National Human Development Report 2010 LIBERIA



PROMOTING HUMAN DEVELOPMENT THROUGH SHARED GROWTH: A SPECIAL FOCUS ON INFRASTRUCTURE AND AGRICULTURE

PREFACE

Shared growth is fundamental to Liberia's efforts to consolidate its economic and social revival, strengthen its democracy, and achieve peace and security. The Government of Liberia's (GoL) Poverty Reduction Strategy (2008-20011), "toward rapid, inclusive, and sustainable development," highlights the instrumental value of shared (inclusive) growth. Achieving shared growth will not be easy given Liberia's continued economic dislocations and narrow revenue base. Development programs and activities will need to draw all segments of the population from across Liberia into the economic mainstream. Since the livelihoods of majority of Liberians are derived from agriculture and rural-based activities, these programs and activities will have to help improve cropping, horticulture, animal husbandry, fisheries and forestry and forest-product development. With the majority of Liberians facing high (and often prohibitive) costs of transport and communications due to the poor state of the roads, bridges, ports, storage and distribution facilities, and telecommunications, ensuring that these improvements materialize will require special attention by the public and private sectors to rebuilding, extending, and maintaining that infrastructure. Supported by the international community, efforts in these areas are already under way.

The theme of this year's Human Development Report is consistent with the GoL's objective of shared (inclusive) growth. Successful implementation will require detailed attention to the challenges of increasing the productivity of agriculture and rural-based activities. , That, in turn, will depend significantly on the reconstruction and expansion of infrastructure and its efficient and sustained maintenance. The effectiveness of infrastructure in lowering transport and transaction costs will stimulate shared growth and strengthen the foundation for achieving sustained improvements in human development, social progress, equity, security and participation.

The explicit goal of the LHDR 2009 is to supplement the vision contained in the Liberia's Poverty Reduction Strategy (PRS) as a prosperous, productive nation that is at peace. Over time, the GoL has been moving progressively to a longer-term strategy of reconstruction and development that began with a 150-day plan. Following that, it adopted the interim PRS (iPRS) and recently formulated and began implementing a full PRS. All of the Government's programs are highly ambitious and are framed with an urgency consistent with the various pressures (to raise the rate of economic growth, kick-start development, improve welfare, and enhance security) of a country that is making the transition from years of mayhem and neglect to a more stable trajectory.

Yet, for economic and social recovery to be effective and the reconstruction effort to have a lasting impact, the programs and activities have to be strategically crafted. It is essential that the development agenda does not outstrip the capacities of the government and local population to respond. Accordingly, the LHDR pays particular attention to the practical issues of rebuilding and extending Liberia's infrastructure and reviving agricultural production and rural output as the foundation for present and subsequent shared growth in Liberia. This point features strongly in the chapters 4, 5 and 6.

The scope of the LNHDR 2009 is fully consistent with the opportunities available to Liberia. The medium-term international market outlook for basic commodities is robust even with the bursting of the commodity bubble in mid-2008. This favors the rapid expansion of production for both local consumption and export of a wide range of products that serve as food, fiber, (bio)-fuel, and industrial feed-stocks. International markets for rubber, coffee, cocoa, rice, cassava, palm oil, sugar, rattan, timber, iron ore, gold, diamonds, bio-fuels, and fishery products will continue to be lucrative for Liberia. Expanding local requirements as local incomes rise will supplement the international demand. Indeed for commodities like rice, which are currently being imported, there is significant scope to import substitution. Moreover, once production meets local demand, Liberia has the prospect of becoming a major rice exporter. Taking advantage of these opportunities is why the role of infrastructure development has gained such (economic) importance. Improved infrastructure will lower transport costs, extend markets, expand the "economic supply of land," spur initiative by intensifying competition, and provide the incentives for farmers and other entrepreneurs to improve their productivity.

Notwithstanding these opportunities, the PRS is being implemented against a backdrop of years of devastation and disruption that required (and often forced) agricultural producers to seek isolation as a survival strategy. Creating the conditions that induce farmers to take the risks that will raise productivity and expand output will involve fundamental changes in policy formulation and implementation. Three issues stand out:

- Ensuring that growth is shared. Economic revival (across sectors, across communities, and across Counties) since the end of the Civil War (2003) has been uneven. Large amounts of effort and attention have been devoted to expanding economic opportunities and the provision of social services (health, primary education). Implementation has often fallen short with the government's attention focused on areas around Monrovia and other large centers where some infrastructure exists or it is easier (and less costly) to repair. The LHDR 2009 highlights activities that, with current capacities in Liberia, can be implemented in ways that promote broad-based inclusive growth.
- The efficient expansion of infrastructure. Infrastructure development has both direct and indirect effects on economic growth. It is essential for the revival of agriculture. Complementarities and trade-offs also exist. For example, by allowing the more timely evacuation of products, improved transport can reduce post-harvest losses thereby boosting market supplies of food and fiber. Similarly, the strategic placement of storage facilities can reduce the need to invest in transport capacity. Finally, increased expenditure on maintenance can economize on capital costs of infrastructure development.
- Promoting the development of agriculture. Liberia faces the task of re-developing its agricultural sector. In addition to the destruction of physical capital during the Civil War, there was serious deterioration in the quality of human capital through the loss of farmers, the loss of local knowledge, and loss of markets and diminished access to markets. Furthermore, the rural sector has been de-capitalized and local farmers lack seeds, tools, technology, and access to means for learning about new techniques and procedures. Overcoming resistance to change associated with decades of self-reliance and extreme risk aversion will not occur rapidly. The revival of agriculture requires special attention to the overall pattern of economic management and micro-economic incentives. It is why the expansion of infrastructure is so important. It will progressively open up larger areas of Liberia to the influences and profitability of participating in local, regional, and international markets.

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National Technical Committee

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ACRONYMS

CARI..... Central Agricultural Research Institute

CSOs..... Civil Society Organizations

CWIQ..... Core Welfare Indicator Questionnaire

EPA Environment Protection Agency FAO Food and Agriculture Organization

GDI. Gender Development Index
GDP. Gross Domestic Product
GoL. Government of Liberia

HD...... Human Development HPI..... Human Poverty Index

iPRS..... interim Poverty Index

ILO...... International Labour Organization IMF..... International Monetary Fund

LDHS..... Liberia Demographic and Health Survey

LDRC..... Liberia Development and Reconstruction Committee

LHDR..... Liberia Human Development Report

LISGIS..... Liberia Institute of Statistics and Geo-Information Services

LMR..... Liberia Market Review

NARDA...... New African Research Development Agency

NERICA...... New Rice for Africa

PPP. Purchasing Power Parity
PRS. Poverty Reduction Strategy
SAPs. Structure Adjustment Programs

UNDAF...... United Nations Development Assistance Framework

WDR...... World Development Report

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Promoting shared growth is fundamental to Liberia's efforts to reconstruct the economy, harmonize the society, promote peace and security, enhance democracy and the rule of law, expand employment opportunities and increase incomes of all Liberians. Each of these objectives is part of the Government of Liberia's (GoL) Poverty Reduction Strategy (2008-2011) which is designed to lay the foundation for shared (or inclusive) growth.

Agriculture and rural-based activities are the main source of livelihoods for the majority of Liberians. The revival of these activities will depend upon the reconstruction and expansion of infrastructure – roads, bridges, ports, water and sanitation facilities, and telecommunications. Together, improvements in agriculture and infrastructure will form the basis for sustained efforts to promote shared growth and human development. The 2009 NHDR argues that achieving shared (inclusive) growth requires detailed attention to the challenges and opportunities of coordinated efforts to develop agriculture and rebuild and expand Liberia's infrastructure. An improved road network and efficient communication facilities connect people to markets, open up economic opportunities, lower the cost of transactions and promote human development. Liberians overwhelmingly recognized during the PRS consultations. Across all the Counties they stated that an improved road network was critical to boosting their livelihoods, connecting them to markets, helping them gain access to social services, making the best use of their skills, and increasing their incomes. As agriculture and infrastructure begin to generate shared growth, key dimensions of human development – long and healthy life, increased literacy rate, decent standard of living, security, and participation – will improve as well.

An explicit goal of 2009 NHDR is to further amplify the vision of the Liberia's PRS by highlighting the role of shared growth in poverty reduction. By improving agriculture, Liberia can be a prosperous, productive nation that feeds itself, has surplus agricultural products to export, and is at peace. The Report recognizes the various capacity limitations confronting Liberia. Weaknesses in human, organizational, financial, institutional and physical capacities are evident in the implementation of development programs. With donor support, these are being remedied. As these are addressed, shared growth and human development will benefit the poor and vulnerable, especially women and youth. The structure of the Report highlights the key messages. Chapter one sets the context by reviewing the efforts the GoL is making to re-build the country and economy by emphasizing activities designed to consolidate peace and security, revitalize the economy, raise standards of governance and promote the rule of law, and improve infrastructure and basic services. To move forward, the government and the international community are now focusing on achieving rapid, shared economic growth to reduce poverty and enhance human development. Chapter two makes the case that promoting human development in Liberia requires programs and institutions that strengthen the social and economic connections among households, within communities and across counties. These are essential to rebuilding "social trust." Current circumstances, which include a large natural resource base and prospects for robust expansion of local and international demand for the country's commodities, provide the opportunity for Liberia to benefit from shared growth stimulated by upgraded and extended infrastructure and the broad-based revival of agriculture.

The main message of Chapter three is that infrastructure services contribute directly and indirectly to human development. Roads, highways, bridges, ports, airports, and transport systems facilitate the exchange of goods, the movement of people and the delivery of services that enhance welfare and well-being. Infrastructure services expand individual and collective choices and opportunities through intermediation, arbitrage, group cooperation, and social participation, especially for women and marginalized groups. Improvements in storage and telecommunications and water and sanitation systems raise human welfare by strengthening personal and economic security.

Chapter four stresses the role of agricultural re-development in the promotion of shared growth. The revitalization of agriculture will enable Liberia move beyond its historical pattern of "growth without development" which systematically neglected small-scale agriculture and led to the geographic

concentration of infrastructure. Broad-based human development in Liberia depends on policy initiatives that raise the productivity of small-holder agriculture (staple foods, livestock, and tree crops). Chapter five argues that the promotion of human development through improvements in infrastructure and the development of agriculture will require public and private actions that tangibly (and positively) change the lives of individuals and communities across Liberia. While resource limitations, both local and foreign, will constrain the rate at which public support can be mobilized for these tasks, there are many opportunities for engaging private individuals, men, women, and youth in their own development. Their enterprise and entrepreneurship will raise productivity, expand output, generate wealth, enhance welfare, and promote human development.

Chapter six concludes the Report by noting that revival, reconstruction, and the re-development that will enhance human development in Liberia will take time. It reminds us that since all resources (both from local and international) are scarce, they have to be used efficiently (for the greatest impact) and effectively (for the desired impacts). Despite the pressing need, human development cannot be rushed. The primary focus of the government, participating communities, external assistance agencies and individuals should be to establish the broadest foundation for sustained shared growth and poverty reduction. For the foreseeable future this will hinge on achieving tangible improvements in infrastructure and agriculture across the whole country. The Chapter outlines an agenda for action to promote human development: 1) re-establish a strategic focus by avoiding policy over-reach; 2) emphasize efficient implementation; 3) improve donor coordination; and 4) stress capacity enhancement particularly of management. Paying attention to these items will help the GoL implement its PRS and in the process strengthen human development across the whole of Liberia.

CHAPTER ONE: THE STATE OF HUMAN DEVELOPMENT IN LIBERIA

Main Message: Following more than two decades of economic and social regression, Liberia is making constructive gains in human development. To re-build the country, the Government of Liberia has emphasized activities designed to consolidate peace and security, revitalize the economy, raise standards of governance and promote the rule of law, and improve infrastructure and basic services. Efforts by the government and the international community should now focus on achieving rapid, shared economic growth to reduce poverty and enhance human development.

1.1: Human Development

Since its introduction by UNDP in 1990, human development has been widely discussed, analyzed and amended. The concept ensures that critical aspects of development, in addition to those normally associated with rising income, are used to assess human progress. Theoretical advances and practical experience have led to several re-assessments and extensions of how that progress is defined.¹

In its broadest terms, human development relates to freedom, potential capabilities, and creative livelihoods. Recent developments (especially in Asia and Africa) have underscored the importance of collective security. As a result, discussions of human development now include the equitable and sustainable expansion of individual and collective choices, capacities and opportunities together with improved (human and national) security.²

The regular assessment of human development achievements in analyzing progress at the national and sub-national level is appropriate and should be expected.³ All forms of development involve learning and adaptation. They require time and "hard pounding" (the Duke of Wellington's phrase) to ensure that the desired progress is made *and* sustained.

In Liberia, much of what was individually and socially learned and much of what was physically, institutionally and organizationally accumulated was lost during the 14 years of war. Indeed, most of what the nation and its people had achieved prior to the mid-1980s was destroyed or allowed to dissipate. Moreover, significant parts of what remains – e.g., public institutions and systems of governance – are not widely accepted or trusted and need to be re-built or revived.⁴

A challenge that all post-conflict countries including Liberia face is coming to grips with the destruction and degradation of institutions, organizations and capacities and the loss of physical, financial and human wealth. Yet, the task of rebuilding the country offers all Liberians the opportunity to use their existing capabilities to contribute to sustainable patterns of social and economic rehabilitation and development. The Human Development Index provides a relevant framework for this endeavor.

The promotion of human development focuses attention on engaging every citizen towards achieving peace and security, promoting effective governance based on the rule of law, revitalizing the economy and revamping infrastructure and basic services in ways that progressively enlarges the choices and enhances the life chances for everyone. In particular, it will enable each citizen to enjoy personal security, gain access to the resources that provide a decent standard of living, modify his/her behavior to preserve (natural) resources for future generations, and foster equal opportunities for all women and men. None of this will occur easily and quickly, or without dedication, cooperation, and effort.

The last point is critical. The human development agenda does not have a "fast-forward" option. No country, anywhere, has ever achieved human development rapidly. Liberia will not be the exception.

1.2 Human Development in Liberia

The National Human Development Report 2006 focused on three dimensions of human development – people, governance and international. With respect to the people dimension, the Report noted that HD is "...concerned with the conditions necessary for people to live healthier, longer, happier and more creative lives using individual and collective capabilities." Thus, while people are the centre of the human development paradigm, good governance is instrumental: an essential means to improve human development.

As the recent data shows (Table 1.1), improvements are evident in all dimensions. Standards of health, nutrition, education and living conditions have risen. Several aspects of "governance" have improved as well. One of the most noteworthy interventions was the district and County consultations during the formulation of the Poverty Reduction Strategy (PRS). For the first time in Liberia's modern history, the government consulted its citizens. The effort was participatory, collaborative and highly informative. Many of the key initiatives in the PRS emerged from this process (see Box 1.1).

Table 1.1: Basic Human Development Data Liberia							
	1996	1999	2004	2005	2006	2007	
Human Development Index (HDI)	0.311	0.276		0.319	0.434	0.442	
Life Expectancy at Birth (years)	42.3	42.3		44.7	45.1	57.9	
Adult literacy rate (percent)	36.4	31.2		51.9	54.4	55.5	
Combined Prim/Sec/Tert. Enrolment	17	58.8		57.4	57.6	57.6	
Real GDP per capita (PPP current year \$)	843	225		187	335	362	
Infant mortality (per 1000 live births)		134			72	71	
Under-5 mortality (per 1000 live births)				235	111	111	
Maternal mortality rate (per 100,000 live births)					994	578	
Adult illiteracy (aged 15 and older, percent)					46	44.5	
Population undernourished (percent of total)			50				
Children (0-5) underweight for age (percent)					26		
Share of people with access to sanitation (percent)						39.4	
Share of people with access to improved water			61		64	51.4	
Gross Domestic Product (current \$ million)					575	746	
Real GDP estimated growth rate (percent)						7.9	
GDP per capita (US \$ current prices)					163		

Sources

National Human Development Report Liberia 1999, Chapter 3; National Human Development Report 2006

Liberia, Annex 1; UNDP Annual Report 2007, p.3; UNDP Annual Report 2008, p.23

UNDP Liberia's Progress Towards the Millennium Development Goals 2008, Table 1

2008 Statistical Update at www.hdrstats.undp.org/es/2008/countries -- go to Liberia.

Box 1.1: District and County Consultations to Formulate the PRS

"The process enabled all citizens to contribute to the development of the PRS. All members of a particular district were invited to attend the district-level consultations. At the county level, meetings included legislative members, traditional leaders, farmers and business people, women, children and youth, persons with disabilities, local non-government organizations and the public at large. The inclusive nature of the consultations meant that all participants had the opportunity to have their voices heard and incorporated into the PRS...." The consultations identified "...local problems and concerns, as well as recommended action plans." For its part, the PRS included the "main public consultation messages from the Counties" (p.46). Two of the highest priorities noted were the revival of agriculture and the reconstruction of infrastructure, especially roads.⁵

The "international" dimension has emphasized the consolidation of peace and security within the subregion. In this regard, Liberia has been actively cooperating with its neighbors (especially through the Mano River Union) to stimulate regional development. The agenda features infrastructure projects including water, power, and roads.

The United Nation's computation of the human poverty index (HPI-1) for 2007 showed that 35.2 percent of Liberia's population was below acceptable levels for living a long and healthy life, having access to education and a decent standard of living. This situation was confirmed by the Core Welfare Indicator Questionnaire (CWIQ) in 2007 which showed that around 64 percent of the population lived below the national poverty line. The CWIQ was estimated on the bases of the consumption expenditure required for a minimally adequate diet.⁶

Other indicators are grim reflecting the country's legacy of destruction, population displacement, and disruption of basic services. The probability of not living beyond 40 years was 42 percent. Adult illiteracy (15 years and older) was 46 percent. Around 36 percent of the population lacked access to an improved water source. More than 26 percent of children below five years of age were underweight. In terms of gender equity, the GDI in 2006 was 96.6 percent; females had longer life expectancy than men (104.1 percent); female literacy was only 82.5 percent of that of males; and female enrolment in formal education was only 73.1 percent.⁷

However, the situation is not entirely bleak. Some significant improvements have occurred over recent years. The consolidation of peace and security and improved governance and rule of law as part of the 150-Day Plan and the iPRS have produced substantive improvements in key elements of human development — health, education, improved access to basic services and increased food security. Table 1, provides details. Perhaps the most impressive dimension of human development has been the drop in child mortality and under-5 mortality. These are some of the most sensitive measures of national welfare and well-being.

In 2007, the Human Development Index was 0.442 representing the combination of the life expectancy at birth index (0.548), the education attainment index (0.562)⁸, and the GDP (PPP \$US) per capita index (0.362). Corresponding data for 2006 were 0.434, 0.451, 0.554, and 0.335.⁹

Advances are evident in other areas, such as the Millennium Development Goals. For example, in 2007 under-five mortality was 133 per thousand live births; the ratio of girls to boys in primary education was 0.93; the proportion of the population living under the local poverty line was 64 percent; and the share of the population under five years that are underweight was 20.4 percent. All of these indicators and numerous others represented improvements from earlier years, especially 2004, 2005, and 2006. 10

1.3 Human Development and Poverty Reduction

Since the Comprehensive Peace Accord of 2003 and especially after the 2005 elections, the Government of Liberia, with broad-based international support has emphasized rapid economic growth and poverty reduction as its top priority. The 150-day plan and the Interim Poverty Reduction Strategy comprised programs and approaches designed to produce "...visible progress that reaches significant numbers of ...people...[and]... establishes the foundation for sustained economic development.¹¹ The iPRS stressed initiatives that would break from "the past and promote new beginnings" thereby helping the country move from "conflict to development." That was followed by a full-blown Poverty Reduction Strategy which ".... articulates the Government's overall vision and major strategies for moving toward rapid, inclusive and sustainable growth during the period 2008-2011.¹²

The PRS is organized around four pillars – peace and security, economic revitalization, governance and rule of law and promotion of infrastructure and basic services (particularly health, education, water and sanitation). These pillars provide a coherent institutional and organizational framework for rapid, inclusive and sustainable growth. This emphasis is intentional. When incomes are low, as is the case in Liberia, poverty cannot be reduced without rapid inclusive growth. The PRS noted:

"...economic growth alone does not guarantee poverty reduction and stability. Worldwide experience also shows that the structure of growth is critical to reduce poverty and achieve the MDGs, growth must be equitable and widely shared and create employment and

economic opportunities for the poor. It must reach the traditionally excluded and vulnerable groups, including the poor in isolated villages, women, children and youth and persons with disabilities. Moreover, to reduce poverty, rapid growth must be accompanied by increased access to basic services and more inclusive governance and political structures.¹³

Rapid inclusive growth is also essential for human development. This is revealed by research results across Sub-Saharan Africa showing that the most extensive improvements in human development take place when poverty declines.¹⁴ That only occurs when there is rapid (shared) economic growth.¹⁵

This result is robust across regions and can be demonstrated by comparing trends in the Human Development Index (which runs from 1975 to the present) and poverty rates. (The former is computed and reported by UNDP; while the latter by the World Bank.)¹⁶ The countries which have recorded the largest increases in HDI (China, El Salvador, Brazil, Bangladesh, India, Indonesia and Vietnam) also reduced poverty by substantial margins.¹⁷ Countries where the HDI declined, or experienced minimal change (e.g. Kenya, Zambia, Zimbabwe, Swaziland, Tanzania, and Mongolia) also recorded significant increases in poverty. Similar trends are evident in other aspects of human development such as education achievement, health status (especially under-5 mortality), and nutrition.

