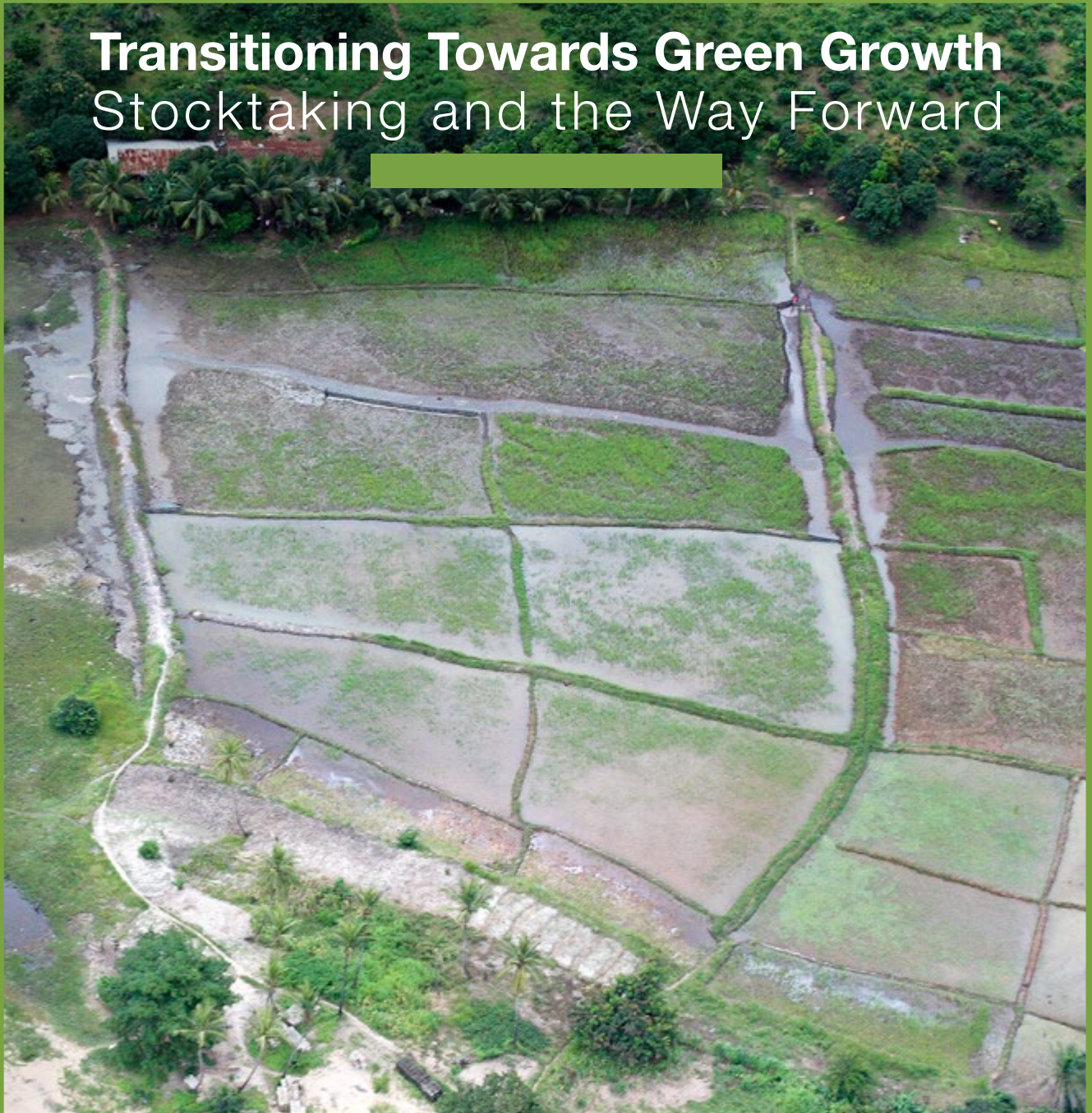


GREEN GROWTH

SIERRA LEONE

Transitioning Towards Green Growth Stocktaking and the Way Forward



AFRICAN DEVELOPMENT BANK GROUP

Green Growth Sierra Leone

TRANSITIONING TOWARDS GREEN GROWTH

Stocktaking and the Way Forward

2013

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ABBREVIATIONS

A4P:	Agenda for Prosperity
AfDB:	African Development Bank
CAADP:	Comprehensive Africa Agriculture Development Program
ECOWAS:	Economic Community of West African States
EIA	Environmental impact assessment
EITI	Extractive Industries Transparency Initiative
FCC	Freetown City Council
GG	Green growth
GAFSP	Global Agriculture and Food Security Program
GoSL	Government of Sierra Leone
IFAD	International Fund for Agricultural Development
IWRM	Integrated water resources management
MDGs	Millennium Development Goals
MMA	Mines and Minerals Act
NAPA	National Adaptation Program of Action
PEER	Public Environmental Expenditure Review
PES	Payment for environmental services
PRSP	Poverty Reduction Strategy Paper
RED	Renewable Energy Directive
SEA	Strategic environmental assessment
SEEA	System of Environmental and Economic Accounting
SPP	Sustainable public procurement
WDI	World Development Indicators
UNEP	United Nations Environment Program

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This knowledge product is part of the work undertaken by the African Development Bank in the context of its new Strategy 2013-2022, whose twin objectives are “inclusive and increasingly green growth”. The Bank provides technical assistance to its regional member countries for engaging on a green growth pathway. Sierra Leone is one of these pilot countries.

The team is grateful to the Government of Sierra Leone, the national counterparts, NGO and private-sector representatives who participated in preparation and review of this report. Without them, this work would not have been possible. This report is dedicated to them, and more specifically to the core team responsible who prepared the country’s latest development program, the PRSP 3 or “Agenda for Prosperity”. We acknowledge their efforts to mainstream green growth in the PRSP 3 and to build a more sustainable development model that benefits all Sierra Leoneans while preserving the country’s natural capital.

This document has been prepared by a team from the African Development Bank, co-chaired by Hela Cheikhrouhou, Director of the Energy, Environment and Climate Change Department, and Franck Perrault, Regional Director. The analytical and operational work was led by Florence Richard and Robert Peprah. The main author, Marjory-Anne Bromhead, worked in close collaboration with a multi-sectoral team whose members included Reynold Johnson, Christian Tucker, Joao Cunha, Yogesh Vyas, Jamal Zayid, Rogers Lubunga, Richard Malinga, Daniel Schroth, Patrick Agboma, Jean-Louis Kromer, Sandy Jambawai, Kalayu Gebre Selassie, Timothy Mkandawire, John Afele, Mbui Wagacha, Ibrahim Ansu Bangura and James Wahome. Yero Baldeh and Kurt Lonsway provided management oversight, and Frank Sperling strategic guidance.

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We hope that the information provided here will contribute to broader and more effective efforts to engage African countries on an inclusive green growth pathway.

FOREWORD

Sierra Leone has made an impressive recovery since the end of its civil conflict in 2002, with an average annual GDP growth rate of 5–6%. Poverty has dropped from 66.4 in 2003 to 52.9 in 2011. However, challenges remain, and social indicators, though improving, remain very low; for example, only 12% of the population has access to electricity and 35% of the rural population to clean drinking water.

Sierra Leone is endowed with abundant natural resources, including fertile land, fisheries, abundant water, forests, minerals, oil and gas, as well as beautiful landscapes and coastlines. All these do form the basis for a rich and diverse economy. Properly managed, these endowments will provide a lasting supply of food while contributing to export revenues and financing social and infrastructure development. They will also be the basis for a thriving tourism industry; efforts are already being made to develop this sector. The sustainable management of natural resources (both renewable and non-renewable) hence also forms a critical part of the sustainable economic agenda in Sierra Leone.

As the country endorses its new Agenda for Prosperity, which defines the development path for the period 2013–2018, it is critical to engage on a more sustainable pathway; this shall be done through strong economic growth that benefits all and ensures responsible management of the natural capital on which the economy is based. This is how Sierra Leone envisions achieving its middle-income status by 2035.

Sierra Leone is committed to mainstreaming inclusive green growth in the Agenda for Prosperity. The Government, in partnership with the African Development Bank, designed this document to identify key challenges and major opportunities for mainstreaming inclusive green growth into the Agenda for Prosperity.

The technical assistance provided by the AfDB to Sierra Leone in 2012-2013 is part of a broader effort by the Bank to support Regional Member Countries in transitioning towards a greener economy. This is in line with the Bank's Strategy 2013-2022 which emphasizes inclusive growth and the transition to green growth as overarching objectives for the development of the African continent.

The Government of Sierra Leone and the African Development Bank share the belief that green growth can bring high-quality growth to all Sierra Leoneans, with more jobs, less pollution, greater resilience and better infrastructure. It can also play a role in improving Sierra Leone's image, as it completes its transition to a post-conflict country committed to transparent governance and high-quality, sustainable growth. Green growth will also bring in more financing – from the private sector and public sources – dedicated to “green investments” and will help better manage revenues from mineral resources.

Through green growth for all, we want to build today a better Sierra Leone for tomorrow!

Minister of Finance and Economic
Development of Sierra Leone

DR KAIFELLA MARAH



Director of the Energy, Environment and
Climate Change (ONEC) Department of
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MRS. HELA CHEIKHROUHOU





EXECUTIVE SUMMARY

1. The Sierra Leonean authorities are committed to mainstreaming inclusive green growth into their new development strategy, currently nearing completion. Following a request from the Sierra Leonean authorities, this document was designed to assist government officials and national stakeholders to consider key challenges and identify major opportunities for mainstreaming inclusive green growth into the 2013–2017 Poverty Reduction Strategy Paper (PRSP 3), known as the Agenda for Prosperity (A4P). Though the A4P focuses on the next five years, it also seeks to lay the foundations for achieving Sierra Leone’s longer-term vision, its transformation into a middle-income, inclusive, green economy over the next 25 years.¹ Preparation of the A4P started in the summer of 2012, and over the last nine months, the authorities have done much to incorporate green growth principles into it.

¹ AfDB’s assistance package also included working “in real time” with members of the A4P Core Team as the various A4P pillars were developed, organizing workshops on green growth, and working with in-country communications professionals to design a communications and knowledge management strategy.

2. This document was produced through literature review, technical analysis and extensive consultations with the Government of Sierra Leone (GoSL), national authorities, development partners, private-sector representatives, and nongovernmental organisations. It also benefited from review and inputs from AfDB managers and experts from various sectors.

Principles of “Green Growth” and Definition

3. Wise management of physical, natural, social and human capital is at the core of green growth. While traditional growth theory saw use of natural capital as a means of financing increases in human and physical capital, green growth makes a clear distinction between non-renewable and renewable natural capital. While both are a source of long-term economic growth and welfare gains, green growth seeks to manage non-renewable natural capital (minerals, oil and gas) responsibly, and to manage renewable natural capital (land, water, forests, sun, and wind) sustainably: green growth aims to “use renewable natural resources without using them up”.

4. A consensus is emerging that such an approach to economic development is not only desirable, but essential for any long-term development strategy. A green approach emphasises the efficient use of resources, innovation and building resilience to shocks across the development policy spectrum. Green growth policy is also good growth policy, especially in Africa.

5. “Green growth”, as defined by the Sierra Leone authorities during A4P preparation, means “developing infrastructure, energy, and cities sustainably, managing renewable and non-renewable natural resources efficiently, and building resilience for the benefit of its citizens.”

Together with an emphasis on inclusiveness, green growth pursues a cross-sectoral approach to growth through policies, programs, and projects that are economically, environmentally, and socially sustainable. Green growth under the A4P focuses on the actions that are needed in the next five years to facilitate longer-term sustainable and inclusive growth. It values natural, human, social, and physical capital as sources of growth and seeks to manage natural resources for the benefits of future as well as present generations. It also focuses on innovation, efficiency, and resilience”.

“Mainstreaming”, in this context, refers to the inclusion of green growth specifics into all aspects of economic growth policies to be adopted over the five years of the A4P (2013–2017).

6. Sierra Leone wishes green growth to be part of its development strategy.

Sierra Leone

7. The country has made an impressive recovery since the end of its civil war in 2002, with an average annual GDP growth rate of 5–6% and greatly improved security.² It is rising rapidly in the Business Environment Rankings and in 2011 ranked 148th, above the average for African countries. Poverty rates are slowly decreasing.

8. Despite recent high levels of economic growth, Sierra Leone remains one of the world’s poorest countries (GNI per capita of USD 340 in 2010). Social indicators, though improving, are also very low, with infant and under-five child mortality rates of about 200 per 1,000 and very high youth unemployment rates. Only 12% of the population has access to electricity and 35% of the rural population to an improved water source. Human development and inclusive growth, therefore, remain the priorities for the A4P.

² GDP growth accelerated dramatically in 2012 to 20%, following the operationalization of large-scale iron ore mining.

Opportunities for Green Growth

9. The sustainable management of natural resources (both renewable and non-renewable) forms a critical part of the green growth agenda in Sierra Leone. Abundant natural resources, including fertile land, fisheries, abundant water, forests, minerals, and oil and gas, as well as beautiful landscapes and coastlines, could form the basis for a rich and diverse economy. Properly managed, these endowments can provide a lasting supply of food while contributing to export revenues and financing social and infrastructure development. They could also form the basis for a thriving tourism industry.

10. With these advantages in mind, policymakers are committed to developing infrastructure and improving energy access while minimizing environmental damage. Energy policy is based on developing a rational energy mix and minimizing transmission and distribution losses while making maximum use of renewables, especially hydroelectric power and biomass energy, where it makes economic sense. The transport agenda is linked to the economic diversification agenda, specifically agricultural commercialization, but also to regional trade and economic resilience. Improving access to water and sanitation is seen as part of the human development and MDG agenda. Work to create livable cities, however, while an objective of the government, is still at an early stage.

11. A strong social protection agenda is linked to social assistance for the vulnerable and creation of durable employment, as well as to increasing physical resilience and risk mitigation. It includes both short- and longer-term programs for food price risk mitigation and resilience to climate-related events. These include addressing floods and air- and water-borne disease through better drainage, sanitation and solid waste management. Vulnerability to extreme weather events can be reduced by improved weather forecasting and data collection services. Sierra Leone is better advanced in social assistance than in risk mitigation and physical resilience programs.

12. The GoSL has publicly resolved to strengthen governance and public-sector management. It supports a decentralized approach to public-service delivery and building strong, accountable institutions in a context of prudent procurement and financial management.

13. Recognizing the importance of information in sound decision-making, it seeks to build statistical capacity across sectors, building social, economic, and geographical information and monitoring systems to inform decision-making. Improving governance and data availability in the management of natural resources will be central to increasing growth and strengthening peace and security in the country.

14. The government has also committed itself to building a sound enabling environment for responsible private-sector investment. This includes improvements in the environment for doing business; transparent, simple regulatory frameworks; better transport infrastructure and reliable, affordable sustainable energy; and building human capacity. Clear, transparent environmental and social impact management frameworks also help attract responsible investment, and Sierra Leone is creating these also.

Green Growth: Value Added for Sierra Leone

15. There are three main advantages for Sierra Leone as it moves forward towards an inclusive green growth path.

16. First and most important, inclusive green growth is about ensuring high-quality growth that benefits Sierra Leoneans. It places emphasis on sustainable, efficient use of natural resources, minimizing waste and pollution and enhancing resilience, including for health and safety. Current and future citizens of Sierra Leone will benefit from its natural resource wealth, fertile soils, and productive agricultural landscapes; safe, well-designed roads and transport systems; mines that do not pollute; efficient and affordable clean energy; towns with functioning water, sanitation and solid waste systems and urban planning; and risk management systems that help increase resilience to energy and food price rises and to droughts, floods, storms and landslides.

17. Second, Sierra Leone's international reputation stands to benefit from its commitment to green growth. This plays a role in the improvement of its image as a country in transition from conflict to a country committed to transparent governance and high-quality, sustainable growth. In this, Sierra Leone can join Rwanda, Ethiopia, South Africa, Mozambique and other African countries as a leader on the continent and an international advocate for a more sustainable and inclusive development model.

18. Third, Sierra Leone's commitment to inclusive green growth will make its economy more efficient and competitive, creating jobs while also attracting additional development financing, including from the private sector. The international community is committed to high-quality growth paths, and has incorporated these principles in core development financing as well as into some dedicated climate and environment funds. Just as important, sound green growth policies and transparent governance are more likely to attract reputable private-sector financing that will bring jobs and growth to Sierra Leone. Efficiency gains and reduced losses will also free capital (financial, natural, physical and human) for additional investments and productive activities that will help to expand and diversify the country's economy.

Green Growth and the Agenda for Prosperity

19. There is considerable green growth content in the A4P. Moreover, the GoSL's decision to use the same coordination arrangements for the A4P and the green growth agenda has increased opportunities for mainstreaming green growth into government policy. The green growth approach under each of the A4P pillars is as follows.

Pillar 1: Economic Diversification

20. Sierra Leone will focus on improving the enabling environment for investment in the employment-intensive industries of agriculture, fishing, tourism and manufacturing. It seeks to increase productivity, move production up the value chain, and improve the macroeconomic and business environment, including access to finance. It also seeks to attract both small-scale and large-scale investment. An enabling environment for doing business (Pillar 4) and sound environmental and social management frameworks (Pillar 2) are important in this regard.

21. Underpinning these objectives, a green growth approach would focus on sustainable management of natural capital resources—land, water, watersheds, forests and fisheries—that underlie increasing productivity in these essential natural capital-dependent sectors (Pillar 2). Specific actions would include addressing agricultural soil fertility and soil/water conservation, sustainable fish stock management, and value chains for artisanal fisheries, water quality/solid waste management and maintaining natural beauty for tourism, including through ecotourism. Given the importance of informal and small-scale industry in agriculture, transport and manufacturing, support measures targeted at improving efficiency and innovation in these subsectors will be important. Sierra Leone is already supporting renewable energy technologies (see also Pillar 4), and there is also scope for development of new business opportunities based on sustainability principles.

Pillar 2: Natural Resource Management

22. The pillar includes many green growth elements. Specifically, it distinguishes between renewable and non-renewable resources and seeks to ensure, through transparent governance and adequate environmental management, sustainable development of infrastructure, minerals and industry. It also argues for a strong environmental impact assessment, monitoring and management system, which is key to sustainable development of the infrastructure and mining sectors. It calls for the establishment of a natural resources geographical information system encompassing mineral, land, forests, and land use data. Such a database could usefully also include water resource and meteorological data, and would be linked with the economic and social databases mentioned in Pillar 7.

23. Pillar 2 emphasizes the importance of managing renewable natural resources sustainably to allow for regeneration of natural capital. The pillar includes proposals for development of a comprehensive land policy, including strengthening land tenure, land markets, and land use planning. Linking with Pillar 1 would also usefully emphasize the importance both of sustainable land and water management and of clear land rights for agriculture. Given the importance of coastal areas to urban and ports development, protection of fisheries' spawning grounds, and fostering of the growing tourism industry, as well as considering coastal storm and flooding issues, development of a comprehensive coastal zone management policy would form a useful part of an economic growth and diversification strategy.

24. The section on forests could also usefully emphasize the importance of forests and woodlands, including those that are community-managed, for sustainable fuelwood and timber production and employment, a key goal of A4P. The section currently focuses on the 10% of wooded area that is state owned, and includes proposals for strengthened ecosystem protection. More than 90% of timber harvested is used for fuel wood and charcoal, which accounts for 85% of household energy and is a major source of cash income and jobs; there is great potential for increasing productivity, sustainability, and efficiency in production, processing, and marketing, as well as for greater use of fuel-efficient cookstoves. Forests also have an important role in watershed protection, and there are opportunities for ecotourism in some areas.

25. The section on water resources could usefully emphasize the socioeconomic development potential of sustainable water management. It currently addresses the importance of IWRM (integrated water resource management) and watershed management, and proposes development of a comprehensive water law. Sierra Leone is “water-abundant” and has resources that can be used for energy, agriculture, and mining as well for drinking water and fish cultivation. There are strong links with the human development and the competitiveness/infrastructure development pillars. There is good experience to draw on from other countries regarding water quality management, an issue especially in the mining sector. A section on fisheries has been developed, which focuses on sustainable management of both marine and inland fisheries, and protection of spawning grounds; it will be linked with Pillar 1.

26. In the mining and minerals sector, “green growth–friendly” legislation is well advanced, and A4P includes proposals for establishment of a Development Transformation Fund. The challenges will be capacity for implementation and understanding by decentralized agencies and artisanal miners of the new approaches. Though the country has failed to reach the expected standards so far, Sierra Leone is committed to the Extractive Industries Transparency Initiative (EITI ++), which seeks to improve transparent contract negotiation, revenue management, and sustainability in the non-renewable resources sector. The mining and minerals legislation includes specific requirements for each level of the extractive industries (large, small, and artisanal) and makes strategic environmental assessments (SEAs) mandatory. The Development Transformation Fund would manage revenues from the extractive industries for both short- and long-term economic and social development.

27. Green growth approaches to consider in addition would include linking allocation of land for mining concessions to broader sustainable land use planning in the country. There would be a strong focus on implementing new approaches to artisanal mining management, while recognizing its importance in job creation, to improve safety, reduce environmental impacts, and encourage employment alternatives.

28. Development of improved hydro meteorological information system and services to end users could also be included under Pillar 2. This cross-cutting issue at present “falls through the cracks”; physical resilience, including flood, drought, climate resilience, and improved weather and climate, could be addressed either under Pillar 2 or under the social protection pillar (Pillar 6).

Pillar 3: Accelerating the MDGs for Human Development

29. The section addresses population, education, health, and water supply and includes substantial analysis on progress to date. Much effort has gone into developing databases, and the section reinforces the value of strong, sustained information systems as a key decision-making tool. The section on population includes a strategy for slowing urban population growth through encouraging agriculture and mining employment in rural areas and includes rural and local government land use planning; it would be helpful to coordinate these with proposals in Pillars 1 and 2.

30. A green growth approach to human development would take into consideration better management of physical capital as a basis for improving social interventions and outcomes. It would underpin social development policies—improve basic education, provide better health services, increase access to water and support gender equality—with initiatives to improve waste management, flood drains, and land-use planning to reduce the impact of air- and water-borne disease. The quality of human capital and people’s wellbeing are intrinsically linked to resistance to disease and protection from environmental damage.

31. The section on water and sanitation refers to analysis that indicates the economic cost of inadequate water and sanitation at 2% of GDP. Analysis of the economic costs of environmental degradation is often useful for decision-making. The section could also usefully address improved drainage, flood management, and solid waste management; these are important if the full health benefits of better water and sanitation are to be achieved.

Pillar 4: International Competitiveness

32. The A4P includes six focal areas of investment to increase international competitiveness: institutional reform, infrastructure, access to finance, skills development, improving the business environment, and regional integration. All these are highly relevant to green growth because of their contribution to efficiency gains. Infrastructure, however, is of major importance.

33. Regarding the business environment, a sound regulatory framework for environmental and social management and commitment to a green economy can attract reputable private sector investment. Sustainable management of natural resources and competitiveness are linked agendas: Efficiency gains and reduced losses will release capital for investment. The SME (small and medium enterprise) support program will need to take into account the specific needs of targeted sectors under Pillar 1, including agribusiness and fisheries value chain development, tourism, and manufacturing. It will also need to support targeted training and education programs relevant to emerging employment opportunities, linking with Pillars 3 and 5.

34. Regarding transport, improved systems at the local, national, and regional levels are important. A green growth approach would include a strong emphasis on road maintenance and safety, as well as sound environmental and social management plans. Maintenance and road safety bring efficiency gains by ensuring that investments are sustained, and welfare gains by minimizing injury and loss of life. Urban transport policy (not at present addressed in the A4P) should prioritize traffic management, public transport management, and ensuring of provision for pedestrian traffic. Adequate environmental management of road construction (eg, with regard to sand and gravel extraction), and design (building roads to avoid erosion and be climate-resilient) are important to a green growth agenda. Social management programs will help bring real benefits to local populations. Efficiency improvements at the port and for trans-border traffic are also needed.

35. Increasing affordable, sustainable, reliable energy access is key to competitiveness, growth, and wellbeing in a green growth strategy, and also helps attract private sector investment. Sierra Leone needs to develop a range of energy sources; hydropower and biomass energy (including wood energy and biofuels) have the greatest potential among renewables, though there is also some potential for solar. Sierra Leone has useful experience to share in biofuel development from the Addax sugarcane ethanol project. There is much potential for efficiency and productivity gains in the fuel wood and charcoal sectors, which accounts for 90% of household energy in Sierra Leone. Increasing transmission capacity efficiency and loss reduction are also priorities. Sierra Leone will need some additional thermal capacity and is exploring liquefied natural gas as an alternative to fuel oil.

