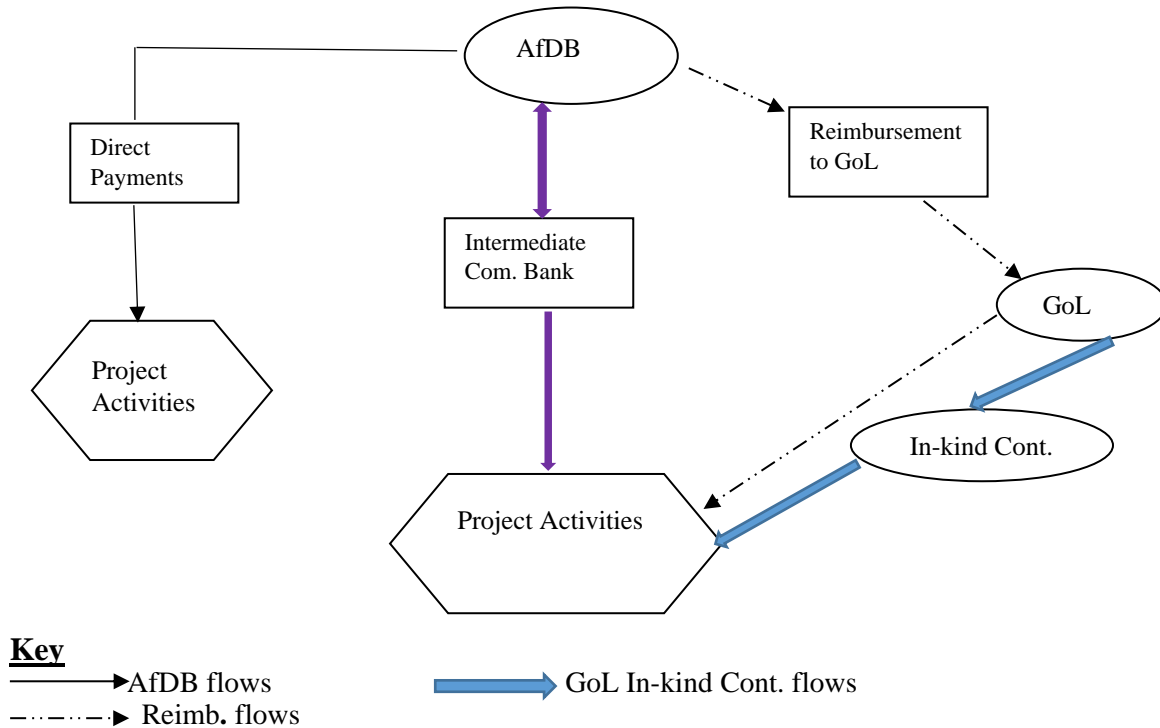
**(iv) Internal Control System, Governance, and Anti-corruption:** The GOL internal control procedures, (as modified by the MOA for donor funded projects) and detailed in the Financial Management Manual (FMM) and Administrative Procedures Manual will be followed for processing and approving payments. The review recommends that a project implementation manual (PIM) be revised and adopted to guide project implementation and operation. The existing Project Steering Committee (PSC) will provide oversight guidance and strategic direction for the Additional financing project as well as review and approve key strategic documents including- annual workplans, budgets and annual procurement plans (before the Bank's 'no objection). In compliant with the PFM reforms, the internal audit functions will be carried by staff of Internal Audit Agency (IAA) that will be seconded to the project. Internal Audit reports must be approved by the head of IAA before

submission to the PSC, who will ensure the timely implementation of audit recommendations. The project will adopt full use of GOL internal checks and approvals for processing withdrawal requests.

(v) **Governance, and Anti -corruption:** The Government of the Liberia Internal control, Protection of Whistle blower and anticorruption policies for safeguarding assets adopted by the MOA will be applied by the Additional financing project to protect project assets from fraud, waste, and abuse. The anti-corruption policy provides guidance, and all project staff, beneficiaries and other recipients would be advised on whom to report to if they suspect fraud, waste or misuse of project resources or property.