1.4 Shared Growth and the Millennium Development Goals (MDGs)

By emphasizing shared/inclusive growth and poverty reduction organized around the four pillars noted above, Liberia's PRS will promote key dimensions of human development. Less certain, however, is the extent to which the PRS will move Liberia towards the Millennium Development Goals.¹ The recent report on the MDGs in Liberia concluded:

The MDGs provide a long-term framework for pursuing a sustainable path to economic development. They provide "signposts" and outputs that inform progress towards development goals. ¹⁸

The PRS responds to the country's challenge of moving from "conflict to recovery.¹⁹ It is not specifically structured to achieve the MDGs. Nonetheless, if the PRS generates rapid shared growth and poverty declines as anticipated, significant progress towards the MDG targets will occur.

Several assessments of Liberia's situation relative to the eight MDGs highlight the distance ("gap") from the 2015 targets. The "gap" is widest in indicators for poverty reduction, under-5 mortality, and maternal mortality nutrition and food security.²⁰

In this regard, some perspective is needed. For instance, when Liberia is measured relative to "objective" standards of poverty such as the Purchasing Power Parity measures of \$1 or \$2 per day that serve as MDG targets the entire population on average is "absolutely poor." Even the most generous recent (official) estimates of national income of around \$800 million leave the whole population of 3.4 million (by the recent Census estimate) with an average annual income of \$250 in 2008 purchasing power (let alone the 1990 purchasing power against which the \$1 per day is measured, or \$1.25 in 2000 prices now used by the World Bank). Specifically, the PRS noted.²¹

Achieving the MDGs will be a challenge for many developing countries, but it will be even more difficult for Liberia because of the legacy of war. While most countries were making at least some progress toward the Goals between 1990 and 2003, Liberia was moving dramatically backwards and losing the capacity needed to achieve the Goals. All of Liberia's indicators were worse in 2000 than they were in 1990.

Progress towards the MDGs will emerge as a result of the overall effort to achieve the PRS deliverables, to promote growth and reduce poverty. The same applies to the promotion of human development.

1.5 Summary Points

One: Human development is about expanding freedom, enhancing potential and creating opportunities for all citizens to develop the capabilities to be what they want to be and become what they choose.

Two: Measures of human development in Liberia, though grim, have been improving as the country supported by the international community makes progress in reconstruction and development. Particularly noteworthy trends are the improvements in under-5 survival rates and the enhanced nutrition status.

Three: The Government of Liberia is focused on activities that consolidate peace and security and improve governance and the rule of law. These changes are providing the foundation for revitalizing the economy and improving infrastructure and the delivery of basic services. They also provide a basis for rapid inclusive growth and poverty reduction.

Four: Liberia's success in promoting growth and reducing poverty will also determine the movement that is made towards the Millennium Development Goals and ultimately the general progress in promoting human development.

Five: In this respect, the Government of Liberia's Poverty Reduction Strategy *is* a human development strategy.

CHAPTER TWO: INFRASTRUCTURE, AGRICULTURE, AND SHARED GROWTH

Main Message: Promoting human development in Liberia requires programs and institutions that strengthen the social, economic and political inter-dependence among households, within communities and across counties. A major deficiency in Liberia, both as a cause and consequence of the civil war is weak social capital, reflected as a lack of "social trust." Current circumstances, which include a large natural resource base and prospects for robust expansion of local and international demand for the country's commodities, provide the opportunity for Liberia to benefit from shared growth stimulated by upgraded and extended infrastructure and the expansion of agriculture.

2.1 The Current Economic Situation

The World Bank *World Development Indicators* reported that Liberia's real GDP declined on average by 2.7 percent per annum over the period 2000-2007. These averages mask a remarkable turnaround in growth that, despite recent difficulties in the global economy continues. Real GDP is estimated to have increased by 2.4, 5.3, 7.8, 9.5, and 7.1 percent per annum over the period 2004 to 2008 inclusive. The IMF's most recent estimate suggests that real GDP will grow by 4.9 percent in 2009 after which it is projected to increase by 6.3 percent (2010) and 10.5 percent (2011). This robust performance reflects the anticipated continued expansion of agriculture and a rapid increase in services, primarily in urban areas and large towns. The expected increase in output of forest products (timber, wood chips, rattan) and the revival of mining operations (led by iron ore) has yet to materialize. Rubber production is increasing but at relatively modest rates.

Looking forward, the main drivers of growth (i.e., sustained increase in real per capita incomes) beyond 2011 are projected to be mining, forestry, agriculture (staple food products, rubber, oil palm, coffee and cocoa), fisheries and services. This broad-based growth is estimated to boost significantly real per capita income measured in U.S. dollars. (These and other key indicators are reported in Table 2.1). Indeed, IMF data indicate that over the period 2009 to 2012, real dollar GDP per capita will increase by 20 percent. If this is achieved it will be a solid (and welcome) foundation for promoting human development.

Table 2.1: Basic Economic Data Liberia 2007 to 2011						
		Est.	Est.	Proj.	Proj.	
	2007	2008	2009	2010	2011	
Real GDP (percent increase p.a.)	9.5	7.1	4.9	6.3	10.5	
Nominal GDP (US\$ millions)	734.6	838	846.4	929.6	1033.7	
Real GDP per capita (US \$ 1992 prices)	126.4	128.9	128.9	132.9	141.3	
Consumer prices (annual average increase)	11.4	17.5	2	4.5	5	
Central Government Operations]				
Total Revenue & Grants	22	26.3	30.1	483.3	32.7	
of which Total Revenue	21.8	25.6	28.1	31.7	29.3	
Total Expenditure & Net Lending	18.3	25.1	43.9	44.3	33.6	
of which Current Expenditure	15.8	22.1	39.5	40.7	28.9	
Capital Expenditure	2.5	3	4.4	3.7	4.7	
Overall Fiscal Balance	3.8	1.2	-13.8	439	-0.9	
External Sector						
Current Account Balance, including grants	-31.7	-26.3	-43.2	-62.7	-52.3	
Current Account Balance, excluding grants	-180.7	-156.8	-175.8	-182.3	-151.2	
Trade Balance	-39.5	-48.7	-64.8	-71.2	-57.2	
Exports f.o.b.	28.3	31.3	13.2	18.6	34.2	
Imports f.o.b.	-67.9	-79.8	-77.9	-89.7	-91.4	
Public Sector External Debt (total)	571.8	482.8	488.4	14.5	8.4	
Source: International Monetary Fund Country Report no.09/177, June 2009, Table 1, p.15.						

2.2 Shared Growth

The Government of Liberia's PRS emphasizes inclusive or shared growth. This is both a necessary and practical response to Liberia's history. From its founding in 1847 and the adoption of its original Constitution, Liberian society has always been highly inequitable. As a matter of law and explicit policy, the original settlers, their descendants and associates enjoyed privileges which significantly exceeded those of other residents of Liberia. Benjamin Disraeli's characterization of Great Britain as "two nations" could have applied to Liberia as well.⁵

The marginalization of the majority of the population was so marked that among development specialists Liberia became *the* case study of "growth without development.⁶ With so little done over the decades to remove the barriers to social and economic progress and reduce the inequalities, the eventual descent into violence and civil war was largely inevitable.

The flip-side is that as Liberia rebuilds its economy and society, shared growth is both the indispensible *and* the responsible means of generating the conditions for social progress and human development. Without shared growth, Liberia runs the risk of a future that repeats most adverse aspects of the past.

Since shared growth is central to the country's future and to the government's Poverty Reduction Strategy, it is worth reviewing what is involved. Recent theory and global practices highlight ideas similar to, or derived from, shared growth. These include pro-poor growth, adjustment with a human face and bottoms-up growth.

"Pro-poor growth" emphasizes policies and actions designed to boost the incomes of the poorest workers and producers (typically small-scale farmers). The aim is to ensure that the benefits of economic growth are shared by those with the lowest incomes and with the fewest productive resources.

Many development specialists argued in Sub-Saharan Africa (SSA) at least poverty reduction requires "pro-poor agricultural growth." As one study noted: "Farm activities, …, are more likely to offer opportunities…with direct and indirect employment and income opportunities for the poor……" It proposed a three-pronged strategy; i) establish the basics such as roads, irrigation systems, research, extension and (potentially) land reform; ii) "kick-start" agricultural markets through expansion of seasonal finance, improved input supply and development of reliable product markets; iii) foster "non-agricultural growth linkages" in ways that make the private sector the driver of rural growth and development.

The theme "adjustment with a human face" was proposed as a critique of the (human) costs of the structural adjustment programs (SAPs). In response to foreign debt that low-income countries could not service, persistent budget deficits, over-extended (and under-funded) public sectors, slow or no growth and rising rates of inflation. SAPs were focused primarily on reducing macroeconomic imbalances. The goal was to move declining or stagnant economies back to sustainable growth trajectories.

Critics argued that their implementation had unacceptably high costs. The "adjustment with a human face" approach – subsequently expanded to include human development and globalization that economic growth was fundamental to achieving sustained (human) development. However, their proponents argued that the growth agenda had to be supplemented by special efforts to create jobs, raise the incomes of the poor and generate broad-based improvements in welfare (especially health, education, and food security).

BOX 2.1: The Costs of Not Adjusting

A huge number of studies have focused on the "costs of adjustment" focusing primarily on the affects of the programs supported by the World Bank and the International Monetary Fund. No one disputes that adjustment can have adverse effects or that the poor are often disadvantaged. Yet, what many of the critics choose to overlook is that when economies are unbalanced, adjustment is inevitable. The basic question is whether the process will be systematic or ad hoc. Ad hoc adjustment occurs through the collapse of income and economic regression. These are circumstances from which the poor, marginalized and vulnerable have few means of protecting themselves. As their governments lurch from one failed (ad hoc) reform effort to the next, their situation worsens. The evidence from African countries (reflected in their HDIs and other indicators) is that the costs of not adjusting (or allowing adjustment to be ad hoc) have been exceedingly high for the poor.

The "bottoms-up growth strategy" alleviates poverty by focusing on "...the transformation and diversification of micro and small-scale enterprises to growth-oriented activities and on increasing their productive capacity...." It stresses the importance of creating a business setting that engages rural entrepreneurs (particularly women), stimulates commercial activities, and promotes self-help efforts among small-scale operators, both men and women. The strategy specifically promotes rural development by combining "...infrastructure development, education and health services, investment in agriculture and the promotion of non-farm activities, in which women and rural population can engage."

While each approach refers to different aspects of development, there are common features. Economic growth is essential. Each stresses the crucial role of agriculture and/or infrastructure. Each identifies the mechanisms (policies, strategies, approaches) that produce the desired spillover effects of economic growth. Finally, emphasis is given to the distribution of economic activity across sectors, the scope and nature of employment created (particularly for women and youth), the (direct and indirect) income and expenditure effects generated, and (economic and environmental) sustainability of the activities being pursued. And, each is consistent with the promotion of human development.

Taken together, the notion of shared/inclusive growth is firmly rooted in development theory and practice and is widely seen (and advocated) as being fundamental to poverty reduction and sustained human (and social) development.¹³ When seen in this light, the GoL's Poverty Reduction Strategy which emphasizes shared growth is a human development strategy.

2.3 Shared Growth and Infrastructure

The mutual links between economic growth and infrastructure are well known. Rising levels of income provide finance for the expansion of infrastructure with subsequent improvements in infrastructure boosting activities that add to income. Viewed broadly over relevant adjustment periods, there is no evidence that infrastructure development leads (or drives growth). Even in regional networks (power grids, road and rail links) or the development of transit corridors where one clearly precedes the other, the expansion cannot be sustained in the absence of significant expected increases in income and welfare created by the infrastructure (roads, ports, water and sanitation systems, storage/warehousing, electricity grids).

Thus, the mutual links (and inter-dependence) between infrastructure and income are clear. However, it is less obvious how shared growth and infrastructure are related. Spreading the benefits of growth requires attention to where the infrastructure is located, how the resources required are mobilized and from whom (local/foreign), the regional impacts of the infrastructure services being created, and their distributive effects, especially who has access to them and under what conditions. Moreover, if shared growth derived from infrastructure expansion is to be sustained, the resources used to build and maintain the infrastructure have to be allocated efficiently and employed effectively.

Infrastructure services that contribute to shared growth directly affect the livelihoods and activities of the poor, the marginalized and the displaced. Roads to the national airport and dams and power stations supplying water and energy to urban areas do not serve those purposes even if, at some level,

they are vital to particular aspects of national development. Examples of infrastructure that generates shared growth are the primary roads that link the Counties, the upgraded farm-to-market roads that lower (raise) the "farm-gate" prices of inputs (outputs), the reconstructed ports that reduce transit costs of agricultural and rural-based exports and create incentives for moving those goods through Liberia to regional markets and the upgraded rural and peri-urban health clinics and schools that are made more accessible by improved roads, bridges, and culverts.

A further effect of shared growth is the dynamic competitive advantage created by the declining real cost of infrastructure services as infrastructure is rebuilt and extended.¹⁵ As costs (measured in terms of cash, time, and effort) fall, the income from exchanging goods and services rises and the welfare (and social benefit) from expanded personal and group interaction increases. More extensive mobility and social interaction also serve to reduce barriers and counter the effects of discrimination, isolation, and marginalization. These changes help re-establish the social capital and social trust that were degraded by the war and instability.¹⁶

BOX 2.2: Mobile Communications

Infrastructure that Fosters Shared Growth by Compensating for "Missing" or Weak Infrastructure. Liberia provides a case study (for others to emulate) of how one dimension of infrastructure development (wireless telecommunications) can compensate for other infrastructure deficiencies. The costs of physically moving people and goods in Liberia are high due to poor roads, the time involved and wear and tear on vehicles. Wireless communications is a low cost, convenient supplement that often substitutes for travel and transport. Mobile telecommunications have reduced barriers to personal interaction, lowered the cost of commercial transactions, and helped to "collapse" the distance between communities and Counties created by the poor state of existing infrastructure. Even without traveling, people can still interact personally and professionally. Better telecommunications between urban and rural areas have added to welfare by expanding consumer choice. 17

2.4 Shared Growth and Agriculture

In principle, the link between shared growth and agriculture is straightforward. In practice, that has not been the case, especially in low-income countries. A major anomaly of economic and social development is that while improvements in agriculture have provided a common pathway to economic development and sustained prosperity in the rich countries (and selected middle income countries as well), few of the world's poorest countries have effectively promoted "agriculture-for-development" especially over recent decade.¹⁸

Governments in most low-income countries have neglected and/or heavily taxed their agricultural sectors for several reasons. One has been the misguided view that the sustained development of the urban/industrial sectors can be promoted by extracting resources from agriculture (through taxation, low producer prices, and over-valued exchange rates). The outcome, evident in chronic food shortages, rural poverty and high rates of rural-urban migration, is that growth in agriculture has been low and rural areas have failed to develop. In turn, rural poverty has blocked the development of sectors outside agriculture. In turn, rural poverty has blocked the development of sectors outside agriculture.

This pattern has been especially evident throughout SSA. ²² With only a brief respite in the first part of the present decade, SSA has experienced economic regression (or inverse development), for decades. This is evident in the rising contribution of agriculture to GDP over time. To illustrate, over the period 1980 to 1990, agricultural growth in SSA averaged 2.5 percent while overall economic growth averaged 1.6 percent. ²³ That is, the poor performance of other sectors substantially offset the weak performance of agriculture. The same outcome is evident between 1990 and 2000; agricultural output rose annually by 3.2 percent (positive in per capita terms) and overall GDP increased by an annual average of 2.5 percent (roughly equivalent to population growth). ²⁴ These differences in growth rates raised the contribution of agriculture in GDP, a trend that runs counter to established or normal "patterns of development." ²⁵

This performance contrasts with earlier periods. Between 1965 and 1980 aggregate GDP in SSA increased by 5.1 percent per annum with agricultural GDP rising by 1.7 per cent per annum. Since annual population growth averaged 2.7 percent, agricultural output per capita declined by roughly 1 percent per annum. The subsequent food deficiencies and increased rural poverty across SSA were largely the result of this distorted performance.

As noted in Chapter four, similar trends were evident in Liberia, though the regression was more extreme. Until the mid-1980s, the contribution of agriculture to GDP was declining – in 1980, it was 36 percent.²⁸ By 1995, agriculture contributed 82 percent to a much diminished aggregate GDP (of \$135 million). In 2007 with the economy growing again, agriculture still represented 54 percent of GDP.

2.5 Summary Points

One: Given its history and development challenges, policies and strategies that achieve shared/inclusive growth are indispensible to Liberia's future economic, social and human development.

Two: Human development requires a foundation of broad-based economic growth. The policy imperative is to create the conditions (activities, mechanisms, procedures, and incentives) that ensure the benefits of rising per capita incomes are widely shared.

Three: The upgrading and extension of infrastructure have significant direct and indirect effects on shared growth. These activities lower the costs of personal and business travel, economic exchange, social interaction and the delivery of infrastructure services and, in the process, generate the resources required for maintaining and further extending infrastructure services.

Four: Infrastructure contributes to human development through the geographical extension of services – health, education, personal security, food security and water and sanitation.

Five: Promoting shared growth in Liberia will require the coordinated development (expansion and rationalization) of infrastructure *and* agriculture.

CHAPTER THREE: INFRASTRUCTURE AND HUMAN DEVELOPMENT

Main Message: Infrastructure services contribute directly and indirectly to human development. Roads, highways, bridges, ports, airports, and transport systems facilitate the exchange of goods, movement of people and the delivery of services that enhance welfare and well-being. Infrastructure services expand individual and collective choices and opportunities through intermediation, arbitrage, group cooperation, and social participation, especially for women and marginalized groups. Improvements in storage and telecommunications and water and sanitation systems raise human welfare by strengthening personal and economic security.

3.1 The Role of Infrastructure in Development

The 1994 World Development Report "infrastructure for development," examined how *efficient* infrastructure services raised economic productivity and improved living standards. As a group, developing countries devote large amounts of public and private resources (in some cases close to 10 percent of GDP) to the expansion and maintenance of infrastructure (roads, railways, harbors, ports, water and sanitation systems, irrigation schemes, storage facilities, telecommunications networks and others).²

Infrastructure typically has high initial costs and is durable. Access, reliability, and maintenance are always critical considerations in decisions regarding the upgrading and/or expansion of infrastructure.

The poor (particularly women, the vulnerable, and marginalized) "...often consume fewer infrastructure services and pay higher prices [for them] than do the non-poor." When determining the scale, scope, and location of infrastructure investments, governments need to pay special attention to who has access to infrastructure services and the conditions under which they have access. Because of their long-lived nature, infrastructure investments have to be explicitly oriented to generate propoor services if they are to reduce poverty.

Reliable infrastructure supports economic development. The demand for infrastructure services (electricity, water, sanitation, irrigation, telecommunications, travel routes, transport load limits) is derived from their contribution to social welfare (health, education, security) and economic activity (agriculture, forestry, mining, wholesale and retail trade). The reliability of the infrastructure services is a crucial determinant of user costs and hence the productivity of individuals whose activities are infrastructure-service dependent.⁵

Maintenance is fundamental to the efficient delivery of infrastructure services. All infrastructure projects create a future stream of recurrent costs for maintenance and operations. These need to be recognized and planned for in advance.

"Infrastructure can deliver major benefits in economic growth, poverty allowing and appropriately allowed to the efficient delivery of infrastructure services. All infrastructure projects create a future stream of recurrent costs for maintenance and operations. These need to be recognized and planned for in advance.

Having noted that infrastructure performance is directly related to incentives, infrastructure services need to be managed *as a business not a bureaucracy*, and stakeholder considerations should feature prominently in their operation, the Bank Report concluded:

"Infrastructure can deliver major benefits in economic growth, poverty alleviation, and environmental sustainability – but only when it provides services that respond to effective demand and does so efficiently."