36. In telecommunications, there is scope to make greater use of mobile phones for accessing information and for a range of financial transactions. There is experience to draw on, particularly from Kenya; the opportunities for efficiency and innovation gains are important elements of a green growth approach.

37. Regional integration can improve efficiency and access across a range of sectors, including in delivery of energy through greater integration in the West Africa Power Pool, in mining governance through the Manu River Union, in transport, and through cooperation on improved governance of regional fisheries. These contribute both to international competitiveness and to green growth through improved resource governance.

Pillar 5: Employment and Labor Strategy

38. A4P focuses on employment promotion, industrial harmony, occupational health and safety, and adherence to international labor standards. A green growth approach would, further, link Pillar 5 with Pillar 1 economic diversification and employment creation in agriculture/agri-business, fisheries/fish processing, tourism and manufacturing because these industries, together with artisanal mining and trade, are where most current and potential employment remains.

39. There is a specific need to recognize the nature and needs of the informal sector and to acknowledge the role of family labor. Many Sierra Leoneans will work in industries processing and transporting agricultural and fisheries production and in construction, creating value chain and jobs. It is important from a green growth perspective to develop skills in these sectors and to contribute to youth employment.

Pillar 6: Social Protection

40. A4P includes a vision of a social protection system that distinguishes among: (i) welfare instruments that provide relief and sometimes recovery from deprivation; (ii) risk-insurance instruments that seek to avert deprivation by establishing robust and accessible recovery mechanisms; and (iii) resilience-building instruments that aim to enhance real incomes and capabilities, build assets, and promote resistance. The focus of the draft A4P program is currently on social assistance for the vulnerable and social action programs.

41. It would be helpful to better link social protection and physical resilience. Social protection programs help people cope with risks and shocks, including those related to food and energy prices, climate, the economy, and health, through risk mitigation instruments. For instance, it would be interesting to consider response programs for food price increases (school feeding programs, conditional cash transfer schemes, and food-for work programs), together with sustained investments that enhance agricultural productivity, resilience, and incomes (see Pillar 1). Agriculture continues to be the mainstay of employment and economic growth, and even though there will be some increase in irrigation, rainfed agriculture will continue to be the predominant system. Urban populations will continue to be exposed to food price shocks, at least over the next few years. Linking short term social protection, physical resilience and longer term social development will bring efficiency as well as welfare gains.

42. Improving weather and climate services is also key to physical resilience, together with better urban land use planning to prevent building on fragile slopes, as well as adequate attention to drainage and solid waste management.

Pillar 7: Governance and Public-Sector Reform

43. This pillar emphasizes strengthening decentralized public service delivery by reinforcing the planning, budget management, procurement, and results-monitoring capacity of decentralized agencies. It has a continued insistence on strengthening budgeting, financial management, and procurement capacity at the central government level, as well as the timely production of core economic and social data.

44. It would also be helpful to address improving governance and decision-making in key economic sectors. For example, improved environmental and social impact assessments are key elements of the governance agenda and key also to sustainable development of the minerals, infrastructure, and agricultural sectors. Other important elements of sector governance include EITI (the Extractive Industries Transparency Initiative), the proposed Transformation Development Fund, and the work on development of transparent land use/land tenure systems.

45. The pillar mentions the need to strengthen statistical information. Development of an integrated information base on natural resources, including water, soils, minerals, forests, and land use, is an important governance tool because it informs decision-making across sectors and can be integrated with economic and social databases (see also Pillar 2).

Pillar 8: Gender

46. A4P focuses on five areas: raising capacities in the Ministry of Social Welfare, Gender and Children; continuous policy review and adjustment; compliance with international responsibilities; gender-responsive budgeting and accountability; and the promotion of gender equality in public life. It would be helpful also to refer to gender aspects of some key sectoral programs (eg, renewable energy, water and sanitation, employment).



Toward Implementation: Principles for Prioritization

47. While implementing the A4P, there are two priority categories against which the Sierra Leonean authorities might wish to measure their green growth policies and programs: a) activities with immediate local benefits; and b) activities with higher upfront costs, but lasting negative consequences if action is not taken soon (ie, with a high risk of being “locked in” to non-sustainable growth paths). In addition, key factors are activities that are likely to have public support, given the importance of mobilizing social capital, and simplicity in implementation.

Conditions for Implementation

Political Leadership

48. Winning active support from policymakers from the highest level to the lowest is crucial to the implementation of green growth. The existence of a “network of champions”, technically competent and prepared to defend the strategy with sound arguments, will contribute to the maintenance of executive support. It is important to have commitment from the politically relevant entities that have a clear mandate for implementation. At the grassroots level, civil society buy-in ensures local and activist commitment.

Adequate Policies and Incentives

49. Policy measures can be categorized into economic incentives, regulations, and social marketing instruments to promote behavioral change. Normally, a combination of measures is needed. Economic instruments include public investment or expenditure support, taxes, and subsidies; regulations include laws with penalties for non-enforcement; social marketing instruments include communications campaigns. In a country with limited institutional capacity such as Sierra Leone, too much reliance on regulatory instruments is unlikely to be effective; in any case, regulatory measures should have both “citizen ownership” and institutional capacity to “monitor and enforce”.

50. Policy instruments should be designed not to have indirect negative impacts on human and natural capital. For instance, subsidies should be provided if they are considered as “smart subsidies”, i.e. when they support activities that have short-term costs but longer-term benefits; when they favor future investments and avoid distorting the markets; etc. It is acknowledged that these policy instruments require resources and political will to redirect expenditure.

51. A sound macroeconomic framework and a clear regulatory environment that create enabling conditions for private-sector investment contribute to the potential for success of green growth strategies. Sierra Leone is moving in this direction; for example, it is moving rapidly up in the World Bank’s Doing Business rankings.

Governance and Capacity

52. Clarity and transparency in government policies and their implementation are essential for the success of green growth policies. These include: accountability in the justice system, decentralization, clarity in land rights, clear regulations for land use, integration in water-resource use, clear rules for the assessment of environmental and social impacts, and openness in public procurement. Sierra Leone has committed to all these requirements.

53. Strengthened institutional, technical and human capacity for implementation is also necessary, together with continued stakeholder consultation and involvement; Sierra Leone, with its commitment to decentralization and democratically accountable institutions, has the right systems in place, though capacity building is a long-term process. Enhanced workforce training and university education programs on sustainable resource management and other green growth topics could be developed.

National Budget

54. Public finances need to be clear, properly budgeted, and defined in developmental objectives. Support for green growth mainstreaming needs to be reflected in budget allocations at central and local level. In the A4P, Sierra Leone has demonstrated its intention to adhere to these principles.

Information and Analytical Tools

55. Competent decision-making and the implementation of a green growth strategy depends upon reliable and regular information through access to trustworthy sources and data. Policymakers need to assess the environmental and social impact of economic activities; evaluate environmental costs and benefits assess the economic costs of environmental degradation; review environmental expenditures in pursuit of policy objectives; and relate environmental, economic and social data to each other. They must include hydro-meteorological data in their services to the population, and accurately assess the impact on the labor market of different green (and other) policies.

The Private Sector

56. The private sector must be prepared to invest in activities that support the general policy goal of green growth. Sierra Leone is rated as one of the 10 top business environment reformers in the world, and foreign private-sector investment has tripled over the last five years to more than USD 1 billion annually. There are further opportunities in agriculture, fishing, mining, processing, and value-chain enhancement, but also in infrastructure and renewable energy development. Opportunities are identified under Pillars 1 and 4. Equally important however, is human capital development, including vocational training adapted to industry needs. The informal sector predominates in agriculture, fisheries, small-scale industry, and transport, and can also be “brought in” to green growth approaches.

Development Partner Support

57. A4P provides an opportunity for development partners to integrate inclusive green growth into their development support strategies, and to align priorities in this respect with those of the government. The 2005 Paris Declaration and Accra Agenda commit donors to align aid programs with country strategies, as well as to simplify and rationalize aid procedures. The results of the November 2012 elections confirm the widespread support of Sierra Leonean citizens for the growth agenda of the government. Yet while Sierra Leone is increasing the capacity to raise revenues locally and the enabling environment for private-sector investment is rapidly improving, development support still provides 40% of the budget. Development partner support will, therefore, be very important in moving towards the inclusive green growth path outlined under A4P.

Communications

58. Green growth is not an easy concept to grasp; hence, the GoSL is planning to undertake dedicated communication activities to ensure that there is a clear and common understanding of what the concept covers, and how it translates concretely in Sierra Leone. A Green Growth Communication Strategy was prepared (Annex 2) that suggests the following activities: (i) a series of workshops to raise awareness at all levels of government; (ii) a series of three training seminars on green growth for local journalists; (iii) dedicated meetings with private-sector representatives given that their role will be crucial for successful implementation; (iv) building a network of “champions” who will be able to transmit green growth messages and lend support from an indigenous, nonpartisan point of view; (v) using artistic approaches to reach the general public—a local musician and/or songwriter could be approached to produce a song on the theme of green growth to be recorded and broadcast on one or several of the local radio stations, or a play could be commissioned on the green growth theme; and (vi) building the communication capacity of the AfDB field office with a full, comprehensive course of communication training. The objective of such activities will be to make national stakeholders understand the value added of green growth for Sierra Leone’s development, and to support efficient implementation of the proposed green growth interventions.

Concluding Remarks

59. Sierra Leone has the immense advantage of enjoying support for green growth at every level of government and administration. The A4P includes a development strategy consistent with many of the elements of a green growth approach for the five years to 2017.

60. This document has made a number of suggestions for additions to the elements of that approach in order to strengthen its green growth aspects. Many of these are being incorporated into the final version of the A4P. Sound economic growth policies are the prerequisite for inclusive green growth policies, and the focus on improving decentralized services, transparent governance, accountability, procurement, and financial management all fall into this category.

61. An additional focus on linking economic diversification and infrastructure development with an integrated approach to managing natural resources, including minerals, oil, and gas, land, water, fisheries, forests, and coastlines, would ensure that Sierra Leone's natural capital is sustained and managed responsibly as it embarks on an inclusive green growth path. Building a sound geographical and natural resources knowledge base and linking it with strengthened economic and social databases will help decision-making. Focusing on resilience, land use planning and infrastructure development decisions, building of sound hydro-meteorological services, and environmental health will help citizens in urban and rural areas defend themselves against floods and droughts and reduce the burden of disease. There are opportunities now for Sierra Leone to plan its urban areas for a sustainable and prosperous future.

62. Mainstreaming inclusive green growth into the A4P was a first step as Sierra Leone embarks on achieving its vision of being a middle-income, green, inclusive economy by 2035. The next stages, as government and other national stakeholders develop a detailed action plan with monitorable results, will be to incorporate green growth elements into the detailed policies, programs, and indicators, as well as to implement a communications strategy that can provide wide support for the efficient implementation of the inclusive green growth agenda.

63. Sierra Leone has the opportunity, the political will, and the capacity to embark on an inclusive green growth path which harnesses the assets of the country in a sustainable and efficient manner to provide a prosperous future for its citizens and their children and grandchildren.



INTRODUCTION

1. **Sierra Leone, a fertile, mineral-rich coastal West African country, has a population of 6 million and a land area of about 72,000 square kilometres.** After more than 10 years of civil war ending in 2002, the country has made an impressive recovery, with an average annual GDP growth rate of 5–6% through 2011 and greatly improved security.³ Nevertheless, it remains one of the poorest countries in the world, ranked 209th globally,⁴ and with a per capita GNI of USD 340 using the Atlas method. Social indicators, though improving, are also very poor, with an under-five child mortality rate of 217 per 1,000⁵ and very high youth unemployment rates.

2. **The Sierra Leonean authorities are committed to mainstreaming inclusive green growth into their new Development Strategy, currently under preparation.** Following a request from the Sierra Leonean authorities, the objective of this document is to assist officials and national stakeholders in Sierra Leone to consider key development challenges and identify major opportunities that green growth (GG) can bring while the government prepares its new Poverty Reduction Strategy Paper 3 (Agenda for Prosperity or A4P, 2013–2017).⁶

3 The growth rate in 2012 jumped to 21% following extensive new mining developments (IMF).

4 World Development Indicators, 2012.

5 This figure is quoted in draft documents developed under the social protection pillar of the Agenda for Prosperity 2012; the WDI 2011 number is 190 per 1,000.

6 The AfDB's assistance package also included working "in real time" with members of the A4P Core Team as the various A4P pillars were developed, organizing workshops on green growth, and working with in-country communications professionals to design a communications and knowledge management strategy.

3. **This document has been prepared in the light of a growing consensus, both at the global and at the national level, that “growing cleaner” does not mean “growing slower”,** and that with the right policies countries can continue rapid growth while avoiding costly damage to their natural capital base and future prosperity and welfare. Within these basic parameters, various definitions of green growth can be provided:

- Green growth is about maximizing economic growth and development while avoiding unsustainable pressure on the quality and quantity of natural assets. It is also about harnessing the growth potential that arises from transiting towards a green economy“ (Source: OECD 2011);
- Green economy is one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a green economy is low carbon, resource efficient, and socially inclusive” (Source: UNEP 2010);
- “A Green Economy can be thought of as an alternative vision for growth and development; one that can generate growth and improvements in people’s lives in ways consistent with sustainable development. A Green Economy promotes a triple bottom line: sustaining and advancing economic, environmental and social well-being” (Source: WRI 2010)

4. **Sierra Leone has developed its own definition:** green growth means developing infrastructure, energy, and cities sustainably; managing renewable and nonrenewable natural resources efficiently; and building resilience for the benefit of its citizens. Together with an emphasis on inclusiveness, green growth requires pursuing a cross-sectoral approach to growth through policies, programs, and projects that are economically, environmentally, and socially sustainable. Green growth under the A4P focuses on the actions that are needed in the next five years to facilitate longer-term sustainable and inclusive growth. It values natural, human, social, and physical capital as sources of growth and seeks to manage natural resources for the benefits of future generations as well as the present population. It also focuses on innovation, efficiency, and resilience.

5. **Sierra Leone’s Agenda for Prosperity (A4P) defines the development path for the country for the 2013–2017 period.** It is anchored in the country’s long-term vision for achieving middle-income status by 2035. The A4P builds on the work of the PRSP 2, entitled the Agenda for Change, which defined the country strategy for the 2008–2012 period. It focused on growth and human development and identified three drivers of growth: agriculture, energy, and transport infrastructure. Cross-cutting areas included improved governance and a sound macroeconomic framework, capacity development, private-sector growth, and management of natural resources. The 2010 midterm review of the PRSP 2 concluded that there had been impressive progress in a number of areas, including human development, agriculture, infrastructure, and decentralization, but that continued work was needed to build on successes and strengthen capacity in a number of areas, including procurement and timely implementation.

6. **Preparation of the A4P includes a comprehensive consultation process,** at decentralized as well as central levels, so that the priorities reflect the concerns of Sierra Leone’s citizens. The A4P provides the framework within which development partners will identify assistance programs, and will also provide an overall framework for private-sector international investment. Both will play a key role given domestic resource constraints.

7. **The objective of this work is to identify opportunities for incorporating green growth policies and programs into the A4P in order to reinforce its inclusive agenda for growth, human development and environmental management.** The report takes into account both key development challenges and Sierra Leone's long term development vision to be an inclusive, green, middle-income country within 25 years. The draft A4P includes eight areas of focus: economic diversification; natural resources; human development; international competitiveness; employment growth and labor; social protection; governance and public sector reforms; and gender. Implementation of the A4P will require very strong cross-sectoral collaboration and committed participation by decentralized agencies and civil society organizations. The GoSL has agreed that the A4P's technical coordination committee will also act as the coordination group for integration of green growth into the agenda during the implementation as well as the preparation period.

8. **This document has been prepared in consultation with the Sierra Leonean authorities.** The AfDB green growth team had the opportunity to meet with the key technical teams charged with coordinating preparation of the A4P, and discussed their key findings at a workshop in Freetown in early September 2012 at which the minister of finance and economic development and minister of energy and water resources played key roles. A wide range of stakeholders participated in the workshop, including representatives of key ministries, civil society organizations, development partners, and the media. There were discussions during formulation of the pillars from October 2012 to February 2013, and follow-up meetings following the presidential elections. This document takes into account feedback received.

9. **The document is structured as follows:** Section 1 outlines principles of green growth, giving an overview of the policy options which can move countries towards a green growth path while taking account of trade-offs. Section 2 outlines the main development opportunities and challenges of Sierra Leone, structured along the three green growth pillars the country has identified: managing renewable and nonrenewable natural resources efficiently; building infrastructure, energy, and cities sustainably; and building resilience for the benefit of its citizens. It summarizes development priorities identified in the Agenda for Change and A4P, and outlines the institutional framework that the government has adopted for A4P and mainstreaming green growth. Section 3 outlines institutional and policy challenges, as well as a possible framework for green growth. Section 4 summarizes development priorities identified in the Agenda for Change and A4P, and identifies green growth options in the A4P pillars. Section 5 provides recommendations for efficient implementation.

I.

An Approach
—TO—
**GREEN
GROWTH
IN AFRICA**





I. AN APPROACH TO GREEN GROWTH IN AFRICA

Elements for Understanding Green Growth

10. **In Africa, green growth will mean pursuing inclusive economic growth through policies, programs, and projects that invest in sustainable infrastructure, energy and urban settlements; better management of natural resources, including land, water, fisheries, forests, oil and gas, and minerals; building of economic, social, and physical resilience, including resilience to natural disasters and climate change; and enhancement of food security.**⁷ Green growth also means focusing on the actions that are needed now to avoid greater costs in the future. Future costs may increase (i) by delaying investment in education, (ii) from continued natural resource degradation, and (iii) from expanding urban settlements in areas vulnerable to floods or erosion with infrastructure that is not sufficiently resilient. Because Sierra Leone's economy and infrastructure base are not yet well developed, there are opportunities to design infrastructure and manage urban settlements and natural resources in ways that avoid long-term damage to the environment and the country's economic base.

11. **Environmental degradation carries a heavy economic cost.** In Nigeria, it is estimated to cost 9% of GDP and in Benin 6% of GDP, in both cases mostly due to landscape degradation and poor water and sanitation.⁸ Lack of attention to environmental management also reduces resilience: Inadequate drainage and solid waste management systems, combined with urban developments on land vulnerable to flooding, exacerbated the impact of the 2010 floods in Benin.

12. **Poor development of human and social capital is also a huge constraint.** Persistently low literacy rates, very high youth unemployment, and poor health indicators hold back inclusive growth. The importance of social capital, a sense of community, trust in institutions, security, and hope for the future must also be emphasized. In many African countries, community institutions, family, and social capital are still strong, and there is scope to build on these.⁹

13. **Wise management of physical, natural, social, and human capital can advance the green growth agenda.** While traditional growth theory saw use of natural capital as a means of financing increases in human and physical capital (using revenues from natural resources to fund education and infrastructure), green growth emphasizes sustainable management of renewable natural capital as a source of long-term economic growth and welfare, and argues for "using natural resources without using them up". Therefore, sustainable land, water, agriculture, fisheries, and forest management, as well as responsible mining and oil and gas development can contribute directly to a poverty reduction and growth agenda. Green growth argues also for more emphasis on efficiency (reducing post-harvest loss, improving road maintenance to reduce wear and tear on vehicles), resilience (flood and drought management, social protection and health systems, and economic resilience through economic diversification), and innovation (such as the IT and mobile phone revolution, or development of improved crop varieties that can better withstand droughts or flooding).

7 "Facilitating Green Growth in Africa", African Development Bank, 2012.

8 "Inclusive Green Growth", World Bank, 2012.

9 In many OECD countries, there is increasing concern about rebuilding social capital. The UK government, for example, is working on developing assessments of wellbeing that go beyond GDP (sustainable development indicators). The SDI measurements to be used are economic prosperity, long-term unemployment, poverty, knowledge and skills, healthy life expectancy, social capital, social mobility in adulthood, housing provision, greenhouse gas emissions, natural resource use, wildlife and biodiversity, and water availability. There is thus a strong focus on social, human, and natural capital.

14. **There are several reasons why green growth options are not chosen**, including :¹⁰ (i) a lack of knowledge about the options or expertise in how to quantify their effects; (ii) the higher upfront capital costs of environmentally superior choices; (iii) undervaluation of the human welfare benefit of natural systems; (iv) price distortions and subsidies for environmentally damaging activities; (v) regulations that may provide the wrong incentives for green growth outcomes; (vi) political economy constraints; and (vii) inertia and resistance to changing established practices.

Elements for Engaging on a Green Growth Pathway

15. **Green growth policies include price, fiscal, regulatory, and behavioral incentives as well as support to innovation to overcome the identified barriers.**¹¹ More specifically:

- Price policies foster the setting of prices that reflect the true costs of using natural resources; for example, by removing subsidies for petroleum or other conventional modern energy sources (generally these subsidies are income-regressive, since the poor in Africa rarely have access to modern energy).
- Fiscal and public expenditure interventions may include “smart subsidies”, measures that support interventions with both public- and private-good elements to overcome trade-offs between short-term costs and longer-term benefits (watershed protection; research into drought-resistant/higher-yielding crops). They also include taxation, for example on exploitation of mineral resources, or suspension of taxation, such as on imports of renewable energy equipment; both options provide incentives for a green transition.
- Norms and regulations may include requirements for environmental and social impact assessments and implementation of management plans, so that new infrastructure does not cause environmental damage or create hardships for affected people. They may include the incorporation of transparency requirements and sound environmental management into procurement plans. They may also include simple land-use planning guidelines so that new settlements are not built on areas liable to flooding or erosion.
- Policies to support innovation may include support for agricultural research, renewable energy or energy efficiency, flood- or storm-resistant building design, and road design adapted to the mix of non-motorized and motorized traffic that is common in many African countries. They also include taking advantage of the information technology revolution in all sectors.
- Knowledge management interventions may include dissemination of best practices such as minimum tillage in crop cultivation, integrated pest management, basic traffic safety measures, and early warning systems for weather events.
- Social capital measures and measures to incite behavioral change – for instance, getting people to stop throwing garbage in storm drains must be accompanied by investments to provide trash disposal; a strategy to increase the use of bed nets must ensure that the nets are available. Generally speaking, in countries with limited institutional capacity, tightening regulations may not be as effective as offering behavioural incentives and making use of social capital.

¹⁰ “Facilitating Green Growth in Africa”, African Development Bank, 2012.

¹¹ As mentioned in “Facilitating Green Growth in Africa”, African Development Bank, 2012, and “Green Growth for All”, World Bank, 2012.

16. **High-level political commitment, consultative processes, decentralized and locally adapted solutions, accountable institutions, and transparency in decision-making** are key to promoting successful green growth policies. Solutions are closely linked to improved governance and public sector capacity, as well as a sound framework for business development.

17. **There are often also key “enabling conditions” that should be considered;** for instance, securing land rights is important to encourage land users to make the long-term investments necessary to improve land and water management; securing rights in urban areas gives users an incentive to access and pay for municipal services.

18. **Analytical tools can also help define priorities;** these may include assessment of the economic costs of environmental degradation, strategic social and environmental impact assessments, and work that is under way in several countries to incorporate natural capital (endowments) into national GDP accounting systems.

19. **Where countries have low institutional capacity, as in Sierra Leone, social capital and incentives to change behavior are likely to work better** than complex regulations that cannot realistically be enforced.¹² But often, a combination of measures is needed, as in the following examples:

- Improving road safety in Africa, for example, requires roads that are designed to accommodate different forms of transport, including both foot and motorized traffic, and allow the latter to safely navigate slopes and turns (public expenditure decisions but also innovative, locally adapted designs); officials must enforce speed limits and laws against drunk driving and overloading trucks (regulations), but also foster public understanding of good “road manners” and traffic regulations (knowledge dissemination) as well as the dangers of speeding or drunk driving (human and social capital).
- Reducing incidence of malaria requires trained health workers, rapid treatment capacity, and bed net dissemination (human capital, logistical capacity to enhance efficiency, and the right public expenditure decisions); improved treatment and prevention (support for innovation); but also adequate drainage to avoid standing water (physical capital) and community cooperation (knowledge dissemination and social capital).

20. **It must be reiterated that “green growth policy” is also “good growth policy”.** Obstacles are often due to political, policy, and behavioral constraints on the one hand, and on the other a lack of the financing instruments necessary to overcome tradeoffs between upfront costs and longer-term benefits, or private- and public-good benefits.

12 Some financing instruments may also be complex to administer. “Payment for ecosystem services”—where, for example, a municipality pays land users in a watershed upstream to maintain tree cover and hence reliable, good-quality water flows—requires a number of institutional and regulatory features to be successful. And some analytical tools require good time-series information to be useful for policymaking purposes.