(vi) **Treasury Management (including funds flow and disbursements):** Four disbursement methods are used by the Bank in disbursing funds to its projects: (i) Direct payments; (ii) Payments through Special Account (SA); (iii) Reimbursement method; (iv) and Reimbursement by guarantee. The assessment recommends the (i) Direct payments; and (ii) Special Account (SA) and (iii) Reimbursement method to be used in advancing resources under the Additional financing project. The **Direct payment method** will be used for payments against larger contracts signed between project management and contractors/suppliers/ service providers. Due to the approval of the SMCC, the project will not be affected by suspension of the use of Special Account as a Disbursement Method for the project. The use of the special account method is not authorised in Liberia for Bank Group funding, Transition Support Facility and also GAFSP due to non-justification of the unjustified balances of some closed Bank financed projects including: (i) Rural WASH Program Development Study closed in: June 2015; (2) Labour-Based Public Works Project closed in March 2015; (iii) Supplementary Labour- Based Public Works closed in March 2015); GAFSP financed SAPEC project which closed in December 2021, which the closing audit report is yet to submitted to the Bank. When the Special Account method is authorised, a dedicated USD special account will be opened at an acceptable commercial bank to receive advances from the Bank for payment of operating expenses. A project operating account in USD account will also be opened at a bank to receive other income on the project including, bid sales. **Reimbursements** will be made for eligible expenses for goods, works, services and operating expenses already incurred and paid for by the GoL from its own resources and supporting documents submitted and duly validated by the Bank for payments. The fourth method (**Reimbursement guarantee method**) shall also be available to the project during implementation if it becomes necessary. *All disbursements shall be in accordance with the Bank's disbursement procedures outlined in the Disbursement Handbook 2020.*

**Flow of Funds Diagram**



**(vii) External Audit**

**Current Audit Arrangement:** The General Auditing Commission (GAC) of Liberia will audit the consolidated annual financial statements (of the ongoing SADFONS and Additional Financing) projects, in line with the GAC’s legal mandate. The consolidated financial statement will disclose both on the face of the PFSs and the notes to the accounts, the respective balances relating to the ongoing and the additional financing projects. The audit will be conducted in accordance with audit terms of reference (TOR) acceptable to the Bank. The audit reports (comprising the audited financial statements with the auditor’s opinion and related management letter) must be submitted to the Bank no later than six (6) months after the end of each financial year. The audit cost shall be paid from project resources. The MOA submitted on time its audit report for the ongoing SADFONS project, which was reviewed and accepted by the Bank. Significant internal control issues were raised in the management letter, including inadequate supporting documentation for transactions, unexplained material variances, inconsistencies between payment vouchers and direct credit instructions and inadequate segregation of duties (among others).

The Bank does not pay audit fees, whenever the audits are performed by the Auditor General, except payments of reasonable incidental audit expenses, which have been duly submitted, reviewed and accepted by the Bank. The audit cost shall be paid for from project resources.

**Outstanding Audit:** The closing audit reports of the following three projects which had been closed dated back to 2015 are still outstanding: (i) Rural Wash Programme Development Study, (ii) Labour - Based Public Works Project, and (iii) Supplementary Labour Based Public Works. Also, SAPEC project which closed on 30.12.2021 has not yet been submitted to the Bank by the MOA. The closing audit report was due for submission to the Bank on 30.06.2022. The submission of the outstanding audit report will be a condition prior to first disbursement.



### Summary Action Plan

The following FM actions need to be carried out by the MOA to operationalize the agreed mitigating measures:

<b>Action</b>	<b>Executing Agency &amp; Responsibility</b>	<b>Completion Date</b>
1. Recruit Project Financial Management Specialist	<b>MFDP/ MOA/</b>	Before first disbursement
2. Assign an Accounts Assistant to assist (PA), to be responsible for making primary entries and filing of accounting records.	<b>MFDP/MOA</b>	Within 6 months effectiveness
3. Submit the closing audit report of SAPEC to the Bank	<b>MFDP/MOA</b>	Before first disbursement
4. Revise and update and implement a project implementation manual (PIM) to guide project operations and further strengthen the control environment.	<b>MFDP/ MOA/</b>	Within 6 months after effectiveness
5. Adopt existing Financial Management and Procedures Manual and Administrative Procedures to streamline FM practices to streamline FM practices within the project.	<b>MFDP/ /MOA</b>	Before second disbursement
6. Set up the project on the existing Tompro accounting software for project accounting and financial reporting	<b>PFMU/MOA/ Tompro Consultant</b>	Within 2 months effectiveness
7. Develop audit ToR and agree with Bank	<b>MOA/ PFMU</b>	At Project Launching
8. FM training workshop including disbursement and procurement.	<b>Bank/ MFDP/ MOA/ PFMU</b>	At project launching
9. Implementation of all outstanding audit recommendation on SADFONS	<b>MFDP//MOA</b>	Before first disbursement
10. Submission of the final audit of the FS of SAPEC, another GASFP funded project	<b>MFDP/MOA/GAC</b>	Before the first disbursement

### Supervision Plan

The periodicity of the FM supervision shall initially be set at 2 supervision missions per year, comprising of a combination of desk and onsite visits, supplemented with the reviews of quarterly un-audited IFRs, annual external audit reports and follow-ups on the implementation of management letter and supervision mission recommendations. Based on the evolving FM, which shall be periodically re-assessed, the frequency of supervision missions will be amended accordingly.