"Government will have a continued role in infrastructure. In addition to taking steps to improve the performance of infrastructure [service] provision under their direct control, governments are responsible for creating policy and regulatory frameworks that safeguard the interests of the poor, improve environmental conditions, and coordinate cross-sectoral interactions – whether services are produced by public or private providers".

In Liberia, the government's involvement in the development of infrastructure will be tempered by a number of realities – the availability of resources, access to and control over the space needed to

expand the services, 8 the capacities to efficiently manage infrastructure services, the impact of space/location on the pace and direction of economic growth and development, and the pressing need to expand infrastructure services in ways that tangibly reduce poverty.

BOX 3.1: Managing Infrastructure's "Bottom Line"

A key recommendation of the 1994 World Development Report was that infrastructure needed to be managed like a business with a "bottom line" not like a bureaucracy that depended on annual subsidies. An important feature of managing the "bottom line" is to ensure that "price" and "cost" are clearly distinguished. Price is the amount charged for infrastructure services. Examples include cents per kilowatt hour customer's pay for electricity; the dollar charge per ship for port services and so on. The "cost" of the infrastructure services is the value of the resources used to provide the particular services, including an appropriate allowance for repairs and maintenance. It is only when the price charged for the service covers the cost of providing the service that infrastructure is managed according to the "bottom line." Anything less requires an annual subsidy or the progressive deterioration and ultimate collapse of the infrastructure that supports the services.

3.2 The Economic Supply of Land

The provision of infrastructure services has a dual effect on the value of land, or space more generally. The stock of infrastructure assets – roads, ports, bridges, watershed areas, tidal basins, fish hatcheries, forest reserves, railways, storage facilities, schools, hospitals, health clinics, airfields – absorb and occupy large tracts of land. But these assets also change the value of the land and space.

The location of a water treatment plant, sanitation facility, or garbage dump typically reduces the value of nearby areas for specific uses (residences, schools, commercial outlets) although it may raise its value for other uses (a bottling plant or recycling facility). Similarly, the expansion or extension of roads and railways typically raises the value of adjacent land or space even as it devalues the location for other uses (such as crop production or watershed management). Economists analyzing these tradeoffs distinguish between the economic and physical supplies of land (or space).

Though it has a long history, the distinction is now fundamental to "economic geography," the subject of the 2009 *World Development Report* of the World Bank. The distinction is especially relevant to Liberia's recovery and development.

BOX 3.2: The Economic Supply of Land

Long recognized by "rural philosophers," particularly the Physiocrats¹⁰ for whom land was the ultimate source of (surplus) value, discussions of the economic supply of land began with the work of Johannes von Thunen (in the 1820s). The economic supply of land is determined by the "net rent" its location generates as a productive asset. Von Thunen described how transport costs (or what we now call infrastructure services) determine the pattern of agricultural production around a large market center (a town or city). Commodities which were the most difficult and costly to transport (perishable, short "shelf-life" items like milk, eggs, fresh vegetables and bulky low-valued products such as tubers) are produced close to the market. More durable, high-value products such as wheat, wool, cotton, are be produced further from the market. The relative difference in transport costs was directly capitalized into the value of land. Nobel laureate Theodore Schultz elaborated and extended von Thunen's approach by including the existing infrastructure (and hence costs of transport and storage), available agricultural technology, the supply of productive factors (including knowledge), and current market conditions. Based on these parameters, the economic supply of land (as distinct from the physical supply) is the area over which the production of particular agricultural products (or combinations of products) yields a net profit. ¹²

Prior to the war, economic activity in Liberia was geographically concentrated. Apart from the rail to the iron ore mines, the major infrastructure was located, as a matter of law and policy, close to the coast. The consequence was that a significant share of the land base, though physically suitable, was economically unsuitable for agricultural production. The people on that land remained locked into subsistence activities because of the high cost and lack of infrastructure services wiped out any net rent from marketing their output.

During the war, the destruction and neglect of infrastructure led to a severe contraction in Liberia's economic supply of land. Few commodities could be produced profitably except in areas close to Monrovia, or a functioning port, or what remained of a road. Markets and marketing activity imploded. Key exceptions were the high-value imports that were easy to transport and protect (e.g. weapons) and export commodities (such as diamonds and gold).

Liberia's economic development will hinge on the success of efforts to expand and extend the economic supply of land. That process has already commenced with the consolidation of peace and security and the restoration of the rule of law.

BOX 3.3: The "Natural" Forces of the Market

Liberia's experience demonstrates a point, well understood by economists and social philosophers across the political spectrum, that there is little that is "natural" about markets. Individuals and communities will trade with each other based on the availability of resources, mutual advantage, trust, incentives, freedom of movement, and security of persons and property. The war and disruption undercut all of these. To compensate, most families and communities resorted to subsistence. This was reinforced by the sharp drop of real income, personal insecurity and threats to property, and the increased difficulty (and cost) of transporting goods to and from what used to serve as market locations. Marketing activities will recover (and are recovering) in the rural areas of Liberia as income rises (increasing the effective demand for commodities), social cooperation strengthens, security improves and transport costs fall.

It is being reinforced by government and donor-supported programs that improve and expand infrastructure and activities that enhance agricultural techniques, provide access to new technology, broaden agricultural (and rural) knowledge, and deepen agricultural (and other) markets. It will be further strengthened by general improvements in rural areas that expand access by the rural population to health and education, water, sanitation and energy resources.

The focus on the economic supply of land has a further implication. It highlights the trade-off in allocating resources to upgrade or extend infrastructure. With limited resources, there is always a choice of improvements at the intensive or extensive margins. The former involves upgrading the quality of infrastructure in a particular location; the latter involves extending existing (or complementary) infrastructure over a broader area.

In Liberia, access to, control over and ownership of land have been sources of contention and conflict. With the end of the war, the GoL has been committed to promoting land reform and has established a Land Commission (see Box).

BOX 3.4: Land Reform Commission

In August 2009, the President of Liberia appointed a Land Commission with a broad mandate. Given the "hot-button" nature of land issues, the Commission's work will take several years and many matters are likely to remain unresolved. Yet, to move the country forward, questions regarding access, titling, security of tenure, alienation procedures, transfer and inheritance, utilization, land use conversion, environmental concerns, reclamation, prevention of degradation, and absentee owners among others need to be addressed. Overlapping (and sometimes conflicting) land claims need to be rationalized. The ultimate success of the Commission's work will be important in determining the degree to which land and land use serves as a driver of Liberia's growth and future peace and security.

3.3 Space, Location, and Human Development

Economic geography seeks to explain why location (defined as a particular place in geographical space) has value and to understand the economic and social forces which modify that value over time. The three features of economic geography emphasized in the World Bank's 2009 *World Development Report* are density, distance and division.

Economic density refers to the economic surplus (measured as gross domestic product or income) per unit area (e.g., square kilometer). Income generation (measured as output or "effective demand") tends to concentrate in specific locations due to economies of agglomeration. These reflect the cost advantages (lower costs of inputs including information) and higher rewards (increased prices of outputs) for those who operate in or close to centers of high economic density. Economic distance is the physical distance between areas of high economic density (or concentrated income generation and expenditure) and the lagging areas (defined as those with low economic density). ¹³ Economic division refers to the barriers and impediments that exist between states and regions due to differences in currencies, restrictions on trade and exchange and regulatory obstacles (whether formal or informal). ¹⁴

"Rising densities of human settlements, migration of workers and entrepreneurs to shorten the distance to markets and lower divisions caused by differences in currencies and conventions between countries are central to successful economic development." ¹⁵

When development experience is examined using this density, distance and division triad several patterns are evident. One: economic development is uneven across space. Particular locations tend to acquire an advantage (as crossroads, transshipment point, port, a source of raw materials, administrative center, or some other attributes) and through economies of scale and agglomeration effects the advantage cumulates. Two: "markets shape the economic landscape." These markets are boosted and sustained by "...growing cities, mobile people, and vigorous trade." Three: "...human capital moves to where it is abundant, not scarce." Educated and/or productive people gain from being in close proximity with one another. While this, too is part of the economics of agglomeration, it more appropriately reflects the spillover effects of knowledge and information. A person's knowledge and skills are more valuable in settings where there are many other people with knowledge and skills. A point related to the expansion of markets is declining transport costs which tend to increase trade and exchange with neighboring regions and countries rather than distant regions or countries. Lower transport costs increase the benefits of specialization and the gains from increasing the scale of production. The secondary of the expansion of the specialization and the gains from increasing the scale of production.

Furthermore, although there is a tendency for economic activity to concentrate geographically (due to agglomeration effects, spillovers from skills and knowledge of economies of scale in production), the benefits of that concentration (higher incomes, innovation, and social dynamism) social *and* national development requires that these benefits are widely spread. According to the World Bank Report, this is the pattern that has been followed in developed countries. It specifically requires the development of spatially-blind institutions ("rules of the game"), spatially connective investment policies and spatially-targeted interventions that promote economic integration.¹⁹

These conclusions are directly relevant to Liberia's effort to rebuild and develop its economy. Most of them are consistent with the focus of the iPRS and PRS to reconstruct and extend infrastructure, improve living conditions throughout the country and expand economic and social opportunities through rapid shared/inclusive growth and poverty reduction.

The above analysis implies that Monrovia, as the most economically dense area in Liberia, should be expected to become more dense, due to its location and the advantage conferred by its infrastructure. It should also be expected that migration to Monrovia will continue until the expansion of the infrastructure and public services reaches the other major towns. This will place additional strains on the infrastructure of the Greater Monrovia area. Nonetheless, the increasing economic concentration will also generate the resources that, if mobilized effectively, could be used to improve welfare more generally throughout the country. Whether this happens will depend on the Government's success in reversing the resource allocation patterns of the past. As noted below (in section 4.4 of Chapter four), the evidence is not encouraging.

3.4 The Infrastructure "Story"

There are valuable insights regarding the connections between improvements in the quality and quantity of infrastructure services and human development. They do not, however, help identify the policies that will enable a country to respond to the challenges of dealing with density, distance and division. Some of those gaps can be filled using the framework developed by the Asian Development Bank study on "...the contribution of infrastructure to economic growth in East Asia (which includes China)."²⁰ The study has five "interlinked perspectives." A). The "economic story," which examines how infrastructure development has supported economic growth and reduced poverty (dramatically in some cases). B). The "spatial and demographic story," that highlights the regional distribution of population and the connections (weak and strong) between different population groups and communities. C). The "environmental story," which traces the positive and negative impacts of developing and maintaining infrastructure on the environment. A key finding of the study is that, the poorest communities have little access to clean water and sanitation and are adversely affected by the sighting of dams, roads, and dumps. D). The "political story," which recognizes the practical reality that all infrastructure activities create winners and losers. Someone is always downstream, down-hill, or downwind of any facility. This raises issues of accountability, risk abatement, risk sharing and/or compensation, E). How infrastructure, both its capital and recurrent costs, will be financed.

Each of these stories can be readily related to the situation in Liberia.

The Economic Story: The success of most of the GoL's economic and social goals over the short and medium term (and particularly those covered in the PRS) involves the expansion, improvement, and/or repair of infrastructure. Without functioning infrastructure which allows the movement of labor, inputs and outputs, there are few economic activities that can be conducted in Liberia and yield a positive return. Moreover, without infrastructure the delivery of basic services (such as the Basic Health Package) and the expansion of schooling in rural areas cannot proceed. The most vulnerable areas lacking infrastructure are the South Eastern Region mainly Grand Kru, River Cess, Sinoe and Maryland counties including some parts of River Gee, Lofa and Nimbia counties. On average travel time to reach markets or social delivery facilities in rural Liberia is estimated at two and half hours while in Gparpolu, it takes about six hours (NFS&NS, 2008, p15). These are the areas with high rates of poverty (Figure 3.1)



Source: Liberia Institute of Statistics & Geo-Information Services (LISGIS), 2007

The Spatial and Demographic Story: Results of three excellent studies are featured in Chapter 3 of the PRS. These are the Core Welfare Indicators Questionnaire Survey (CWIQ), the 2007 Liberia Demographic and Health Survey (LDHS), and the Participatory Poverty Assessment. Their data reveal a common set of problems confronting all Liberians. Poverty is pervasive and deep-rooted; housing is generally sub-standard; repair and expansion of infrastructure are universally seen as a priority; food insecurity is common; and health and education services are limited and often of poor quality.²¹

The Environmental Story: This story has two inter-linked parts. The war prevented large-scale exploitation of some natural resources. Examples are forests and fisheries. These have regenerated and if sustainably harvested would provide the basis for future growth. The iron ore deposits, though offering long-term economic possibilities are non-sustainable. The war also led to significant degradation of the limited infrastructure, especially in rural areas and some over-exploitation of natural resources, for example, the over-harvesting of bush-meat. The Greater Monrovia area continues to lack sanitation and (to date) effective garbage removal. Charcoal production has had some adverse effects. The deterioration of rubber and palm oil plantations as the infrastructure collapsed undermined the productivity of key forest-based industries.

The second part of the environmental story is the steady increase in the external demand for "green" products particularly bio-fuel feedstock and animal feed. While Liberians were pre-occupied with the war, the rest of the world was beginning to adapt to the challenges of higher fossil fuel prices and the growing evidence of climate change. This has led to the emphasis on activities which have a "small" or "minimal" carbon foot-print. With its production of cassava, sugar cane, palm oil, timber and other biotic material, Liberia can respond to this growing demand.

The Political Story: The PRS is a blueprint for economic recovery and development of Liberia. The emphasis on "shared growth" is an explicit admission that, unless those who were formerly marginalized, the vulnerable, the poor and the deprived tangibly benefit from the revival of growth and spread of development, Liberia's economic and social future will remain problematic.

The Financing Story: Raising resources has been a major preoccupation for the GoL. Considerable effort, time and skill have been devoted to ensure the various development initiatives, including agriculture and infrastructure can be financed. Detailed costs of the PRS activities have been derived.²² The financing requirements are large. Annual development assistance is in the order of \$400 million; debt relief will eventually require close to \$5 billion and the annual contribution for UNMIL activities have been on the order of \$550-600 million.

Even with all this attention, there are anomalies and gaps. Large amounts of resources have been provided by donors and the non-government bodies for some activities (primary education and AIDS relief and official travel). Few funds have been allocated for other activities (slum clearance in urban areas, higher education, management training). Moreover, there has been too little attention to the recurrent cost requirements involved in rapidly expanding infrastructure and other capital (such as plant and equipment). The GoL response has been to urge donors to provide more budget support. Whether the pelages will help depends on how the additional resources are allocated. One option would be to re-establish "sinking funds" to cater to the replacement (or repair) of infrastructure.²³

3.5 The Role of Infrastructure in the Poverty Reduction Strategy

The GoL appreciates that infrastructure, broadly defined, is the physical connective tissue of the economy and the society. A two-fold impact is recognized. The expansion and maintenance of infrastructure generates income and wealth. Resources (physical, financial, human, organizational, institutional, natural) are required to construct and maintain infrastructure in the form of roads, bridges, ports, airports, storage facilities, sanitation works and so on. The use of these resources generates incomes for their owners and enhances the wealth of those who supply them.

The emphasis accorded to infrastructure in the PRS continues and expands the efforts contained in the 150-day Plan and the iPRS. The latter noted:²⁴

A critical challenge facing Liberian society is rebuilding infrastructure: roads, telecommunications, water and sanitation, schools and health care facilities that were destroyed as a result of war and years of neglect. A major focus of the government since assuming power has been on rehabilitating infrastructure and delivering basic services to the public and private sectors in order to create the necessary conditions to achieve broad-based growth and poverty reduction.

These points were echoed in the PRS:²⁵

One of the Government's foremost objectives was...to quickly embark upon the rehabilitation of infrastructure and the rebuilding of systems to deliver basic services in order to create the conditions and linkages needed to achieve broad-based growth and poverty reduction. Rebuilding roads, in particular, is central to achieving all of the Government's other major objectives, including consolidating peace and security, facilitating inclusion, revitalizing growth throughout the country, building strong systems for local governance, promoting physical access to security and legal institutions, and making public and others services accessible to all Liberians.

The instrumental role of infrastructure is obvious and fully understood. The PRS spelled out the initiatives that would be taken with respect to road and bridges, transportation (land, air, maritime), energy, postal services, telecommunications, water and sanitation, and public buildings and facilities.²⁶

While some of the details differ slightly, the basic strategy in each is summarized in four "strategic objectives" with respect to roads and bridges. These are: i) ensure primary roads are of a quality that make them passable all year; ii) ensure that bridges and roads built by private operators meet nationally recognized standards; iii) rehabilitate roads within the urban areas and key centers in each county; iv) rebuild the national capacity for constructing and maintaining roads and bridges; and "rebuild the financing, planning, and management capacities..." for road construction and maintenance.²⁷ This approach highlights quality, cooperation with respect to standards, rebuilding of priority facilities; re-establishing the capacity to reconstruct and repair roads and bridges; and rebuild the financial and management capacities.

The phasing of reconstruction is important. Many programs designed to increase output and incomes and deliver basic services depend on how rapidly infrastructure can be reconstructed and extended. The back-log far exceeds the GoL's (financial, institutional, and other) capacities. To its credit, the PRS set priorities and some (reasonable) benchmarks have been established.²⁸ While targets are important, it will be crucial to determine what modifications are made as implementation proceeds to ensure that the infrastructure being repaired, extended and expanded is serving the challenges of sustained human development.

With resources so limited, efficiency concerns will determine what is repaired and what is upgraded, where and how. No purpose is served by rushing. It will generate waste and inefficiency and generally undermine the effort. Shoddy roads that deteriorate in one or two seasons add little to infrastructure services. Indeed, their poor quality adds to costs in terms of travel times, wear and tear on vehicles, accidents and additional costs of maintenance.

An important means of saving resources and accentuating the impact of infrastructure services on economic growth and human development will be determining how other activities can substitute for infrastructure that is both costly and time-consuming to construct. As already noted, the development of telecommunications services has compensated in part for the weak and costly infrastructure. People can communicate and conduct business without having to physically travel. Another means of

substituting for infrastructure is to invest more in storage.²⁹ A further adaptation is for organizations to decentralize their functions and services. Fortunately, in Liberia, this is already on the political agenda. In this regard, decentralization is a "two-tier process" – it responds to the political imperative of devolving power and responsibility from Monrovia to the Counties while at the same time it helps conserve resources that would otherwise have been devoted to the expansion of centralized control systems.

3.6 Summary Points

One: Infrastructure improves human development by lowering the resource, time and other costs of economic exchange, cooperation, and social interaction.

Two: As intermediation and transaction costs decline, the economic supply of land expands. This is both a cause and result of extension of markets and the spread of information and ideas, improvements in technology, and rising levels of income.

Three: The broader contacts and interactions across communities and regions resulting from expanded levels of trade and exchange create positive social externalities, including the deepening of cooperation and trust.

Four: Improved infrastructure boosts welfare by expanding the delivery of health and education services and the broadening of opportunities for gender empowerment.

Five: The enhanced communications and interactions across regions strengthen civic participation enabling more financial and administrative responsibilities to be devolved to local authorities.

Six: The increasing degree of integration helps reduce social risks by enabling local and central authorities to respond to emergencies or shocks (food insecurity, natural disasters).

Seven: The expansion of infrastructure requires detailed attention to the future financing and resources (human, capital, organizational, institutional) involved in providing appropriate levels of maintenance.

CHAPER FOUR: AGRICULTURE AND HUMAN DEVELOPMENT

Main Message: Liberia's pattern of "growth without development" was largely due to the neglect of small-scale agriculture and the geographically concentrated infrastructure investment that systematically excluded most farmers and rural residents from the benefits of economic growth. To promote broad-based human development in Liberia, policy initiatives need to emphasize shared growth based on small-holder agriculture (staple foods, livestock, and tree crops) sustained and supported by the expansion of rural economic activity.

4.1: Agriculture and Development

A review of the literature (and practical experience) on the contribution of agriculture to economic development provides comfort and concern. It is comforting to learn that many of the lessons of recent decades of what is relevant to agricultural development still apply. It is a concern that a large number of problems (food insecurity, low agricultural productivity, the lack of incentives to expand output, rural poverty, limited infrastructure, and policies that reinforce "urban bias") remain unaddressed. By building upon the lessons, governments could constructively deal with the problems and in the process promote human development.

The literature on the role of agriculture in development is huge. Yet, two World Development Reports, published a quarter century apart by the World Bank, conveniently summarize mainstream thinking.

