



Inclusive Green Economy Policies and Structural Transformation in Mozambique



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Inclusive Green Economy Policies and Structural Transformation in Mozambique

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Acronyms and abbreviations

AfDB	African Development Bank
AFRODAD	African Forum and Network on Debt and Development
APGE	Action Plan for the Green Economy
BdPES	Balanço do Plano Económico e Social (Report on the Economic and Social Plan)
BMI	Business Monitor International
CEDEFOP	European Centre for the Development of Vocational Training
CONDES	Conselho Nacional para Desenvolvimento Sustentável (National Sustainable Development Council)
ENDe	National Development Strategy
FDA	Fundo de Desenvolvimento Agrário (Agricultural Development Fund)
FDD	Fundo de Desenvolvimento Distrital (District Development Fund)
GDP	Gross domestic product
HIV/AIDS	Human immunodeficiency virus
IMF	International Monetary Fund
INE	National Statistics Institute
MCT	Ministerio dos Transportes e Comunicação (Ministry of Transport and Communication)
MICOA	Ministério para a Coordenação da Acção Ambiental (Ministry for Coordination of Environmental Affairs)
MozSAKSS	Mozambique Strategic Analysis and Knowledge Support System
MPD	Ministério da Planificação e Desenvolvimento (Ministry of Planning and Development)
PARP	Poverty Reduction Plan 2011-2014
PNISA	National Agricultural Sector Investment Plan
SIDA	Swedish International Development Cooperation Agency
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme

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Executive summary

African countries have recorded comparatively high rates of growth in recent years. Over the last decade, significant improvements have been made in several areas, including trade, mobilization of government revenue, infrastructure development, and provision of social services. Nonetheless, the current pattern of growth is neither inclusive nor sustainable. African countries are heavily dependent on natural resources as drivers of economic growth, but most such resources – fossil fuels and metallic and non-metallic minerals – are non-renewable and are being depleted at a pace that may endanger growth and sustainability over the longer term (UNCTAD, 2012). Like the rest of the world, Africa has been integrating environmental concerns into economic development plans in order to tackle the problems that have arisen as a result of unsustainable patterns of production and consumption (Mozambique, 2012).

The green economy approach is increasingly recognized as one that can achieve sustainable, inclusive and resilient economic growth, while at the same time enhancing the productivity and efficient use of natural resources. Mozambique shares Africa's Common Position on Rio+20 and on the green economy as a tool for achieving sustainable development. It has adopted a proactive approach by preparing a Green Economy Roadmap in the context of sustainable development and the eradication of poverty. The Roadmap contains information about the process Mozambique will go through in the transition to a green economy by the year 2030, based on the substantial progress made towards sustainable development over the last 20 years (Mozambique, 2012).

The green economy, a new economic model that reflects the social and environmental costs of development decisions currently not captured by traditional economics, will allow Mozambique to improve actions and policies in favour of sustainable development. In this sense, Mozambique

understands that integrating the value of natural resources and social capital in national accounting and planning is crucial to achieving economic growth that is equitable and sustainable. The Government of Mozambique has adopted the Green Economy Action Plan for the transition period 2013-2014, which defines the green economy as an economic model that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological inadequacies (Mozambique, 2013).

This report explores the linkages between and contribution of inclusive green economy policies to the structural transformation of Mozambique. It assesses how the existing inclusive green economy policies relate to the structural transformation strategy and implementation processes, and reviews the contribution of inclusive green economy policies to the transformation agenda. It seeks to enhance understanding and promote the adoption of inclusive green economy policies that contribute to the achievement of inclusive structural transformation goals in Mozambique.

Mozambique has been among the fastest-growing economies in sub-Saharan Africa over the last ten years, with average annual real GDP growth of 7.4 per cent. Various indicators of human development, such as GDP per capita, poverty headcount ratio, and life expectancy have improved significantly. This strong performance was supported by the determined implementation of credible macroeconomic policies and structural reforms, a favourable external environment, donor support, and, in recent years, the discovery and exploitation of natural resources. The economy of Mozambique, and therefore the well-being of its population, is almost entirely dependent on natural resources, both renewable and non-renewable. The Mozambican economy in general and the rural economy in particular are strongly dependent on the exploitation and use

of natural resources. Natural resources contribute directly more than 33 per cent of national wealth, while recently discovered mineral and hydrocarbon reserves open promising prospects for their role in the economy (IMF, 2014).