II.

DEVELOPMENT OPPORTUNITIES AND CONSTRAINTS IN SIERRA LEONE





II. DEVELOPMENT OPPORTUNITIES AND CONSTRAINTS IN SIERRA LEONE

21. This chapter is organized according to the three green growth focal areas highlighted by the African Development Bank in its discussion paper “Facilitating Green Growth in Africa”: (i) efficient and sustainable management of natural assets, (ii) promoting sustainable infrastructure, and (iii) building resilience of livelihoods.

22. Annex 1 provides more information on what policy is available for each sector and how it potentially contributes to a green growth approach in Sierra Leone.

Managing Renewable and Non-Renewable Natural Resources Sustainably

23. **Increasing agricultural productivity and fisheries management are accorded high priority by the Government of Sierra Leone**, both because of their key role in economic growth and poverty reduction and as a source of employment. About 65% of employment is in the agricultural sector, which accounts for 45% of GDP; in low-income countries, agricultural growth is more than twice as effective in reducing poverty as is growth in other sectors.¹³ Sierra Leone has rich deposits of minerals, including gold, diamonds, rutile, iron ore, and bauxite, and extensive offshore oil and gas explorations are ongoing.

Land

24. **Sierra Leone has fertile lands and varied topography.**¹⁴ It includes lowland and mountain forests, savannah woodlands (35% of the total), freshwater and wetland, coastal and marine ecosystems. Sierra Leone has the highest mountains in West Africa, with altitudes reaching 1,800 meters, as well as 500 km of coastline. It has rich biodiversity. Of the total land area (72,000 km²), 54,000 km² is estimated to be suitable for cultivation, including 43,000 km² in upland areas and about 1 million hectares in lowland areas. However, currently only 25% of potentially arable upland and 15% of lowland area is cultivated. Sierra Leone has approximately 18 arable-land hectares per 100 people, a ratio similar to Uganda¹⁵ or Nigeria. Agriculture accounts for 33% of GDP, fisheries 9%, and forestry 3%—a total of 45% of GDP.

25. **There has been limited focus to date on integrated land-use planning as part of the broader development agenda in Sierra Leone, but this could change under A4P.** Such planning is key to sustainable land use management. In addition to erosion from poor agricultural land management, especially in upland areas, and from woodland degradation, challenges include poorly controlled extraction of sand, gravel, and other building materials from beaches and riverbeds for a range of construction and infrastructure development purposes; expansion of urban development into erosion-prone, fragile areas; and land and water pollution from mining.

13 World Development Report on Agriculture, and CAADP (Comprehensive African Agricultural Program) endorsed by the African Union, 2008.

14 Figures in this paragraph are taken from the National Sustainable Agricultural Development Plan, Ministry of Agriculture, Food Security and Forestry, 2009.

15 Much of the information in these paragraphs is derived from the GoSL's National Sustainable Agricultural Development Plan 2010–2030 (2009) and its Global Agricultural Food Security Program (2009).

26. **The Ministry of Lands, Country Planning and Environment has embarked on preparation of a land-use plan for the country, with a widespread consultative process.**¹⁶ The ministry has also started a process of land tenure regularization to help establish functioning markets in the areas of the country under the customary tenure system. The Environmental Protection Agency (EPA), under the auspices of the presidency, is responsible for controlling environmentally damaging activities. The Ministry of Works, Housing and Infrastructure (MWHI) has regulation of the quarry industry and prevention of coastal erosion as one of its objectives under the A4P; it aims to develop and implement a policy that would include a licensing and revenue generation mechanism, and establish a secretariat within the ministry for management of coastal erosion. The MWHI is also responsible for issuing construction permits.

An integrated approach to land management, land use planning, land development, and the construction permitting process would be a key element in a green growth approach to the A4P, in order to avoid long-term or irreversible damage to Sierra Leone's land resources and to facilitate efficient, sustainable growth.

Water

27. **Sierra Leone has abundant water resources.** Annual precipitation varies geographically but averages 3,000 mm annually, varying from 2,000 mm in the north to 4,000 mm in the south. There are nine major river systems. Total runoff is estimated at 74 cubic km per year. Of the total water potential, only about 0.37 cubic km/year is used, mainly in agriculture, with land under irrigation totaling about 150,000 ha. With 29,000 cubic meters per person of annually renewable water resources in the country, Sierra Leone is five times richer in water than the average African country.

28. **There is 1,300 MW of potential¹⁷ for hydroelectric power generation, but to date only 50 MW have been developed** at Bumbuna (see section on energy). The Bumbuna project also includes a provision for a forest conservation offset, to compensate for forests flooded and otherwise affected by construction of the dam. Systematic hydrological monitoring is done at only a few sites. There are very substantial variations in dry and wet season flows that limit development of small-scale hydro. Mining of sand from beaches and gravel from riverbeds is widespread, as mentioned above, and affects river flow functions. The EPA is limited in its capacity to prevent these widespread activities, but they are also a reflection of broader institutional and governance capacity weaknesses as well as of limited public awareness. The A4P envisions a policy for integrated water resource management,¹⁸ and a new Ministry of Water Resources has been established.¹⁹

16 Based on discussions with the Ministry of Lands, Country Planning and Environment in September 2012 and presentations of the A4P in July 2012.

17 The 1996 Energy Master Plan estimated total hydro-power potential at approximately 1500 MW. The 2012 Energy strategy estimates potential at 1300 MW.

18 The AfDB is supporting improved regional water management through the Mano River Union Ecosystem Conservation and International Water Resources Management project.

19 Before the 2012 elections, responsibility for water and energy was combined under one ministry.

While much has been done to develop a water and sanitation policy, there has been less focus on developing an integrated approach towards water resource management, including the impact of land-based activities on water. A green growth approach would support an integrated water management policy that combines sustainable resource development and longer-term resource protection.

Agriculture

29. **Because of agriculture's economic and social importance, and its importance as a user of natural resources, the sector is discussed in more detail than some others.** Agriculture, forestry and fisheries account not only for 45% of GDP, as mentioned, but also 65% of employment.

30. **Smallholder farming predominates,** with average farm sizes of 1.5 ha for food crops and one to five hectares for tree crops. More than 450,000 farming households cultivate about 1.1 million ha of land. The main food crops are rice (the principal food crop in the country), cassava, sweet potato, maize, sorghum/millet, and groundnut. Tree crops such as coffee, cocoa, oil palm, and to a lesser degree cola, cashew, and rubber, are also grown. On the upland areas, which are the predominant areas used in agriculture, the principal cultivation method remains "slash and burn", with fallow periods cut shorter as population pressure increases. It is recognized that the present system contributes to land and woodland degradation and to soil erosion, affecting watershed functions and stream flow; there is great potential for improved land and water management and integrated landscape approaches to enhance productivity and longer-term soil fertility.

31. **Inland valley swamps—mostly highly fertile, flood-prone "bottom lands"—cover 1 million ha in Sierra Leone.** These areas can potentially be double-cropped or even triple-cropped, using irrigation in the dry season. To date, for a variety of reasons, only 10–15% of this land is cultivated; constraints include higher up-front costs of developing these lands for cultivation and equipment requirements, potential health issues (malaria, bilharzia), and concerns about losses from pests if a second crop is grown. The government's strategy is to encourage farmers to move to these more fertile lowlands, thus reducing pressure on upland areas.

32. **Rice dominates the sector, accounting for nearly 60% of the total volume of production.** In 2007, yields were estimated at 0.72 and 1.23 tons per hectare for upland and lowland rice respectively. They were 5.5 tons per hectare for cassava. Crop losses were estimated at 40%. Fertilizer use was 4 kg per hectare, amongst the lowest in Africa. Yields of other crops and livestock productivity were correspondingly low. A survey of farmers conducted in 2006 highlighted the major constraints as losses from pests and diseases; lack of access to improved seed, basic tools, and equipment; lack of financing; food for seasonal workers; and processing, milling, and marketing constraints.²⁰ Only 25% of arable land is currently cultivated.

²⁰ Employers Survey 2006, referred to in World Bank Small-Holder Commercialization and Rural Development Project Appraisal Document, 2007.

33. **Under the framework of the Agenda for Change, the National Sustainable Agriculture Development Plan (NSADP) 2010–2030 was launched as Sierra Leone’s Country Compact under the Comprehensive Africa Agriculture Development Program (CAADP)**²¹ in 2009. The vision of the NSADP is to make agriculture the engine for socioeconomic growth and development through commercial agriculture and the promotion of the private sector/farmer-based organizations (FBOs). It has six components: (i) smallholder agriculture commercialization; (ii) small-scale irrigation development; (iii) market access expansion through feeder road rehabilitation; (iv) smallholder rural access to financial services; (v) strengthening social protection, food security and productive safety nets; (vi) planning, coordination, monitoring and evaluation.

34. **The Government of Sierra Leone prioritized smallholder commercialization over the 2007–2012 period** because of its high potential in improving food security and wealth generation. In 2010, Sierra Leone received a USD 50 million grant from the Global Agriculture and Food Security Program (GAFSP)²², to be designed and supervised by the International Fund for Agricultural Development: the proposal focuses on smallholder commercialization, irrigation, rural finance, and monitoring/evaluation. World Bank support is focusing on rural road rehabilitation, improving market infrastructure and access, and farmer organization for commercialization. The AfDB is also supporting farm rehabilitation, and several other development partners and non-state actors support the sector.

35. **Appraisal of the Global Agriculture and Food Security Program included an environmental assessment (EA) by IFAD.** The conclusion was that the program had few negative environmental effects, and that the GAFSP program implicitly incorporates “climate-smart” agricultural approaches, in particular through the focus on cultivation of the inland valley swamps. The EA states, however, that the GAFSP does not propose approaches to address deforestation/land degradation issues, except through tree crop rehabilitation. The assessment recommended an increased focus on (i) sustainable land and water management approaches (eg., intercropping vegetables and groundnuts in order to restore soil fertility, reduced tillage, etc.); (ii) promoting Sustainable Rice Intensification (SRI); and (iii) climate resilient varieties. The EA also supported greater focus on food safety, in line with the national Food Safety Action Plan, and support for sustainability certification for tree crops.

36. **Sustainable land and water management is being supported on a pilot scale.** IFAD, with Global Environment Facility support under the LDCF (Least Developed Countries Fund, under the climate adaptation window),²³ is supporting a USD 11.4 million pilot program in Kono and Kailahun districts in Eastern Province for (i) sustainable development of inland valley swamps; (ii) integrated water and natural resource management; (iii) capacity building and awareness raising and (iv) project management and M&E. Building on an ongoing rural development program, the project supports participatory vulnerability mapping, climate-resilient rice production systems, and dissemination of relevant agro-meteorological information; integrated water and natural resource management and erosion control, irrigation in both upland and swamp areas, and drainage in lowlands; climate awareness programs among farmers and capacity building for the hydro-meteorological department (improved equipment and training) and government officials; and monitoring and evaluation. The program is not, however, explicitly integrated into the GAFSP program.

21 Sierra Leone participates in the CAADP, endorsed by the African Union, which seeks to enhance agricultural productivity and food security in Africa through implementation of policies and programs under four pillars: improved land water management; improving market access for agricultural products; increasing food supply and reducing hunger; and capacity building through agricultural research. In 2010, the AU developed an Adaptation-Mitigation Framework for Agriculture, and since then, African ministries of agriculture have sought to integrate climate resilience and low-carbon growth into African agricultural development plans; the UN Food and Agriculture Organization has provided assistance. A Conference of Ministers of Agriculture was held in Johannesburg in 2011, and the position was re-articulated in the Durban COP (Conference of Parties on Climate Change) in December 2011.

22 GAFSP was established in 2008 with the objective of supporting scaled-up funding for agricultural development in low income countries.

23 “Integrated Adaptation to Climate Change in the Agricultural Sector, Sierra Leone”; GEF/LDCF project document, 2011.

37. **The Agriculture Sector Five-Year Vision for 2012–2017 highlights the successes of recent years.**²⁴ Specifically, domestic rice production doubled from 2007 to 2011, from 0.58 million to 1.08 million metric tons, while domestic prices increased by less than international prices. Yields increased to 8.8 tons per ha and production from 1.8 to 3.4 metric tons. The vision also highlights, however, the continued bottlenecks regarding access to and affordability of new technologies and irrigation, as well as processing, marketing, and transport constraints. Although the differential is now marginal, domestic rice at 3,300 leones per kg is still more expensive than imported rice. There has also been progress with cash crops: cocoa production, mostly from smallholders, nearly doubled from 2007 to 2011, totaling 28,000 tons that year, and export earnings totaled USD 36 million. Cocoa growers are aiming for higher prices by achieving organic certification of most of their crops over the next five years. There are also ongoing investments in oil palm rehabilitation (7,000 ha rehabilitated so far with longer-term plans for up to 100,000 ha from a range of private-sector investments and support from the Islamic Development Bank) as well as in establishment of a new 10,000 ha sugarcane plantation for ethanol production (see section on energy).

38. **To accelerate growth and achieve food security targets, the Five-Year Vision aims to increase smallholder productivity, promote large-scale private sector investments, and develop farmer organization in production, processing and marketing.** It supports continued value chain enhancement and commercialization, as well as critical infrastructure investments in irrigation, roads, and energy. For rice, there will be an increasing focus on out-grower schemes, such as “rice production hub models, which combine smallholder production with the technical know-how that larger-scale operations can provide.

39. **The focus of the Five-Year Vision is on productivity and commercialization to meet food security needs and increase export revenues.** Productivity increases—growing more from less land and water—can be a key part of a sustainability agenda. The programs are also supporting improved hydrological monitoring in some areas. This should help to feed into a broader water resource management strategy.

Moving forward with greening the A4P, the current focus on increasing productivity and commercialization is the priority for Sierra Leone. But to date, there has been perhaps less focus on improving land, water, and woodland management in both upland and lowland areas through supporting sustainable productivity increases. These can restore natural capital through increasing vegetation and tree cover, restoring soil fertility, reducing erosion, and enhancing rain-fed agriculture's resilience to extreme weather events. There is scope also for more focus on improving weather forecasting services adapted to farmers' needs, and developing mobile phone technology.

Forests and Woodlands

40. **Forest and woodland cover is estimated at 2.8 million ha in Sierra Leone** (38% of land area).²⁵ The great majority of these (2.4 million ha) are community-managed and owned; publicly administered forests total 0.4 million ha, of which 0.19 million ha are managed for biodiversity conservation and watershed conservation and the remainder for sustainable timber production. The current forest legislation dates from 1988, but the stated priorities of the Forest Department, under the 2010 Forest Policy, include “the three Cs” of conservation, communities and commercial forestry.²⁶

24 Draft Agriculture Sector Five-Year Vision, Ministry of Agriculture, Food Security and Food, July 2012.

25 The figures in this paragraph are taken from the FAO 2010 National Forest Resource Assessment, Country Study for Sierra Leone.

26 Cited in “Sierra Leone Biodiversity and Protected Areas Conservation Project”, GEF/World Bank project appraisal document, 2010.

41. **Fuel wood and charcoal, which account for 90% of household energy, constitute by far the greatest use of timber products.** Fuel-wood timber removals average 6.2 million cubic meters per year (over-bark), compared with 0.14 million cubic meters for industrial round wood. Timber is also used for some artisanal mineral processing and in fish drying, as well as in the domestic construction industry. According to the World Development Indicators, deforestation rates are estimated at 0.7% per annum, substantially less than Ghana or Nigeria. Subsistence agriculture, poorly managed inefficient fuel-wood, and charcoal burning account for the majority of forest degradation. Almost all regeneration is natural; afforestation and reforestation together average less than 1,000 ha per year, mostly in peri-urban areas. The assessment estimates carbon stocks at 180 million cubic meters above ground and 43 million cubic meters below ground. Community management regimes, run by local organizations and paramount chiefs, cover 90% of forest and woodland areas. Sierra Leone has favorable growing conditions for multipurpose woodland management and could increase productivity of these areas while managing them sustainably,²⁷ but this has not been a focus of programs to date.

42. **Mangrove forests have declined from 145,000 ha in 1990 to 90,000 ha in 2010.** Because of the key multi-functional role that mangroves play in coastal protection—as spawning grounds and nurseries for fish, other aquatic life, and birds—and as a fuel wood source, this is of special concern. The assessment also refers to the damage done to forest and wooded resources by fire, related very largely to agricultural practices.

43. **Sierra Leone is rich in biodiversity.** Its position at the westernmost extent of the Upper Guinea Forest Ecosystem provides for significant diversity and endemism. Indigenous fauna include 15 species of primate, 18 species of antelopes and duikers, and more than 500 bird species. More than 4,800 square kilometers of Sierra Leone is wetlands, including freshwater swamp, riparian forests, and mangroves. This biodiversity is under threat due mostly to expansion of subsistence agriculture, savannah burning, poorly managed timber, and bush meat harvesting.

44. **There has been progress in establishing protected areas for biodiversity and watershed conservation,** which now cover 180,000 ha. A Biodiversity Strategy was approved in 2003. There are a number of programs from a range of development partners and NGOs, with current commitments estimated at USD 24 million.²⁸ Key programs include the GEF-supported USD 6 million Biodiversity Conservation Project, which aims to strengthen conservation management using participatory approaches in selected sites, replicate good practices, and build broader capacity for conservation management at the district and national levels. Sites include the Kangari Hills, Outamba and Kilimi, with district capacity also being strengthened in Tonkolil and Bo. In addition, the Loma Mountain reserve has been financed as a conservation offset by the Bumbuna hydroelectric project, but the GEF program will provide additional support for operationalization and sustainability.

27 Countries with much less favorable growing conditions, such as Senegal, have established programs for sustainable, community-based fuel-wood and charcoal production; Tanzania has a successful approach to district-level woodland management, while the DRC has established fuel-wood plantations intercropped with food crops on degraded lands in the vicinity of Kinshasa.

28 “Sierra Leone Biodiversity and Protected Areas Conservation Project”, GEF/World Bank project appraisal document, 2010.

45. **The Gola forest reserve is the largest area of primary forest in Sierra Leone, and the subject of a trans-boundary conservation program together with Liberia.** The EU is supporting establishment of the 17,000 ha Western Protected Forest Reserve near Freetown, for both biodiversity conservation and watershed protection, while USAID is assisting on a trans-boundary project with Guinea. Other partners include Irish Aid on Tiwa Island, as well as foreign and domestic NGOs such as Birdlife, Conservation International, and the Conservation Society of Sierra Leone. These programs recognize the importance of community ownership, as well as the link between biodiversity conservation and more productive agriculture, which should help reduce pressure on fragile ecosystems. There is also an appreciation of the links between conservation and tourism development, with the Ministry of Tourism now preparing an Ecotourism Strategy.

Much of the focus on and support for forest management has targeted protection and participatory conservation management in the forest reserves, which account for less than 10% of forest and woodland area. Development partner support will be key for sustainability until longer-term financing mechanisms are developed. The forest conservation offset provided under the Bumbuna project is a promising model in the context of plans for larger-scale development of hydropower as well as mining. It is important that project financiers set aside adequate resources to cover operational management costs and ensure long-term conservation.

Regarding forest and woodland management more broadly, there has been less focus on support for sustainable management of the 90% of woodlands that are under community management. There is scope for more sustainable management of fuel wood and charcoal production, as well as other production and ecosystem services, both in these areas and through integration of woodland and agricultural land management. Because as in many African countries, subsistence agriculture is the main driver of deforestation, increasing agricultural productivity and reducing deforestation are linked agendas. There is also scope for greater support for agro-forestry, including trees, in the production landscape. With forestry, food security, and agriculture management under the auspices of one ministry, in principle Sierra Leone has a favorable institutional framework for this approach.

Fisheries

46. **Sierra Leone has a long tradition of fishing; fisheries comprise nearly 10% of GDP and, including indirect employment, 10% of jobs (230,000 people); fish products constitute 80% of the animal protein consumed by Sierra Leoneans.**²⁹ The industrial fleet is made up of trawlers that are owned nationally or chartered, as well as a foreign fleet established under various joint companies that target a variety of fish stocks. The local small-scale fleet includes some 30,000 workers, who catch 70% of the fish consumed locally. Legal fish catch and marine products catch is estimated at 134,000 tons annually. The PRSP 2 put a high priority on sustainable fisheries management, which is the responsibility of the Ministry of Marine Resources and Fisheries.³⁰ Despite this importance, key fisheries are overexploited, and there is great scope to increase value added to the local economy.

29 Figures in these paragraphs are drawn from the West Africa Regional Fisheries Program Adaptable Program Loan 1 Project Appraisal Document, World Bank, September 2009, itself based on a body of work including the Sierra Leone Fisheries Sector Strategy Paper, DIFID, 2007.

30 A draft Fisheries and Aquaculture Bill (2011) notes the importance of sustainable development of the aquaculture subsector. Globally, this sector accounts for 50% of the market in aquatic products, but is little developed to date in Africa.

47. **Studies have identified three major constraints to sustainable fisheries management in Sierra Leone.** First, there is a lack of basic capacity to govern and manage resources; the country lags behind in registration of fishing vessels, transparency in the sale of fishing licenses, monitoring, and statistical capacity. Second, and related to the first, officials are unable to prevent illegal fishing by both foreign and domestic vessels; it is estimated that 35% of fish caught in Sierra Leone's waters are illegal and that around USD 40 million per year is lost to illegal fishing. Third, the industry has failed to add value locally, as most of the fish are processed offshore. Sierra Leone lacks basic infrastructure and food safety controls to support significant landing of industrial vessels or allow for adequate conservation/processing from small-scale vessels. Local processing companies that do exist are constrained by over-exploitation of fisheries, which means a dearth of supply for them.

48. **Sierra Leone is participating in a regional fisheries program whose objective is to strengthen the capacity of West African coastal countries to govern and manage targeted fisheries sustainably, reduce illegal fishing, and increase local value added to fish products.** Regional integration is a key element. The USD 20 million first-phase program for Sierra Leone supports (i) improved governance and sustainable management, including registration of fishing vessels, stock assessment, and information systems; management plans for coastal demersal and shrimp fisheries; revision of licensing fees; rights-based fishing based on co-management; and support for alternative livelihoods and marine-protected areas; (ii) reduction of illegal fishing through support to monitoring, control, and surveillance systems, including the leasing and operation of patrol boats and aerial patrols; and (iii) increasing the contribution of fisheries to the local economy through support to a fish landing site cluster at Konakree Dee. The program sets environmental, economic, and social achievement indicators. It builds on an artisanal fisheries program supported by the AfDB whose aim was to increase fish supply in the postwar recovery period.

Commitment to sustainable fisheries is strong; success will be linked to effective management and protection of coastal landscapes and wetlands, including mangroves, as well as to progress in fisheries management. There may also need to be a stronger focus on increasing value added as part of Pillar 1 of the A4P, economic diversification.

Mining and Mineral Resources

49. **Sierra Leone's mining sector is key for the economic growth of the country.** It is made up of three subsectors: (a) large-scale production of diamonds and gold; (b) large-scale production of nonprecious (base metal) minerals, mostly iron ore, rutile, and bauxite; and (c) artisanal and small-scale production of diamonds and to a lesser extent, gold. Other minerals being mined include platinum, chromite, lignite, clays, and base metals (copper, nickel, molybdenum, lead, and zinc). The sector is estimated to provide about 300,000 jobs in large-scale, small-scale mechanization, and artisanal mining processing and trade (including 38,000 employed in large-scale mines) and is the second-largest source of employment after agriculture, but estimates vary widely.³¹ New private investment collapsed during the civil war, but is now recovering; in 2010, two large-scale contracts for iron ore extraction were signed, and exploration by a number of large-scale firms is ongoing. Iron ore has been responsible for the very high GDP growth figures estimated for 2012.

31 These paragraphs draw from information provided in the "Guide to the 2009 Mining and Minerals Act", Ministry of Mining and Minerals, Government of Sierra Leone, 2009; the "Extractive Industries Technical Assistance Project", project paper for additional financing, March 2011; and the "Mining Technical Assistance Project 2009", World Bank project appraisal document, as well as A4P draft documents.

50. **In addition, oil was discovered in Sierra Leone's offshore waters in 2009.** The government has awarded eight concessions for detailed exploration of the deep-water oil deposits; only after this work is undertaken will it be possible to determine the amount of oil that is commercially recoverable.