In 1982, the theme of the WDR was "agriculture and economic development" and in 2008, it was "agriculture-for-development." The shift in emphasis was both noteworthy and needed. By 1982, significant progress was being made in key Asian countries (China, India, Indonesia and Bangladesh) to increase agricultural output, improve food security and raise rural incomes. These countries had constructively responded to and were moving beyond the disruptions of the food and oil shocks of the early 1970s. As the WDR noted, their attention was focused on "managing agricultural development" through the provision of appropriate (price and exchange rate) incentives, building upon agriculture's comparative advantage, stimulating the adoption of suitable technology, mobilizing rural resources for rural development, using public investment efficiently, and encouraging foreign investment in agriculture.³ Although far from being universally applied in developing countries, these changes were occurring in the most populous countries thereby relieving national and international anxieties about the likelihood of widespread famine and deprivation.

The emphasis on "agriculture-for-development" reflected two changes. First, countries that had continued to support agriculture had developed rapidly. The same applied to countries such as Vietnam, Chile, and several transition states which emphasized agriculture as part of an overall growth strategy. Rural incomes rose, poverty rates fell, food security improved, and key elements of human development (nutrition status, child survival, life expectancy) increased – dramatically in some cases.4

Second, during the intervening quarter century the countries that had neglected or taxed agriculture (explicitly through export taxes or implicitly through over-valued exchange rates) continued to regress. With few Asian exceptions (such as North Korea and Myanmar), most of them were in Sub-Saharan Africa. Between 1980 and 1990, population growth in SSA significantly exceeded the increase in agricultural output; for the period 1990 to 2000, the two grew at similar rates.⁵ It was only after 2000 that agricultural growth rose above that of

"In the 21st Century, agriculture continues to be a fundamental instrument for sustainable development poverty and reduction."

population. The food situation, however, did not recover; food production per capita for SSA as a whole has declined since the late 1970s.⁶

Responding to these trends, the World Bank and other international agencies⁸ have re-emphasized the need to make agricultural growth and rural development central features of development policy and practice. The intention is to create "pathways out of poverty" by taking advantage of, and building upon local knowledge, asset endowments, market opportunities, and access to infrastructure and social services. The "agriculture-for-development" agenda comprises four initiatives – improving market access and creating conditions that deepen value chains; enhancing smallholder competitiveness and facilitating market entry; improving livelihoods in subsistence agriculture and low-skilled rural occupations; and increasing employment opportunities in rural labor markets.⁹

Liberia's current efforts to promote shared growth and reduce poverty are consistent with this "agriculture-for-development" agenda.

4.2 Agriculture and Human Development

In most developing countries and especially in SSA, agriculture provides livelihoods for the majority of the population, especially women. In post-independence South Asia, it was agricultural development based on the spread of the Green Revolution from the mid-1960s that helped countries promote human development. The Green Revolution raised rural incomes and improved food security and provided a foundation for the commercialization of agriculture and successful diversification of rural livelihoods.

Agriculture contributes to shared growth through higher labor productivity (i.e., more output per unit of labor input). Rising productivity generates the resources and stimulates the demand (through "rural growth linkages") that boost employment. That, in turn, expands the range of profitable activities and enhances the livelihood choices available to rural communities by helping draw the vulnerable and marginalized, particularly women, into mainstream economic activities. Rising income creates a foundation for promoting human development.

BOX 4.1: Rural Growth Linkages

The expansion of agriculture stimulates growth in other sectors through rural growth linkages. This pattern — which reflects the inter-sector (and inter-regional) flows of product, expenditure, and income — has been widely noted in the literature. Phyllis Deane described how agricultural surpluses were invested in transport facilities (particularly canals) in the United Kingdom at the start of the (first) Industrial Revolution. John Mellor discussed how the expansion of rural-urban links, supported by systematic patterns of public and private investment, stimulated both rural and urban development in India, Taiwan, and Japan. Each of these developments was based on the expansion of labor-intensive small-holder agriculture. A dramatic example was the spread of Green Revolution technology. In India, for example, the adoption of new high yielding varieties was accompanied by the rapid increase in fertilizer use. Food grain output rose augmenting farmers' incomes and boosting employment in both agriculture and non-agricultural sectors. Activities related to fertilizer production, agro-processing, output and input distribution, as well as related manufacturing (e.g., implements) sectors benefited from the demand (and income) generated in agriculture.

Human development reflects capabilities, potential and opportunities and the "substantive freedoms" that allow people to expand the range of things they can do and what they can be. It is ironic that one of the most dramatic failures of human development has occurred in developing countries despite the presence of large agricultural workforces and ample supplies of land and other natural resources.

This undermines the ability of these countries to sustain economic growth and promote other dimensions of human development. Despite the lessons that many policy makers pronounced that they had learned during world food crisis in the 1970s and the subsequent large flows of foreign assistance, technical support and efforts to promote agricultural reform, food insecurity has been common to many countries. Some countries such as Zambia with "hungry farmers on fertile land;" Others are like Nigeria where a chronically overvalued real exchange rate has crippled their ability to export agricultural exporters turning them into major food importers. Still others are agrarian-based societies like Ethiopia which require "emergency" food aid on an annual basis.

There is compelling evidence that countries that cannot feed themselves cannot and do not develop.¹⁵ No country that has registered robust improvement in its human development index over the last three decades has been food insecure. Moreover, no country that has experienced chronic (and acute) food insecurity has recorded other than modest changes in its HDI. ¹⁶ Indeed, due to food and other problems, the HDIs in countries such as Zambia, Zimbabwe and Cote d'Ivoire have declined.

There are many reasons for food insecurity – natural disasters, civil disruptions, pests and pestilence. The chronically poor have difficulty obtaining food even if the country as a whole has adequate supplies. As A.K. Sen (and others) have noted, this incapacity is due to insufficient real income. Poverty and food insecurity tend to be inter-connected with both often being aggravated by agriculture and rural development policies that block (or deflect) the changes needed to promote shared growth and reduce poverty.

In Liberia, food insecurity was a feature of the pre-war period due largely to the distortions and inequities that excluded large segments of the population from mainstream economic activity. It intensified during the war as production and income collapsed and the food/agricultural marketing system imploded. Changes in life expectancy at birth are indicative. In 1980, life expectancy at birth was 54 years; by 1983, it has fallen to 49 years. In 1990, it was 43 years; in 2004, 42 years. The prevalence of under-nutrition was 34 percent in 1990-92 and 50 percent in 2002-2004.

No doubt Liberia's circumstances have been extreme but there is a feature common to the experience in other countries. The lack of agricultural development and food insecurity blocked and, indeed, undercut human development.

4.3 Agriculture in Liberia

During the 1970s, Liberia was already experiencing the "inverse development" or regression that earlier sections noted was widespread throughout SSA (Chapter 2, section 2.4). Between 1970 and 1980, real GDP increased by 1.7 percent per annum and agricultural output rose by 4.7 percent per annum. By 1980, agriculture was 36 percent of GDP. The economic regression continued with overall GDP declining sharply during the 1980s. Agricultural output fell as well, but at a rate slower than total GDP. World Bank data show that in 1990, GDP was \$384 million with 54 percent derived from agriculture. In 1995, corresponding data were \$135 million and 82 percent. By 2007, four years after the Comprehensive Peace Accord, GDP in current prices was \$735 million, with 54 percent from agriculture.

Once peace and security began to take hold, the most immediate challenge facing Liberia was to improve the food situation. A two-pronged strategy was adopted. Foreign aid and commercial imports would cover food requirements while efforts were made to revive agriculture. With respect to the former, the main food import has been rice. This has filled a major consumption-production "gap" which is estimated at 66 percent of the rice consumption gap. Liberia's annual staple food requirement, measured as milled rice, is around 350,000 metric tons. Government data on s show that commercial rice imports were 120.6 thousand metric tons in 2004, about 35 percent of national rice consumption requirement. With improved distribution and rising incomes, rice imports in 2008 were 341.3 thousand metric tons. With the latter costing approximately \$250 million (inflated somewhat by the global food panic), there is both a need and significant incentive to expand local rice production and that of substitute staples. This is the second part of the food security strategy.

Detailed reviews of the food, agriculture, and nutrition situation highlight Liberia's problems and potential.²⁸ The crop assessment conducted in 2006 described the weak production situation. Average rice yields were 0.4 tons per hectare with cassava yielding 6 tons per hectare. Poor seed, weeds, pests, few implements, outmoded techniques and limited farmer knowledge were the main constraints. The often impassable roads prevented farmers from gaining access to inputs or marketing their produce.

The Liberia Market Review (LMR) provided a comprehensive assessment of the level of activity in the 224 daily and weekly food markets throughout Liberia. Storage, limited (and costly) transport, low

incomes and a narrow range of commodities kept these markets confined. The Review showed that almost every household depended on markets even if to reach them required hours of walking.

Food and Nutrition studies (including one for Greater Monrovia) identified the major gaps in food availability across households and communities and the problems of food utilization. The latter arose because of limited transport, the absence of storage and the generally poor health status of large numbers of the population.

BOX 4.2: Food Insecurity

"Food insecurity and malnutrition is mainly caused by poverty which is manifest in poor access to health, water and sanitation services; lack of education and inadequate care practices of infants and young children; and limited availability and access to food resulting from low agricultural productivity, the poor state of infrastructure (especially roads) and the lack of income generating opportunities." ²⁹

The GoL and development agencies have responded to this situation by developing a comprehensive food security and nutrition strategy through the National Food Security and Nutrition Strategy. Implementation began in March 2008.³⁰ The strategy has two elements – emergency preparedness and response, and medium term support to the PRS. The former has activities such as building capacity in the Ministry of Agriculture, school feeding, the provision of new seed varieties, improving child malnutrition, the formulation of a nutrition policy, and post-harvest crop protection. Support for the PRS extends over the period 2008 to 2011. The main activities involve improving access by farmers to markets and factors of production, the provision of basic services in rural areas, the strengthening of (nutrition) safety nets and special support for priority nutrition interventions.³¹

4.4 The Need for Improved Agricultural Productivity

BOX 4.3: Improved Agricultural Productivity

"Agriculture is critical to achieving global poverty reduction targets. It is still the single most important productive sector in most low-income countries, often in terms of its share of GDP and almost always in terms of the number of people it employs. In countries where the share of agriculture in overall employment is large, broad-based growth in agricultural incomes is essential to stimulate growth in the overall economy, including the non-farm sectors selling to rural people. Research has shown that every dollar of growth from agricultural products sold outside the local area in poor African countries, leads to a second dollar of local rural growth from additional local spending on services, local manufactures, construction materials, and prepared foods." 32

All efforts to develop agriculture in Liberia so that it contributes to shared growth and human development hinge on raising productivity (i.e., output per worker) in agriculture. Extending agricultural production throughout Liberia at current levels of productivity will employ large numbers of people. That may be a useful exercise in keeping people occupied but it does nothing to raise incomes. For that, labor productivity has to rise.³³

BOX 4.4: Emphasis on Small-Holder Production

Since 1980, the economic growth of Ghana has been largely driven by the agricultural sector with a major contribution by smallholder cocoa and livestock production. From 2001 to 2005, growth in agriculture (5.7 percent) exceeded overall GDP growth (at 5.2 percent). The principal reason was the expansion of area under crops, although there have been modest yield increases. Favorable prices helped stimulate growth which, in turn, played a key role in reducing poverty. Between 1991-92 and 1998-99, the poverty rate in Ghana declined from 51.7 percent to 39.5 percent and by 2005-2006, it had fallen to 28.5 percent.

The need for sustained increases in agricultural productivity across Liberia cannot be over-stressed. Poverty will not decline unless incomes rise and incomes cannot rise unless farmers become more

productive. There are many opportunities for expanding output evident in the existing "effective" demands (i.e., demand backed by purchasing power) for particular goods. An example is rice. As the food balance sheet demonstrates, there is ample scope for increased domestic production. With rising incomes, the amount demanded will increase further.

Table 4.1: Food Balance Sheet (domestic Requirement) for Rice for 2008 based on 2007 output

Rice	In Metric ton
Local Production(milled)	155,293
Domestic Consumption Requirement	321,969
Deficit (Import Requirements)	185,282
Food assistance(WFP)	22,000
Uncovered deficit (import requirement)	163,282

Source: Post Harvest Crop Assessment-Liberia, 2008, p.27

Producing 350,000 metric tons of milled rice at recent yields (approximately 0.75 tons per hectare of paddy)³⁵ would require roughly 500,000 tons of local production. It would also require approximately 660 thousand hectares of land. Moreover, with each farmer cultivating on average 1 hectare per year this would generate 660 thousand person years of employment.³⁶ Furthermore, there would be a large amount of additional employment generated (and income as well) through the collection, storage, transportation, processing and distribution of the rice.

At present, there are simply not enough farmers, or land under cultivation, or seed or even equipment (hoes, axes, bags) available to produce and handle to respond to this level of "effective" demand for rice. Current estimates suggest that roughly 175,000 hectares are planted to rice, producing close to 150,000 tons of paddy.

These data indicate that there is plenty to occupy farmers and rural residents if only they become more productive than at present. The same applies with respect to the (local and international) demand for oil palm, livestock, sugar, cassava, coffee, cocoa and vegetables.³⁷

Responding to this demand at current levels of productivity in all of these activities represents a pathway to employment with low potential returns. As the World Development Report 2008 noted, providing a "pathway out of poverty" requires sustained improvements in labor productivity.

BOX 4.5: Millennium Village Initiative – Raising Productivity, Incomes and Improving Welfare

Kokoyah, the first Millennium Villages (MV) in Liberia, seeks to combine programs related to agriculture, health, education and infrastructure as means of improving small holder livelihoods at the village and district level. The project's key goal is to achieve the MDG within the district of Kokoyah (Bong County) in 5 years. With activities having commenced at the start of 2009, Kokoyah is a microcosm of the challenges and opportunities confronting the rural areas of Liberia as a whole. Organizers believe that to make a significant impact on local development, special attention needs to be paid simultaneously to several areas. This requires resources, good management, community participation, coordinated effort, painstaking attention to detail and the precise sequencing of project activities. There are particular challenges. For example, the attempt to raise rice yields through improved varieties and fertilizer is hampered by the lack of infrastructure. The real cost (labor, time, effort) of moving seeds and fertilizer to farmers' fields (especially in terms of farmers' time) is exceedingly high. Other problems arise due to the weak institutional capacity including the lack of government extension workers with up-to-date skills in farming.

How will that occur? The government and donors are already implementing a two-pronged strategy. This should continue. The first part relates to what is happening (and should continue to happen) "off-farm" with respect to the repair and expansion of basic infrastructure, the strengthening of (local and national) institutions, policy reform, and the re-engagement of the private sector in agricultural

activities, particularly the distribution of inputs and purchase, storage and processing and distribution of produce.

The second part is what is happening, and can happen, "on-farm." Four areas deserve special attention – improvements in farmer knowledge and production techniques, access to improved inputs, encouraging the selective specialization of production and strengthening value-chains throughout the rural areas.

BOX 4.6: Government Intervention to Build Farmers' Capacities

The government with the support of the international partners initiated in 2009 activities such as the production and presentation of 52 radio programs on Star radio (non-profit and private). Entitled "Farmers Forum," the programmes are designed to educate farmers on improved farming methods. The messages are intended to increase productivity and provide information to farmers. Some of the interventions include establishing thirty (30) active farmers' field schools throughout the country. The government in collaboration with the FAO provided ago-processing machines such as rice threshers (123), rice mills (14) with capacity of 250 kg of milled rice, cassava graters-motorized (11) and manual (11), cassava presses (45), winnowers (111), oil palm presses and kernel crackers (5) in ten of he fifteen counties. Increased agro-processing activities are intended to modernize the farming system and help raise productivity. Some partners, particularly USAID and FAO, are supporting appropriate technological transfers to farmers by funding agricultural research and extension services. An initial distribution of 50 metric tons of foundation seeds were provided by donors to be multiplied as part of the Seed Bank Programme of the Ministry of Agriculture. This programme will ensure the availability of high quality seeds for the 2010 farming season. About 15,000 farmers directly benefitted from the application of modern methodologies through participatory farming practices to increase farm size. The average farm size has now increased from 1.5acres in 2007/08 to 2.5 acres in 2008/2009 (MoA Annual Report, 2009).

Knowledge: The disruption and displacement caused by the war and recent resettlement efforts, destroyed (or seriously degraded) traditional methods of farmer learning, sharing of new ideas, and adaptation. Liberian farmers need to gain access to current information on varieties, techniques, market opportunities, improved techniques of land preparation, weed control and crop protection. The last-mentioned is critical given evidence that in many cases up to half of the growing crop is lost to birds, weeds, grass-hoppers and other pests. At this point, however, there is little role for formal extension services. Though often widely supported by governments and donor agencies, they offer few advantages in Liberia. There is no capacity to train extension agents even if there were qualified staff to train.

More effective and more immediate approaches are available (Box 4.6). Demonstration plots in major districts with selected farmers paid to experiment with particular varieties and techniques. Free distribution of improved seed; special programs distributed over cell phones or (UNMIL) radio on crop protection, cultivation techniques, weeding times and other agronomic practices. Another option is community mobilization (supported perhaps by Central Agricultural Research Institute or West African Rice Development Association staff) to train trainers in crop production and protection is another option.

Access to Improved Inputs: Innovation is defined as doing new things or doing existing things in new ways. For output per worker to increase in rice, cassava, cocoa and other areas that reflect Liberia's potential comparative advantage, the immediate challenge is to do existing things in new ways. Government and donor agencies have been doing this through the distribution of improved seed and tubers and rootstocks, the provision of new tools, and by spreading information on means of crop protection, weed control, food processing and storage.³⁸ These efforts need to be intensified with special attention given to reaching marginalized, women, and the vulnerable. Table 4.2 and table 4.3 have details.

Table 4.2: Source of Seed Rice, Fertilizer and share of Farmers Benefited in 2007 Farming Season

	Seed F	Rice	Use of Fertilizer		
	No Support	Support	No Support	Support	
Farmers			98%	2%	
o/w farmers own stock	41%				
purchased	37%		30%		
others	3%				
FAO		14 %			
Others(NGOs, etc)		5%		70%	
Total number of	81%	19%	98%	2%	
Farmers					

Source: Post Harvest Crop Assessment-Liberia, 2008, p25

Table 4.3: Some Key Assistance (farm inputs) to Farmers 2008/09

Items/Inputs	Quantity	Beneficiary(Farmers)	Number of County
Farming Machine (rice threshers, winnower, cassava graters, etc)	177 pieces	Over 15,820	15
Tools for women	37,457pcs (assorted)	7,961	3
Seeds(rice)	810.1 metric tons	Over 15,820	15
Seed to Women	158 metric tons	7,961	3
Vegetable seeds/planting inputs		5,000	5
Training (Extension Services)		1,796	All
60 Farmers Schools organized			12
Pest mgt inputs/fertilizers		15,000	

Source: MoA Annual Report, 2009

An area where access to improved inputs would make a major difference is livestock. War and mayhem led to the almost complete destruction of the livestock population throughout Liberia. Recent estimates show that domestic meat production was only 24 percent of estimated national consumption (of 37.8 thousand tons). Since livestock accounts for a minimal part of agricultural GDP and there is ample land (2 million hectares of pastureland) and incomes are rising thereby boosting the demand for meat, future potential for the sustained expansion of meat and livestock products is robust. The challenge is to rebuild herds. This can be done through regional imports and local breeding. Increased livestock production will have a positive environmental effect, offering a substitute for bush-meat.

Inducing Increased Specialization: While the GoL has made a useful start through its district and county consultations to re-engage farmers and rural communities, one issue that will hold back agriculture's response is the not-yet-answered question: why should farmers (this time) believe what the government is telling them? Through peace and war, successive Liberian governments have exploited and/or neglected the concerns of small-scale farmers. Survival for most of these farmers has involved a sustained pattern of "coping." This has been evident in their extreme conservatism based on a locally diversified (though closely defined) set of subsistence activities. ⁴⁰ For example, farmers undertake mixed cropping especially in food crops such as rice and cassava or plantain, and/or palm nuts as a form of coping strategy, with production at subsistence levels. Nearly all Liberian households (rural residents about 79.2 percent and urban 97.3 percent) consumed imported rice.