Structural transformation and inclusive green economy policies in Mozambique

Mozambique has emerged from decades of war to become one of Africa's best-performing economies. Political stability and structural reforms such as trade liberalization between 1994 and 2006, and sound macroeconomic policies since 1992 have generated steady growth since Mozambique emerged from the civil war and started its transition from a centralized to a market economy. As a result, the poverty rate has declined and significant progress has been made towards achieving the Millennium Development Goals (UNDP, 2014). Nonetheless, the overall picture is mixed and the progress achieved so far insufficient. Mozambique remains one of the world's poorest countries, the decline in poverty appears to have stalled in recent years and income inequality remains high. The country is now confronted with the issue of "quality of growth" and needs to consider measures to ensure that growth is pro-poor, inclusive and environmentally sustainable.

The Government has put in place sound macroeconomic policies, complemented by a series of structural policy reforms, strongly supported by donors and favourable global economic conditions, especially for commodity prices. In the immediate post-war phase, macroeconomic policy reforms focused on liberalizing the exchange and trade system, and reducing fiscal imbalances and the role of the State in the economy.

According to the Mozambique Strategic Analysis and Knowledge Support System (MozSAKSS), total real GDP trends for Mozambique reveal that the economy experienced steady growth averaging 3.2 per cent per year between 2001 and 2009. Over the same period, positive growth of roughly 2.1 per cent was recorded for per capita

GDP. Given the recovery of major economies from global recession, it is reasonable to expect this trend to continue, at least in the short term. The same source suggests that the economy experienced little structural transformation during this period and that the strategies implemented did not lead to any significant structural change (MozSAKSS, 2011). Policies relied heavily on megaprojects in the aluminium and extractive industries and the energy sector, the capital-intensive nature of which does not generate enough employment to provide sufficient opportunities for the rapidly growing young population.

With new major investment during the decade of post-war reconstruction, the share of agriculture (primary sector) fell from 38 per cent of GDP in 1992 to 20 per cent in 2001. This phenomenon reflected the rebuilding of the economy, the rehabilitation of the Cahora Bassa hydropower station (1995–1997), and the construction of the Mozal aluminium smelter (1998–2003), (Cungara and others, 2012).

Nonetheless, the Mozambican economy is still largely agriculture-based. As 69 per cent of the country's population of 23 million remains rural-based and largely dependent on agriculture for employment and livelihood, the role of agriculture in stimulating overall economic growth and poverty reduction remains critical (MozSAKSS, 2011).

The megaprojects are generating impressive growth rates for the country but are not in themselves a shortcut to sustainable development and inclusive growth. While the investments are, in many ways, remarkable, their net benefits to the rest of the economy have been questioned. The linkage between the megaprojects to the rest of the economy is minimal, and there is almost no spillover effect or significant job creation in related industries. In addition, there is a real risk of "Dutch disease", whereby new megaprojects might harm the growth prospects of other sectors (possibly creating a dual economy within the country). Mozambique still has an opportunity to consider policies and structures that would allow

it to escape the “resource curse” that has plagued many countries exploiting natural resources on a large scale (IMF, 2014).

Mozambique must generate inclusive and broad-based growth if it is to achieve its development goals and reduce poverty significantly. A particularly challenging task will be to create formal jobs at a rapid and sustained pace. An ambitious strategy of economic development and diversification is called for. Private investment, both national and foreign, should be the driving force of the economy, underpinned by a strong regulatory framework and sustained public investment.

Inclusive green economy policies and their role in fostering structural transformation

Many policies may be adopted or revised to stimulate and ensure the transition to a green economy. Mozambique possesses a wide variety of sustainable development and environmental conservation policies relevant for the green economy. Implementation of this new approach can be facilitated by analysing and revising existing policies or adopting new ones.

According to the Green Economy Roadmap, Mozambique will implement policies in four distinct areas: regulatory policies for the conservation, exploitation and management of natural resources; fiscal policies focused on taxation; investment policies directed towards infrastructure development, training and funding producers; and institutional policies aimed at strengthening national institutions through capacity-building, transformation and best governance practices (Mozambique, 2012). These policies will have a huge impact on developing an inclusive green economy and structural transformation.

Mozambique has identified some sectors with great potential to boost progress towards an inclusive green economy and structural transformation. The agriculture, construction, food security, cities and energy sectors have the greatest potential for transition to a green economy. Although

many sectors are considered potentially favourable, the three main priority sectors are agriculture, industry and energy.