51. **Policy is guided by the Mines and Minerals Act (MMA-2009), and Sierra Leone is a participant in the Kimberley Process and the Extractive Industries Transparency Initiative (EITI and EITI+).**³² The Mines and Minerals Act is the outcome of detailed consultations and is regarded as good practice internationally. The law is consistent with all the main ECOWAS principles and policies governing the mining sector, including the acquisition of mineral rights, respecting the rights of landowners, protection of the environment, financial terms and conditions and company reporting, access to information, state participation in mining operations, respecting the rights of local communities, and reserving the right for the government to acquire an interest in large-scale mining operations. Programs to improve governance of the sector are ongoing, but there has been limited progress to date in improving mining revenue generation; EITI standards have not been reached so far.

52. **The new legislation addresses several issues not previously covered,** including health and safety, environmental protection, and community development. It tightens rules for administrators and mineral rights holders, including application and reporting requirements. It promotes investment and minerals sector development by ensuring security of tenure and preventing companies from holding land under license for too long without demonstrable activities. And it rebalances fiscal benefits—including higher royalty rates for precious stones and precious minerals—among companies, communities, and government. A National Minerals Agency is being established to work alongside the Ministry of Mining and Mineral Resources as a technical regulatory agency, with responsibility for technical and operational management of geological information, regulation of precious metals trading, and application of transparent mineral rights licensing systems.

53. **Development of detailed environmental and social regulations for large-scale, mechanized small-scale and underground mines is ongoing,** together with procedures for support to mining communities, local sustainable development, and mine closure and site rehabilitation. Officials are also developing a mining sector code of practice, trading license regulations, a detailed mining cadastre, a geological information system, regulations under the MMA and for oil exploration, and institutional strengthening of the ministry and agency, including geological survey and mapping equipment, training, and operational support. Sierra Leone, as a Mano River Union country, also participates in regional policy dialogues on the mining sector.

54. **As mineral revenues recover, Sierra Leone is considering establishment of a Transformation Development Fund (TDF) under the A4P,** similar to the funds established in other mineral-rich countries, so that the wealth generated can also be used by future generations, for the public good, and to avoid development of the so-called “Dutch disease”.³³ There are many options for fund management, and planning is still at an early stage. The TDF concept is to save 80% of mining revenues for (i) stabilization purposes, to smooth consumption during commodity price fluctuations; and (ii) to further invest in four priority areas: health, education, infrastructure, and reducing inequity. The governance framework is being developed in line with an operationalization strategy. The GoSL made a policy pronouncement on the TDF establishment in the 2013 budget speech, and the IMF is providing technical assistance with regard to establishment of a fiscal rule alongside the TDF establishment. The IMF has also included TDF establishment as an indicator under the sixth review of its Extended Credit Facility (ECF) program with the government.

32 EITI seeks transparency, accountability, and sustainability throughout the extractive industries value chain, including development of sound regulatory frameworks, awarding of contracts and licenses, collection of taxes and royalties, disclosure of payments and receipts by companies and governments, and sustainable social and environmental management.

33 The term has been used since the 1970s, when it was noted that rapid accumulation of oil revenues in the Netherlands contributed to inflation, exchange rate appreciation, and loss of competitiveness while it did little for job creation and the “real economy”.

55. **Artisanal mining remains a key source of employment** and is governed by provisions under the MMA. Separate, though related, provisions cover small-scale mines, and more detailed regulations for both are being prepared. The legislation includes eligibility and operational requirements, including for environmental remediation. Artisanal licenses are given for one year and are renewable three times. A “middle” category of small-scale mining licensing also applies where large-scale mine with a 25-year license is not justified, including for quarries and gold mines. In order to mitigate conflicts with artisanal miners, some areas may be designated solely for their use, especially in diamond-producing areas. Some programs support the transition of artisanal miners to alternative livelihoods, specifically farming. Although local capacity is being built to help apply the regulations, implementation challenges will remain, especially in the early years, as well as asymmetries in capacity between the public sector in charge of regulation and large-scale mining companies.

Mining and minerals policy and legislation are recognized as good practice internationally, and the provisions governing transparency, environmental and social impact assessments, management and remediation, and the small-scale and artisanal mining sectors are progressive. Local capacity-building will take time. The large-scale sector may also usefully consider funding for establishment of conservation offsets similar to that supported for the Bumbuna project. And new mining concessions need to take account of other land uses and land use plans in the country, including agriculture, water resource development, and forestry. The draft A4P highlights the importance of natural resources in the nation's inclusive growth strategy. The sectors dependent on renewable natural resources are emphasized in the economic diversification, including agriculture, fisheries, and tourism. Employment and value-added generation will depend on sustainable management of the lands, waters, forests, and fisheries on which these sectors are dependent. And the country's nonrenewable natural resources, including minerals and potentially oil wealth, can be managed to support broad-based growth, including human and infrastructure development, as well as to help manage renewable resources sustainably.

Energy, Infrastructure, and Urbanization

Energy

56. **Poor access to electricity is recognized as a binding constraint to long-term economic growth in Sierra Leone.** Fixing this problem was a major focus of the PRSP 2, which included a goal of “cheap, affordable energy for all”. Overall, access to modern energy has increased from 3% of the country’s population in 2000 to 12.1% in 2011; biomass from fuel wood and charcoal still accounts for more than 85% of total energy use, and is the source of fuel for cooking for 99% of households. There is scope for efficiency gains from all sources of energy, and transmission losses remain high at over 40%. The target is to increase billing and collection rates to 90% through technical and organizational improvements. Fuel prices (USD 0.94 per liter for both gasoline and diesel in 2010)³⁴ are higher than in Ghana (USD 0.83) and similar to Guinea and Liberia. Sierra Leone currently has only 90 MW of installed capacity, of which 86% is for Freetown; the hydroelectric facility at Bumbuna, completed in 2009, generates 62% of the country’s power, and oil-powered facilities provide the remainder.³⁵

57. **The Ministry of Energy has prepared an ambitious new Energy Strategy.**³⁶ Its vision builds on the three pillars of (i) access, (ii) efficiency, and (iii) renewable energy³⁷, with specific, time-bound targets for each pillar. Sectoral targets for households, industry, agriculture, transport, and mining are outlined; renewables include bioenergy, solar, and increased hydro-power, as well as more efficient production of charcoal and increased use of fuel-efficient stoves, and stoves powered by liquid fuels. The overall cost of the program is estimated at more than USD 7 billion up to 2030.³⁸ The strategy proposes different energy source mixes for different uses. Government policy includes further development of a legal and regulatory framework, a rural electrification strategy, energy efficiency and conservation, and promotion of renewable energy and policies that minimize the impact of energy consumption on the environment. In order to speed up the implementation of this strategy, Sierra Leone has decided to opt in to the UN-led Sustainable Energy for All Initiative; a gap analysis report has been prepared and the country is expected to develop a comprehensive action plan with the support of development partners.

58. **The strategy identifies hydroelectric power as the cheapest energy source for Sierra Leone.** Potential is about 1,300 MW, from a mix of large-scale and small-scale as well as some mini-hydro sources (though mini-hydro potential is limited by the high seasonal variation in water flow). There is potential for further development of Bumbuna, as well as development of other resources. The challenge will be to find financing for the up-front costs of hydropower development. Hydropower will also be complemented by some further development of thermal power as well as generation from other sources, but overall the focus on hydro is consistent with a green growth strategy, so long as environmental and social safeguards are respected. The importance of both future energy and irrigation developments, however, highlights the need to develop an integrated, multi-sectoral approach to water resource management, taking into account the potential impact of climate change.

34 World Development Indicators, 2012.

35 Ministry of Energy Draft Energy Strategy, 2012. Estimates of actual capacity, as well as of access to electricity, vary.

36 These paragraphs draw heavily on information from “Sustainable Energy for All”: MEWR, Government of Sierra Leone, June 2012, and “Sierra Leone Energy Profile”, UNDP/Government of Sierra Leone, 2011.

37 The pillars are consistent with the UN Sustainable Energy for All Initiatives, which aim to achieve universal energy access, double the rate of improvements in energy efficiency, and double the proportion of renewables in the energy mix by 2030.

38 This figure, though high, is consistent with estimates in “Africa’s Infrastructure: a Time for Transformation”, Africa Development Forum, Agence Française de Développement, World Bank, and others, 2010. The report underlined the particular challenges for energy infrastructure and estimated funding needs, for new investment and operation and maintenance, at USD 41 billion annually; it also highlighted the potential for efficiency gains.

59. **Sierra Leone also has potential in bioenergy production, especially from sugarcane, again so long as environmental and social safeguards are respected.** The AfDB is supporting biomass energy generation through the Addax project,³⁹ funded by a EUR 25 million senior private-sector loan, together with a range of European financial institutions and the private investor Addax, based in Switzerland. Because this project has the potential to be “transformational” for Sierra Leone, and because of plans for further large-scale agricultural investments in Africa,⁴⁰ it is described in some detail below.

60. **The project consists of 10,100 ha of irrigated sugarcane estates and an ethanol factory capable of producing 90,000 cubic meters of ethanol per annum and, from the bagasse waste byproduct, 32 MW of nominal electrical power capacity,** of which 15 MW will be available for sale to the national grid. A second byproduct, vinasse, rich in nutrients, will be returned to the fields through the irrigation system and a dedicated pipeline network to replace fossil-fuel-based fertilizer. The final product (denatured anhydrous ethanol) will be transported to the Kissy terminal in Freetown by road, primarily for export to Europe. The ethanol will be stored and loaded on oceangoing tankers from the terminal.⁴¹ The project will consume about 80 million cubic meters per year of water, diverted from the Rokel River, whose overall flow is 3.8 billion cubic meters and which is already regulated upstream by the Bumbuna dam. In addition, 2,000 ha will be developed as part of the project’s Farmer Development Program (FDP), which will focus on rice and cassava and is being implemented with the support of the FAO to ensure food security in the project area. An additional 1,800 ha will be set aside for ecological corridors and buffer areas to protect existing pockets of biodiversity.

61. **The Addax project is largely financed by European development finance institutions and the African Development Bank** and applies IFC performance standards, Equator Principles and AfDB policies. In order to meet EU sustainability criteria, the project will also adopt international best practices for the sugar and biofuels industry as defined by the Roundtable on Sustainable Biofuels (RSB) and the Better Sugarcane Initiative (BSI), of which Addax is a member.

62. **A key element of the program has been agreement with local communities on the land leasing arrangements.** Addax has leased a total of 57,000 ha for the project, much of which will remain undeveloped. Current legislation (Provinces Land Act Cap 22) requires that revenues from land leased to a third party be shared among the chiefdom, the local government, and the national administration; the law does not provide for rent payable directly to landholders. The Addax project, through a consultative process and with lawyers representing both parties, has agreed that landholders will directly receive rent for the land they lease; these “acknowledgement agreements” thus supplement the provisions of the Provinces Land Act. The amount agreed was determined as reasonable by the Ministry of Agriculture, Food Security and Forestry.

63. **The Addax project represents one of the largest private investments in Sierra Leone’s agriculture/energy sector to date,** and would be a tangible example of successful investment in the country. It will broaden electricity supply throughout the country, enhance productivity in agriculture, and improve the country’s standing as an investment destination. It is the first large-scale ethanol project in Africa.

39 Published on AfDB website, Tunis, 11 April 2011; the following paragraphs draw heavily on the Environmental, Social and Health Impact Assessment of the project, prepared for AfDB and published in January 2011.

40 The section on agriculture describes the government strategy, which is to encourage a mix of small-scale and large-scale investment in the sector. The lessons from the Addax project are very useful with regard to large-scale investment in agriculture, especially in the light of international concerns about potential negative social and environmental effects of these kinds of investments.

41 The reduction of carbon emissions achieved by the electric power generated from residual sugarcane fibers (bagasse) will earn Addax Certified Emission Reduction certificates (CER), also known as carbon credits, after Addax certifies the high carbon savings of its ethanol production under the EU certification schemes. A greenhouse gas life-cycle assessment has estimated the CO₂ savings of Addax’s ethanol production versus gasoline at 71%, i.e. well above the EU RED floor of 50%. Addax is developing the co-generation part of its project under the Clean Development Mechanism (CDM) of the United Nations Framework Convention on Climate Change (UNFCCC).

64. **There is potential for more sustainable fuel wood production, charcoal processing, and marketing.** Improving charcoal conversion rates and energy efficiency of cook-stoves (currently, only 30% of the country's cook-stoves are energy-efficient) is a priority. This sector is important economically; a recent study in Rwanda estimated the value added from fuel wood and charcoal at 5% of GDP, and a study of Tanzania estimated that the sector created 2 million jobs.⁴² Energy Minister highlighted the importance of the fuel wood and charcoal sector at the green growth workshop on 5 September 2012, but overall the sector, and more broadly meeting the challenge of clean, efficient, affordable energy access for cooking, has not received sufficient emphasis.

In summary, Sierra Leone has a progressive power strategy to achieve energy access for all. While acknowledging the importance of maintaining a sound energy mix, it emphasizes that with regard to electricity access hydroelectric power is the cheapest alternative, and it has taken account of the importance of respecting environmental and social safeguards in energy development. There are proposals under the A4P to address water resource management comprehensively, important as Sierra Leone develops its hydroelectric and agricultural resources. An additional focus on sustainable production of fuel wood and charcoal, which will remain the key source of cooking fuel for Sierra Leoneans, as well as on clean, efficient energy access for cooking, will help maintain a balanced approach to energy-sector development.

Transport

65. **With regard to road transport, Sierra Leone's network is underdeveloped⁴³ but is in the process of being upgraded with substantial development assistance.** The road network (National Road System, or NRS) comprises about 11,500 km⁴⁴ of road, classified into four broad categories—primary, secondary, tertiary/feeder and local/urban roads. The primary and secondary roads constitute the Core Road Network (CRN), which represents about 4,400km⁴⁵. Over the PRSP 2 period, the intention was to upgrade 1,400 km of rural roads (part of a broader program to increase agricultural production and commercialization), and 200 km of trunk roads, urban access and ring roads in key provincial cities. The eventual aim of the Roads Authority is to have 2,000 km of tarmac roads. Key indicators being measured include reductions in vehicle operating costs and improved road safety. These “efficiency” and “welfare” gains are consistent with a green growth approach. An independent Road Fund has now been established. The GoSL recognized that the institutional framework within which the Road Fund was situated in the Sierra Leone Roads Authority (SLRA) was not conducive to the sustainability of the road network. This led to the institutional and road sector reforms intended to have an autonomous Road Maintenance Fund, established through the Road Maintenance Fund Administration Act of 2010. Policy coordination for trunk, provincial, and major city roads is the responsibility of the Ministry of Works, Housing and Infrastructure, while the Sierra Leone Roads Authority is charged with implementation (administrative control, planning, development, and maintenance of all roads and related structures).

42 Biomass Energy Strategy for Rwanda, 2009; “Environmental Crisis or Sustainable Development Opportunity: Transforming the Charcoal Sector in Tanzania”; World Bank policy note, 2009. While fuel wood and charcoal have traditionally been regarded as a “poor man's energy source”, upper-middle-income countries are increasingly recognizing their potential in a sustainable energy mix. Brazil, for example, uses sustainably produced charcoal to produce pig iron, and it is used as a heating source in some parts of northern Europe.

43 The 2011 data on the state of the road network showed that about 42% of the NRS was in poor condition, with about 25% in good to excellent condition.

44 The public road network totals about 11,500 km, of which 8,500 km are functionally classified in the NRS and the other 3,000 km consist of local roads and unclassified roads and tracks.

45 951 km paved, representing about 8% of the total road network.

66. **The draft A4P highlights the progress and constraints with achieving the objectives outlined in the PRSP 2.** Funding has been provided by a range of development partners, including the African Development Bank, for trunk roads and by the European Union. There has been good progress in many areas. The A4P highlights a number of lessons: (i) while activities to date in the sector have been very largely dependent on development partner funding, an increasing contribution by government will be necessary going forward; (ii) the country needs a clearly defined road maintenance policy, as highlighted in the A4P; (iii) there should be more focus on operationalization of the Road Fund; (iv) good procurement processes have been key in cost-effectiveness and local contractors have benefitted from foreign technology transfer, but well qualified contractors may easily become overloaded. The draft A4P also mentions overlapping legislation with regard to roads and the involvement of other ministry development agencies in the sector, sometimes affecting consistency of standards of construction and maintenance. A4P mentions road safety, but does not specifically address public transport or non-motorized transport such as bicycles; provisions for other means of transportation beyond cars and trucks could be further considered as part of A4P.

67. **Rural roads are a high priority because of their role in linking farmers with markets, reducing post-harvest crop losses, and cutting down on transport costs.** As mentioned before, while Sierra Leone has highly favorable conditions for rice production, domestic rice is still more expensive than imported rice largely because of processing and transport inefficiencies. Rural roads (feeder roads) have generally been financed through agricultural and rural development projects, with district authorities playing a role, and prioritization linked both to national policy and to willingness of rural communities to commit to maintenance. The GoSL launched a Feeder Roads Policy in June 2011, which should help improve the situation in the coming years.

68. **For public transport in urban areas, as in many West African countries the use of “okadas” (motorcycle taxis) is widespread for short journeys** and an important source of employment, especially for young men. The inter-province bus system is gradually being upgraded through investment in buses, including through a joint Ghana-Sierra Leone venture.⁴⁶ Minibuses, or “poda poda”, are important for shorter journeys. Work on urban traffic management is still at an early stage; it is challenged by the dense pattern of housing, narrow streets, in many areas lack of pavements (footpaths/sidewalks) for pedestrians, and the lack of space for on-street parking. There is some progress on traffic control at intersections through the use of traffic police and wardens, but there are still long delays in some areas. Given the relatively high population density, there is also scope for more public transport development, especially of buses, which operate alongside cabs. There is not yet any provision for control of private vehicles or parking controls in the city. The cordoned operation of taxis being confined to zones in the city (eastwards and westwards) has to some extent introduced controls, but there is still more to be done to address congestion levels. The same is true for needed improvements to arrangements for foot traffic and other non-motorized transport, including from a safety perspective.

46 Reference on Peace FM radio online, June 2011.

69. **The draft A4P outlines the vision for the 2013–2017 period.** This includes connecting Freetown with the capital cities of Monrovia, Liberia, and Conakry, Guinea, and promoting a trade corridor linking Dakar, Senegal, with Lagos, Nigeria, in order to strengthen the regional integration agenda; connecting Freetown with provincial and district capitals via tarmac roads; building a national ring road; and installing weighbridges for axle load control. A4P also highlights the need for adequate financing of the Road Fund, as well as enhanced road safety, increased private sector involvement, and improved cooperation with law enforcement agencies. Constraints acknowledged include unpredictable funding, difficulties with property and right of way acquisition, and inadequate financing for the Road Fund. The funding for road maintenance is still a challenge, with the recent figures indicating a shortfall in the maintenance needs against the funding actually realized. There are also problems that need to be addressed with the new setup, whereby the autonomous Road Fund reviews the work plans and funding requests for maintenance from the Road Authority.

70. **Regarding railways, the focus is likely to be on heavy freight transport** connected with the mining industry (iron ore from Pepel to Lunsar, for example). Attracting private-sector investment outside the mining clusters presents challenges. The railway subsector was defunct for some time. With the railways now being promoted/developed by the mining companies for the transportation of their goods as mentioned, it is anticipated that will spur the expansion of rail to other parts of the country, outside mining clusters specifically, with need for incentives to attract private-sector participation.

71. **Work is also ongoing to improve container handling at Freetown's port and operating procedures at Lungi International Airport.** Responsibility for port operations has been handed over to private concessionaires, and both the airport and port have installed improved navigational equipment. The PRSP 2 midterm review highlights challenges with contractors, ensuring that work is completed to high quality, timely payment of wages to workers, and the linked problem of attracting underemployed youth to the work opportunities offered by these programs.

The draft A4P continues to put a priority on upgrading the country's road network, key to enhancing competitiveness, efficiency, and connectivity. Rather less emphasis is given to road maintenance and safety, as well as traffic and public transport management. There are also strong links among rural road upgrading, agricultural competitiveness, and upgrading the provincial and national network. These contribute to efficiency gains in the sector, as well as to broader competitiveness and citizen wellbeing.

Water and Sanitation

72. **Access to improved water sources and sanitation is improving, but still inadequate.** An estimated 35% of the rural and 87% of the urban population has access to an improved water source, while only 6% of the rural and 23% of the urban population has access to sanitation.⁴⁷ Programs are under way in district centres, Freetown, and rural areas. The government recognizes the link between making progress in this key area and reducing public health vulnerability (particularly to diarrhoeal diseases, a leading cause of illness and death).

47 Note that the 2011 Country Status Report (WDI) has estimates of water supply access of 87% for urban areas and 26% for rural areas. There are differing views regarding the reliability of these figures; the MDG indicator does not explicitly take into account reliability of supply, which varies widely.

73. **The government launched a National Water and Sanitation Policy in January 2011.** Its objectives are to develop a comprehensive framework for water resource management, address cross-sectoral interests, improve the provision of water and sanitation, ensure stakeholder participation, and put in place strategies for sustainable development and management of water resources. The 2011 Country Status Report⁴⁸ highlights financing gaps for both water supply and sanitation: national targets to be reached by 2015 for water supply and sanitation are 74% and 66%, respectively; the review highlights financing gaps of USD 130 million per year for water and USD 26 million for sanitation if these targets are to be met. It also emphasizes the progress that has been made in articulating clear investment plans, as well as in procurement and accountability.

74. **The ongoing Community-led Total Sanitation program for rural areas could provide a model for using social capital in other green-growth-led initiatives.** This government-led program relies on communities to change their behavior regarding sanitation practices, such as safe disposal of sewage and hand-washing with soap. Similar models are used in other countries, such as India. The Country Status Review highlights that even with this “no-subsidy” approach, with capital costs financed by users, there needs to be sufficient public expenditure on information, education, and communication (software) support.

75. **The Country Status Report highlights the particular challenge of meeting sanitation needs in peri-urban areas;** it mentions an institutional vacuum with regard to sector oversight and service delivery in these areas, with the Ministry of Health and Sanitation responsible in principle, but seriously underfunded in practice. The “no-subsidy” approach does not work in a peri-urban setting because of the high population density. Poor drainage and very poor garbage collection make these areas especially vulnerable to outbreaks of water-borne diseases.

While there has been considerable focus on improving access to water and sanitation, there is still a long way to go. Organizational and capacity constraints make delivery of adequate, reliable service difficult, as well as collection of user fees. Also, delivery of adequate sanitation is dependent on broader adequate storm water drainage, solid waste management, and urban land use systems. A green growth approach would seek to link the water and sanitation program to improvements in these linked areas.

Urbanization and Livable Cities

76. **Thirty-eight percent of Sierra Leone’s citizens live in urban areas, where poverty rates are generally lower than in rural areas.** But access to services remains a challenge, especially in the secondary towns and in Freetown’s unplanned settlements, where the risks of flooding or erosion increase citizens’ vulnerability. Overall, land-use planning that will allow for orderly urban development with sufficient land for public facilities is a challenge, and municipal institutions need strengthening.

48 PRSP Interim Progress Report, Sierra Leone, 2011; AMCOW (African Ministers Council on Water) Country Status Report, “Turning Finance into Services for 2015 and Beyond”, 2011.

77. **Urban land-use planning has been neglected until recently. There is no legislation governing the preparation and implementation of physical land-use plans.** In most countries, these plans developed in a participatory manner and are considered a very useful tool for urban development. There is an opportunity now for the country to plan urban growth in a way which minimizes some of the difficulties now faced in large African cities, with regard to provision of adequate, modern services to settlements built without provision for adequate road access, space for public facilities or sanitation. The Ministry of Lands, Country Planning and Environment is preparing a land-use plan for the country, and the EU is providing some support for development of an urban plan for Freetown. The purpose of the project, in the context of the decentralization process, is to create a technical and institutional basis on which the Freetown City Council (FCC) can prepare, implement and manage a Freetown Development Plan and an Urban Development Master Plan. These will take a comprehensive approach to urban planning, including roads, transport, solid waste, water supply, and spatial planning. The EU has also supported programs for urban road upgrading, and there are policies and programs for water and sanitation. Responsibility for housing, development control, and the allocation of construction permits currently falls to the Ministry of Works, Infrastructure and Housing; this may add complexity to the effective implementation of urban land use plans.⁴⁹

78. **As mentioned earlier, the lack of effective solid waste (garbage) collection and disposal is widely recognized as an environmental health threat in Sierra Leone, particularly in Freetown.**⁵⁰ There have been a number of initiatives to improve organization, collection, and disposal, including NGOs working with unemployed-youth groups. The Freetown Solid Waste Management Company provides services for 120,000 people (less than 15% of the population), but it is underequipped and under-budgeted, and there is not yet a tradition of or functioning organizational arrangements for charging for these services. Dump sites are located at Kington and Cranville and neither is sanitary, but the first priority is an adequate collection and removal system.