Although the farmers' circumstances have changed over the last several years – there is peace, some markets are reviving, law and order is being "reestablished," and major roads are being repaired and re-repaired – many farmers remain skeptical that the government will "deliver." That skepticism remains justified. The most recent budget allocated only 2.5 percent of the 2008/2009 budget (of \$278.8 million) to agriculture and the three-year share of expenditure for agriculture is 2.4 percent. 42

This is unfortunate because one of the principal means of raising output per worker in agriculture will be through specialization. Although the national need is pressing, small-scale farmers in Liberia are unlikely to abandon quickly many aspects of subsistence production. The main inducement will be the demonstration by the government (a point that unfortunately is not reflected in the budget data above) that *this time* specialization is the most rewarding strategy.

Perhaps the most lucrative area for specialization would be in tree crops – coffee, cocoa and small-holder rubber production. These crops require substantial investment and time for returns to materialize. Significant improvements have occurred in all three types of cultivars so there is major potential for Liberian farmers to gain from expansion in all three aspects. If bio-fuel demand continues to increase in the developed countries, small-holder oil palm offers important expansion possibilities as well. A key to these improvements, however, will be upgraded infrastructure.

Expanding Markets and Deepening Value Chains: Chapter three highlighted the notion of the "economic supply of land." In addition, in order to function markets require substantive institutional support (security, rule of law, absence of arbitrary controls). There also has to be an increasing measure of trust (and cooperation) among buyers and sellers to support the expectation of mutual gain that underpins exchange. The LMR, cited earlier, noted that markets have been reviving in rural areas. As the resource costs of transport declines, local product volumes increase and rural incomes rise, they will deepen and begin to spread. This "extension of the market" (to use Adam Smith's phrase) will provide a basis for further expansion of agriculture and rural economic activities. In this respect, one of the key areas where the rice market needs to be "extended" is from the Liberian country side to the Greater Monrovia area. World Bank data derived from the CWIQ (2007) showed that only 7.2 percent of households in the Greater Monrovia area consumed rice that was locally produced. About 98 percent of the rice they consumed was imported. This is a major market that local producers, supported by improved infrastructure and more efficient storage and processing, could productively tap on a sustained basis.

A major index of the deepening of value chains will be the decline in wastage as improvements in transport, storage and processing enable farmers and distributors to gain more from what they produce. An area where deepening value-chains are not only possible (as infrastructure improves) but potentially highly lucrative is fish marketing. At present, sales of fish are localized because of transport difficulties. Assistance in motorizing vessels would support higher catches and improving storage and processing methods (such as more efficient smoking and salting) would raise welfare of fish marketers and processors, the majority of whom are women.

4.5 Agriculture in the Poverty Reduction Strategy

The role of agriculture is explicit in the Poverty Reduction Strategy: 48

"A large proportion of the economically active population of Liberia is engaged either directly or indirectly in smallholder subsistence agriculture or fisheries. Women and children are particularly dependent on the agricultural sector. Revitalizing the agricultural sector is crucial to overall economic recovery, ensuring that growth is inclusive, promoting peace and stability and sustaining poverty reduction."

Transforming agriculture requires activities that increase crop yields; improve access to inputs (seeds, fertilizer) and strengthening marketing linkages (primarily through farm-to-market roads); restoring and deepening value chains; providing food assistance to those who are food-insecure; strengthening agricultural institutions; promoting improved resource management (especially forests and fisheries) and "providing greater opportunities for women and youth in agriculture."

Major emphasis is given to improving conditions for women who according to survey data, comprise the majority of agricultural workers producing around 60 percent of agricultural output and undertaking 80 percent of rural trading activities. Most of this contribution occurs through the informal sector. Boosting their contribution would require programs that increase their access to productive inputs "...including land, skills training, basic tools and technology."

BOX 4.7: Main Sectors of the Informal Sector Providing Livelihood and Income to households

...the informal sector has strived and provides some degree of livelihood for many Liberians including both urban and rural dwellers/farmers, etc. The profile of livelihood shows that households have sought income opportunities in petty trade, contract work (casual), firewood/charcoal production, fishing and fishing processing, rubber tapping, hunting/trapping, food and cash productions, processing palm oil, etc to survive. These livelihood strategies are essential to survival and are associated with lower per capita expenditure. ...About 31 percent of households are in processing and sales of palm nut and oil, 28 percent in petty trade and small-scale business and 18 percent in contract or casual work. 50

The proposed approach by the government involves four measures. The first is to develop a "more competitive, efficient and sustainable food and agricultural chains and linkages to markets." The second strives "...to improve food security and nutrition, especially for vulnerable groups, including pregnant and lactating women and children under five." The third measure will "strengthen human and institutional capacity." Through the fourth, the government will "...expand the role of women in the agricultural value chain and increase women's participation in non-traditional segments of the economy and the labor market."

Many of these activities were already underway at the time the PRS was formulated. For instance, the Food and Nutrition Security Strategy included activities that helped the food insecure, have received improved inputs, paid attention to women's concerns (especially in the area of marketing), and provided training for key officials as a means of strengthening capacity. All of these areas are coherent with the promotion of human development.

BOX 4.8: Women's Role in Food Crop Production and the Gender Division of Labour

The Comprehensive Food Security & Nutrition Survey (CFSNS) of 2006 showed that on average 33 percent of agricultural household income was jointly generated by men and women. An further 5 percent was generated by women with the support of children. According to the survey, six percent of food crops were produced only by men while eight percent produced only by women. They jointly produced 57 percent. Besides the on-farm activities, women are commonly engaged in petty trade and small-scale business, about 24.3 percent and men about 11.1 percent. They dominate inland fishing but less involved in rubber tapping, mining, salaried work, and skilled labor. They generate only 5 percent of cash-crop income. The gender division of labour in food crop production mainly for rice and cassava shows that women contribute the following to planting (62 percent), weeding (67 percent) and harvesting (64 percent). Men provide most of the labour for clearing and preparing the land. 52

4.6 Summary Points

One: For Liberia to achieve inclusive growth, small-scale agricultural production needs to expand throughout the country.

Two: This expanded production needs to be based on improved productivity, i.e., higher levels of output per worker.

Three: Rising productivity in agriculture will generate additional employment, raise farm family incomes, enhance food security, and improve welfare (especially of women and children).

Four: Major improvements in agricultural productivity will require actions on "off farm" and "on farm." Off-farm activities include the upgrading and extension of infrastructure, the broader

provision of key social services, strengthened institutional support and national policies that induce farmers to change their production (and subsistence) behavior in ways that raise output and incomes.

Five: Key improvements "on-farm" relate to efforts to provide farmers with access to relevant knowledge, to create the conditions that induce them to increase their degree of specialization in production, to gain access to and use improved inputs, and to respond in ways that deepen the rural value-chains (based on production, storage, processing, and distribution).

Six: Shared/inclusive growth requires special attention to the requirements of women who are major food producers and engage in most of the marketing(see box 4.8). Community based efforts to engage women – improved security, revamped market sites, more convenient access to services (including health) – would have a high pay-off.

CHAPTER FIVE: IMPLEMENTATION CHALLENGES IN DEVELOPING INFRASTRUCTURE AND AGRICULTURE TO PROMOTE SHARED GROWTH

Main Message: Promoting human development through improvements in infrastructure and the development of agriculture will involve public and private actions that tangibly (and positively) change the lives of individuals and communities across Liberia. Resource limitations, both local and foreign, will significantly constrain the rate at which public support can be mobilized for these tasks. But, with economic activity being stimulated in all areas of the country, there will be a wide range of activities in which the private sector – men, women, and youth – can engage. Their enterprise and entrepreneurship will raise productivity, expand output, generate wealth, enhance welfare, and promote human development.

5.1 Introduction

Perhaps the main challenge the GoL faces in seeking to rebuild and develop the country is avoiding over-reach. With so much so widely acknowledged that "needs" to be done, it may appear unseemly to insist that all resources be used efficiently. Doing that requires priorities (especially how leaders use their limited time) and setting priorities means that many "needs" will remain untended. Yet, the pretense that priorities can be fudged and that the existing resources can be spread more broadly creates waste and inefficiency and undermines the efforts to promote human development. For the GoL to use its existing resources efficiently, it has to pare it development agenda to match its available (financial, human, organizational, institutional, and physical) capacities. ¹

The 150-day plan and the iPRS are history, and the PRS has been underway for more than a year. There is now extensive evidence available on the capacity of the GoL to set goals for itself and make progress towards them. That evidence was recently reviewed by the Cabinet at in mid-August 2009. The implementation is proving to be far more difficult than was anticipated when the PRS was formulated.

5.2 Implementation Challenges

A review of the "summary progress of the PRS" in April 2009 provides a mixed picture. Noting that the PRS "Lift Liberia consists of over 900 activities requested by the people of Liberia in a broad consultative process...," the review stated that of the "107 interventions in the four pillars" [for the first year], 20 had been successfully implemented, 14 were ongoing and on track and 73 were off-track.

This outcome should not have been surprising. A "scorecard" approach to implementation is uninformative. Not all 900 activities, or even the 107 for the first year, could possibly have been of equal priority for inclusive growth, poverty reduction or even promoting human development. Indeed, those who have read the PRS will quickly realize that the "over 900" activity items range from the absolutely critical (such as developing an honest, responsive security force, distributing the Basic Health Package as widely as possible, rebuilding primary roads, ramping up local food production) to the purely fanciful. For example, the government plans to build or reconstruct 1,187 miles of primary road of which 1,075 miles (later revised to 240 miles) were to be paved and 300 miles of all-weather secondary roads during the three years of the PRS were over-ambitious. In addition, 33 bridges were targeted to be installed. Progress on road works shows that fewer than 30 miles of primary road were paved with only six bridges constructed or rehabilitated in the first year (Table 5.1). To reverse this trend and push up the implementation of the deliverables, a 90-day Action Plan (September–November 2009) was launched. Again, the results have been mixed but the number of deliverables were raised to 55, of which 35 were completed within the 90 days timeframe.

Table 5.1: Roads (mileage) and Bridges within the PRS Framework (2009-2011)

Construct/ Rehabilitate Roads & Bridges	Initial (PRS) Total Planned miles & bridges*	Initia Plani Miles	ned	early	Total Revised (planned) miles & Bridges**	Year (Plan Miles	ned)	evised	Miles/b	U	es	Miles Beyond PRS Period 2011- 2014
	2008-2011	Y 1	Y 2	Y3	2008-2011	Y 1	Y 2	Y3	Y 1	Y 2	Y 3	
Primary	1487				1327					_		
Laterite	412			412	1187	450	369	368	622***			
Paved	1075	450	520	105	240	28	10	62	28			140
Secondary	300	100	100	100	319	107	112	100				
Neighborhood Monrovia(paved) Cty seats	212 62 150				169 69 100	37	22	10	24.6			
Feeder	400				400	130	135	135	79.8			
Bridges	33				33	6	21	6	6			

Sources:

PRS, April 2008

Ministry of Public Works: PRS deliverables 2009-2010

Feeder Road Project Profile FY-2008 & 2009

done.

In this respect, the government has set itself false standards by presuming it can "score" whether it is on- or off-track. The resource gaps for each pillar confirm this. Those data show that neither the funds provided by government nor those committed or disbursed by donors are consistent with the totals in the PRS. These outcomes confirm two points. The PRS was far too ambitious given the capacities of the GoL. That, in turn, implies that the capacity constraints underscored in the PRS (Part 3, "PRS implementation") were basically ignored.

That section listed the constraints under three headings: building capacity (Ch. 12); monitoring and evaluation (Ch.13); and managing potential risks and constraints. The weaknesses in private and public capacities were acknowledged.⁵ Yet, the only suggestion that capacity may be over-stretched occurred when the PRS noted: "...generating the capacity to implement the PRS activities will take time and may be subject to setbacks and delays." But, having recognized this, the appropriate response by the GoL would have been to understand what can be achieved with existing resources and build out from there. As capacity is improved – through additional training or technical assistance – the range of activities undertaken could then be expanded. The basic error (which is evident in the government's own assessment that the PRS implementation is "off-track") is the presumption that implementation capacity can be created "on the fly." When this is attempted, the desired capacity is generally not created as planned, and the program for which the capacity is intended is generally not implemented as anticipated.

The review of the outcomes of the first year's implementation results has prompted the GoL to restructure its approach to PRS activities. It now has four priorities: resolve capacity issues; (better) sequencing of PRS deliverables; "establish(ing) effective links among planning, programming and budgeting"; and improving communication with the general public to deepen links in PRS implementation. The underlying message is that the GoL will more closely focus on what needs to be achieved, and given the capacities, can be achieved. Several interviews by the president emphasize the importance of such a shift in approach (Box 5.1).

^{*}PRS, April 2008, P.114

^{**}Ministry of Public Works PRS Deliverables 2009-2010

^{***}Instead of reconstructing 450 miles of laterite roads in year one, 622 miles of repair (only critical spots on the stretch of primary roads) was

BOX 5.1: News Report: "Ministries, Agencies to Be Held Accountable"

"After failing to meet most of the targets of the first year implementation, President Sirleaf has urged Ministries and agencies to set ambitious goals that would far exceed the 100-percent deliverable target at the end of the exercise." This statement was made following a mid-August Cabinet retreat which noted that key targets — delayed legislation related to public finance management, a code of conduct for three branches of government and energy policy — and a failure to mobilize resources for key infrastructure such as the Monrovia-Buchanan road (the start of which is delayed by a year). It was further reported that "The Executive Mansion says the President called for the setting up of a monitoring framework that would assess progress and help speed up implementation in areas where progress may be slow or off track...."

An unfortunate outcome of this review is that it was almost entirely focused on process of implementation (i.e., whether the government "owns" the PRS, whether legislation has been passed, whether the public is aware of "Lift Liberia") rather than actions (i.e., whether budget allocations are spent in rural areas to repair schools, roads and clinics, whether new seeds are being multiplied and distributed to farmers, and whether new police recruits are protecting citizens rather than shaking them down).

A further unfortunate outcome is that it has not modified the "scorecard" approach to judging implementation. Officials may want to keep scorecards within their agencies. But scorecards are irrelevant (and meaningless) to farmers whose production has been undercut because the anticipated repair or reconstruction of a road was not completed because Ministry of Public Works officials did not submit relevant documentation to the funding agencies so that funds for the work would be released.¹⁰

Similarly, scorecards are irrelevant to rural mothers who, after having walked miles to a health clinic, return untended because the drugs that might have cured their ailing children were not delivered because the budget did not include the recurrent resources required to service the vehicle that delivered supplies. The basic reality is that in order for the GoL to "Lift Liberia" it has to emphasize actions rather than the process. To date, the balance (evident in the MPEA review, i.e., the Lift Liberia Scorecard, the 90 Day Action Plans: Results & Progress, and the various reports on PRS Deliverables from the sector agencies) has been the other way.

A number of specific implementation difficulties can be identified. Four stand out - a) human capacity; b) organization and management; c) developing and maintaining coherence in the mobilization and use of resources; and d) taking account of recurrent cost implications.

5.2.1 Human Capacity

The 2006 National HDR "Mobilizing Capacity for Reconstruction and Development" correctly stressed the importance for Liberia's recovery of improved capacity. Its agenda for action included seven (self-explanatory) points: 1) rebuilding government capacity; 2) responding to transitional human resource needs; 3) developing a national capacity development program; 4) promoting donor coordination on capacity building, led by Government; 5) strengthening policy management capacity; 6) undertaking a country capacity profile; and 7) building and maintaining reliable databases. No time frame was proposed for this agenda although some urgency was expressed with respect to the national capacity development program. Three years later a draft NCDS has been formulated.

There have been important achievements in human capacity development related to teacher training, the rehabilitation of some aspects of university education, training of security forces, and reorganization of numerous government agencies and departments. The special efforts under the SES and TOKTEN programs and donor-supported technical assistance have had positive outcomes.

Notwithstanding these initiatives, human capacity development which is fundamental to all of the Government activities, is taking a long time.¹³ Since this is unlikely to change, it increases the importance of using efficiently existing (human) capacity. That urgency has intensified with the recent PRS review. If the President's insistence that Liberia is to "...far exceed the 100-percent

deliverable target..." for the PRS, capacities will become even more over-extended than at present. This, however, is not a solution. More modest goals would enable Liberia to use effectively its existing human capacity; more modest goals would allow Liberia to more efficiently achieve shared growth and create the conditions that promote human development.

5.2.2 Organization and Management

Organization and management are stressed in the PRS. Chapter five describes the process by which the strategy was developed. A core group of senior officials worked with a technical support team that regularly liaised with pillar and special working groups and a stakeholders' consultative committee. A key dimension, noted earlier (chapter 1, section 1.2), was public consultations. Through these consultations policy makers learned citizens' concerns. Policy makers, in turn, had the opportunity to inform citizens about the pressures and constraints (limited resources) that the country as a whole confronted.¹⁴

Chapter thirteen of the PRS focuses on "monitoring and evaluation" both of which are fundamental to efforts to understand and interpret progress and problems associated with PRS implementation. Significant and ongoing progress has been made through the surveys undertaken by LISGIS and other donor-funded agencies. An element critical to M&E was the formulation of the National Strategy for the Development of Statistics (NSDS). ¹⁵ Completed in 2008, the NSDS provides a framework for strengthening the data and analytical bases for policy formulation and implementation. It also provides an approach to upgrading the statistics and data analysis capacities in line ministries and County administrations. These developments provide implementing agencies with a solid foundation upon which to build.

It is unfortunate that the consultations with citizens have not continued. District and County consultations could have helped policy makers and senior officials identify where implementation was proceeding well (and why) and where it was blocked (and why). These consultations would not have addressed every implementation problem such as those arising from the inability of ministries and agencies to provide the documentation needed to release donor funding, or to hire or train the skilled workers needed for implementation. These consultations would have provided the government with an earlier assessment that many PRS activities were off-track. One area they would have shown up is over-concentration of the national budget on Monrovia and its immediate vicinity. As noted above (chapter four, section 4.4), food and agriculture received an allocation of 2.5 percent of the 2008/2009 budget.

5.2.3 Coherence in the Mobilization and Use of Resources

By any measure (aid to GDP, aid to exports, aid to budget expenditure), Liberia's aid dependence is extreme. ¹⁶ This is unlikely to change markedly in the foreseeable future. The challenge for the GoL is to ensure that the aid provided is consistent with Liberia's development agenda and that aid flows, even if large, supplement rather than supplant the government's own efforts to raise resources.

Much is made of the concept of aid coordination and many conferences, meetings, seminars, and consultancies are regularly devoted to the topic. Some agencies such as the United Nations coordinate their own activities through a "One UN" framework. This has been an effective approach in Liberia. ¹⁷

A reason that some PRS activities are "off-track" is that the government has been unable to provide the documentation that will induce donors to release fund that they have committed to the PRS. Throughout the formulation of the PRS and now with its implementation, the GoL has spent considerable effort to boost the capacity for donor coordination and resource monitoring of the Liberia Reconstruction and Development Committee (LRDC). The pay-off has been low.

An alternative is to move beyond the struggle to upgrade the LRDC by taking a more flexible and informal approach. As a recommendation, a small team of officials should be formed and instructed to visit each donor to determine the issues (if any) that are delaying or otherwise blocking disbursement. Having identified the issues and what needs to be done, the group could then work on remedies with

the relevant agencies. This team should be headed by an energetic senior official whose brief is to report weekly to the president and monthly to the Cabinet. Were such a team to be established, it is highly likely that the donors would supplement its efforts with technical assistance.¹⁹

5.2.4 Recurrent Costs

By definition, capital projects (financed by investment) are anticipated to yield a stream of direct and indirect returns over an extended period (conventionally taken to be more than one year). All capital items, whether tangible such as roads, bridges, ports, schools, and health clinics or intangible such as human skill development or institutional strengthening, require an ongoing stream of recurrent expenditure to ensure that the activities operate at the intended levels and their productive capacity is maintained.

Liberia's economic recovery involves the fundamental rebuilding and reconstruction of the basic infrastructure, institutions and human capacities. The potential capital expenditure during the decadeslong reconstruction period will amount to billions of dollars. Most of these (capital) costs are already recognized, even if funding has not been mobilized or identified. For example, the PRS specifically notes the need to reconstruct the Mt. Coffee hydroelectric facility. Its estimated capital cost is approximately \$500 million.

Curiously, the PRS does not explicitly include any recognition that the rapid rebuilding of infrastructure and rehabilitation of public sector capital will pre-empt significant portions of future recurrent budgets. With expenditures already constrained by Liberia's low income and sharp limits on the budget to ensure continued macroeconomic stability²⁰ it will be difficult to provide adequate funding of operations and maintenance of capital that is now being rebuilt. There are three implications: a) future recurrent funding will be too small for the size of the capital stock; b) future capital construction will be reduced so as not to comprise operations and maintenance of existing capital; c) or donor agencies will have to reconstruct and/or replace capital items that have experienced accelerated depreciation due to inadequate maintenance.