**ANNEX 1: FM RISK ANALYSIS SUMMARY**

Elements	Weaknesses	Risk Types	Likelihood of occur.	Impact if risks occur	Initial risk rating	Risk mitigation measures planned	Conditionality (Yes/ No)
<b>INHERENT RISK</b>							
<b>Country</b>	Overall FM capacity in Liberia	<b>Structural</b>	<b>Substantial</b>	<b>Substantial</b>	<b>S</b>	The FM function of the project will be handled by the Project Financial Management Specialist (FMS) to (be hired) who shall be a seasoned chartered accountant) in addition to the current PA. The FMS will be an experienced chartered with several years of experience in managing the fiduciary arrangements of the Bank and other DP financed projects in Liberia. The technical implementation will be handled by MOA Finance Assistant. The FMS will be supported by a PA and an accounts assistant (for capacity building and sustainability).	<b>No</b>
<b>Entity</b>	Inadequate experience in handling the financial management of Bank financed project and non-compliant with the existing guidelines and regulations	<b>Financial</b>	<b>Substantial</b>	<b>Substantial</b>	<b>S</b>	The FM function of the project to be headed by the FMS (an experienced chartered accountant- to be hired), will collaborate with the team and the PIU in managing the fiduciary arrangements of the project. The FMS will review and approve all reports before submission to the project coordinator and the Bank	<b>Yes</b>
<b>Project</b>	Nature of project activities, inappropriate use of project funds and incorrect information reported	<b>Operational</b>	<b>Substantial</b>	<b>substantial</b>	<b>S</b>	The proposed Additional financing project will implemented through the existing FM system, chart of account and FM manual in addition to the existing ones in the current project to manage the FM arrangements of the project. The PIM will be reviewed and updated to guide project operation and implementation. An FMS will also be competitively recruited to be directly in charge of the FM function of the project. The FMS will supervise the work of the PA and provide overall quality assurance for project transactions recorded in in the Tompro Accounting System.	<b>Yes</b>
<b>OVERALL INHERENT RISK</b>					<b>S</b>		
<b>CONTROL RISK</b>							
<b>Budgeting</b>	Delays in the release of Counterpart funds from Government	<b>Financial</b>	<b>Substantial</b>	<b>Low</b>	<b>L</b>	Use of the existing GOL budgeting system by the project for preparing, executing, and reporting on the utilization of funds. The budgeting process is bottom up and participatory ensuring that all the technical units' inputs are collated and included in the budget. The annual workplans and budgets will be drawn from the overall approved project workplan and budget, which must be scrutinized and approved by the PSC before submission to the Bank for its no-objection. To mitigate against delays in releasing of funds from government treasury, the GOL contribution is in-kind.	<b>No</b>

<b>Accounting</b>	Possible delays in recording and reporting project related financial transactions.	<b>Financial</b>	<b>Moderate</b>	<b>Substantial</b>	<b>S</b>	The FMS will ensure the PA uses the existing Tompro Accounting Software and guided by the current financial management manual to enhance the accounting and financial reporting. The FMS will ensure that all accounting transactions are properly authorized, recorded and accurately reported in a timely manner.	<b>No</b>
<b>Internal Control</b>	Non-Compliance with project financial regulations	<b>Structural</b>	<b>Moderate</b>	<b>Moderate</b>	<b>S</b>	Use of GoL internal controls as modified for projects and the GOL internal audit function (IAA) to strengthen the overall control environment. A PIM will be slightly modified and implemented to guide project implementation and operation. The IAA seconded internal auditor will periodically review project operations and provide internal checks to strengthen the control environment.	<b>No</b>
<b>Treasury Manag't/ Funds Flow</b>	Delays in effecting disbursements, SA justifications and replenishments.	<b>Operational</b>	<b>Low</b>	<b>Low</b>	<b>L</b>	The project will not be affected by suspension of SA for the Bank funded operations in the country.	<b>No</b>
<b>Reporting</b>	Delays in submission and/or non-submission of IFRs.	<b>Financial</b>	<b>Substantial</b>	<b>Moderate</b>	<b>S</b>	Use of the project Tompro Accounting system by the PA to produce IFRs for submission to the Bank. The FMS will ensure that the IFRs are prepared early for timely submission to the Bank.	<b>No</b>
<b>External Audit</b>	Audits may not be performed in in line with Bank's ToR and submitted within the timeframe	<b>Financial</b>	<b>Low</b>	<b>Low</b>	<b>L</b>	The General Auditing Commission (GAC) or an independent external audit firm will be competitively recruited by the AG with the approval of the Bank to audit the consolidated PFS (ongoing SADFONS and the Additional Financing) on an annual basis, using audit ToRs acceptable to the Bank. The GAC has been auditing Bank funded projects in Liberia and the AG had always ensured that the audit reports are finalized early for timely submission to the Bank.	<b>No</b>
<b>OVERALL CONTROL RISK</b>					<b>S</b>		
<b>OVERALL PROJECT RISK RATING</b>					<b>S</b>		

*H – High*

*S - Substantial*

*M – Moderate*

*L – Low*