One of the most important links between inclusive green economy policies and structural transformation in Mozambique is agriculture because it is the main source of sustenance and income in the country. The sector should be transformed through the adoption of appropriate technologies to ensure that it is not a source of environmental degradation. Inclusive green economy principles should be at the centre of the transformation. Since 70- 80 per cent of the population is directly or indirectly employed in agriculture, it is clear that successful structural transformation must begin with improved agricultural productivity and an increase in reliable food supplies. Practical actions that link the inclusive green economy and structural transformation in the agricultural sector include: increasing agricultural production in the areas with the greatest potential; implementing food production and job creation actions by opening lines of funding for the sector, such as the Agricultural Development Fund and the District Development Fund, among others; raising awareness of the need to change food habits (ensuring a balanced diet and adequate nutrition); raising awareness of the use of household assets to guarantee food security; mapping soils and agro-ecological conditions; controlling the use of agricultural chemicals; introducing new crops and practices; and diversification of crops. Another fundamental driver that links the inclusive green economy and structural transformation is the movement of labour out of less productive semi-subsistence agriculture into the more productive sectors of manufacturing and services.

Industry is another key driver of structural transformation with linkages to an inclusive green economy, and one the Government considers a decisive factor in economic development. Mozambique must therefore aim, not simply to achieve industrial development, but also to improve resource-use efficiency and mitigate pollution and waste. Structural transformation will involve a greater degree of industrialization of the country's

economy (ENDe, 2013). If structural transformation is to be successful, industrialization will be needed to create jobs, increase incomes and foster economic diversification. Commodity-based industrialization could be very useful in ensuring the success of structural transformation, while the development of manufacturing activities on a national scale will be critical.

The energy sector is also considered a driver of structural transformation and an inclusive green economy, but lack of energy is an impediment to economic growth and structural transformation. Poverty reduction is highly dependent on energy supply, while the development of well-integrated infrastructure is the biggest challenge facing Mozambique. At present, charcoal is the main energy source and this is threatening the country's forests. With high energy demand resulting from population growth, forests will be depleted rapidly if proper measures are not put in place. Demand for energy is also rising as a result of industrial development and investor pressure. Frequent power outages are discouraging investment in both rural and urban areas.

In order to cope with growing energy demands and reduce the environmental impact of charcoal use, the Government is investing heavily in extending hydroelectric power to every district in the country, and new hydroelectric power plants are under consideration. In addition to rural electrification, the Government has been investing in the distribution of natural gas as an energy source. A liquefied natural gas plant is to be built in the north using private investment, and distribution lines have been built in major cities, such as Maputo. Fossil fuels are also in high demand and there have been shortages. In order to address the problem, the country intends to augment petroleum reserves by diversifying sources, building new reservoirs, and controlling supplies. Coal is another important energy source abundant in Mozambique but current use is very limited. An attempt to establish coal plants to generate electricity is under way. The Government is also planning to implement renewable energy policies (mainly solar energy).

Challenges and opportunities

By 2030, the population of Mozambique will have increased by 15 million people to 38 million, 60 per cent of whom will live in urban areas. These people will need employment, modern energy, drinking water, effluent and waste management, transport and health and education systems (INE, 2013). A transition to a green economy could help to reduce depletion of scarce natural resources as a result of population growth, transform societies and environments, and contribute to more rational urbanization and migration.

The challenge is to transform an agricultural sector dominated by small farmers into a sector of market-oriented medium and large producers (agribusiness), and to develop food and manufacturing industries based on natural resources (particularly mining) and tourism. The remaining challenges in this sector concern both the demand and supply sides. On the demand side, they include implementation of policies to increase the availability of food to meet growing demand patterns and cope with population growth, while on the supply side, they include the limited availability of land, water, mineral supplies, the size of the labour force and the increasing vulnerability of the agricultural sector to climate change.

Mozambique will have to implement the several lines of new policy interventions it has identified to drive the transition to a green economy. It also needs to: enhance the coherence of existing with new policies; facilitate the reforms identified by the new policies; address the lack of technical, financial and human capacity; analyse and strengthen the tools available for the transition to a green economy; reduce the vulnerability of Mozambique to natural disasters and other climatic and environmental factors and improve the management of the green economy component in this situation; and take advantage of the catalytic role of African organizations in the green economy agenda.

For the successful implementation of inclusive green economy policies and strategies, Mozambique has specific statistical and sectoral reports

for which information is collected to enable an understanding of the challenges and opportunities of each economic sector in terms of value added, job creation, and environmental impacts on poverty, inequality, and vulnerability indicators. The country also uses surveys to identify the key economic and social challenges and opportunities of inclusive green economy policies, among others.