None of these options is attractive. But, all highlight the challenges Liberia faces and the time it will take to re-build and develop the economy. In this respect, the recurrent cost issue is one dimension of the over-reaching noted earlier. Building capital resources that cannot be operated efficiently and maintained appropriately undermines the economy's capacity for shared growth and poverty reduction and ultimately human development.

5.3 Implementation Issues Related to Infrastructure

The damage to and destruction of infrastructure during the war has been widely described. ²¹Few facilities escaped the damage or neglect. ²² Nonetheless, remarkable progress has occurred due to the combined efforts of the government and international agencies. The United Nations, Germany, the United States, World Bank and numerous others have provided significant amounts of support to reconstruct and rehabilitate many different types of infrastructure. ²³ Through numerous large and small initiatives, tangible progress has been made, and is being made, for rebuilding, repairing and reconstructing.

To illustrate, with the support of five separate countries (Japan, Norway, Belgium, Germany, and Sweden) the UNDP has been repairing and upgrading administrative and other structures in most counties.²⁴ Other UN agencies have been focusing on the repair of schools and health clinics.²⁵ The German Ministry of Economic Cooperation and Development recently reported joint German-Liberia development cooperation covering a range of infrastructure. They include capacity development for the transport sector, construction of water and sanitation facilities, (re)construction of schools, rehabilitation of roads and potable water in Grand Kru, rehabilitation of roads between Barclayville and the highway in River Gee, and rehabilitation of rice fields and rebuilding of bridges in Lofa. See below status of infrastructural improvement in year one and beyond within The PRS Framework.

Table 5.2: Status of Other Infrastructure for Year One of PRS

Sector		PRS	us of Other Planned interv 2008/9-2010/1	ention	Year One Achievements			
		Rehab/ Type	New Constr/ type	Capacity	Rehab/ Type	New Constr / type	Capacity	
Water	Urban	- 190	3,12		More than 17 communities in Monrovia with access to pipe borne water; less than 50%		741 hygiene promoter trained	
	Rural	7 rural city water outstations			2 rural city water outstations		148WATSA N Team organized	
			800 hand- dug wells		288 hand -dug wells	346 hand pump well	71 Health volunteers enlisted	
			700 boreholes			137 bore-holes	28 hand pump technicians trained	
			100spring catchment- fed system in rural hills			1spring catchment system		
Sanitation	Urban	100% Monrovia sewerage system			Nil			
		3,000 communal latrines in schools, hospitals and clinics across country			362 communal/instituti onal latrines			
	Rural		50,000 house -hold latrines in rural communities			1,384 families latrines		
			10,000 communal and institutional latrines in schools, health centers & public buildings			51 communal/institution al latrines		
Health	Health Workers		6000-8000				4300	
	Midwives		5500			2	450	
	Training Institutions							
	Scholarship						40	
	Staff with Incentive		6000			2	2150	
	Clinic/Hospi tal	205						
	BPHS/health Inst		192				60	
	HIV/AIDS/ TD center					125HIV/AIDS & 200T		
	County Ambulance (equipped		All cites			2001	15	
	Drug Depots		15				8	
Education	Policy issues			Payroll audit &			Two audits only	

				establish teacher			
				database			
				New Salary for all teachers			New salary scale based on qualification
	Regional Teacher training Institutes	3 Institutes			2 Institutes		
	Teacher housing		35 houses			nil	
	School	33 primary schools	40 primary sch		nil	40 primary schools in progress	
		6 secondary schools	4 secondary schools		3 secondary sch	2 secondary schools	
	Facilitate Purchase & publish of approved textbook			Textbook purchased & distributed			Textbooks purchased
	Furniture		26,287 pcs for primary sch			57,034 pcs of furniture contract awarded	
			3,360 pcs for secondary sch				
	Water wells & hand pumps		82 wells & hand pump			40 wells & hand pumps in progress	
	Field-based In-service Teacher training			In fifteen counties			Functional in six count-ties
Electricity	Urban supply					Less than 10% prewar capacity or less than 10megawatt electricity supply	
	Rural supply(pilot solar energy /biomass project)					About 87 kilowatt(solar energy/ bio fuel fossil supply to 12 counties	
National Port					All four ports not rehabilitated, lacks equipment and dredging. All export (intermediate) via Port of Monrovia.		
					Goods and other Imports to rural Liberia via sea once or twice a month		

Sources:

PRS, April 2008

Ministry of Health & Social Welfare PRS Deliverables (update), September 2009

Ministry of Education PRS Deliverables (Update), September 2009

Ministry of Lands, Mines & Energy: Water & Sanitation PRS Report, September 2009

Liberia Water & Sewer Corporation: Achievements & Update on Water & Sanitation Program, October 2008

Liberia Electricity Corporation/Rural & Renewable Energy Agency

National Port Authority

Reviews of programs of other donors are equally revealing. For example, the recent Joint Country Assistance Strategy of the World Bank and African Development Bank noted "...the government has indicated that its preferred use of lending from the World Bank and ADB is for roads, agricultural infrastructure, and water supply and sanitation." ²⁶ Both agencies are providing large

amounts of finance. In addition the World Bank is administering the Liberia Reconstruction and Development Trust Fund to which numerous other donors are contributing to boost the rebuilding of infrastructure.

For these and other donors a considerable amount of activity has been and is underway. One of the GoL's difficulties is keeping abreast with these activities. Indeed, this issue was explicitly noted in the MPEA review cited above. Many ministries and agencies responsible for infrastructure lack the capacities to plan, write, and design programs that the donor agencies can finance. Other issues arise because of unclear (or lack of) authority. For example, the budget does not include specific allocations for rural water and sanitation. This has created confusion regarding the lead agency responsible for implementing rural water and sanitation programs. In addition to its lack of a budget for this item, the agency which should take the lead (Public Works) lacked staff with the skills to adequately assess what was required in this area. In the absence of government action, the critical projects have been implemented by NGOs with donor funding.

5.4 Implementation Issues Related to Agriculture

The PRS anticipated that in the first year of the PRS, 200,000 smallholders, half of whom are women would have access to agriculture inputs (seeds, fertilizers, and pesticides) and processing equipment to boost smallholder production. Furthermore, 4,400 farmers would gain access to credit designed to help strengthen value chains in agriculture.

The idea is that improved value chain will provide farmers access to higher incomes through faster-growing markets, domestically and internationally, thereby helping to raise the rate of economic growth. Improved value chain will benefit particularly the food crop sector. Expanded production would improve food security and contribute to human development. The government planned to construct 15 community-based food security facilities (called technology centers), one in each county. Initially they would work on reducing post-harvest losses, estimated at 40 percent of the crop. They would also seek ways of adding value to staple crops through processing. The technology centers would contain storage compartments, along with providing farmers with access to processing and land development equipment such as tractors, power tillers, rice mill, rice winnowers, cassava graters and oil mill, etc.

During the first year of the PRS there has been less progress than anticipated. Annual agricultural growth will remain low. The anticipated 25,000 farmers were not provided with agricultural materials and supplies such as fertilizers and disease and pest control inputs. No significant improvement made in value chain to benefit the targeted farmers (4,400) while the anticipated 200,000 farmers did not access government extension services in terms of input supplies and advisory services. Overall the institutional capacities of the public and private sectors remain weak and the appropriate technological packages were not provided as expected. As a result the impact on productivity both at the farm level and through the various stages of the value chains was limited.

The "technology centers" have not materialized. Instead of being set up in 15 counties, one was established. It is not yet functional due to the lack of appropriate equipment and inputs. Moreover, the poor state of rural infrastructure has made it difficult for farmers to gain access to inputs or to sell their output.

There have been some developments at the Central Agricultural Research Institute (CARI) where activities have focused on rebuilding research infrastructure (offices, residential, etc), and staffing. Some demonstration plots with new high yielding varieties (NERICA-new rice for Africa, yam and cassava) have been planted. The results have yet to be disseminated to small farmers.

The Ministry of Agriculture was expected to intervene into smallholder staple production through extension service delivery. Unfortunately not much would be achieved due to inadequate funding (only 2.5% of national budget allocated to agriculture) and weak institution capacity. While accurate

figure for assistance to farmers are difficult to determine, some preliminary estimates from extension services provided to farmers by the ministry, as previously indicated in table 4.2, show that very few farmers received assistance (farming inputs/supplies).

Poor coordination between the Ministry and other agencies including partners has prevented proactive intervention in smallholder staple production. Like the previous year, production output in 2008/09 will increase but not significantly as anticipated within the PRS framework. For example, farmers are yet to have access to the New Rice for Africa (NERICA)²⁷, a high yielding variety of rice. NERICA is currently undergoing seed multiplication exercise on demonstration plots at the Central Agricultural Research Institute (CARI). This exercise has involved less than 30 farmers in four counties. The seed multiplication of NERICA has been hampered or challenged by the difficulties of identifying honest individuals with legal title to farm land (CARI, 2009).

Since the inauguration of the government of Madam Sirleaf, donor assistance to agriculture coupled with assistance to returnees has been the drive behind agricultural productivity and the increase in number of family farm households. The number of farming households has increased from 408,770 farm households (Post Harvest Crop Assessment-Liberia, 2008) in 2007 to 670,295 farm households.²⁸ Also active agricultural population increased from 1,455,000 to 1,857,301 in the same period of which female population rose from an estimate of 585,000²⁹ to 927,310 (Table 5.3).

Table 5.3 Agricultural Statistics from the National Population & Housing Census 2008

	Male	Female	Total Number of households
			3,425,241
Total Population of Liberia			
Farming population	929,991	927,310	1,857,301
Number of Farming Households	488,937	181,358	670,295
Heads of farming Households	253,121	78,684	331,805
Rice Farming Households	210,697	63,691	274,388
Cassava Farming HHs	203,022	60,987	264,009
Coffee farming Households	20,483	5,876	26,359
Cocoa Farming Households	29,245	7,187	36,432
Rubber farming Households	29,201	5,401	34,602
Oil Palm Farming Households	19,091	4,520	23,611

Source: The 2008 National Population And Housing Census-

Liberia Institute Of Statistics And Geo-Information Services (LISGIS)

Although the 2008 National Population Census did not target data collection on farming areas, it has been observed that agricultural harvests and farming areas for the 2008 farming season rose consistent with the increase in farm households. This was manifested into increased flow of food crops mainly cassava and rice to urban centers during 2009. While farm output for 2008 showed some degree of momentum as evident by the increases in the proportion of farming households especially for food crops (see table 5.4), the fundamental issue of inadequate assistance(farming implements and credits) is holding back growth in agricultural productivity and growth. This suggests why rice cultivation has remained relatively low (tables 4.1 and 5.4a) and below national consumption requirements as shown in Chapter 4 by the gap in rice production. For example, shortfall in rice production is mainly off-set by rice import which comes with serious balance of payment consequences. Rice import for 2008 cost approximately US\$250 million. Cassava production (table 5.5b) which is the second staple contributes significantly to narrowing the food gap as many urban dwellers including the poor depend on it for food intake.

Table 5.4: Proportion of Farmers in food and cash crops in 2007 and 2008 farming seasons

	2007	2008
Rice	83%	83%
Cassava	58%	80%
Oil Palm	16%	7%
Coffee	12%	8%
Cocoa	21%	11%
Rubber	21%	10%

Source: 2007 Survey data (estimates) from the Post Harvest Crop Assessment-Liberia, 2008 2008 National Population & Housing Census-LISGIS

Table 5.5a: Smallholder Agricultural Productivity³⁰ (rice, cassava, coffee, cocoa and palm Oil) during 2007 Farming Season Based on a Population of 408,770 Farm Households

	Ave. area/ Family in hectares	Ave. yield/ha in Metric Tons	Total Output in Metric Tons	Milled rice in Metric tons ³¹
Rice(paddy)	0.568	1.5	295,149.5	155,293
Cassava	0.9	17.84	1,693,770	
Coffee			3,180	
Cocoa			3,000	
Oil Palm			34,800	

Source: Source: Post harvest Crop Assessment-Liberia, 2008, p22

5.5b: Food Balance Sheet for Cassava-2008

Total local Production(2007)	1,693,770 MT
Losses(based on post harvest loss of 16.09 %	272,527 MT
Available for Consumption	1,421,243 MT
Domestic Consumption	349,966 MT
Surplus	1,071,277 MT

Source: Post Harvest Crop Assessment-Liberia, 2008, p.28

A further positive development is that the improvement in rural roads is saving women significant amounts of time in their marketing activities. With donor support, such as the German support for road reconstruction in River Gee and Lofa, some of the burden on women is being eased.³² Moreover, the government in collaboration with FAO has also launched a rapid supply response project in four counties to assist food insecure farming household vulnerable to soaring food prices. An initial distribution of 395.5 metric tons of seed rice was provided to 15,820 beneficiaries in Bong, Lofa, Nimba and Grand Gedeh counties, in addition to the provision of seed, the intervention will include providing pest management inputs, farming chemicals as well as providing technical backstopping to the beneficiaries. The efforts are to ensure expansion of production areas and increase food output. The rapid response project is complemented by an emergency seed purchase and distribution exercise which resulted to the purchase of 414.57 metric tons of locally produced quality rice seeds and distributed to 14,587 seed insecure households in fifteen counties. The interventions in food sector especially in the staple food (rice) are to ensure increased food supply, reduce rising food prices and increase access of vulnerable food insecure groups to food intakes including rice. Harvests for 2009

are encouraging as productions in the intervening counties have shown increases over the previous year. This is evident by increased flow of food crops including rice, cassava, vegetables, plantain, etc to urban centers. Prices of these commodities have been declining.³³

BOX 5.2: Improving Food Security & Nutrition through Economic Empowerment of Women

Since women contribute more labour and time to caring for the food needs of household and are more vulnerable to food insecurity, the government with the support of donor funding (FAO) launched a food security and nutrition programme to economically empower women through improved agricultural productivity and income generation. ...The empowerment of women to produce more food and increase their income will overall contribute to poverty reduction. Phase one of the project successfully sensitized, mobilized and engaged 43 farming groups (7,961 beneficiaries) in the rural women structures in three counties(Bong, Lofa & Nimba) and also assisted the groups with 37,457 pieces of assorted farming tools and 158 metric tons of seed rice.....Selected staffs and other participants have sensitized, mobilized and trained management, power tiller operations and maintenance to support the project while logistical assistance including vehicles (2) were provided for the management and operations of the women food and nutrition empowerment project. Other components of the project include building agro-processing capacity to improve value chain and providing provision of inputs for vegetable, poultry and fishery productions (Ministry of Agriculture Annual Report, 2009).

5.5 Resource Issues

Since the basic requirement in Liberia is redevelopment, resources will always be perceived as being limited. This perception is widespread despite more than \$500 million per year for UNMIL to sustain peace and security (and revive Liberia's security forces); general aid flows (food, projects, technical assistance and so on) of around \$350 million per year; and by 2011, the provision of approximately \$4.5 billion to rationalize Liberia's external debt. Overall, during the decade 2004 to 2014, Liberia will have had in excess of \$12 billion in external assistance. To put this support in perspective, Liberia's GDP remains significantly below \$1 billion per annum.

The reality is that there are too few resources to repair the damage and develop the economy in ways that would enable Liberia to rapidly regain its former middle income status. More important, the only sustainable means of regaining that former status is through shared growth. As this Report has already argued, that goal may be diligently sought but given the country's capacity constraints, it cannot be fast-tracked. If they are to come at all, economic and social development and the human development derived from them will come slowly.

While the PRS gives a prominent role to financing, the major resource constraints in Liberia are not financial. The principal resource constraints in Liberia are human, institutional and organizational capacities.³⁴ It is these which will largely determine the efficiency with which financial resources can be mobilized and utilized to create the physical capital which will drive sustained shared growth.

5.6. Summary Points

One: Human development (freedom, potential, capabilities) is not directly created by government action. It is derived from the circumstances created by the government and its agencies as they mobilize and allocate resources that help stimulate the private activity that generates shared growth, reduces poverty, and enhances welfare.

Two: Effective implementation requires governments to avoid over-reaching. Their development agendas need to be matched with their available (financial, human, organizational, institutional, and physical) capacities. Imbalances between the agenda and the capacities available will undermine the efficiency of resource use, holding back efforts to raise growth rates and reduce poverty.

Three: Within the limits required of matching its agenda to its capacities, the GoL will face several specific implementation challenges. These relate to human capacity, organization and management, developing a coherent strategy to mobilize resources, and accounting/providing for the recurrent cost implication of development projects.

Four: The GoL's recent assessment of its implementation success focused too much on a "scorecard" accounting of implementation performance. This does little to promote shared growth and reduce poverty. These require action more than process.

Five: The government has stressed the need to restructure its implementation efforts. One change that would contribute positively would be to set up a task force to ensure that conditions that need to be met to have donor funds released are understood and acted upon.

Six: The government would benefit from focusing more on what the donor agencies already have underway. This would allow them to strengthen local ownership, help create local capacity, and provide experience in coordination. Support from the United Nations as part of its "delivering as one" could be productively pursued with these objectives in mind.

CHAPTER SIX: CONCLUDING OBSERVATIONS AND AGENDA FOR ACTION

Main Message: Revival, reconstruction, and development that enhance human development take time. Since all resources (both from local and international sources) are scarce, they have to be used efficiently (to achieve the greatest impact) and effectively (to achieve the desired impacts). Despite the pressing need, human development cannot be rushed. The primary focus of the government, participating communities, external assistance agencies and individuals should be to establish the broadest foundation for sustained shared growth and poverty reduction. For the foreseeable future in Liberia this will hinge on achieving tangible improvements in infrastructure and agriculture across the whole country.

6.1: Introduction

Inappropriate policy responses to the oil and food shocks of the 1970s and civil war swept away much of what has been seen in Liberia as development (or economic transformation). The end of the war has created the conditions – peace and improved security, better governance and more robust rule of law, economic revitalization and revamped infrastructure and enhanced social services that provide a foundation for expanding the opportunities and increasing the human capabilities that are critical to promoting human development.

The need to promote human development is urgent. The resources required for that task are limited. Yet, despite the urgency, the process cannot be rushed. Doing so creates inefficiency and wastes the few capacities that are available to Liberia. That, in turn, will undermine recovery and hurt the very people (the poor, marginalized and vulnerable) who could benefit from opportunities provided by shared growth and development.

The Government of Liberia has formulated a Poverty Reduction Strategy has many elements of a human development strategy. Appropriately implemented, the PRS which emphasizes shared economic growth will raise income, spread the benefits of development more broadly, and enhance overall welfare. In the process, it will enable Liberia to make progress towards the MDGs, especially those related to health, education, poverty reduction and environmental sustainability.

This Chapter concludes the Human Development Report by suggesting an action agenda designed to boost the prospects that the achievement of shared growth through agriculture and infrastructure will promote human development.

6.2: The Basic Requirements for Moving Forward

Liberia already has action plans and policy matrixes and development agendas that consume a growing body of work, much of it (though recently completed) sitting on shelves untended and often heeded. As an illustration, the PRS has 19 separate policy action matrixes some of which contain more than two dozen items. UNDP's recently revised UNDAF has an action matrix that runs for twenty pages in a 53 page report. The IMF's recent Country Report (no 09/177) has 13 performance criteria that it requires Liberia to meet. Other agencies have similar lists of activities deemed vital for revamping, rebuilding, reconstructing, rehabilitating and otherwise reviving the economy and society.

These lists are useful pointers to what might be done were capacity constraints less binding. They are of little use in helping to identify what needs to be done to move Liberia constructively forward. Moreover, they are even less relevant for determining what can be done. As an example, many of the activities in the PRS designed to generate rapid inclusive growth include sub-components related to creating the capacity to undertake the activities. This approach is back-to-front. Creating capacity "on-the-fly" in this manner has two drawbacks: I) it rarely generates the capacities that are actually needed to achieve the task; and ii) the tasks actually achieved are not what were planned (precisely because the capacity to achieve them was not available). This is not a useful means to promote human development in Liberia.

Five elements Liberia will find useful in promoting human development include the following.

One: Ensure that peace and security is maintained. Without peace, human development is impossible. Liberia's history is direct evidence; international experience (especially ongoing conflicts) is further confirmation.

Two: Maintain macroeconomic balance. This requires appropriate fiscal, monetary, exchange rate and debt management policies. It also requires the efficient (i.e., least cost) mobilization of government revenue and the (equally) efficient (i.e., maximum impact) allocation of government expenditures. Achieving macroeconomic balance will not guarantee rapid growth that can be shared. But, without macroeconomic balance, there is no prospect of sustained growth. Again, experience in Liberia and elsewhere provides direct evidence.