79. **The Ministry of Infrastructure, Housing and Works has overall responsibility for housing policy.** The draft A4P highlights that housing quality in Sierra Leone compares poorly with that of Ghana and Togo but is comparable with other Mano Union countries. While the ministry aims to construct up to 5,000 low-cost houses per year under A4P, local builders using a range of materials will continue to construct the great majority of homes. In poor countries, public construction even of low-cost housing is rarely cost-effective.

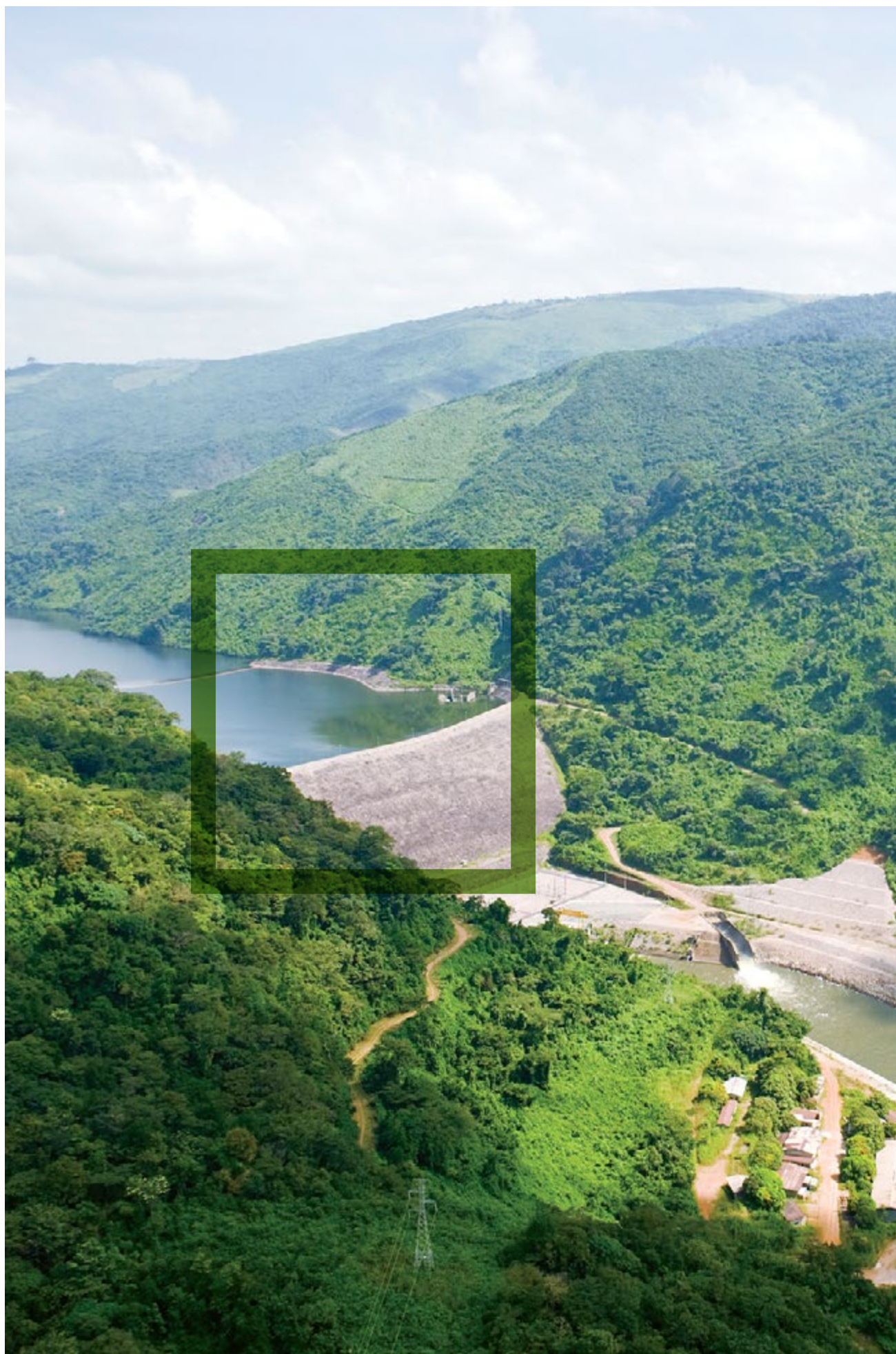
80. **The Ministry also aims to prevent coastal erosion through regulation of the quarry industry and the establishment of a management secretariat.** It will be important for other concerned agencies to be involved in coastal protection, since many, including fisheries, tourism, and the Ministry of Lands, Rural Planning and Environment—as well as coastal communities—have a stake.

As part of the A4P, there may be a need to increase focus on improved urban land-use planning, integrated with improvement of municipal services, access to sanitation, drainage, solid waste, and transport.

Solid waste management has been the subject of a number of initiatives but has received insufficient systematic focus in Sierra Leone, despite the links from inadequate garbage collection and blocking of storm drains to flooding and water-borne diseases.

49 In most countries, planning authorities have this responsibility, but in Sierra Leone capacity constraints may limit their effectiveness.

50 Alhaji Brima Gogra et al, "A Situational Analysis of Waste Management in Freetown, Sierra Leone", Journal of American Science, 2010.



Building Resilience

81. **Inclusive green growth and physical, social, and economic resilience are closely linked agendas.** Green growth strategies prepared for other African countries, such as Ethiopia and Rwanda, emphasize the need for continued rapid growth as a pathway to resilience; people with more assets are better able to withstand shocks of all kinds. Social and community resilience are also key: Institutional delivery systems for health care, weather and climate services adapted to citizens' needs, and strong, accountable local institutions play a role, as do broader improvements to infrastructure, financial systems, security, and the environment for doing business. One of the largest resilience programs in Africa, the Ethiopia Productive Social Safety Nets project,⁵¹ combines support for improved land and water management and livelihood diversification with strengthened drought early warning systems and rapid deployment of emergency assistance to those who need it. The aim is to increase the economic resilience of millions of Ethiopians to climate-related events.

Physical and Climate Resilience

82. **Sierra Leone is characterized by a tropical bimodal climate with distinct rainy and dry seasons.** The rainy season usually lasts from May to October and peaks in intensity between July and September.⁵² A UNDP climate diagnostic analysis⁵³ gives a slightly different time frame for the rainy season, starting in June and ending in November. Average rainfall is about 3,000 mm annually, varying between about 4,000 mm in coastal areas to 2,000 mm inland. The annual climate is influenced by the shifting location of the Intertropical Convergence Zone (ITCZ). When the ITCZ moves from the northern to the southern tropical regions, the rainy season wanes and is displaced by the dry season, which usually lasts from December to May and is characterized by reduced humidity and prolonged dry spells. The ambient temperature in Sierra Leone is 27–35 C, with the lowest average temperatures of 22–25 C being observed during the wet season, and higher averages for the rest of the year. Humidity is high all year, especially in the coastal areas.

83. **Climate records in Sierra Leone are scarce, so trends are difficult to assess.** Much existing climate data was destroyed in the war, and there are few functioning meteorological or hydrological monitoring stations. Since 1960, according to the UNDP Climate Change Profile, the mean temperature in Sierra Leone has risen by 0.8 C per year. With regard to climate extremes, the analysis notes a significant increase in the number of hot nights per year. Average annual rainfall amounts for the country have declined over the same period, but the rainfall records also show considerable decadal variations of drier and wetter averages, making it unclear whether this is a long-term decreasing trend. Sierra Leone's climate variability is also influenced by patterns such as the El Niño Southern Oscillation (ENSO).

84. **Climate change projections derived from Global Climate Model (GCM) simulations expect further temperature increases** (between 1.0 and 2.6 C by 2060), which would exceed the rate of warming observed over a similar time period since 1960. Increases of up to 4.5 C in comparison to present day conditions are possible by 2090 (UNDP country profile). As in many countries in West Africa, there is great uncertainty regarding changes in rainfall patterns: there is a likelihood of increased rainfall during the wet season, but decreases in rainfall are also possible. Importantly, the risk of intense precipitation events is expected to increase during the rainy season, associated with an increasing risk of flooding

51 IEG Review of the Second Productive Social Safety Nets Program, World Bank, June 2011; D. Gilligan, J. Hoddinott, A. Taffesse, "Impact of Ethiopia's Productive Social Safety Nets Program and its Linkages", IFFPRI, 2008.

52 Much of the material in these paragraphs is drawn from C. McSweeney, M. New, and G. Lizcano. Draft UNDP Climate Change Country Profiles Documentation.

53 P. Tarawalli, "Diagnostic Analysis of Climate Change and Disaster Management in Relation to the PRSP III in Sierra Leone", UNDP-Sierra Leone, 2012.

85. **Sierra Leone is not a particularly disaster-prone country.** Based on mortality and economic loss risk, the UNISDR ranks Sierra Leone 118th of 162 countries profiled.⁵⁴ However, it ranks seventh in terms of disasters resulting from landslides, which may point to linkages between local environmental degradation and climate-related hazards. Not captured in UNISDR's disaster profile is the prevalence of vector and water-borne epidemics, caused by inadequate sanitation or weather-related events.

86. **The Sierra Leone National Adaptation Programme of Action (NAPA) of 2009⁵⁵ identified key sector vulnerabilities and identified priority areas to increase resilience to weather and climate variability.** These related largely to agriculture, fisheries, coastal zones, and natural ecosystems, but also to energy and public health. The NAPA emphasizes vulnerabilities related to Sierra Leone's broader poverty and development issues, including a lack of capacity to prepare for and address natural disasters and disease outbreaks and a high dependence on weather-dependent sectors (agriculture and fisheries). The priority may be to address vulnerability due to short-term climate variability and extreme weather events. The NAPA outlined ways to increase resilience to weather and climate variability: (i) stronger weather and climate services and disaster risk management; (ii) increased resilience in agriculture and food security; (iii) improved water resource management; and (iv) better coastal and marine ecosystems management. Many of these areas are closely linked to pillars of the A4P, which should facilitate implementation of the NAPA. While many development partners are supporting improvements in the water and sanitation sector, the AfDB is also building resilience to climate change in this sector in both urban and rural areas through a GEF supported operation which complements AfDB-funded sector activities.⁵⁶ This approach, similar to that supported by IFAD in the agricultural sector (see above), which mainstreams resilience through sector operations, holds much promise.

87. **Functioning meteorological and hydro-meteorological services providing practical information to citizens are key to resilience, but these services are lacking in Sierra Leone** because most stations were destroyed in the civil war.⁵⁷ Of 13 comprehensive weather stations, only four are still somewhat operational. Sierra Leone now has only two trained meteorologists. Its system is underfunded, with the most senior staff focusing on monitoring weather conditions for aviation. Hydrological monitoring stations were installed as part of the Bumbuna hydroelectric project, and agro-meteorological services are being supported under a number of agricultural projects.

88. **GHG emissions in Sierra Leone are low.** Estimated per capita (0.2 metric tons) and total emissions (1.3 MtCO₂) are substantially below the global average and also lower than the mean value for sub-Saharan Africa.⁵⁸ The same is true of the measure of CO₂ emissions per unit of GDP. Data on the breakdown of the source of emissions are lacking, but in most African countries, emissions from agriculture, land use change, and deforestation account for the great majority of emissions.⁵⁹ The same is likely to be the case in Sierra Leone.

Strengthening hydro-meteorological systems as well as weather and climate services adapted to specific sector requirements and citizens' needs is a key element to strengthening climate resilience in Sierra Leone. Improved information would help decision-making, particularly in the key agriculture sector.

54 P. Tarawalli, "Diagnostic Analysis of Climate Change and Disaster Management in Relation to the PRSP III in Sierra Leone", UNDP-Sierra Leone, 2012.

55 Sierra Leone: National Adaptation Programme of Action, 2009.

56 "Sierra Leone: Building climate resilience in the water and sanitation sector", GEF grant for USD 4 million, 2013. From GEF website.

57 Information drawn from "Sierra Leone: Integrating Adaptation to Climate Change into Agricultural Production and Food Security in Sierra Leone", GEF/IFAD project document, Washington, DC, November 2010.

58 Little Data Book on Climate Change, World Bank, 2012.

59 "Climate-Smart Agriculture—Increased Productivity and Food Security, Enhanced Resilience and Reduced Carbon Emissions for Sustainable Development—Opportunities and Challenges for a Converging Agenda: Country Examples". World Bank Agriculture and Rural Development Department, October 2011.

Social and Economic Resilience

89. **Sierra Leone has a comprehensive program for improving primary health care and health outcomes, but there are implementation problems.** These are related to broader development challenges, including poorly developed infrastructure; lack of access to electricity and water supplies; lack of sufficient trained staff, especially in rural areas; and insufficient materials. Climate- and environment-related diseases include malaria, respiratory infections, diarrhoea, cholera⁶⁰, and other water-borne diseases and parasites. There has been progress in recent years: an estimated 26% of children under the age of 5 sleep under bed nets, and 30% of those with malarial fever receive anti-malarial drugs, the average for low-income countries. Over half (57%) of those with acute diarrhoea receive oral rehydration therapy (compared with 39% for low-income countries), and nearly half those with acute respiratory infections are taken to a health-care provider.⁶¹ But there is still much progress to be made in addressing many of the underlying conditions of poor social and health resilience, including the lack of access to clean water sanitation and clean cooking fuels, as well as inadequate solid waste disposal and drainage. Improved health outcomes are fundamental to broader resilience in Sierra Leone.

90. **Sierra Leone has made progress on school enrollment, but youth unemployment and under-employment remain major challenges.** While primary school enrollment is high, only 35% of children attend secondary school; youth unemployment is estimated at 70%.⁶² A program targeted at youth⁶³ has spent USD 20 million to provide short-term job opportunities as well as longer-term training and expansion of youth-owned enterprises. This will be critical, as youths have limited skills and therefore cannot be recruited for full-fledged jobs with reasonable salaries.

91. **The country also has a strong social protection policy,**⁶⁴ which recognizes clearly the need to combine basic social assistance for the most vulnerable households with transformative action programs to help lift people out of poverty and reduce their need for assistance in the future. Social protection programs are decentralized per the country's policy, and well linked with public works programs (for example, rural road construction). Social protection and public works grants would complement government fiscal transfers and flow through the same mechanism as those used by the government. They also include strong local accountability mechanisms.

92. **Sierra Leone's citizens are exposed to increases in the cost of food.** Food accounts for 63% of the expenditure of an average household, and 45% of households remain food-insecure. The current drought in the US (affecting maize and soybean production) and the Black Sea Basin (wheat) has not yet reached the crisis levels of 2008, and rice prices to date are relatively less affected. During the last crisis, Sierra Leone benefited from the Food Crisis Response Program, a multi-donor program that has disbursed more than USD 1.5 billion⁶⁵ to nearly 40 countries to respond to food price crises while building longer-term resilience. Responses include school feeding programs, conditional cash transfer schemes, and food-for-work programs to ease pressure on the poor, together with sustained investments to enhance agricultural productivity and incomes (through improved varieties and farm systems, sustainable intensification, irrigation, improved land and water management, and reduced post-harvest losses). Given its natural growing conditions, Sierra Leone has the potential to address vulnerabilities in this regard.

60 The recent cholera outbreak underlines the urgency of providing adequate clean water and sanitation to Sierra Leone citizens.

61 World Development Indicators, 2011.

62 World Development Indicators, 2011.

63 Youth Employment Project, World Bank, 2010.

64 Policy Framework on Social Protection 2009, Social Protection Steering Committee, Government of Sierra Leone.

65 Global Food Crisis Response Program, World Bank, 2008.

The A4P draft recognizes that Sierra Leone still has a long way to go regarding social resilience. The A4P proposes developing new policies and legislation to better coordinate the social assistance, productivity, and social insurance pillars of the social protection system.

Sierra Leone recognizes clearly the links among social, physical, and economic resilience and has developed programs to address both social resilience (social assistance) and economic resilience (diversification, especially in agriculture). There is still much to be done, however, and the physical resilience pillar, including development of land use planning systems to reduce vulnerability to floods and landslides and sustainable land and water management to strengthen longer-term agricultural resilience, could use more focus. There is also an urgent need to rebuild hydro-meteorological information systems so that relevant, timely weather-related information can serve the needs of Sierra Leone's citizens.

Gender: A Cross-Cutting Issue

93. **Women constitute 52% of Sierra Leone's population.** An estimated 60% to 80% of women earn their living through agricultural activities and are involved in 90% of the country's food production. However, women in Sierra Leone rarely own land titles or property, either individually or jointly with their husbands. Strong traditional views hamper gender relations and reinforce a lack of equality between the sexes.⁶⁶ The mainstreaming of gender issues in the A4P is the subject of a technical assistance program supported by the AfDB.⁶⁷

94. **Policy is guided by the 2010 national Gender Strategic Plan,** following important legislation on gender justice. There is now nearly gender parity in primary school enrolment (girls' enrolment rates are 97% of those of boys), though not yet in secondary school (70%) or senior secondary school (57%). The government is vigorously pursuing the political empowerment of women in the country. To attain Millennium Development Goal 3, whose primary focus is to eliminate gender disparity at all levels, the A4P policy paper articulates the following priorities:

- Intensification of secondary education for girls;
- Further improvement of sexual and reproductive health and rights;
- Provision of time-saving infrastructure for women;
- Promotion of effective property and inheritance rights for women by enforcing the three Gender Justice Laws;
- Vigorous pursuit of formal employment and equal employment opportunities for women;
- Improved participation and representation of women in politics and public administration;
- Improved access to finance and job training.

⁶⁶ These paragraphs draw heavily on a draft document on gender prepared for the A4P by the Ministry of Social Welfare, Gender and Children's Affairs.

⁶⁷ Please contact the field office for more information on this complementary study.

III.

CONSIDERATIONS
REGARDING

THE

INSTITUTIONAL

AND

**POLICY
FRAMEWORK**

FOR

GREEN GROWTH
INTERVENTIONS





III. CONSIDERATIONS REGARDING THE INSTITUTIONAL AND POLICY FRAMEWORK FOR GREEN GROWTH INTERVENTIONS

Institutional Framework

95. **The government recognizes that the same cross-sectoral coordination that is key for implementation of the Agenda for Prosperity is also useful for green growth interventions.**

The A4P is coordinated by the Ministry of Finance and Development, and there are eight technical coordination committees developing the A4P, each one being cross-sectoral. The government has decided that, for the preparation phase, the same institutional arrangements will be used for coordination of green growth as for the A4P. Decisions will be taken later regarding the most effective coordination bodies to implement specific policies and programs; with A4P more generally, the relevant sectoral agencies will take the lead.

96. **At the central government level, Sierra Leone's cabinet comprises 24 ministries,⁶⁸ many of which would be involved in strategy implementation.**

Those with key roles are the ministries of Finance and Development; Trade and Industry; Energy; Water Resources; Health and Sanitation; Agriculture, Food Security and Forestry; Lands, Country Planning and Environment; Marine Resources and Fisheries; Tourism and Cultural Affairs; Labor and Social Security; Education, Science and Technology; Youth Employment and Sports; Transport and Aviation; Works, Housing and Infrastructure Development; Local Government and Rural Development; and Mineral Resources.

97. **Sierra Leone is committed to decentralization following implementation of the 2004 Decentralization Law, which**

gives responsibility to local institutions for delivery of a number of important services, including primary and secondary health care, primary and junior-secondary education, agricultural extension, rural water supply, environmental health, solid waste management, licensing of canoes, and aquaculture. There are 13 district councils and six municipal/urban councils with responsibility for delivering services at the local level. There are also traditional structures comprising chiefdoms and paramount chiefdoms, which are represented in Parliament.

98. **Green growth policies and programs must be implemented with an understanding of the decentralization process.**

The government has developed a system of fiscal transfers to local authorities and has a substantial local-level capacity-building program. The total cost of its present decentralized service delivery program, being implemented over a four-year period, is USD 138 million.⁶⁹ The objectives are to improve local service delivery, including the availability and predictability of funding, and the intergovernmental transfer system. The project delivers grants to local communities for health and sanitation, education, rural water, solid waste management, and social assistance to the disabled and other vulnerable groups. It also strengthens local planning and implementation, monitoring, and financial management systems. It is coordinated by the Ministry of Finance and Development and emphasizes cross-sectoral coordination. Green growth programs may most effectively be integrated with ongoing and larger programs, rather than as stand-alone operations.

68 As of February 2013.

69 Project Paper: Decentralized Service Delivery Program 2, World Bank/Government of Sierra Leone, August 2012.

99. **While cross-sectoral integration is important, implementation plans also need to take account of the political economy and realities on the ground.** A program⁷⁰ to support agricultural value-added and commercialization was slow to start while project implementation was jointly managed by two ministries (Agriculture and Trade and Industry), but implementation was more successful once the Agriculture Ministry took over sole coordination of fiduciary and procurement aspects. Different ministries retained technical responsibility for implementation of different elements of the program: the Ministry of Trade and Industry was responsible for cocoa and rice harvesting and post-harvest initiatives; the Ministry of Works, Housing and Infrastructure Development was responsible for oversight of the rural roads component,⁷¹ and the Ministry of Local Government and Rural Development for activities which are the responsibility of the local councils. This model for implementation is regarded as successful by the Agriculture Ministry, which has proposed this approach for all ministry programs.

100. **Aligning responsibilities with budget is key for successful implementation.** For example, for water supply and sanitation, district councils play an important role. The Country Status Report mentions that the main institutional gap in this subsector appears to be in peri-urban sanitation, where the no-subsidy approach used in rural areas does not work well because of higher population densities and the need for more up-front financing. The Ministry of Health and Sanitation, which in principle is responsible, is underfunded, and does not necessarily have the appropriate technical skills.

101. **The Sierra Leone Environment Protection Agency, established under the 2009 Environmental Protection Act, also plays an important cross-sectoral role in regulation and sustainable development.** Since 2010, it has been an autonomous body reporting directly to the presidency. This step was taken by Parliament because of the growing need to mainstream environmental issues into national development and to address the alarming negative changes occurring in the country's environment. The agency advises on policy formation, coordinates activities, prescribes standards and issues environmental permits, ensures compliance, undertakes environmental education, promotes planning of environmental management, and seeks to establish a comprehensive database on the environment.

Because green growth promotes cross-sectoral approaches, institutional arrangements should be considered while keeping in mind the following:

- *Cross-sectoral coordination is key for implementation and implies a clear understanding of responsibilities by all parties;*
- *Green growth policies and programs must be implemented while taking into account the decentralization process for more efficient results;*
- *Implementation plans need to take account of the political economy and realities on the ground;*
- *The institution/stakeholders in charge of implementing GG policies and programs should secure the appropriate budget within the broader government budgeting system.*

70 "Rural and Private Sector Development Project: World Bank Additional Financing," project paper, April 2011. The 2007 grant was USD 30 million; additional financing was USD 20 million.

71 The authority also addresses road selection consistent with the Feeder Roads Policy, based on updated district master plans, priorities identified by communities, and their commitment to participate in rehabilitation and maintenance.

Policy Framework

102. **The motivations for green growth policies vary.**⁷² They include the need to manage natural resources sustainably to meet basic needs, alleviate poverty, and create employment; to improve the quality of life in urban and rural areas; to increase competitiveness through provision of improved, safer infrastructure; to generate efficiency gains and additional revenues; and to improve the business environment and attract responsible investment through transparent, simple, sound regulatory frameworks, including for environmental management of new infrastructure and mining investments.

103. **Cross-sectoral collaboration is key for successful implementation of a green growth plan.** Implementing a bioenergy policy, for example, requires collaboration between the Ministry of Agriculture and Ministry of Energy and Water, but also the Ministry of Lands, Country Planning and Environment and local administrations, to ensure that community land rights are respected, local people participate and benefit, and environmental effects are managed. Policy implementation involving public expenditure allocation also must be incorporated into planning and budget cycles, hence the need for discussion with the Ministry of Planning and Finance.

What policies and programs can best increase human, natural and physical capital?

104. A green growth approach would consider how limitations in these areas constrain growth and identify priorities accordingly:

- For human capital, key policies would include support for education and training, as well as health and nutrition and access to water and sanitation.
- For natural capital, the following should be considered: sustainable fisheries and forest management, watershed management (for natural capital), sustainable water resource management for water supply, irrigation and power generation, wetland protection and ecosystems management, and carefully planned increases in minerals production (an EITI++ approach would help ensure that benefits reach Sierra Leonean citizens). For forests and woodlands, sustainable systems of fuel wood and charcoal production, processing, and transport are likely to be priorities.
- For physical capital, key policies would include increasing transport coverage (roads and ports), expanding connectivity (phone and Internet access), and improving access to electric power through new renewable-energy power generation and distribution systems.