Conclusions and policy recommendations

The Green Economy Roadmap is the starting-point for implementation of a transformative agenda that ties together national development objectives and sustainable development goals. There are other policies and strategies that Mozambique can adopt to strengthen the transition process and the link between an inclusive green economy and structural transformation. These should seek, among other priorities, to: establish a basis for development capable of reconciling the indispensable economic growth with sustainable use of natural resources, social justice and higher living standards for people; create jobs; increase the productivity of materials; increase water use efficiency; reduce carbon emissions; increase the weight of renewable energy in the overall energy mix; and improve air quality.

Structural transformation based on the country's rich natural resources and pristine ecosystems should be guided by an integrated approach that views the environment and human resources as valuable assets in the development of the country. Management of the transition is not the exclusive responsibility of the Government, a specific organization or group of individuals, but one that

should be shared by the whole society. This implies a set of harmonized actions carried out in a spirit of shared responsibility. Practical actions and commitments need to be spelt out for the private sector and the Government, and institutions put in place to manage the transition. A snapshot of some of the key actions for the success of structural transformation and an inclusive green economy in Mozambique are set out below.

- Accelerate implementation of the Roadmap and reform of existing policies in line with the green economy agenda
- Improve stakeholder engagement, particularly local communities, in issues related to use of natural resources and development projects that impact their local environment.
- Develop agribusiness and the processing and manufacturing industries that have links with the rest of the economy in order to support the transition to an inclusive green economy.
- Address the lack of technical, financial and human capacity in the country to implement the green economy.
- Invest in and develop human resources for structural transformation and an inclusive green economy.
- Stimulate increased productivity through technology transfer, research and innovation.
- Develop incentives for private sector investors in the green economy.
- Make communication and awareness-raising an integral part of the implementation strategy for the Green Economy Roadmap.

Key messages

Despite strong and sustained economic growth in the last decade or so, progress in human development has been slow. The fact that social development and quality of infrastructure are still below the desired levels, makes the green economy an attractive alternative that can harness the wealth of natural capital without generating risks, while supporting diversification of the economy through sustainable industrialization.

The Mozambican economy in general and the rural economy in particular are strongly dependent on the exploitation and use of natural resources. Investments in the sector should among other things, leverage the resource rents and value of natural resources and strengthen the social components of natural resource sectors through investment in infrastructure, human resources, and technical skills, and strengthen linkages between natural resources and other sectors of the economy, particularly agriculture.

Structural transformation in Mozambique will depend heavily on the extent and manner of industrialization, using natural resource and agricultural potential. This transformation should encourage and support growth from the grassroots to small and medium-sized enterprises.

It should also tap into its ten agro-ecological zones to diversify agricultural production and develop agribusiness and agro-food processing industries with linkages to the rest of the economy to achieve a significant impact on poverty eradication and economic growth.

The adoption of the Green Economy Roadmap and the Green Economy Action Plan is a clear indication of the ambition to transform.

The country should accelerate alignment of national and sectoral policies to support the green economy transition through the identified pillars of green growth in Mozambique: sustainable infrastructure; efficient and sustainable use of natural capital; and strengthening livelihood resilience and the capacity for adaptation.

The enabling conditions for an inclusive green economy and structural transformation require the Government to mobilize support for the green economy. Policy review is the starting point but more resources need to be mobilized in order to: strengthen institutions; build the capacity of individuals and public and private sector institutions; develop, disseminate and transfer technology; disseminate information; and strengthen stakeholder engagement and participation in the process.

1. Introduction

African countries have recorded comparatively high rates of growth in recent years. Over the last decade, significant improvements have been made in several areas, such as trade, mobilization of government revenue, infrastructure development, and the provision of social services. Nonetheless, the current pattern of growth is neither inclusive nor sustainable. African countries are heavily dependent on natural resources as drivers of economic growth but most such resources – fossil fuels, metallic and non-metallic minerals – are non-renewable and are being depleted at a pace that may endanger growth and sustainability over the longer term (UNCTAD, 2012). Like the rest of the world, Africa has been integrating environmental concerns into economic development plans to tackle environmental problems that have arisen as a result of unsustainable patterns of production and consumption (Mozambique, 2012).

The green economy is increasingly recognized as an approach that can achieve sustainable, inclusive and resilient economic growth while at the same time enhancing the productivity and efficient use of natural resources. The green economy, a new economic model that adequately reflects the social and environmental costs of development decisions not captured by traditional economic models, will allow Mozambique to improve actions and policies in favour of sustainable development. Mozambique understands that integrating the value of natural resources and social capital in national accounting and planning is crucial to achieving economic growth that is equitable and sustainable. The Government of Mozambique has adopted the Green Economy Action Plan for the transition period 2013-2014, which defines the green economy as an economic model that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological inadequacies (Mozambique, 2013).