Three: Actively promote small-holder agriculture in food crops, cash crops (coffee, cocoa, oil palm), and livestock production. This will require special efforts to distribute improved seeds, root stocks and breeding animals; disseminate information on more productive techniques and practices; remove administrative barriers to the revival of rural markets; expand efforts to protect crops and livestock and reduce post-harvest losses; and support community action to improve rural amenities (schools, health clinics, village storage facilities, and farm-to-market roads). None of this is rocket science, but it will involve improved management and enhanced technical capacity within the relevant ministries and agencies and effective coordination of their activities.²

Four: Construct and/or repair infrastructure (especially primary roads) and appropriately maintain it. The latter is critical. The re-development of Liberia's infrastructure (ports, schools, hospitals, health clinics, water and sanitation systems, electricity networks, roads, storage facilities, etc.) simultaneously involves a commitment to provide resources for their maintenance and operation. Given the volume of re-construction required, these recurrent cost implications are large. Without special attention they will rapidly dominate future budgets.

Five: Each of the above involves a sub-set of actions and activities, many of which are already stressed in the various agendas and action plans referred to earlier. Each of the above requires resources – human, financial, institutional, organizational, physical, environmental, and time – to achieve. All of these resources are limited, or their supplies can only be augmented through the expenditure of additional resources (especially time). Ensuring that implementation is efficient (i.e., involves the least cost approach, or yields the maximum output) and effective (the activities have the desired impact) requires management and administration skills.³

6.3: The "Next Best Step"

Moving forward is always a challenge for policy makers. The current situation is cannot be known in all its detail. Policy actions take time to formulate and implement and then to have an impact. Some goals are easier to achieve than others; the same applies to the measurement of outcomes. Moreover, over time the goals may change and the resources (both the level and combination) available for pursuing them will change.

These circumstances are not unique to Liberia. They relate to every attempt to foster (or stimulate) social and economic change. Every policy maker (or "social change agent") encounters the same issues.

A constructive approach to moving forward can be derived from the basic results of dynamic or adaptive programming which, in turn, have drawn inspiration from the results of control theory. The main feature of this approach is for decision makers to take into account what is known about the current situation, the goals which are being sought, and the availability of resources for achieving the goals and to then enquire what is the next best step (or move). Such an approach applies at several levels. At the broadest level, it reflects the fundamental feature of a "capable state," i.e., one in which decision makers match their priorities to the resources that are available.

At the macro level, obvious examples in Liberia relate to roads and agriculture. For instance, would all-weather roads connecting each county capital contribute more to shared growth over the short term (18 months) and medium term (5 years) than devoting the same resources to repairing roads in and around Monrovia? With respect to agriculture, would the promotion of small-holder rice production as a means of substituting for rice imports have a greater impact on shared growth over the short and medium terms than using public resources to encourage large-scale commercial rice production?

When applied to the micro level, the approach helps focus the attention of project leaders/managers on feasible outcomes given the availability of resources, especially management capacity. For instance, project managers seeking to upgrade a section of rural road can evaluate whether devoting more resources to improved drainage would increase road longevity. Ministry of Agriculture officials could determine whether the next best step is to distribute new seed as a means of increasing output or whether old seed with improved crop protection and reduced post-harvest losses would be more effective.

These examples show that the approach is scale-neutral. What is required is a working knowledge of current circumstances, the goals being sought, the resources available, and the techniques for employing them. The next best move is then the decision about what needs to be done with existing resources in the context of current constraints and opportunities in order to best achieve the specific goals being sought.

6.4 An Agenda for Action

The basic agenda for action to promote human development in Liberia consists of items related to requirements of a "strategy," efficient implementation, effective coordination of government/donor activities, and capacity development, especially management capacity.

(*Re*)-establishing a Strategic Focus: The PRS, like the 150 Action Plan and the iPRS before it, is proving to be unwieldy and given current resource deficiencies incapable of being implemented as it has been formulated. Notwithstanding President Johnson Sirleaf's recent call for all ministries and agencies to get back on track, the GoL does not have the capacities for that, and, moreover, will not have the capacities by 2011 required to fully implement the PRS.

To boost human development in Liberia, what is now being attempted needs to be modified and scaled back to match the GoL capacities. Donor agencies could (and should) assist in this effort. The United Nations agencies could take the lead by extending their "One UN" idea to embrace the activities other donors and the Government.

The exercise would involve a rapid review of existing PRS and other activities to determine what impact they have had. (Some of this was done following the August 2009 retreat on the PRS.) The assessment should focus on the degree to which these activities have been promoting shared growth and poverty reduction. Activities that do not tangibly and immediately contribute to either goal should be dropped. Other activities that have minimal or limited impacts in these areas should be deferred or set aside. Of the remaining activities that contribute to shared growth and poverty reduction, emphasis should be placed on those whose principal effects are in the rural areas. Of these, only those for which resources have been mobilized or are actively being mobilized should be implemented. The remainder, i.e., those for which resources are not available, should be deferred.

If pursued rigorously (and with dispatch), this exercise will re-focus the Government's energies and donor support on the elements of the PRS that are strategic. In the process, it will increase the efficiency of resource use by scaling back the PRS agenda to a level that matches the capacities available to the government and its agencies.

Efficient Implementation: Scaling back the activities in the above manner is the first step; the second is to ensure that the activities being undertaken are effectively organized and implemented. This will require major improvements in coordination within the government and between the government and

the development agencies. That, in turn, will require improvements in the operations of the government ministries and public agencies.

This process could be usefully started by understanding why some issues cannot be addressed despite their apparent urgency. Why, for example, cannot the issue of violence against women be dealt with in ways that reduces its incidence and brings perpetrators to justice? This is not a new issue; there are laws prohibiting violence against women; the violence continues; yet there are no legal repercussions for the perpetrators. Again for example, why is it not possible to keep the garbage off Monrovia's streets? There are skips; there are trucks to carry the skips; there are Ministry of Public Works employees to drive the trucks; and there is a convenient dumping place. Nonetheless, the garbage continues to accumulate. A third example, why do post-harvest crop losses remain so high in Liberia? There is evidence that 25 to 40 percent of the major staple crops (rice, cassava) are lost; there is evidence that food insecurity is a crucial problem to which aid agencies and the government have responded by importing food; there are techniques that could be widely applied to reduce post-harvest losses; yet, the communities and the relevant agencies have not yet been able to convince and/or induce farmers to modify their operation in ways that reduce the losses.

Studied for the lessons they provide on problems of implementation these (and other) examples would highlight the difficulties – lack of skills, imbalances in financing, lack of institutional initiative, bureaucratic dysfunction, general disorganization within the government, and/or the absence of clear areas of responsibility. They would help public agencies and those with whom they work structure remedies or work around the difficulties. The most useful outcome is that they would move the government and donors away from implementation processes and planning procedures and get them focused on what is (and is not) working and why?

Improved Donor Coordination: All donor agencies regularly stress the need for donor coordination. Few do it on a consistent basis even when, as in Liberia, there is close cooperation among the main donors. But, cooperation is not coordination. Moreover, notwithstanding the commitments that donors made in endorsing the Paris Declaration on Aid Effectiveness, ensuring that donor coordination is effective involves a major effort, one that is generally beyond donors and host governments to accomplish. A basic problem in Liberia is that the government lacks the capacities required to keep track of what the donor agencies are doing and are proposing.

Several mechanisms have been partially implemented for a central clearing and monitoring agency (initially the Liberia Reconstruction and Development Committee) through computerized and other systems. These have not worked. In view of the management skills required, it is not clear any can work. Donor agencies have a variety of reporting and allocation systems. Few of these are mutually compatible or consistent with the government's own reporting system. Most donors operate on different budget cycles with that of Liberia. Many ministries have either been unable or been incapable of providing the necessary information in the time spans required to have funds released for relevant activities.⁶

While the point has been made many times before, it bears repeating. Donor coordination would ease a major burden on the limited skills available to key Liberian agencies. Many models have already been tried with lead agencies in particular sectors, regularly scheduled donor coordinating meetings, and a series of designated local agencies (such as LRDC). None of this works well in Liberia. More experimentation would be worthwhile.⁷

Capacity enhancement, particularly of management: Everything the government and donors undertake requires management and organization. These areas, however, are two of the least well handled aspects of PRS implementation. For its part, the PRS glosses over management issues. In Chapter 12 it focuses on building capacity for PRS implementation without mentioning that activities have to be managed. Chapter 14 discusses "managing risks and constraints" without explaining what that would entail. Indeed, the chapter is a catalog of the possible difficulties that might arise in

implementing the PRS rather than an assessment of the challenges of managing the PRS (i.e., attempting to successfully accomplish the goals of the PRS with the resources available).

What would be useful (and informative) is a review, preferably by a small task force, of the common weaknesses evident in managing activities that contribute to shared growth and poverty reduction. Once the weaknesses are identified, the task force can begin to identify mechanisms, approaches, and techniques to help remedy them. These could involve special technical assistance, weekend training on-the-job work-study programs, mentoring and training, incentives managers/administrators to upgrade their skills. Liberia's universities could be contracted to produce special management modules and offer them on their campus or some other location. Major donors could be asked to give priority to management training in all their activities. Special courses for all senior government officials could be designed with the officials who opt out because they insist they know how to manage drafted to undertake the training.

Conscientiously and consistently pursued, this aspect of capacity building would have a high and relatively rapid pay off. It would result in the more efficient use of all resources and it would accelerate implementation. It would improve the effectiveness of policy implementation (i.e., the degree of coherence between the expected and actual outcomes) and, in doing so, would strengthen the conditions for promoting human development in Liberia.

6.5 A Final Comment

Promoting human development is a process that seeks to expand opportunities and capabilities. The GoL has determined that the most appropriate way to reduce poverty and counteract widespread deprivation in Liberia is to adopt measures that achieve rapid shared/inclusive growth. This National Human Development Report has emphasized the connections among agriculture, infrastructure and shared growth. Each is vital to the other and each, when promoted, enhances the other. There will be no growth to share without the revival of agriculture, and agriculture will not revive and prosper without the expansion of infrastructure. Completing the circle, it will take rapid economic growth to generate the resources needed to support infrastructure development and create the incentives for further expansion of agriculture.

Success in these inter-related activities will require the participation and engagement of the rural communities across Liberia. The process of raising the rate of shared growth will promote human development. Increased agricultural output will enhance food security and raise health status. This will reduce under-5 mortality and raise worker productivity. Improvements in infrastructure will increase the returns from agricultural production thereby boosting incomes. It will also enable the providers of basic social services (health, education) more convenient access to the rural population thereby further raising farm household and rural welfare. Each of these contributes to key dimensions of human development (enhanced capabilities to produce and earn income, improved health, food security and increased access to services such as education).

The Government of Liberia will strengthen the foundation for human development if it effectively implements the key provisions of the PRS. For that to happen, the government will need to carefully focus its attention on the primary growth-inducing and poverty-reducing measures and ensure that its activities are consistently matched to the resources it has available.

ENDNOTES

Chapter 1

Writing in the Human Development Report 1999, Paul Streeten examined why human development was such an appealing idea. Human development, he noted "...went well beyond narrowly defined economic development to cover the full flourishing of all human choices. It emphasized the need to put people – their needs, their aspirations and their capabilities – at the center of the development effort" (Streeten 1999).

at the center of the development effort" (Streeten 1999).

This is evident in HDR 2005 (Chapter 5, pp.151-3). "Human security" has "...two aspects: safety from chronic threats, like hunger, disease and repression, and protection from sudden disruptions in the patterns of daily life" (p.153). More recently, climate change has been included as a potentially disruptive force. The HDR 2007/2008 (p.7) stated: "All development is ultimately about expanding human potential and enlarging human freedom. It is about people developing the capabilities that empower them to make choices and to lead lives they value. Climate change threatens to erode human freedoms and limit choice."

³ The National Human Development Report (UNDP 2006, Box 1.3, p.10) specifically noted that HD is "an evolving concept." To emphasize the point, it traced the shift in emphasis of each HDR from 1990 (Box 1.4, p.11); the 1999 NHDR had done the same thing (UNDP 1999, Box 2,3, pp.8-10).

⁴ In addition to the new learning that needs to occur, a key element in helping Liberia to move forward will also involve some explicit *un-learning* of acquired patterns. Thuggery, violence against women, degradation of natural resources, and dissipation of public capital through corruption and neglect are examples.

⁵ GRL (2008, pp.45-46)

⁶ The CWIQ surveyed rural and urban households to determine their perceptions of poverty. An "objective" poverty line was established as the cost of achieving consumption of 2400 Kcal per day (GRL 2008, pp.25-28).

⁷ www.hdrstats.undp.org/es/2008 Country: Liberia (accessed September 8, 2009)

⁸ Computed as two-thirds of the adult literacy index (.555) and one-third of the combined primary, secondary, and tertiary enrolment index (.576); UNDP Human Development Report 2009, Statistical Annex H, pp. 173.

⁹ UNDP Statistical Update, Liberia; www.hdrstats.undp.org/es/2008 for Liberia (access September 9, 2009)

¹⁰ World Bank (2009, Tables 1.2 to 1.5); GRL/UNDP (2008, pp.1-2); <u>www.ddp-ext.worldbank/ext/ddpreports</u> Country: Liberia (accessed September 8, 2009)

¹¹ GRL (2006)

¹² GRL (2008, par.1.2)

¹³ GRL (2008, par.4.2)

¹⁴ Arimah (2004) examined the degree to which human development strategies (which focused on health, education, and improved governance) reduced poverty in 30 African countries. He concluded that "inter-country differences in poverty levels are accounted for by variables indicative of the different facets of human development" (p. 412). See also: Thomas *et al.* (2000), Dorward *et al.* (2004), Lopez (2004), World Bank (2007, Chapter 1, esp. pp.45-47) for similar results.

¹⁵ World Bank (2007, Ch. 1, esp. Focus A, pp.45-49)

¹⁶ Sources: UNDP (2008, Human Development Indicators, Table 2) and *World Development Indicators 2009*, (World Bank 2009, Table 2.8, pp.67-71).

¹⁷ The one major (i.e., large country exception) to this trend was Philippines where the HDI increased significantly (due largely to high rates of economic growth) but poverty measures did not improve.

¹⁸ It is difficult to determine the overall performance of Liberia with respect to the MDGs. There are three basic sources, none of them completely up to date (GRL 2008, Table 3.5, p.34; GRL/UNDP 2008, Annex 1; UNDP 2006, Table 3.7). ¹⁹ GRL 2008, Ch.1

²⁰ GRL (2008, pp.32-35); GRL/UNDP (2008, Table 1, Annex 1)

²¹ GRL (2008, p.32)

¹World Bank (2009, Table 4.1, p.205)

² GRL (2008, Table 4.1, p.40); IMF (2009, Table 1, p.15).

³IMF (2009, Table 2, p.16)

⁴ Ibid

⁵ Disraeli published *Sybil, or The Two Nations*, in 1845. It describes the working class predicament in England. This theme of "two (rival) nations," rich and poor, privileged and deprived has been common to many descriptions of national transformation or, as in Liberia's case, the lack of it.

⁶ Clower *et al.* (1966). In view of the grossly distorted and unequal comparators like Brazil, Peru, El Salvador, Venezuela, Pakistan, and several oil-rich sheikdoms at the time, this reflected poorly in Liberia's circumstances.
⁷ Dorward *et al.* (2004, p.75).

⁸ Cornia, Jolly, and Stewart (1987). The first formal Structural Adjustment Program supported by the international financial institutions was for Turkey in 1980. There were dozens subsequently in scores of countries. The approach to reform, eventually dubbed (inaccurately) as the "Washington Consensus" has been widely scrutinized – praised by some, attacked by others. Many African governments participated reluctantly. An SAP was part of earning the IMF's "stamp of approval." Much of the United Nations system was hostile to the approach. The Economic Commission for Africa specifically

formulated an "alternative" to structural adjustment (UNECA 1989). However, what was missed in the bureaucratic and academic wrangling was that adjustment always occurs when macroeconomic imbalances exist. Countries that adjusted systematically (Mauritius, South Korea, pre-1998 Indonesia; Chile) restored balance quickly and prospered. Countries that dithered (much of Africa) did neither.

⁹ One of the prominent recommendations emerging from this approach is that governments need to create "social safety nets". Yet, research (Fan 2005) suggests that these safety nets are often an inefficient (i.e., more costly) means of reducing poverty. This is critical when public funds are limited. Extensive comparative research shows that public expenditures which are most effective in reducing poverty are infrastructure, education, and (adaptive) agricultural research. Many social safety nets programs experienced misuse of the funds and the (politically determined) mis-targeting of support.

¹⁰ Mehrotra and Jolly (1997) examine the performance of nine developing countries that emphasized social aspects of development while seeking to promote economic growth. These countries had significantly higher social indicators (especially for health, education, and nutrition) than those with comparable per capita incomes which primarily focused on economic growth.

¹¹The theme of HDR 1999 was "globalization with a human face."

¹² UNIDO (2003, p.10). UNIDO provided principles to guide a bottoms-up approach: a strategic focus; people-centered; root-cause analysis; gender sensitive; locally specific; asset-based; analysis and understanding of absorptive capacities; sustainability; open architecture (i.e., cooperate with others); measurement of impacts; and the commitment to learning (*ibid.*, p.16). These principles contrast with (and even contradict) those associated with "top-down" development. Many sources highlight the relevance and applicability of inclusive/shared growth/development. The World Bank's website PovertyNet includes a sub-section "achieving shared growth" with detailed discussions of "shared growth, inclusive growth, [and] pro-poor growth." The opening chapter of South Africa's medium term budget policy statement (GoSA 2005) was entitled "accelerated and shared growth" (Brown 2006). The recently formulated Eleventh Five-Year Plan in India featured inclusive growth (Rao 2008). Inclusive growth has been emphasized in Mindanao (Philippines) as a socially progressive means of dealing with conflict (Cabral 2008). UNDP, itself, has an "Inclusive Growth and Development" project (started in 2009) that is helping prepare the National HDR in Somalia, monitoring performance towards the MDGs, and supporting poverty assessments. In Malaysia, UNDP provided selective assistance in the development of the Ninth Malaysia Plan (2006-2010). It is committed to "inclusive globalization and promoting inclusive growth." It specifically responds to the continued existence of serious distortions in regional growth and development in Malaysia and the continued limited access of some groups to the benefits of the country's rapid, sustained growth. Key features of inclusive growth are also evident in studies that focus on the "quality of growth" (Thomas et al. 2000). Recent studies have highlighted "inclusive development." It was seen as a major justification for expanding, extending and upgrading infrastructure (ADB 2005). Finally, the Commission on Growth and Development urged the poorest countries to promote "fast sustained and equitable growth" so that their populations could benefit from inclusive development (Growth Commission 2008). ¹⁴ Many of these were analyzed in the World Bank's 1994 World Development Report "Infrastructure for Development" (World Bank 1994, esp. pp.14-22; 114-121) and the 2004 Asian Development Bank's study "Connecting East Asia: A New Framework for Infrastructure" (ADB 2005, Ch. 2).

¹⁵ This is a theme of the 1994 World Development Report (World Bank 1994).

¹⁶ The concepts of social capital and social trust are linked. Coleman, Putnam and others have discussed the idea in detail. The World Bank's PovertyNet website (www.worldbank.org/poverty/scapital.htm) has a summary. It defines social capital as "...the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions...." An associated term, social trust, was popularized by Fukuyama (1996). He used the idea of "radius of trust" to summarize the degree to which an individual was willing to cooperate and interact. Societies which have limited or little trust have few relationships through which social capital can be developed and extended (National Statistics 2001; Smith 2007).

¹⁷ See Lambert (2009) who gives the example of how wireless communications have boosted rural activities in Guinea Bissau. The impact of mobile telecommunications in developing countries was also reviewed in *The Economist* (September 26, 2009).

¹⁸ See chapter 4 below.

¹⁹ A multi-equation model for thirty-three African countries over the period 1970 to 1998, estimated using Three Stage Least Squares, found that the growth of agriculture was highly significantly and negatively related to the growth of agriculture (McPherson and Rakovski 2002). The implication was that the non-agriculture sector had grown at the expense of the agricultural sector. Policies which systematically undermined agriculture were inflation (the result of large, persistent fiscal deficits), overvalued real exchange rate (exacerbated by nominal exchange rate manipulation and domestic inflation), and the urban bias in the allocation of both local and international (aid) resources.

urban bias in the allocation of both local and international (aid) resources.

20 Over the period 1975 to 2005, for example, per capita income in the whole of Sub-Saharan Africa declined by 0.5 percent per annum (UNDP HDR 2007, Table 14, p. 280). By contrast, over that period per capita income in all developing countries rose by 2.5 percent per annum.

rose by 2.5 percent per annum.