⁷² These paragraphs draw from the G20 Inclusive Green Growth Toolkit, jointly prepared by the World Bank, AfDB, OECD, and UNDP in 2012.

What policies and programs can best improve efficiency and support outward movements in the production frontier?

105. Depending on the type of capital targeted for improvement through increased efficiency, various policies can be implemented:

- For human capital, policies could include improving opportunities for youth employment, reducing the time spent in collecting water and fuel, and improving gender equality in access to employment and skills training.
- For natural capital, policies could focus on improved watershed management that enhances the underlying productivity and efficiency of land and water. For mineral resources, enhanced governance, improving extraction rates, artisanal mining management, and worker safety could be priorities. Protected area management and coastal zone management, in addition to conserving biodiversity and fragile ecosystems, could also provide a basis for development of an ecotourism industry.
- In this area, social capital would also be important: It would include strengthened local organizations; efficient, accountable institutions and regulatory frameworks; security and freedom from violence; and hope and a belief in the future.
- Cross-cutting areas would include property rights, key for land users to undertake longer-term investments, and access to finance.

What policies can best enhance resilience?

106. Some policies are best suited to increase resilience, such as:

- For human capital, policies that give priority to areas such as nutrition, hygiene and sanitation, and the control of malaria and other communicable diseases are “fundamentals”. But basic social protection measures are also important to reduce vulnerability.
- For physical capital, there are great opportunities to incorporate resilience into design and maintenance regimes: road contracts, for example, can include measures for adequate design of culverts and anti-erosion measures. Designing roads to plan for multi-modal transport (public transport and foot traffic) also increases flexibility. Road safety is also likely to be a priority. Hydroelectric and solar energy (which has potential in Sierra Leone) can be designed to minimize environmental and social impact and take account of likely long-term changes in precipitation. Land use planning has an important role to play in urban growth, to minimize building on erosion-prone land or flood plains.
- For natural capital, many of the measures to enhance efficiency also enhance resilience: watershed and forest protection, wetland and coastal zone management, protection of fisheries spawning grounds, improved land and water management in agriculture, and development of drought/pest resistant crop and livestock varieties. Food security is key for Sierra Leone; despite rich soils and fishing grounds, many people still depend on food aid, so food security and enhanced agricultural productivity go hand in hand.

Prioritizing Interventions: a Possible Framework⁷³

107. **Many of the interventions and priorities proposed in the A4P are consistent with a green growth approach.** The long-term vision to be an inclusive, green, middle-income country by 2030 also integrates green growth into the overall development strategy. However, in order to speed up its implementation, prioritization of interventions may help. The following classification can be considered.

Activities that are urgent with local and immediate benefits

108. These may include improving access to basic health and education, drinking water and sanitation, drainage and solid waste disposal; dissemination of known improved agricultural practices and sustainable intensification in agriculture; planning for road safety, improved road maintenance, enhanced port and customs operating procedures; and support for moving up the fisheries and agriculture value chain. Enhanced Internet and phone connectivity immediately benefit the population. In the minerals subsector, improving safety and conditions for artisanal miners and enhancing revenue transparency could also yield rapid benefits.

Activities that are urgent, but where there may be trade-offs between short-term local costs and longer-term local benefits

109. Much enhanced renewable natural capital management would fall under this category, including improved watershed management; forests, fisheries, and coastal zone management; landscape approaches; and tree-crop rehabilitation programs. It takes time to reap the benefits of improved access to education and educational quality. Major infrastructure and energy investments (trunk roads, hydroelectric or solar facilities) also take time, but delaying investments increases future costs and runs the risk of irreversible damage or “lock-in” effects. Institutional and regulatory improvements (enhanced local government, better property rights) also fall into this category. Overall, for Sierra Leone activities that have global rather than local benefits may be of lower priority at present, unless financial packages are available from international funding mechanisms that support development of substantial local co-benefits.

Activities that have a high level of public support and can be implemented within capacity constraints

110. Reviews of country strategy implementation have emphasized the need to avoid complexity and “keep it simple”. In countries with limited capacity such as Sierra Leone, community cohesion and empowerment (using social capital) are generally more effective at achieving objectives than are complex regulations that cannot easily be enforced. So the third “priority filter” would be “simplicity of implementation”. Often, even in smaller countries, inter-ministerial coordination is a challenge. As discussed earlier, it is important that where programs are cross-sectoral (for example, bioenergy is a component of energy and agricultural development as well as broader land and water resource management), there is an agreed approach between the various national agencies involved. The table below provides some illustrations that apply this framework.

73 The framework for prioritization draws on a number of documents, including “Inclusive Green Growth: The Pathway to Sustainable Development”, World Bank 2012; “Towards Green Growth”, OECD 2011; and “Towards a Green Economy: Pathway for Sustainable Development and Poverty Reduction”, UNEP 2011.

111. **Policy measures can be categorized into economic instruments, regulations, and social marketing instruments to promote behavioral change.** Normally, a combination of measures is needed. Economic instruments include public investment or expenditure support, taxes, and subsidies; regulations include laws with penalties for non-enforcement; social marketing instruments include communications campaigns. In a country with limited institutional capacity such as Sierra Leone, too much reliance on regulatory instruments is unlikely to be effective.

112. **It is important that policies be chosen that are adapted to the capacity and culture of each country.** Regulatory measures should have both “citizen ownership” and institutional capacity to “monitor and enforce”. Financial incentive schemes such as “payments for ecosystem services”, where a municipal water utility may pay land users for watershed protection and delivery of reliable, clean water, only work when institutional mechanisms exist to identify reasonable prices, pay land users, and charge water users. “Smart subsidies”, where public expenditure policies support activities that have short-term costs but longer-term benefits or benefits to people living in other areas (reforestation, infrastructure designed to avoid eroding soils, agricultural research into drought/flood-resistant crops), require resources and political will to redirect expenditure.



IV.

IDENTIFYING
OPPORTUNITIES

— FOR —
**GREEN
GROWTH**

— IN —
SIERRA LEONE
THROUGH

— THE —
A4P
—



IV. IDENTIFYING OPPORTUNITIES FOR GREEN GROWTH IN SIERRA LEONE THROUGH THE A4P

113. **A green growth approach in Sierra Leone will enhance successful implementation of the A4P. Possible areas for support under a green growth approach, or areas that could receive more emphasis, are outlined below, aligned to the proposed A4P pillars.**⁷⁴ Often, one intervention can address more than one A4P pillar. For example, investing in sustainable land and water management can address both the pillars of economic diversification (by enhancing soil fertility, the basis for agricultural productivity increases) and natural resource management (by protecting watersheds). Possible interventions for each A4P pillar are summarized in Annex1. As mentioned above, policies and programs need to be designed to navigate the political economy realities and capacity constraints faced by Sierra Leone. Social inclusion, and solutions adapted to local circumstances using social capital, are key, together with simple, transparent governance. Ease of implementation is important and decision-making processes need to be robust but adaptable. There are also information gaps that will take time to fill.

114. **Green growth should be mainstreamed in sectoral policies, legal frameworks, and budgets for successful implementation through the A4P period.** Sectoral policies are usually revised on a regular basis as the national context evolves. The government should take the opportunity to ensure mainstreaming of green growth in these revisions where possible

Pillar 1: Economic Diversification to Promote Inclusive Growth

115. **Pillar 1 under the A4P focuses on improving enabling environment for four key, employment-intensive subsectors: agriculture, fishing, tourism, and manufacturing.** It emphasizes moving up the value chain, improving the macroeconomic and business environment and access to finance. Agriculture, tourism, and fisheries depend on sound land and water (renewable natural capital) management. Green growth approaches would include ensuring that this natural capital, on which long-term productivity depends, is well managed.

116. **For agriculture,** the current A4P focuses on sustainable intensification in irrigated areas, support for improved varieties and technologies, commercialization, moving up the value chain, and loss reduction, as well as tree-crop rehabilitation. These are key elements of a green growth approach, focusing on innovation and increased efficiency. However, they could be enhanced by a greater focus on enhancing natural capital through improving soil fertility and moisture content (such as through reduced tillage and integrated landscape approaches). Policy interventions would include primarily public expenditure support through “smart subsidies”, but also knowledge dissemination. One strategy identified in the A4P (large-scale investment) depends on sound land tenure and land markets; it would be helpful to refer to the principles for responsible agro-investment as well as to the experience with the Addax project, one of the recent large scale agro-investments in Sierra Leone.

⁷⁴ Many of these suggestions are already being taken into account in the finalized version of the A4P, since the AfDB has provided “just-in-time” assistance to the working groups working on A4P.

117. **Regarding fishing,** the A4P focuses on controlling illegal fishing, increasing the production and export of industrial fisheries, and increasing local value added, port rehabilitation, and fish catch. Because some areas are overfished, fisheries resource monitoring and management, and integration with the actions proposed under the natural resources pillar is an important element to consider. Artisanal fisheries are a major employer, so it will be useful to refer to the importance of programs to improve their management, productivity, and value added. While modern processing and freezing facilities hold potential, there is great scope in the short term for improving artisanal conservation methods (eg, by more efficient smoking of fish and supporting dedicated woodlot production for fuel wood). Sustainable catch management depends not only on marine resource management (and cooperation with neighboring countries under the West Africa fisheries program), but also on protection of spawning grounds; this may be covered in more detail under Pillar 2.

118. **Regarding tourism,** the A4P emphasizes Sierra Leone's tourism potential and the need for strategic tourism planning, as well as infrastructure development and improvements in the business environment. Equally important are adequate waste and water management, as well as maintaining the natural beauty that will attract tourists. Taking action now will help Sierra Leone avoid long-lasting damage that would be costly and difficult to reverse ("avoiding the 'lock-in'" principle of green growth). More broadly, coastal zone management (which should be addressed under Pillar 2) is also important for the tourism industry. The section could also usefully mention the role of non-tourist visitors in boosting the economy and creating jobs.

Linking Pillar 1 on economic diversification with Pillar 2 on natural resource management and Pillar 4 on competitiveness, which includes improving access to energy and infrastructure, may reap benefits for realizing the potential of each pillar under a green growth approach to A4P.

Pillar 2: Natural Resource Management

119. **Pillar 2 could usefully emphasize that Sierra Leone is rich in both renewable and non-renewable natural resources,** including minerals, (potential) oil and gas, water, fertile land, forests, coastlines, and fisheries. Well managed, these resources have great potential to contribute to economic diversification (linking with Pillar 1), as well as to finance human development (linking with Pillar 3) and infrastructure, a key element of competitiveness (linking with Pillar 4). Sound management and governance of natural resources (linking with Pillar 7) is also key.

120. **Pillar 2 discusses implementation of environmental impact legislation.** In this regard, capacity building in the key sectoral agencies (eg, Energy, Minerals, Transport, Agriculture, etc.) is important. The policy should be that environmental mitigation costs are included in the investment cost estimates of large scale investments. Pillar 2 could usefully emphasize that environmentally sound infrastructure programs facilitate economic growth. It is also important that the main economic actors participate in development and adaptation of environmental regulations to ensure that they are "implementable", and that information generated by licensing requirements benefits all parties. Regarding environmental management more broadly, cross-reference to Pillar 3, which addresses water and sanitation, would be helpful.

121. **With regard to mining, oil, and gas**, the Mining and Minerals Act of 2009 provides a solid basis for sustainable development of the extractive industries sector. It also introduces specific requirements for large-scale, small-scale, and artisanal miners. Strategic environmental and social impact assessments are a requirement under the legislation, and programs to strengthen capacity in that regard are ongoing; this makes solid provision for environmental impact assessments and management of mining at all scales. It is part of EITI++ and linked with broader mineral and infrastructure development and governance (linking with Pillar 7).

122. **A4P focuses on implementing the new mining legislation to improve revenue generation, transparency (EITI++), and sustainability in the sector.** Discussions are underway to establish a Transformation Development Fund for sound long-term management of minerals revenues; this approach is very much consistent with green growth principles. Efforts should be further deployed to reach the EITI++ standards, which have never been reached so far. There is scope also for consideration of developing aggregate offset approaches as part of broad environmental management of the sector.⁷⁵ A4P plans target appropriate support measures for improved management of the artisanal mining sector, including basic safety requirements and protection of the most vulnerable people. A particular concern is enforcement of regulations concerning employment of children in mining. The sector is a significant source of jobs, but working conditions are often unsafe and artisanal activity causes environmental damage that is more difficult to regulate than that of the large-scale sector. These programs are all consistent with a green growth approach.

123. **With regard to renewable natural resources**, Pillar 2 focuses on forests, biodiversity conservation, fisheries, and land and water management.

124. **Integrating trees, forest and woodlands into production landscapes:** The current A4P emphasizes improved management of state forest reserves (400,000 ha) for biodiversity conservation, watershed protection, and sustainable timber production (though there is currently a ban on commercial timber harvesting). A green growth approach would incorporate the 2.4 million ha under community management and move away from managing forests primarily for timber or conservation, toward multi-purpose sustainable energy and watershed management. The approach for community woodlands would be integrated into the agricultural productivity agenda and involve participation of local communities. It would have a much stronger emphasis on woodland management for sustainable fuel wood and charcoal production, an important source of income and employment. The current program has a strong focus on forest conservation biodiversity protection; these programs have development synergies with ecotourism. Well-managed forests have economic value for wood energy and industry demands, as well as for watershed protection and ecosystems conservation.

125. **Fisheries management should be given high priority, taking into consideration the economic importance of fisheries resources** for Sierra Leone and to guarantee sustainable production (linking with Pillar 1). Fisheries management should include resource monitoring, control, and surveillance (MCS). Particular attention should be given to fighting illegal, unreported, and unaccounted (IUU) fishing. Actions in this area should be designed at the regional level, through effective partnership with neighboring countries, as well as with regional fisheries organizations, in particular Co-Fish West African Fisheries (CSRFP). Co-management schemes with local communities should also be supported and designed in order to complement MCS. In addition, a greater focus on improved management of coastal areas, and in particular mangroves—which protect spawning grounds for fisheries, offer storm protection, and provide a basis for tourism—would be desirable.

⁷⁵ Frequently when large mining, oil and gas, or hydropower developments are undertaken, the project proponent agrees to finance establishment of a protected area as compensation connected with loss of habitat from the original development (this was done in the case of Bumbuna). Aggregating offsets, and financial management of offsets, provides a larger and longer-term source of revenue for protected area management, including benefit sharing with communities. The concept is still a new one.

126. **Biodiversity conservation must be seen in the context of its local role—providing for employment, livelihoods, and community resilience—as much as its global role.** Sustainable ecosystem management provides the basis for direct services (timber and aquatic products) but also indirect “regulating” services (protection from floods and seawater intrusion, soil fertility conservation, climate regulation from carbon sequestration), as well as cultural services (sacred and recreational places). Providing incentives for sustainable natural resources management and ensuring community ownership—using social capital—is key in any green growth approach. Matching grants to communities for activities that manage natural resources sustainably is one instrument that could be used. The section on biodiversity could usefully link ecosystems conservation with tourism development (linking with Pillar 1 on economic diversification).

127. **Land rights, land management, and land use planning:** There is a strong focus in the A4P on land tenure and land rights, a key element of an enabling environment for green growth. Work has started on an integrated land-use plan for the country, and on programs using participatory approaches to facilitate development of land markets. These are key to mainstreaming green growth in the A4P, and various ministries need also to be involved; many countries face challenges when different ministries may allocate mining or agricultural development rights to overlapping land areas. Simple, locally adapted land titling for small-scale farmers provides the enabling environment for sustainable land management as well as for increased investment in agriculture. Also, regulatory frameworks for large-scale investments in land need to ensure that such investments effectively contribute to agriculture development and poverty reduction, with minimal environmental impacts. Priority should be given to investments that include smallholder producers, and lessons should be drawn from the Addax bio-ethanol project to guide policies in this area.

128. **Water resource management:** There is not yet an integrated approach to water resource management in the country. Sierra Leone, with 29,000 cubic meters per capita of internally renewable water resources, is water-abundant. Nevertheless, with seasonal variation, agriculture as the major user, plans for development of hydroelectric power, the rapidly growing need for domestic water, and the important role of rivers and watersheds in ecosystem service provision, the A4P needs a comprehensive approach to water resource management as part of a green growth agenda. A new Ministry for Water Resources has been created with this mandate; again, cross-sectoral coordination is important.

129. **The A4P includes a proposal for a natural resource inventory that would cover water resources** as well as minerals, land, vegetation, forests, fisheries, current land use, and temperature/precipitation. A geographical database of this kind is a key governance tool and will help with governance decision-making across sectors. As such, it would be helpful to link this with the work under Pillar 7 in strengthening statistics and to ensure that Pillar 7 mentions it.

130. **Coastal zone management could usefully be addressed under the A4P.** This area is important to economic diversification and competitiveness in many ways: long-term port and trade development, urban land use planning, tourism, protection of fisheries’ spawning grounds, and broader ecosystems protection.

131. **Climate and weather services and resiliency:** This cross-cutting issue at present “falls through the cracks.” Physical resilience—including flood and drought mitigation measures, climate resilience, and improved weather and climate—could usefully be discussed either under Pillar 2 or under the social protection pillar (Pillar 6). Improved weather and climate services and climate resilience are also important for agricultural development (Pillar 1) and underlie efficient infrastructure development (Pillar 4).

Most of the proposed interventions under Pillar 2 are consistent with a green growth approach. Possible improvements could be done through:

- *Build capacity for environmental management in key sectoral ministries as well as the country's Environmental Protection Agency (EPA)*
- *Provide more systematic support for participatory land use planning and land titling, especially for poor farmers*
- *Develop an integrated approach to water resource management*
- *Move away from managing forests only for timber or conservation toward multi-purpose management for sustainable energy, agro-forestry, and watershed management*
- *More effectively fight illegal fishing, in collaboration with neighboring countries*
- *Develop integrated natural resources and geographical information systems to facilitate decision-making across sectors*
- *Strengthen hydro-meteorological information systems and weather and climate services for key sectors.*

Pillar 3: Addressing the MDGs for Human Development

132. **This pillar focuses on building human capital through improving population planning services, basic education and health services, improving access to water and sanitation, and mainstreaming gender.** A green growth approach might focus also on the links between human capital, resilience, and better drainage flood management, solid waste management, and land use planning—key for controlling water-borne diseases. The discussion mentions analysis that estimates the economic cost of inadequate access to water and sanitation as 2% of GDP. Addressing household and indoor air pollution, a key cause of respiratory illness and one related to smoke from using unimproved cookstoves, would also be a priority.

133. **Millennium Development Goal 7 on environmental sustainability** calls for, in addition to improved access to water and sanitation, a reduction in the number of people living in slums, improved biodiversity conservation, and reduced deforestation. A green growth approach would support improving the living conditions of people living in informal settlements in urban areas by supporting regularization (simple title registration); improving access to water, sanitation, drainage, and solid waste management; and bringing in simple payment systems to ensure sustainability of these services. It would, importantly, gradually introduce participatory land-use planning procedures, so that people do not settle on land that is vulnerable to flooding and landslides, and facilitate the setting aside of land for local infrastructure, education and other community facilities, and public open space for recreation. The EU-supported program for Freetown is important in this regard, but more support is needed.

134. **Strengthening local government organizations to deliver services at all levels is a key “underlying condition” to delivering the MDG and a green growth agenda.** Finding solutions adapted to local circumstances, and local accountability, are both easier with decentralized approaches, and it is easier also to build on local social capital and help bring about behavioural change (the community sanitation program is evidence of this). The strong focus in Sierra Leone, under both the Agenda for Change and the A4P, on decentralized service delivery is consistent with an inclusive green growth approach.

Proposed interventions under Pillar 3 are consistent with a green growth approach. A4P in addition could usefully:

- *Focus on the links among human capital, resilience, and better drainage flood management, solid waste management, and land use planning*
- *Improve the living conditions of people living in informal settlements in urban areas*

Pillar 4: International Competitiveness

135. **Pillar 4 includes six focal areas⁷⁶ that are all highly relevant to a green growth agenda** because of the great potential for efficiency gains (eg, from infrastructure improvements, regional integration and institutional reforms), for innovation (eg, from improving the business environment and access to finance), and for increasing capital (eg, human capital from skills development and physical capital from enhanced energy and transport access).

136. **Infrastructure—Transport:** A green growth approach would include a strong focus on road maintenance to retain the value of these investments; often this is a challenge because one-off investments may be more visible and politically appealing than longer-term maintenance. It would also include, for new roads, careful design and implementation of environmental and social management plans to ensure their long-term sustainability (poorly designed roads can also lead to erosion, which is costly to address, and one particular challenge has been extraction of sand and gravel from riverbeds, which contributes to erosion and flooding). One way of addressing this is incorporation of these plans into the detailed project design, cost, and bidding documents.⁷⁷ The approach would also focus on road safety through a mix of expenditure, regulatory and knowledge dissemination/behavioural change measures. The roads programs should be closely linked to sectoral agricultural productivity, commercialization, and value-chain enhancement programs (Pillar 1), as well as to broader resilience.⁷⁸

137. Included in A4P are provisions for weigh stations and axle-load control (key to promoting easier road maintenance and sustainability through asset protection and traffic safety), as well as operationalization of the Road Fund. These form key elements of a green growth agenda, together with making adequate provisions for non-motorized transport and controlling passenger loads through awareness and regulation. In urban areas, there would be a stronger focus on traffic management, public transport, and non-motorized transport, including foot traffic. With regard to ports, a green growth approach would focus on increasing efficiency and reducing costs via better port procedures and more efficient and transparent customs clearance procedures. Sierra Leone is making good progress in this regard. At Freetown’s airport, there is progress to be made regarding access and other areas.

⁷⁶ Institutional reform, infrastructure, access to finance, skills development, improving the business environment, and regional integration.

⁷⁷ Maintaining the value and efficiency of physical capital, using economic terminology.

⁷⁸ The “Economics of Adaptation to Climate Change” study (World Bank and others, 2009) identified improved rural roads

138. **The regional integration sections cover energy, water, transport, and fisheries.** They include proposals for enhanced efficiency in delivery of energy through greater integration in the West Africa Power Pool, as well as regional integration in other sectors, including through the Manu River Union, on water resources and ecosystems conservation, mining governance, and improved governance of regional fisheries. These programs are key elements in improving the international competitiveness of both Sierra Leone and neighboring countries, and contribute to green growth through efficiency gains and improved resource governance.

139. **Although access to water supply** is covered mostly under Pillar 3, it would be helpful for the pillar to emphasize the link between access to water, water resource management more broadly, and competitiveness. It could refer also to the irrigation agenda under Pillar 1.

140. **Infrastructure—energy:** the A4P will have a continued focus on increasing access to affordable, cheap energy, emphasizing renewables; this should be closely coordinated with the work on Sustainable Energy for All. A green growth approach would involve opportunities for development of a realistic energy mix, including both large- and small-scale hydro, solar, improved fuel wood, and bioenergy, appropriate given Sierra Leone's abundant land and water resources. Additional thermal power energy is certainly also needed given the seasonal variations in rainfall; under the A4P, the option of importing liquefied natural gas (cleaner than oil or coal) is being explored. There is also scope for efficiency gains, through reducing transmission losses, through revenue collection and sector organization, reduced losses in harvesting and processing of fuel wood and charcoal, the use of fuel-efficient cookstoves, and knowledge dissemination. All of these are now mentioned in the A4P. As part of a green growth approach, the government could include sustainable bioenergy in its energy strategy, and it could consider renewable energy development within a broader integrated sustainable land and water management approach for the country.

141. **Access to finance:** A green growth approach would focus on developing financing instruments that help overcome the barriers to green investments, in particular the lack of access to longer-term finance to support upfront investment costs and overcome the time gap between when investments are made and returns start to accrue. Often, "smart subsidies" or matching grant mechanisms may be needed, particularly for projects that may have a public good element: tree crop rehabilitation, establishment of fuel wood plantations, or sustainable land and water management investments.

142. **Improving the business environment:** Sierra Leone is making rapid progress in the World Bank's Doing Business survey, and as of 2011 was ranked 148th out of 183 countries surveyed, in the upper half of African countries.⁷⁹ It has also shown improvement in the Mo Ibrahim Governance and Accountability survey.⁸⁰ It is rated among the top 10 business environment reformers in Africa. Constraints noted in the Doing Business Survey 2009⁸¹ include poor infrastructure, corruption,⁸² a lack of skilled workers, and an underdeveloped banking system. SME development is closely linked to Pillar 1 on economic diversification. The SME support program will need to take into account the specific needs of targeted sectors, including agri-business and fisheries value chain development, tourism, and manufacturing.

79 World Development Indicators, 2011.

80 AfDB/World Bank Joint Country Assistance Strategy, 2010-2012.

81 World Development Indicators, Table 5.2, 2011.

82 With regard to corruption, Sierra Leone compares fairly well with other West African countries.

143. **A green growth approach would continue to focus on removing the barriers to private sector development while emphasizing Sierra Leone's commitment to transparency** and social and environmental sustainability.⁸³ Sierra Leone's commitment to the EITI process for mineral resources, as well as to the IFC principles of sustainability in the Addax project and respect of environmental and social safeguards for Bumbuna, illustrate that its policies regarding large-scale investment are sound. The challenges will be in implementation and in providing incentives also for small-scale investors to manage resources sustainably. More broadly, commitment to a green economy can attract reputable private-sector investments in key development sectors such as tourism, energy, agriculture, etc.

144. **Regional integration:** Sierra Leone, consistent with a green growth approach, is focusing on regional integration in a number of areas: in the power sector through the West Africa Power Pool, where there is scope for bringing down the cost of connectivity, for example through the landmark CLSG interconnection project, connecting Cote d'Ivoire, Liberia, Sierra Leone, and Guinea; in transport, where there is progress in improving access to Liberia and Guinea and in reducing border delays; through the Manu River Union, especially with regard to mining and minerals transparency; and in fisheries through the Regional Fisheries Program and cooperation with existing organizations such as CECAF (Fishery Committee for the Eastern Central Atlantic) and SRFC/CSRP (Subregional Fisheries Commission). Regional cooperation is also essential to combat illegal fishing.

145. **Other important green growth areas include reliable delivery of good-quality agricultural products** to replace imports but also to take advantage of Sierra Leone's export potential, which is important work under the natural resources pillar.

146. **One key element in competitiveness is improving telecommunications and inter-connectivity.** While Internet penetration remains very limited (only 0.3% of the population has access, according to WDI 2011), Sierra Leoneans' access to mobile phones will increase substantially by completion of a fibre-optic cable link to the country (scheduled for this year). The A4P includes proposals for further development of IT networks. Development of a variety of applications for mobile phones, including access to market information and money transfers, could help drive inclusive economic growth, overcoming traditional barriers of lack of infrastructure and access. Continuing to improve the environment for telecommunications will be an important element of a green growth strategy.

Green growth approaches under A4P would:

- *Include a strong focus on road maintenance, road safety, and construction standards that avoid causing erosion and ensure that roads are resilient to floods*
- *Focus on energy access for all, including development of a mix of energy sources (based on Sierra Leone's natural potential), while also taking advantage of efficiency gains*
- *Demonstrate that transparent green growth policies as part of an improved business environment can help attract responsible private-sector investments*
- *Support improved telecommunications and mobile phone applications adapted to local needs*
- *Expand regional integration*

83 Proving incentives for sustainable land and water management in agriculture, sustainable fisheries, and woodland management, as well as control of pollution in larger-scale investments such as mining through implementation of environmental management plans.

Pillar 5: Employment and Labor Strategy

147. **A4P focuses on employment promotion, industrial harmony, occupational health and safety, and adherence to international labor standards** by strengthening the capacity for labor administration. The private sector, including the informal sector, plays a crucial role in building an inclusive green economy; it is and will remain the principal source of employment in Sierra Leone, at present primarily through agriculture, fisheries, construction, and commerce. A green growth approach would further emphasize the informal sector, which dominates employment in Sierra Leone, and family labor.

148. **Sustainable agricultural intensification, improved fisheries management, commercialization, and value added would play a key role in green growth strategies** for Sierra Leone because agriculture and fisheries, together with artisanal mining and trade, provide the most jobs in the country. As Sierra Leone becomes more prosperous, processed products will account for an increasing share of employment and GDP.⁸⁴ Therefore, skills development in processing, commercialization, and development of a modern agricultural and fisheries sector and improved fish processing will be key. There are close connections between Pillars 5, 4, and 1.

Pillar 6: Social Protection

149. **The A4P vision states that “the Government and people of Sierra Leone aspire for a social protection system that contributes significantly to sustainable development, resilience and equitable growth to create equal opportunity for all people to improve their livelihoods and welfare”.** Social protection forms part of the resilience pillar of a green growth strategy in Sierra Leone. The section distinguishes among: (i) welfare instruments, which provide relief and sometimes recovery from deprivation; (ii) risk-insurance instruments, which seek to avert deprivation by establishing robust and accessible recovery mechanisms; and (iii) resilience-building instruments, which aim to enhance real incomes and capabilities, build assets and promote resistance.

150. **The social protection agenda has focused on rebuilding basic services** through the national social action program, including health, education, local roads, and cash for work. This has also been closely linked to the decentralization agenda. In the context of increases in international food prices, social protection programs have also supported school meals, food for work, conditional cash transfers, and longer-term investments in improving agricultural productivity (towards a productive social safety net approach).

151. **It would also be helpful to address the link between social protection and physical resilience** by combining more robust natural resources management systems, and weather and climate services, with effective social safety nets. Risk management systems should include the monitoring of food commodity prices (key in Sierra Leone, where food is such a large part of household expenditures), as well as flood, drought, and agricultural production forecasting and crop and livestock disease monitoring. It would also include development of robust hydro-meteorological monitoring systems, as well as weather and climate services delivering timely information to citizens. These systems help people cope with risks and shocks, including food and energy price shocks and climate-related economic and health shocks, through risk mitigation instruments. Programs that respond to food price increases include school feeding programs, conditional cash transfer schemes, and food-for-work programs, together with longer-term investments to enhance agricultural productivity, resilience, and incomes, including land and water management (linking with Pillar 1).

⁸⁴ In Brazil, one of the world's largest agricultural producers, farming itself accounts for only 8% of GDP (and about the same for employment), but with agro-processing, that number rises to 28% of GDP and employment. Source: “Climate-Smart Agriculture—Country Examples”, World Bank Agriculture and Rural Development Department, 2011.

152. **Improving weather and climate services is also key to physical resilience**, together with better urban land use planning to prevent building on fragile slopes and adequate attention to drainage and solid waste management. This area links also closely with Pillars 2 and 3 (natural resource management and social protection).

Proposed interventions under Pillar 6 are consistent with a green growth approach. The A4P, in addition, could usefully include:

- *Risk management programs, to build resilience to food and other commodity price fluctuations and to weather-related risks*
- *Improved weather and climate services*

Pillar 7: Governance and Public Sector Reforms

153. **Continued strengthening of capacity, governance, and accountability continue to be priorities** under the A4P. Part of the broader inclusive growth agenda, and an underlying condition for green growth, is the progress that Sierra Leone is making on broader security, justice, and human rights issues. The progress on accountability in the mining sector has been highlighted (Pillar 2). The work on strengthening decentralized agencies to ensure locally accountable service delivery continues and is also key to inclusive green growth. The A4P recognizes the challenges regarding public procurement and financial management, and is committed to continue strengthening of agencies and ministries in this regard. A green growth approach would also focus on building capacity for EITI++, as well as environmental and social impact assessment and management in key sectoral agencies as well as the EPA; the proposed Transformation Development Fund; and the work on development of transparent land use/land allocation. Provision for including environmental and social mitigation costs into standard procurement documents would be useful.

154. **The A4P discusses the need to strengthen data and information, and improve access to it across agencies.** Development of an integrated information base on natural resources including water, soils, minerals, forests, and land use is an important governance tool because it informs decision-making across sectors and can be integrated with economic and social databases. Contract documents for work financed by the Sierra Leonean authorities or by development partners could also usefully include a provision for transfer of models, data, and analysis to Sierra Leone, together with capacity building for staff of government agencies on the use of these data and models.

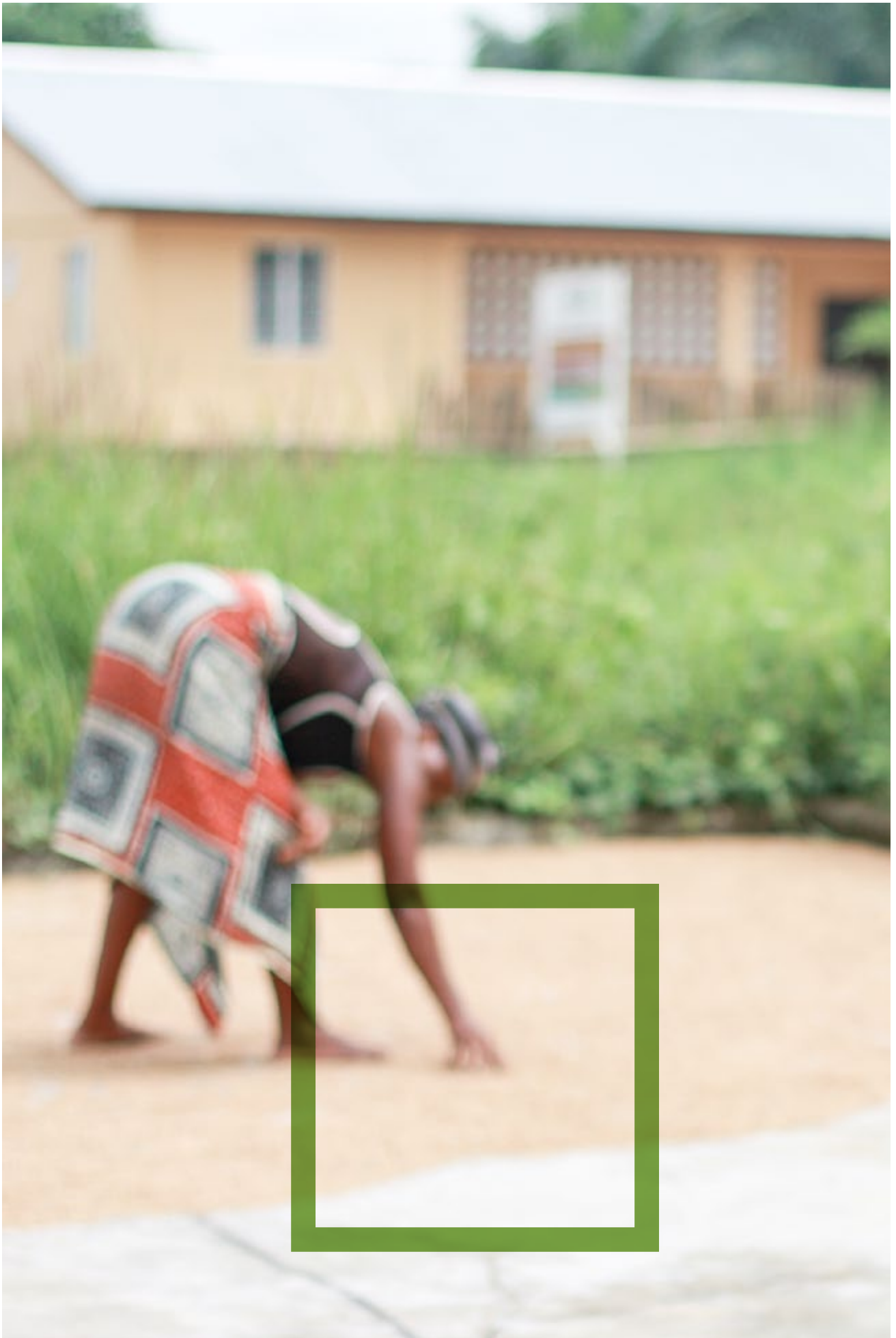
Governance and public sector reform are a key element of green growth; A4P could ensure that:

- *Governance is improved in economic, infrastructure, and natural resources sector agencies, as well as core ministries*
- *Data and information strengthening include geographical as well as social and economic databases*

Pillar 8: Gender

155. **The A4P emphasizes the cross-cutting nature of the gender dimension**, including its links with meeting the MDGs, with broader governance, transparency and human justice issues, and with inclusive economic development. The A4P focuses on five areas: strengthening the capacity of the gender directorate of the Ministry of Social Welfare, Gender and Children; continued policy and legal review and adjustment; compliance with international and regional instruments regarding women's rights; gender-responsive budgeting and accountability; and promotion of women's participation in governance at all levels. Pillar 8 has a proposed program on renewable energy that should also reflect Pillar 4. More broadly, it might be helpful if Pillar 8 mentioned the gender aspects of some other infrastructure and human development programs, such as WASH (Water, Sanitation and Hygiene for All), that are addressed through other pillars.

156. **The AfDB is also supporting the A4P** through in-depth work on mainstreaming gender issues. As part of this exercise, gender considerations have been integrated into the other seven pillars, while also being specifically detailed in Pillar 8.



V.

MOVING TOWARDS
IMPLEMENTATION





V. MOVING TOWARDS IMPLEMENTATION

Green Growth Vision for Sierra Leone

157. **The government is committed to inclusive green growth under the Agenda for Prosperity. A definition of what green growth means in the context of Sierra Leone** was elaborated during the scoping mission that was organized in early September 2012, on the basis of discussions held with various stakeholders.

158. For Sierra Leone, green growth means developing infrastructure, energy, and cities sustainably, **managing renewable and non-renewable natural resources efficiently, and building resilience** for the benefit of its citizens. Together with an emphasis on inclusiveness, green growth requires pursuing a cross-sectoral approach to growth through policies, programs, and projects that are economically, environmentally, and socially sustainable.

159. **Green growth values natural, human, social and physical capital as sources of growth and seeks to manage natural resources for the benefits of future as well as present generations.** It also focuses on innovation, efficiency, and resilience. Under the A4P, green growth focuses on the actions that are needed in the next five years to facilitate longer-term sustainable and inclusive growth.

Conditions for Efficient Implementation of Green Growth Policies and Interventions

160. **Sierra Leone, through the Agenda for Change and the Agenda for Prosperity,** has already embarked on a development strategy consistent with many of the elements of a green growth approach. The following paragraphs discuss in a little more detail the conditions for efficient implementation of such an approach.⁸⁵

Strong Political Buy-in and Clear Institutional Arrangements

161. **Strong high-level political commitment and leadership is needed** to facilitate the preparation and implementation of the green growth policies and interventions, and to ensure the process is not captured by vested interests or taken over by other items in the political/policy agenda. Involvement of the president and prime minister with full technical backup from leading ministries/agencies is crucial.

162. **There is a need for “champions” to move the approach forward and fully mainstream it into the broad policy framework.** A change in process involving cross-sectoral collaboration requires a critical mass of people with the ability to understand the vision, communicate with various stakeholders, and use technical expertise to design, appraise, apply and adjust the policy solutions. It is important that these people also act as a “network of champions” for green growth.

⁸⁵ The UNEP 2011 Green Economy Report places enabling conditions into five categories: governance, finance, markets, infrastructure, information.

163. **Some steps, like the definition of the vision and the objectives/expected outcomes, require broad consultations with national stakeholders** (including civil society, private sector, development partners, municipalities, advocacy networks etc.). In the case of Sierra Leone, a national workshop has been held to inform national stakeholders, share views, and contribute to a common understanding of what green growth can be in the country.

Good Governance

164. **Sierra Leone is committed to strengthened, transparent public institutions, decentralization, and an accountable judiciary and police. These are key building blocks for green growth.** Additional enabling conditions, which are proposed under A4P, include:

- Clarity in land tenure and land rights;
- An integrated, participatory, multi-purpose approach to land use planning, with a clear regulatory framework, including coastal zone management;
- An integrated approach towards water resource management and river basin planning;
- A clear regulatory framework for environmental and social impact assessments, with enforcing legislation for implementation of management plans;
- Strengthened public procurement (SPP): Given the importance of procurement in infrastructure development, some countries have committed to sustainable public procurement processes;⁸⁶
- Improved, publicly available social, economic, geographic, and environmental data and information bases to inform decision-making and transparent governance across sectors.

Catalyzing Finance

165. **Public investment finance and development finance** can be included in the sectoral development plans proposed under the A4P and incorporated into detailed annual public expenditure plans and budgets. It is critical that the national budget be prepared in line with a green growth approach, focusing on efficiency gains and mobilization of adequate financing. Creating an enabling environment for green growth private-sector investment is also key, but this is dependent largely on governance and enabling regulatory frameworks. Sierra Leone does not have the price distortions faced by some other countries (eg, fossil fuel subsidies like those in Nigeria); these generally favor better-off people and encourage wasteful consumption.⁸⁷ Designing support measures (incentives through investment support) that overcome the barriers between short-term costs and longer-term gains, or the externalities that often constrain implementation of green growth policies, will be important. The earlier section discussed financing tools, sources, and options in more detail.

166. **Agreement on royalty pricing and taxation for mineral concessions also offers great potential for generation of revenues to finance broader inclusive green growth** in Sierra Leone. There is agreement on EITI ++ approaches, and Sierra Leone is benefiting from technical assistance with regard to establishment of the Development Transformation Fund. Other financing tools include natural resource pricing, user charges and cost recovery, pollution taxes, and payment for environmental services(PES).⁸⁸

86 SPP is most commonly defined as “a process whereby organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organization but also to society and the economy, whilst minimizing damage to the environment” (definition of the UK Task Force on SPP, adopted by the Marrakech Task Force on SPP).

87 Subsidies may have a role in “jump-starting” higher productivity, especially among poorer consumers; in Kenya, for example, small farmers receive a limited fertilizer subsidy.

88 PES are defined as “a voluntary, conditional agreement between at least one “seller” and one “buyer” over a well-defined environmental service—or a land use presumed to produce that service”. By providing compensation to the stewards of an environmental service, they can strengthen the ecosystem service provisions at different scales. Some financing instruments may also be complex to administer. “Payment for ecosystem services”, where, for example, a municipality pays land users in a watershed upstream to maintain tree cover and hence reliable, good-quality water flows, requires a number of institutional and regulatory features to be well established to work. PES schemes may be complex to administer in low-capacity countries.

167. **New investors such as the BRICS⁸⁹ countries can have a significant role to play in the financing and implementation of green growth interventions.** Sierra Leone is among the top ten China-Africa “investment and contract” destinations, with total cumulative investment of USD 4.73 billion since 2005.⁹⁰ Such investments should be aligned with the green growth approach that is reflected in the A4P. The GoSL may envision dedicated advocacy to ensure that all investors support the implementation of sustainable development in Sierra Leone.

Information and Analytical Tools

168. **Appropriate analytical tools can facilitate decision-making for green growth approaches.**⁹¹ These tools may include, for instance:

- Assessment of the economic costs of environmental degradation: Work in Ghana referred to earlier estimated these costs at 9% of GDP annually, primarily from poor water and sanitation, forest and land degradation, and land and water pollution from mining; this work facilitated some major policy and program reforms in these sectors.
- Strategic social and environmental impact assessment: Work on the regional impacts of mining in the Manu River countries facilitated greater cooperation on these issues.
- Project cost benefit analysis: using the tools of environmental economics to assess comprehensively the costs and benefits of particular investments, and ensure that environmental mitigation costs are included in total cost calculations.
- Green accounting, which extends national accounts to include the value of the depletion and restoration of natural assets and signals indicates whether well-being can be sustained into the future. Negative net saving indicates that it cannot, because the assets that support well-being are being depleted. This approach is being piloted in Botswana and Madagascar as well as countries in other regions.⁹² The approach requires solid national accounting frameworks and reliable social, economic, and natural-resource inventories and monitoring; these databases are being strengthened under the A4P.
- Public environmental expenditure review, which includes analysis of expenditures against policy targets and highlights mismatches and potential for realignment; such an analysis may be premature at this time.
- Spatial information systems that link geographical, natural resources, economic, and social data to facilitate integrated decision-making processes; the intention is to strengthen this under the A4P.
- Improved hydro-meteorological information systems, including provision of timely, relevant weather and climate services to end users. This is a priority for Sierra Leone.
- Assessment of the labor-market implications of different policies, including the implications of formalization.

⁸⁹ Brazil, Russia, India, China, and South Africa.

⁹⁰ Le Monde, 25 March 2013.

⁹¹ These paragraphs also draw from the Green Growth Policy Toolkit, AfDB and others, paper for G20 meeting in May 2012. The paper included a range of analytical tools and policy approaches, several of which could be useful for Sierra Leone.

⁹² The earlier sections referred to the WAVES (Wealth Accounting and Valuation of Ecosystem Services) initiative.

Mobilizing the Private Sector and Providing Incentives for Market Development

169. **For Sierra Leone, the priority is to develop domestic and eventually export markets for locally produced commodities.** Some countries have also taken the opportunity of emerging markets, especially in OECD countries, for development of products that are certified as sustainable.⁹³ Some countries have adopted green innovation and industrial policies, encouraging innovation or supporting specific technologies. They include industry-specific research and development subsidies, capital subsidies, and tax breaks; feed-in tariffs; and import protection. For Sierra Leone, the priorities may include, among other sectors, support for renewable energy, including improved cook-stoves and energy generation.

Improved Communications to Build a Common Understanding

170. **Green growth is not an easy concept to grasp; hence, the GoSL should undertake dedicated communication activities to ensure that there is a clear and common understanding** of what the concept covers, and how it translates concretely in Sierra Leone. A Green Growth Communication Strategy was prepared (Annex 2) that suggests the following activities: (i) a series of workshops to raise awareness at all levels of government; (ii) a series of three training seminars on green growth for local journalists; (iii) dedicated meetings with private-sector representatives, since the role of the private sector will be crucial for successful implementation; (iv) building a network of “champions” who will be able to transmit green growth messages and lend support from an indigenous, nonpartisan point of view; (v) using artistic media to reach the general public—a local musician and/or songwriter could be approached to produce a song on the theme of green growth to be recorded and broadcast on one or several local radio stations, or a play on the theme could be commissioned; and (vi) building the communication capacity of the AfDB field office with a full, comprehensive course of communication training. The objective of such activities will be to make national stakeholders understand the value added of green growth for Sierra Leone’s development, and to support efficient implementation of the proposed green growth interventions.

Options for Financing Green Growth in Sierra Leone

171. **Global analysis suggests that green growth paths are not necessarily more expensive than “business-as-usual” growth paths.** The priorities, therefore, are to reorient expenditure towards green growth objectives, and to develop financing tools and policies that support the up-front transition costs and send the right signals to the private sector. But for Sierra Leone and some other low-income countries, the options may be more limited.

93 Environmental certification can increase the market value and share for farmers and producers, while helping long-term resource sustainability. Acting as information systems for consumers, certification schemes include: (i) multi-stakeholder agreement on what constitutes best/acceptable practice in a set of standards; (ii) auditing processes to assess compliance; (iii) sustainable source tracking process; (iv) product labeling. They can be complex to develop and administer.

Reorienting Public Expenditure Towards Green Investment and Avoiding Environmentally Harmful Subsidies

172. **A comprehensive study by UNEP estimates the global costs and benefits of moving towards green growth paths in different economic sectors.**⁹⁴ In the agricultural sector, for example, while globally subsidies to the sector total USD 350 billion per year, the aggregate cost of investments and policy interventions for a green growth path for agriculture would be USD 198 billion per year. Similarly, fossil fuel energy subsidies are currently estimated at USD 455-485 billion per year and water subsidies are USD 200-300 billion per year.⁹⁵ There is thus ample scope for greening agriculture, investing in renewable energy, improving demand management, and increasing efficiency in the energy and water sectors while reducing (often environmentally harmful) subsidies, at negative or little net public cost.

173. **In Sierra Leone, there are few direct environmentally harmful subsidies.** The priority for both water and electricity is improving access, although there are challenges in achieving cost recovery in both sectors. But there is still scope for efficiency gains (in reducing transmission losses or unaccounted for water) that could then reduce the cost of expanding access. In agriculture, there is scope for greater focus on sustainable land and water management, to ensure the sustainability of productivity increases. Rwanda's green growth strategy, for example, includes a focus on sustainable land and water management and food security, renewable energy production and energy security, and increased resilience, with domestic and development partner investment support focused on these priorities.

174. **The opportunity for “greening” sectoral investments in the A4P pillars** has been discussed in some detail in the previous sections. Tools to facilitate greening would include incorporation of environmental and social management plans in project design and project costs, green procurement, and comprehensive cost-benefit analysis that incorporates the costs of natural capital depletion (and the benefits of restoration) or impact on human health into decision-making processes. There is an opportunity to use these approaches in detailed design of programs under the A4P. With up to 40% of the budget financed externally, there is also scope to ensure that development partners follow green investment principles.

Creating an Enabling Environment for Green Private Investment

175. **Much of the growth in Sierra Leone will be private-sector-driven.** Key investments are ongoing in mining, hydroelectric energy, and bioenergy generation. Sierra Leone can build on recent experience to ensure the “greening” of these and future private investments through a variety of measures. The Addax bioenergy program has included a variety of social and environmental management programs, and, importantly, has also included support for food production, key to food security in Sierra Leone. The Bumbuna hydroelectric program has included, in addition to social and environmental mitigation measures, a biodiversity offset. And there is scope for “feed-in” tariffs to support renewable energy. With the right regulatory framework, mining investments can include similar provisions for community support and environmental offsets. The proposed Transformational Development Fund can also ensure that royalties are used for long-term development and poverty reduction.