21 This error has been so widespread (especially across SSA) that it could be seen as a mis-reading of history and what development models implied. The dominant development paradigm in the 1960s was the Lewis or Fei-Ranis model hitched to the Harrod-Domar growth framework. The misinterpretation of Lewis in particular (Lewis 1994) was to believe that resources could be extracted from agriculture without supplementary investment to ensure agriculture remained dynamic. Most African countries extracted resources from agriculture without reinvesting whether through agricultural research, infrastructure or other support. In this regard, the pattern of economic regression (highlighted in the data in this chapter) was policy-driven.

22 It was a feature of Asian development as well (Myrdal 1968; Ehrlich 1975), until the widespread famines of the 1960s and

²² It was a feature of Asian development as well (Myrdal 1968; Ehrlich 1975), until the widespread famines of the 1960s and early 1970s forced key countries (India, China, Bangladesh, and Indonesia) to reverse course and adopt policies that stimulated agricultural development (Timmer, Falcon and Pearson 1983; Timmer 2005; FAO 2006). Instead of extracting resources from agriculture, these countries actively directed resources into the sector.

- ²³ World Bank World Development Indicators 2000, Table 4.1, p.184
- ²⁴ World Bank World Development Indicators 2006, Table 4.1, p.196; 2009, Table 4.1, p.206
- ²⁵ Chenery and Syrquin (1975), Syrquin and Chenery (1989)
- ²⁶ World Bank World Development Report 1989, Table 2, p.166.
- ²⁷ *Ibid.*. Table 6, p.215
- ²⁸ World Development Report 1982, Table 3, p.114.

- ⁶ World Bank (1994, p.2).
- 7 Op.cit.

- ⁹ World Bank (1994, Box 2, p.2)
- ¹⁰ Schumpeter (1954, pp. 234-243)

- ¹⁴ The probability of loss/wastage needs to be considered as well.
- ¹⁵ World Bank (2009, p.12)
- ¹⁶ World Bank (2009, p.13)
- ¹⁷World Bank (2009, p.21)
- ¹⁸ Ibid.
- ¹⁹ World Bank (2009, pp.23-24)
- ²⁰ ADB (2005)
- ²¹ GRL (2008, Chapter 3, esp. pp.25-32)

- ²⁵ GRL (2008, p.97)
- ²⁶ GRL (2008, pp.99-108)
- ²⁷ GRL (2008, p.100)
- ²⁸ GRL (2008, p.158

¹ World Bank (1994)

² Infrastructure includes public utilities (electricity, water, sanitation), public works (roads, dams, irrigations schemes), other transport and logistics (roads, ports, harbors, airports). They tend to be subject to economies of scale and spillover effects from users to non-users. Some facilities such as forests and watersheds are open-access and serve multiple uses (World Bank 1994, p.2).

³ *Ibid.*, p.5

⁴ Part of this emphasis results from the recognition that public actions have a dual effect. Infrastructure development can have positive effects on one group (increasing their capabilities) and negative effects (displacement) on others. Krishna (2004) used this point to explain why some people escape poverty and others become poor. An example in Liberia is that the extension of urban water supply in Liberia will raise welfare for some groups (water users/household members) but will undercut the livelihoods of those engaged in water delivery.

A large portion of the cost is the down-time (lost production) due to intermittent service. Some enterprises reduce this cost through back-up facilities (generators, private wells, higher level of inventories). These, too, add to costs. Improved reliability is a major factor in reducing the share of infrastructure services in producer and consumer costs. This lower share, in turn, is an important determinant of the flows of goods and services and patterns of production and trade (Deichmann and Gill 2008).

⁸ Refuse removal was restricted in Monrovia and garbage piled up on the streets in 2007 because a suitable dump site was not available.

¹¹ Schumpeter (1954, pp.465-467); Niehans (1998, pp. 636-639). Highlighting the notion of "net rent" reminds analysts that even though they focus on the supply of land, its extent is determined by underlying conditions of "effective demand" (i.e., demand backed by purchasing power). This point is made explicit by Amanor-Boadu (2009).

¹² Schultz (1953, Ch.13), Schultz (1951) had argued earlier that as an economy developed the contribution of land as a productive resource declined relative to all other factors (physical capital, knowledge, human skills). This will not be the case in Liberia over the medium term at least. With re-development and the expansion of activities, the contribution of land to economic output (and growth) will increase. That increase will be largely induced by the expansion of infrastructure.

13 Distance is also measured as the resource cost (time, effort, equipment charges) of travel or transport between two

locations.

²² GRL (2008, Chapter 11) provides a summary of the work of several months effort by dozens of donor representatives and government officials.

Once common in colonial Africa, "sinking funds" ceased being used as government budgets came under pressure and foreign aid became more plentiful. Most governments argued correctly that it made little sense to dedicate funds in special accounts when donors would simply provide the additional resources as physical facilities fell into disrepair or needed replacing.
²⁴ GRL (2006, p.7)

²⁹ There is a large literature on inventory analysis, warehousing, and the "theory of emptiness" to determine how large inventories need to be relative to operations and delivery rates and probabilities of disruption.

- ¹ Dumont (1966); World Bank (1982; 1990; 2007); Timmer, Falcon and Pearson (1983); Mellor (1984); Eicher and Baker (1982); Badiane and Delgado (1995); Goldman (1999); Binswanger.and Townsend (2000); FAO (2006).
- ² World Bank (1982, pp.45-52).
- ³ To illustrate, the HDI for China, India and Indonesia increased, respectively from .559 to .777; .45 to .619; and .533 to .728 between 1980 and 2005 (UNDP HDR 2007, Table 2).
- ⁴ World Bank World Development Indicators 2003, Tables 2.1. and 4.1.
- ⁵ Evidence may be found in *World Development Indicators* 2003, 2009, Tables 2.1 and 3.3.
- ⁶ World Bank (2007, p.1)
- ⁷ For instance, the Gates and Rockefeller Foundations have combined to promote the Alliance for a Green Revolution in Africa (AGRA) see www.rockfund.org/initiatives/agra).
- ⁸ World Bank (2007, Ch. 10, esp. pp.226-228).
- ⁹ Mellor (1984); Brown and Haddad (1994); Delgado et al. (1998); Timmer (2005).
- ¹⁰ Deane (1965, Ch.5); Mellor (1984, p.137-139)
- ¹¹ UNDP HDR (2007, p.28)
- ¹² This is the title of a 1997 Harvard Business School case study of agricultural development in Zambia.
- ¹⁴ World Development Report 1982, Box 5.2, p.46.
- ¹⁵ The issue is not food self-sufficiency but food self-reliance, i.e., the ability to provide through direct and indirect means the supplies of food that will provide adequate nutrition levels to the whole population.
- ¹⁶ Comparisons come from UNDP HDR (2007, Table 2, pp.234-237) and WDI (2009, Tables 2.1 and 3.3).
- ¹⁷ Sen (1981) argued that lack of income reduced their capacity to acquire food, i.e., income poverty deprived them of their "entitlement" to food.
- ¹⁸ Data show that conditions in Liberia deteriorated rapidly at the end of the 1970s and in the early 1980s. Food production per capita in 1978-80 was 98 (1969-71=100) and daily calorie supply, which had been 2400 on average was declining (WDR 1982, Tables 1, 22). By 1981-83, food production per capita as 92 (1974-76=100). In 1983, cereal imports, rising from minimal levels in the mid-1970s, were 126 thousand tons with food aid accounting for an additional 57 thousand tons (WDR 1985, Tables 1, 6).
- ¹⁹ WDR 1982 and 1985, Table 1
- ²⁰ *WDI* 2006, Table 2.19, p.121.
- ²¹ WDI 2008, Table 2.18, p.107.
- ²² WDR 1982, Tables 2, 3.
- ²³ In 1980, current GNP per capita was \$530 (WDR 1982, Table 1); by 1987, it was \$450 (WDR 1989, Table 1).
- ²⁴ World Bank WDI 2006, Table 4.2, p.199; 2009, Table 4.2, p.209
- 25 Response of Liberia to Global Food Price Increases, 2008, p.2
- 26 National Food Security & Nutrition Strategy, 2008, p.14
- ²⁷ Ministry of Commerce, Monrovia, report on "Rice Imports," 2008
- ²⁸ FAO/WFP (2006); GRL/United Nations (2006); GRL/United Nations (2007); GRL/EU (2007); GRL/MA (2008)
- ²⁹ GRL/United Nations Joint Program (2008, p.6)
- ³⁰ GRL/United Nations Joint Program (2008, p.8)
- ³¹ *Ibid.*, p.11
- ³² IDA (2008, p.4)
- ³³ International evidence on this issue is clear (Eicher 1982; Brown and Haddad 1994; Goldman 1999; Timmer 2005; FAO 2006; IDA 2008).
- ³⁴ World Bank (2007, Box A.4)
- ³⁵Meeting with James Logan, Deputy Minister of Agriculture and Rural Development, Monrovia (September 2, 2009). This datum is consistent with the CAAS (2007) which revealed that rice yields are around 800-900 kg per ha. By comparison, the average yield in SSA is 1.5 tons per ha; the global average is 3.9 tons per ha.

 ³⁶ CAAS 2007
- ³⁷ Rubber output is currently being expanded through the revival of the plantations. This is antithetical to shared growth and poverty reduction. A preferable re-development strategy for rubber more suited to Liberia's development objectives would be the Malaysia/Indonesia/Vietnamese system of small-holder producers and centralized processing.
- ³⁸ GRL/United Nations Joint Program (2008)
- ³⁹ CAAS (2008), vol. 2.1, p.155
- ⁴⁰ John Kenneth Galbraith in *The Nature of Mass Poverty* (1979) aptly described the response as "accommodation." The very poor, he noted, refuse to struggle against what they see as overwhelming odds. Though based on his experience in India, the idea applies equally to Liberia where governments have always done too little for small-scale farmers away from the coast.
- ⁴¹ A recurrent concern raised during the PRS's rural consultations was the arbitrary behavior of many officials including the police. Peace (or the absence of war) was established quickly. As the District and County consultations revealed, it has taken much longer for law and order to return (GRL 2008, p.46).
- ⁴² \$38.7 million of a total of \$1.612 billion (GRL 2008, p.136).
- ⁴³ This idea has been part of economic doctrine since Adam Smith (1776, Cannon ed. 1937, Book 1, Chapter 3).
- 44 GRL/EU (2007)

- ⁴⁵ The Comprehensive Agricultural Assessment Survey (CAAS 2007) pointed to huge losses and wastage. Its data show that rice farmers on average sell 21 percent of their rice and consume the rest. Roughly 25 percent of the crop is lost postharvest. For cassava and vegetables, wastage and losses are estimated to be 25 percent and 45 percent respectively.
- ⁴⁶ Recent assessments indicate that current production of fish (which is consumed by 80 percent of Liberian households) is less than 15 thousand tons per annum. To place this datum in perspective, pre-war sustainable fish catch was in excess of 180 thousand tons (CAAS 2007, vol.1, p.51).
- ⁴⁷ CAAS (2007, vol.1, p.49)
- ⁴⁸ GRL (2008, p.60)
- ⁴⁹ GRL (2008, p.61)
- ⁵⁰ CAAS(2008), Vol. 1, p.13
- ⁵¹ GRL (2008, pp.62-63)
- ⁵² CAAS (2007), Lib Synthesis Report, Vol. 1, p.14, 2007

- ¹ This is not a new point but it needs to be repeated. There is a large literature on implementation issues and many case studies of the consequences when implementation goes awry. The World Development Report 1997 highlighted the issue by focusing on "capable states" defined as those which match their agendas to their capacities (World Bank 1997). By implication, incapable or dysfunctional states over-stretch their agendas and otherwise over-reach. By doing so, they block development. The NHDR 2006 (UNDP 2006, p.12) made a similar point noting explicitly that over-reach erodes the effectiveness of existing capacities.
- MPEA (2009)
- ³ Even though it is emphasized in the PRS, much of the focus on upgrading legislation and the medium term financial framework could have been easily postponed. When laws are unenforced and unenforceable (an example is the current law against rape), economic growth and poverty reduction are undermined not promoted.
- ⁴ GRL/MPEA (2009) GRL/MPEA (2009) "90 Days Action Plans: Results and Progress Report on PRS Implementation", LDRC, Monrovia, December, p.5
- ⁵ GRL (2008, p.160)
- ⁶ GRL (2008, p.161)
- ⁷ This presumption is not confined to Liberia; it is common in developing countries where urgency trumps efficiency (World Bank 1997, Chs 2.9).
- Briefing by Honorable Minister of Planning and Economic Affairs to donors (UNDP offices) September 4, 2009.
- ⁹ Sengbeh (2009)
- ¹⁰ A common complaint in Liberia is that the donor procedures are too complicated, time-consuming, and require too much effort. Since most donors deal with upwards of ninety countries and are responsible to their own parliaments or boards of directors, they are unlikely to change for Liberia. One dimension of developing capacity is understanding and doing what needs to be done to mobilize resources.
- ¹¹ UNDP (2006, Ch.6)
- ¹² It was noted that: "In the absence of such a strategy [program], interventions will remain piecemeal and transformation efforts needed to foster economic, political and social reforms...will fail" (UNDP 2006, p.55).
- ¹³ The PRS review (cited above) listed the lack of human capacity as a major constraint for each of the pillars.
- The consultative process identified three major priorities roads, education, security not the 900 plus noted in the MPEA (2009) review. The Liberian public understood the need to set priorities. The government, by contrast, has been unable to decide what is and is not important.
- ¹⁵ GRL/LISGIS (2008)
- ¹⁶ For 2008/2009, MPEA data show that the GoL's contribution is \$170.6 while donor commitments represent \$509.3 (MPEA 2009).
- It is reflected in the concepts of "deliver as one," "at work together" and "joined up thinking" (UN 2008, p.2, 26; UNDP 2008, p.2).
- ¹⁸ This point was emphasized during interviews by the authors with selected donors. It is evident in the gap between commitment for the first year of the PRS (\$509.3 million) and disbursements (\$238.6 million).
- ¹⁹ Special teams to cut through bureaucratic blockages and institutional delays have been a feature of many successful adjustment programs.

 20 The government recently reconfirmed its commitment to a cash-based budget in its Letter of Intent to the IMF (IMF)
- ²¹ UNEP (2004); GRL (2006, pp.7, 35-39; 2008, Ch.9).
- ²² The total road network in 2007 was approximately 6,162 miles of which 456 miles were paved (GRL, 2008, p.99).
- ²³ The details can be found in UNDP (2007, 2008), World Bank/ADB (2009); German MECD (2009), and www.usaid.gov/location/sub-saharan africa/countries/liberia.

 24 Projects in twelve counties are listed in UNDP (2008, Table 2.2, p.16).
- ²⁵ See UN (2008, p.21) which notes "...currently, 90 percent of funding for health comes from international organizations, nearly half of rural adults have no schooling and only 5% completed high school." It continues "UNICEF, UNDP, UNESCO, UNOPS, UNHCR, and WFP have worked together on schools rehabilitation, and there are joint programs involving several UN actors on...food security and nutrition..."

²⁸ GRL/LISGIS (2009) "2008 National Population & Housing Census" in 2008

hours to reach a market

³³ (Ministry of Agriculture Annual Report, 2009).

Chapter 6

¹ As an illustration, the Food and Agriculture area has three strategic objectives (GRL 2008, p.76). The first is "revitalize the food and agriculture sector..."; the second is to "improve food security and nutrition"; and the third is to "strengthen human and institutional capacities." It should be noted, however, that the reason for the third is that "agricultural institutions remain largely ineffective at delivering services such as regulation, policy and planning, and research and extension." Thus, the agricultural institutions that are "largely ineffective" are being required to revitalize and improve key areas of the food and nutrition system as they, themselves, are being upgraded. There are numerous other examples of this type of Catch 22 in the PRS (to wit, p78, mining, p.80, private sector investment, p.81, financial sector, p.93, governance and rule of law, among others).

² It is useful to remind policy makers and their advisors that the PRS is above all a "strategy". That is, policies, actions, processes need to be strategic if they are to be effective. In this respect, knowing what not to do (and when to stop doing something) is just as important as knowing what to do (and doing it effectively).

³ These are not new points. W.Arthur Lewis (1956) in one of the first books written on development planning highlighted the need for efficient, honest administration. Similarly, Goren Hyden (1983) specifically argued that even with effective management, there are "no short-cuts to progress." Development requires efficient managers and effective management. Re-development, in Liberia's case, is likely to demand additional diligence and patience.

⁴ This approach has been widely used in decision making and planning (e.g., Day and Groves 1975; Day 1976; Killick 1976). The idea comes from two bodies of work. On any optimal control trajectory (i.e., the time path that traces the optimal movement of a variable from one state to another) each point along the path represents the "optimal continuation" from the original state to that point. Pick another point and the movement is another "optimal continuation" (Dorfman 1969; Arrow and Lind 1970). If the underlying system does not change, the optimal path comprises the sub-set of optimal continuations (or "next best moves"). Earlier, Strotz (1955/6) had shown that if underlying conditions changed, earlier trajectories (for consumption, income, investment, etc.) were no longer optimal. Each time the conditions changed, the optimal trajectory needed to be re-calculated. When the two ideas are combined they imply that when conditions change (the norm in developing countries), the optimal response is to determine at each relevant decision point what is the next best move (or optimal continuation) given what is known about the existing system and the outcomes which are being sought.

This definition comes from World Development (1907) for the outcomes which are being sought.

⁵ This definition comes from World Development Report 1997 "The State in a Changing Society" (World Bank 1997). ⁶ Some aid activities, such as debt relief under the Highly Indebted Poor Country initiative, involve minimal input from the GoL.

⁷ The costing exercise for the PRS which involved a dedicated groups contacting and working with the donor agencies proved that useful coherent data could be assembled relative quickly. This group's effectiveness came from being able to cut across bureaucratic boundaries that arise when there is a regular "formal" reporting structure. In effect, donors can be coordinated but it requires a flexible approach.

²⁶WB/AfDB (2009, p.26)

²⁷The NERICA varieties (about six high yielding varieties) are currently in multiplication stages with trials undertaken through demonstrative plots at the Central Agricultural Research Institute (CARI) in Bong County. The seed multiplication exercise has been extended to selected farmers in four counties (Bong, Lofa, Margibi and Nimba). The expansion process has been hampered by the issue of title to land. The challenge has been the identification of honest people with legal title to land. The extension of seed multiplication to farmers requires farmers to commit to the process for a period of 10 years through lease agreement between the farmer and CARI. In this relation, the latter provides capital inputs including the NERICA seeds while the former payback the investment by the latter within the leased period. NERICA has six varieties of which four varieties are applied to upland cultivation while the other two are identified for lowland (swamp) areas. The impact of NERICA will not be immediately felt due to the slow pace of the seed multiplication process.

Active population is 1.455 million of which male population is estimated at 870,000 while female population is at 585,000 (Data Source: FAOSTAT 2009)

³⁰ Rice and cassava are the main food crops cultivated by Liberian farmers. A joint Post Harvest Crop Assessment conducted in 2008 revealed that 83 percent and 58 percent of farm household (estimated at 408,770 farm families with average household size of 7 persons) cultivated rice and cassava, respectively(Post-Harvest Crop Assessment-Liberia, August 2008, P.17).

³¹ A provision of post harvest estimates for losses and seeds of 22 percent and 19 percent, respectively are applied which made total paddy rice production available for consumption in 2008 to 175,171.3 metric tons. This is converted to milled rice(155,293 metric tons) using a factor of 65 percent(Post Harvest Crop Assessment-Liberia, August 2008, P. 27)

³² As noted in the Food Security and Nutrition Strategy (GRL/MA 2008, p.15) some women in Gparpolu County walk six

³⁴ Even with the best of intentions, it takes a long time to time to move the reform agenda forward. An example is the national strategy on capacity building. Recommended as being an urgent requirement in the National HDR 2006, the Government gave its support in 2007. The process of drafting the strategy continues. It is anticipated that the strategy will be adopted in 2010. In the meantime, many of the pressing capacity development issues have languished or alternative measures have been taken. Many of these have been one-off approaches that do not contribute to the integrated development of national capacity.

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⁸ The chapter refers to "performance management systems" but that is about monitoring performance rather than managing it.

⁹ It would also complement the recently formulated (currently in draft) National Capacity Development Strategy (UNDP 2009). This strategy offers a comprehensive agenda for developing capacity to support Liberia's re-development. Its main weakness is the development of the management skills needed to oversee that re-development

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