94 “Towards a Green Economy”, UNEP, December 2011.

95 Inclusive Green Growth”, World Bank, 2012.

176. **There is scope also for supporting small-scale green private investment.** Investments in agriculture and food processing are largely private sector-driven, and can be “greened” with targeted support for sustainable land and water management, research into resilient technologies and reduction of food waste. There is also scope through “green microfinance,” which is not well developed in Sierra Leone. While there are risks in microfinance, it can support small-scale green investments in all sectors; such programs have been successfully supported in other low-income countries such as Nepal.

Using Innovative Financing Tools

177. **A range of innovative financing instruments have been developed to support green investments,** including PES. These tools require fairly well-developed regulatory, transfer payment, and monitoring mechanisms, which are not yet in place in Sierra Leone. There is scope, however, for piloting and innovation. The EU-supported program for protection of the watersheds to the west of Freetown, for example, will help protect the capital city’s water sources, though not through a formal PES, and the Bumbuna biodiversity offset creates a precedent that can be used in examining the potential of aggregating finance from these offsets.

Using Trust Funds to Support Green Growth Interventions and Capacity Building

178. **A number of dedicated grant mechanisms have been established that Sierra Leone can mobilize.** These include the Global Agriculture and Food Security Program; the Africa Fertilizer Financing mechanism; African Water Facility; the Climate Investment Funds (see also paragraph below); the ClimDev-Africa Special Fund, which supports improved weather and climate systems; the Fund for African Private Sector Assistance; the NEPAD (New Economic Partnership for Africa’s Development) infrastructure project preparation facility (IPPF); the Rural Water and Sanitation Financing Facility; the EU-Africa Infrastructure Trust Fund;⁹⁶ and the Sustainable Energy Fund for Africa.⁹⁷ Sierra Leone is also a candidate country for funding from the Millennium Challenge Corporation, which can be used to support development in a range of areas, including infrastructure development, water and sanitation, and land registration/administration. Sierra Leone could seek to leverage these funds for green growth interventions through ensuring that the regulatory frameworks are in place for “green growth-oriented” program design, with support of the AfDB and other partners.

Using Financing Mechanisms for Global Public Goods

179. **The Global Environment Facility support investments in biodiversity, improved management of international waters, climate change** mitigation, and sustainable land management. Sierra Leone benefits from such funds and could increase the amount of financing for targeted projects, with support from the AfDB, the World Bank, and the UN agencies.

180. **Carbon finance has supported pilot investments in energy efficiency, renewables and reforestation in a number of countries.** Though some difficulties exist, Sierra Leone could tap into such funds when relevant. And building on the experience of the Climate Investment Funds in climate resilience, clean technologies for climate change mitigation, forest conservation to reduce emissions, and renewable energy, the Green Climate Fund will, when it becomes operational, offer scaled-up support for climate resilience and low-carbon growth.

181. **The key for Sierra Leone will be to develop the capacity to utilize these sources of funding and to blend them with national development partners and private-sector finance.**

96 The EU ITF, for example, approved in September the AfDB’s request for a direct grant of EUR 10 million for rural electrification in Sierra Leone along the CLSG transmission line route.

97 “Facilitating Green Growth in Africa”, Perspectives from the African Development Bank, June 2012.

Proposed Follow-Up Activities

182. **This report represents the first step taken by Sierra Leone to engage on a green growth pathway**, through identifying key development challenges and opportunities. National stakeholders have validated the report. On the basis on the findings of this report, these follow-up steps are proposed:

- Further mainstreaming green growth in the A4P (including its results framework), according to the needs identified by the government, and ensure that appropriate policies and actions are adequately budgeted.
- Explore the need for a more in-depth analysis of green growth options in a few key sectors, such as natural resources management, agriculture, mining and energy.
- Share lessons learned with other African countries on green growth transitions, and promote the Sierra Leone experience to attract new financing for implementation.
- Implement the knowledge management and communications strategy prepared for Green Growth in Sierra Leone, explaining simply the content and value added of green growth policies, with messages adapted to different audiences.

CONCLUDING REMARKS

183. **Sierra Leone, through the Agenda for Change and now the Agenda for Prosperity, has embarked on a development strategy consistent with many of the elements of a green growth approach.** Sound economic growth policies are a building block for inclusive green growth policies, and the focus on improving decentralized services, transparent governance, accountability, procurement, and financial management are all key.

184. **An additional focus on linking** development of energy, transport, mining and minerals, agriculture, fisheries, forests, manufacturing, tourism, and urbanization with an integrated approach to land, water, and forest management would ensure that Sierra Leone's rich natural capital is sustained as it embarks on an inclusive green growth path.

185. **Building a sound geographical and natural resources knowledge base** and linking it with strengthened economic and social databases will help decision-making. An additional focus on resilience, land-use planning and infrastructure development decisions, building sound hydro-meteorological services, and environmental health will help citizens in both urban and rural areas against floods, droughts, and disease.

186. **As the government moves forward with the finalization of the A4P, the AfDB and other partners may continue to support the development and operationalization of a green growth approach** in Sierra Leone. Further discussions will take place in the coming weeks to come up with key operational activities/interventions that promote the transition towards a green economy.



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Annex 1: “Mapping” of Green-Growth-Related Policies in Sierra Leone

Sector	Policy available			Comment
	Yes	No	Under development	
Agriculture Ministry of Agriculture, Food Security and Forests	✓			National Sustainable Agricultural Development Plan 2010-2030 and Agriculture Sector Five-Year Vision 2012-2017. Clear policy on commercialization and intensification; greater links with sustainable land and water management and woodland management in rain-fed areas would be beneficial.
Forestry Ministry of Agriculture, Food Security and Forests			✓	Policy framework under early development. Need to clarify scope, include community woodlands, link with broader landscape management and sustainable fuel-wood and charcoal production.
Fisheries Ministry of Marine Resources and Fisheries	✓			Strong policy. Fisheries and Aquaculture Bill (2011) linking with coastal zone and mangrove protection is important, as well as a focus on value added.
Minerals and Mines Ministry of Mining and Minerals	✓			Comprehensive policy; 2009 Mining and Minerals Act covers artisanal, small-scale and large-scale mining. Committed to EITI++. Makes provisions for environmental impact assessments and licensing. Minerals Transformation Fund under consideration.
Water and Sanitation Ministry of Energy, Local Authorities, Ministry of Health and Sanitation, local water companies	✓			National Water and Sanitation Policy (2011). Strong focus on decentralized provision of services for smaller towns and rural areas. Companies for larger towns. Peri-urban sanitation falls through the cracks, and collection of user fees still difficult.
Water Resources Ministry of Water resources		✓		Integrated water resource management envisaged under the A4P.
Solid Waste Local authorities and companies		✓		Essential need. Important also for disaster risk management. Different systems in place; mostly inadequate.
Land Use Planning Ministry of Lands, Country Planning and Environment Construction permits issued by Ministry of Works, Housing and Infrastructure			✓	Multi-sectoral approach to land use planning under consideration coordinated by Ministry of Lands, Country Planning and Environment, together with land market development and land registration/land rights. Land use planning is also supported in Freetown.

Sector	Policy available			Comment
	Yes	No	Under development	
Energy Ministry of Energy			✓	Draft Energy Strategy (2012) focuses on enhancing affordable energy access with strong focus on renewables, especially hydro, as part of the energy mix. Additional focus on sustainable fuel wood and charcoal needed, together with loss reduction and increased capacity in electricity transmission and distribution.
Decentralized Government Service Delivery Ministry of Local Government and Rural Development	✓			2004 Decentralization Law has a strong focus on decentralized government with inter-governmental fiscal transfers, health, education, sanitation, local infrastructure, social protection. Capacity building ongoing.
Tourism Ministry of Tourism			✓	Draft policy under preparation; important to coordinate with other agencies especially regarding maintenance of natural beauty; provision of adequate water; sewage treatment and solid waste management; ecotourism; and coastal zone management.
Environmental Protection Environmental Protection Agency	✓			2008 Environmental Protection Act is comprehensive: building up capacity at local level is the challenge, as well as capacity building in sectoral ministries.
Disaster Risk Management Office of National Security			✓	Are linkages between water and sanitation, drainage, solid waste, and health recognized?
Climate Change National Climate Change Secretariat under EPA			✓	Sierra Leone NAPA (2009). National Climate Change Secretariat under the EPA is not yet functional; series of strategic documents prepared.
Social Protection Social Protection Coordinating Committee	✓			Policy framework on Social Protection (2009). Stronger emphasis on productive safety nets, physical (eg, to weather shocks) and economic resilience (eg, to food price shocks) may be beneficial.
Health Ministry of Health and Sanitation	✓			Health Sector Strategic Plan 2010-2015, for delivery of essential health services. Comprehensive (budget and capacity constraints) but links with physical resilience building and disaster risk management could be strengthened.
Gender Ministry of Social Welfare, Gender and Children's Affairs Office of Gender Coordination under the president	✓			2010 Gender Strategic Plan. New targets being set under the A4P.
Education Ministry of Education	✓			Important to get the skills for economic diversification in a green growth context, creating employment opportunities.

Sector	Policy available			Comment
	Yes	No	Under development	
Transport Ministry of Works, Housing and Infrastructure; Ministry of Transport and Aviation	✓			Strong focus on road-building at all levels; Road Fund being established through the Road Maintenance Fund Administration Act, dated April 2010; efforts to improve contracting and provide youth employment. Need greater emphasis on maintenance, road safety, and urban traffic management, as well as considering tradeoffs between greater initial investment costs and lower maintenance costs; plans to control quarrying and beach erosion.

Note: With regard to institutions, the table only mentions the responsible ministries. In most sectors, agencies have been established for implementation of sector policy, and some important functions are contracted to the private sector (eg, ports management, water supply, energy).

Annex 2: Communications for Green Growth in Sierra Leone

[Extracts from the “Green Growth Communication and Knowledge Management Strategy”, AfDB, March 2013]

Current Situation

With significant input from the African Development Bank’s green growth teams, the government of Sierra Leone is integrating green growth into its forthcoming poverty reduction strategy paper (PRSP), locally known as the Agenda for Prosperity (A4P). The government has set up an inter-ministerial coordinating committee for the PRSP and has allowed direct access to the committee for AfDB personnel, both from the field office and from the Temporary Relocation Agency in Tunis. The result is a full commitment from the government to mainstreaming green growth in the formulation of the A4P, with continuous consultation with the Bank’s staff. At every stage of the inter-ministerial consultation process and in every draft of the document, the Bank has had the opportunity to introduce green growth principles. A local and an international consultant have continuously been able to analyze new drafts and to reemphasize green growth principles at every stage. The government of Sierra Leone is publicly and consistently committed to green growth. This places Sierra Leone at the forefront of synergies between the Bank’s green growth policies and national policy making. There is no current green growth action plan, this having been deemed unnecessary, given the level of deep involvement with the national policymaking environment. However, there is some support for a separate document outlining the basic principles of green growth and how they might be integrated into national development planning.

Sierra Leone’s government and President Koroma have made it abundantly clear that, following the war that left the country in ruins and which was rooted in the rampant exploitation of mineral deposits, it was imperative to implement a new approach to development that recognized the need to invest for the future on the basis of non-renewable resources currently available. The trauma of the war made clear the absolute necessity of a new, sustainable approach to the country’s development. Such an approach could not be based on growth for growth’s sake, but on a new paradigm that matched green growth. Hence, after receiving a request from the government for providing technical assistance in mainstreaming green growth into the PRSP, the AfDB considered Sierra Leone as a near-perfect opportunity for development based on the principles of green growth.

The “lead” ministry for the PRSP and, thus, for integrating green growth into the national development policy, is the powerful Ministry of Finance and Economic Development. Despite a cabinet reshuffle during 2012 and national elections held in November 2012, the government’s commitment to green growth remains strong. Sierra Leone has not made it an “environmental” issue; rather, by mainstreaming the concept in the PRSP, it has made it a central plank of national policy, rather than the concern of a particular ministry or even of a particular administration. Numerous interventions from the Bank have strengthened relations to the point where regular and informal contacts between Bank staff and senior officials have become the norm, serving to maintain the impetus towards making green growth the underlying principle behind national development policy. Local Bank staff have been deeply involved in establishing trust and cooperation with the national authorities and have direct access to key ministry officials.

The close relationship with government is only partially mirrored in contacts with the civil society organizations (CSOs) active in Sierra Leone. Indeed, despite the best intentions, on issues surrounding green growth the relationship with CSOs is somewhat tenuous. This is partly because of the perennial problem of a lack of understanding among the CSO community of the full meaning of green growth. In fact, there is little hostility to the concept among CSOs—because there is little understanding of what it means. CSO representatives were surprised to learn, during a meeting organized by the Field Office, that green growth encompasses all aspects of government activity. Local CSOs seemed mollified by the references to integrated development and to the links between, for example, governance issues and gender equality. They were surprised by the statement that “there is no such thing as single-issue politics in green growth” and sought further clarification. The entire concept seemed new to them. International CSOs, on the contrary, were initially suspicious, thinking that green growth “robbed” them of visibility, since their concerns would be subsumed under the general mantle of “integrated policy”.

The media in Sierra Leone are seriously underdeveloped. The country has a plethora of poor-quality, usually partisan newspapers, and journalists are unsophisticated, untrained, and generally see their roles as “combative”. It is crucial that green growth should not be seen as something belonging to the current governing party, but as a national development strategy. Journalists expressed surprise that it could be a nonpartisan issue, since their understanding of the concept was superficial to say the least. When the concept was outlined to them, however, their attitude changed and they expressed great interest in learning more. Indeed, national television subsequently broadcasted an interview on the subject, as did two local radio stations. There is clearly interest in offering media audiences in Sierra Leone more information on green growth.

Local field office staff in Freetown are enthusiastic and committed to the AfDB’s green growth strategy and are eager to play a more significant role in widening local knowledge of the concept. As in Mozambique, however, local staff do not have training in communication and are somewhat hesitant about talking to the media on green growth and, indeed, on other issues related to the Bank’s policies and activities in the country. This is unfortunate, since local staff have established extremely good relations with government and senior civil servants, giving them privileged access to key players perfectly placed to support continued mainstreaming of green growth into Sierra Leone government policies. Local staff have been central to the Bank’s cooperation with the government in mainstreaming green growth specifically into the PRSP; they have provided valuable assistance to officials and consultants from headquarters; and they have remained in constant contact with the PRSP process, which would have been impossible from Tunis.

Recommendations for Better Communicating on Green Growth in Sierra Leone

There is already a strong commitment on the part of the government to mainstream green growth into public policy. This is demonstrated by the concept’s inclusion in the PRSP and the participation of the Bank in the formulation of that document. The local field office is fully involved in the PRSP process and has good contacts at the government and CSO levels. Officials from the field office recognise the need for enhanced communication on green growth and see themselves working in synchronization with the government on this. However, there is little contact with local media, and awareness of green growth outside the lead ministry and other officials directly involved with the PRSP is slight or nonexistent. There had been no communications training at the field office prior to the mission on which this report is based. The Bank, however, is well-known in the country due, in part, to its public association with certain key development projects, such as the Lungi-Port Loko road and a number of agricultural and fisheries projects.

Target Audiences

Government officials, including some of those directly involved in the PRSP process, openly admit that they have some difficulty understanding the full extent of the implications of green growth. Indeed, a perverse effect of AfDB staff's close involvement in the preparation of the PRSP is the dependence on them that has evolved to take the lead in mainstreaming green growth. This is unfortunate, especially since local officials are the first source of information on likely outcomes and current case studies. It is imperative, therefore, that local government officials should be the immediate focus of an information and communication strategy. By the same token, and because their collaboration would be important for the implementation of green growth strategies, provincial officials should also be targeted and encouraged to distribute information on the concept to other bodies in their areas, such as traditional leadership figures.

As mentioned, the national and international media in Freetown and the provinces lacks any structured awareness of green growth, but when offered information, journalists in Freetown were intrigued and asked for interviews. The local field office, however, does not have a contact list of local journalists and has no way of keeping in regular contact with them. There is no culture of media relations, so the source is largely untapped. This could lead to distortion and misunderstandings not only of green growth, but of the Bank's activities in supporting the government's policy initiatives in this area. Improving media relations is, therefore, a key priority for the communication strategy in Sierra Leone, as in Mozambique.

Private-sector actors are also deficient in their knowledge of green growth and its place in the government's development strategy. Sierra Leone is the location of several large-scale mining operations. It is also home to artisanal miners operating in barely regulated conditions. Meanwhile, the government is attempting to stimulate the local private sector and is examining ways in which small and medium-sized enterprises can be extended and supported. It is essential that the entire range of private-sector actors be included in a green growth strategy, especially since their operations—large and small—are likely to have effects on the environment, the acquisition of skills and capacities, investment, and local development. The local private sector needs to be turned into an ally in the struggle to implement green growth strategies; its opposition would be a serious impediment, even leading to further cleavages in a society that is still trying to recover from 10 years of war.

Sierra Leone lacks green growth “champions”. This is to be expected given the general lack of awareness, but it is a deficit that can leave the field of discourse open to manipulation by vested interests acting from economic or political motives. In the absence of a government green growth communications policy, and where the media are poorly resourced and largely ignorant of the concept, vested interests could easily “capture” the debate and militate against the strategy. The idea of establishing a group of personalities to act as green growth “champions” is to form an indigenous constituency ready to defend green growth from a non-partisan position more likely to be seen as credible by the general public. Individuals susceptible to green growth messages need, therefore, to be identified and brought into the communications strategy. These individuals may come from the private sector, community groups, and local CSOs.

Support from international CSOs for green growth in Sierra Leone needs to be extended to others in the civil society and donor community. If the government is to be able to mainstream green growth in the PRSP and beyond, it can only do so by an integrated approach to policymaking, which implies the involvement of all those actors involved in every sphere of economic and social endeavor.

Sierra Leone is still recovering from the ruptures in society caused by the war that ended in 2002. It is now a democratic society in which political parties compete for votes and influence and in which public opinion is an important factor in policymaking. It is a highly competitive political system but, as the

November 2012 election demonstrated, a largely peaceful democracy. It is essential that the current government's commitment to green growth not be perceived as meaning that it is a partisan issue. A number of factors can influence public opinion, but cultural institutions, the media, and the actions of high-profile personalities play important roles. Any communications strategy must, therefore, include raising awareness among the general population.

Vectors, Tools and Channels

It is important to remember that Sierra Leone is at the first stage of the three-link communication chain—awareness, understanding, action—when it comes to green growth. Hence, raising awareness at all levels of government is the necessary first step. It is most important that the government be associated with this awareness-raising, and that the Ministry of Information and Communications should be invited to take part.

- **Recommendation 1:** A series of workshops should be organized to include senior civil servants from as many ministries as possible in Freetown. These meetings should be sufficiently structured to include an introduction to the green growth concept, its place in the PRSP process, and the likely impact on individual ministerial policies. A parallel set of workshops should ideally be held in provincial centers with local officials. If traveling to the provinces is unfeasible, these meetings could be held in Freetown.

As noted, the **media** in Sierra Leone are poorly trained. They also lack basic resources and often operate on a sharply partisan basis. However, radio is widely listened to, with music programming the most popular. Television is limited for most of the population to the Sierra Leone Broadcasting Service (SLBS) and ABC Television-Africa. Estimates put television reception reaching as few as 10% of the population, while radio covers almost 75%. Print media operate mainly in Freetown, often using outdated printing methods and with unpredictable publication schedules. Though the AfDB mission organized in February 2013 generated interest among journalists, globally, none of the media currently shows any interest in green growth, though there is some focus on the PRSP.

- **Recommendation 2:** The Sierra Leone field office should immediately create a contact database of media and journalists based in the country. A series of three training seminars—"What is green growth?" "What does it mean for Sierra Leone?" and "What part can the media play in implementing green growth in Sierra Leone?"—should be organized in Freetown, beginning with a slideshow presentation and supplemented with a short, simple information brochure for participants. The final session should end with a press lunch, hosted by the field office, as an added incentive for journalists to participate. Local and visiting Bank officials should make themselves available for interviews in the local media.

Overcoming any reluctance to support green growth from the private sector will be crucial for successful implementation. Besides the very large informal sector, the country is host to some very large multinational corporations in the extractive industries. Their contact with the government is generally cordial, but sometimes involves conflict when, for example, large corporations fail to implement environmental and social regulations. In addition, the resources the large mining interests bring to the country could be used to expand infrastructure for the benefit of local populations. Thus, aside from the direct impact of their operations on the environment, the large corporations are as much in a position to provide overwhelming support to green growth as they are to frustrate it. Private-sector actors at all levels, from small informal-sector actors to the large mining firms, respond to hard economic arguments. Arguments in favor of a green growth strategy, therefore, must be based on rational, economic arguments, rather than altruism or some vague "national interest".

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- **Recommendation 3:** Organizations such as the Sierra Leone Chamber of Commerce, Industry and Agriculture (SLCCIA) should be invited to submit written comments on green growth to the Bank's local field office. On the basis of these comments, a meeting should be jointly organized by the field office and the SLCCIA to include local business leaders in the discussion of the concept. The meeting will essentially be about dispelling misconceptions about green growth as a constraint on business and will include information about the government's strategic objectives. It is, therefore, important that the meeting should be organized in full cooperation with the government.

Outside the Sierra Leone government and the AfDB, it is important to mobilize prominent personalities in support of green growth. These personalities should be drawn from as many sectors of society as possible, including academics, business leaders, cultural leaders, labor and political leaders, artists, and representatives from religious and sporting groups. This core of "champions" will be able to transmit green growth messages and lend support from an indigenous, nonpartisan point of view. At the moment, prominent personalities tend to be focused only on their particular domains of action, operate independently and are not coalesced around a single issue. Yet for a number of reasons, they are likely to be well disposed to green growth.

- **Recommendation 4:** The field office should draw up, in cooperation with the government, a list of people held in high regard by Sierra Leonean society. From this overall list, a group should be selected for a luncheon seminar, hosted by the field office and attended by a member of the AfDB team, to encourage them to become public supporters of green growth. Given the extreme significance of religion in Sierra Leone, the core group should include both Christian and Muslim representatives. It should be emphasized that the support that is being requested in no way implies political allegiance or a surrendering of independence on the part of the "champions", who may or may not see themselves as part of a structured team.

Reaching the general public with an idea as complex as green growth was never going to be a simple affair, especially since most people in Sierra Leone are struggling merely to survive. However, their support is critical and there are many ways in which individual members of society can contribute to the implementation of green growth (by, for example, responsibly disposing of household waste). We have seen, however, that radio, particularly cultural radio, has great influence; religion is also very powerful in people's lives. Tapping into these sources of information may present a way of broadcasting messages in support of green growth to the overall population. In these circumstances, an innovative approach to communication may be called for.

- **Recommendation 5:** A local musician and/or songwriter could be approached to produce a song on the theme of green growth to be recorded and broadcast on one or several of the local radios. Such a song would convey simplified messages connected with the idea; it should be adapted to local musical tastes, be upbeat, and preferably be written in creole. Thought could also be given to the organization of a competition in which local radio listeners would be invited to submit an essay, a song, or a poem on the topic, with the winner to be decided by a panel of judges including the resident representative of the Bank. The prize would be a laptop computer. Another possibility is the commission of a play on the green growth theme. Finally, religious leaders could be persuaded to mark a “Green Growth Day,” on which people would be encouraged to think about the concept.

All the above recommendations imply the participation of the Sierra Leone field office. Clearly, the local office does not have the capacity to carry out all the initiatives listed alone and additional help will be required. Some of this could come from Tunis and/or consultants, but another or additional option is to contract a specialized local agency to assist with the work. In any case, local staff need to be trained in communication to enable them to participate fully in the green growth communication strategy.

- **Recommendation 6:** a full, comprehensive course of communication training for Sierra Leone field office staff should be initiated as soon as possible. As part of her or his contract, the specialist hired for the training should seek out and select a potential local communications agency to assist with the continuing work of the communications strategy. The same consultant should be required to provide professional assistance with the other strands of the Sierra Leone green growth communication strategy, as listed above.

GREEN GROWTH SIERRA LEONE

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The AfDB is a multilateral development bank whose shareholders include 54 African countries and 27 non-African countries. The AfDB Group's primary objective is to contribute to the sustainable economic development and social progress of its regional members, individually and jointly. It does this by financing a broad range of development projects and programs through policy-based and other public-sector loans, private-sector loans and equity investments; providing technical assistance for institutional support projects and programs; making public and private capital investments; assisting countries with development policies and plans; and supplying emergency assistance.

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