1.1 Overview of Mozambique

Mozambique is situated on the east coast of Africa and is bordered to the north by United Republic of Tanzania, to the west by Malawi, Zambia and Zimbabwe, and to the south by South Africa and Swaziland. It has an area of 799,380 km², of which 13,000km² are maritime, while its terrestrial area is 786,380 km². The Indian Ocean coast extends for 2,470 kilometres, from the mouth of the Rovuma River to Ponta de Ouro. There are numerous islands off the coast, including the Quirimba Archipelago in Cabo Delgado Province, Mozambique Island and the Goa and Sena islands in Nampula Province, the Bazaruto Archipelago in Inhambane, and Inhaca, Elefantas and Xefina islands in Maputo Province. The climate is predominantly humid tropical, with two seasons: fresh and dry, and hot and humid. Its geographical location makes the country systematically and cyclically prone to natural disasters, such as floods, drought and tropical cyclones (ENDe, 2014).

Mozambique has had one of the fastest growing economies in sub-Saharan Africa over the last ten years, with average annual real GDP growth of 7 per cent. This performance was supported by the determined implementation of credible macroeconomic policies, donor support and, in recent years, the discovery and exploitation of natural resources.

The main driver of growth is foreign direct investment mainly focused on the extractive sector. The fastest growing sectors are mining, propelled by a boost in coal exports, and the financial sector, fuelled by credit expansion and increased income, mainly in urban areas. Other dynamic sectors are construction, services, and transport and communication. The agricultural sector, employing 70 per cent of the population, lacks this economic dynamism. The country's low agricultural productivity is the result of: a

Figure 1: Administrative provinces of Mozambique



Source: Nations Online Project*.

* http://www.nationsonline.org/oworld/map/mozambique_map.htm

lack of appropriate technologies and support, and markets that are generally distant, unreliable and uncompetitive for smallholder farmers who depend on traditional farming methods, low-yield seed varieties and manual cultivation techniques. Nonetheless, the sector is growing at a rate of more than 4 per cent a year (IMF, 2014).

1.2 Economic structure and outlook

The economy of Mozambique shows little structural transformation, relying mainly on megaprojects in the aluminium and extractive industries and the energy sector, which, although part of the structural transformation agenda, lack the necessary spillover effect to the traditional sector, remaining isolated from the overall economy. Sometimes seen as leading industries that would galvanize the emergence of new supporting industries, these projects are essentially outward-oriented. The people living near such projects do not benefit from their proximity as consumers and producers (suppliers of goods and services). In fact, few micro, small or medium-sized Mozambican companies supply goods and services of any kind to megaprojects. This is the biggest challenge to the megaprojects strategy.

The primary goal of the Poverty Reduction Action Plan 2011-2014 was to reduce the incidence of poverty from 54.7 per cent in 2009 to 42 per cent in 2014, and stipulated that government action should first of all promote “pro-poor” growth. In the Mozambican context, such “broad-based” growth can be achieved through investment in agriculture in order to boost the productivity of the family sector and diversify the economy, thus creating jobs and linkages between foreign investment and the local economy, supporting micro, small and medium-sized enterprises, and fostering human and social development. Such economic growth would reduce food insecurity and chronic child malnutrition, while strengthe-

ning defence mechanisms against endemic diseases such as HIV/AIDS, tuberculosis and malaria (Poverty Reduction Action Plan, 2011).

Despite the remarkable economic performance and progress made in tackling some of the main socioeconomic challenges, particularly in the areas of health, education, gender empowerment and extreme poverty, Mozambique has one of the lowest levels of human and social development. The challenge confronting the country is therefore not only to maintain rapid economic growth, but to translate it into sustained and inclusive development based on economic diversification that creates jobs, helps to reduce inequality and poverty rates, and enhances access to basic services. With that in mind, Mozambique prepared a Green Economy Roadmap, a document that contains information about the process the country will follow in the transition to and implementation of a green economy by the year 2030, based on the substantial progress made towards sustainable development over the past 20 years.

According to the United Nations Environment Programme (UNEP), a green economy is an economy that results in improved human well-being by significantly reducing environmental risks and ecological scarcity (UNEP, 2011). The green economy is increasingly recognized as an approach that can be used to achieve sustainable, inclusive and resilient economic growth, while at the same time enhancing the productivity and efficient use of natural resources. This is a new economic model that reflects the social and environmental costs of development decisions that are not captured by traditional economic models and will allow the country to improve sustainable development policies and actions. Mozambique understands that integrating the value of natural resources and social capital in national accounting and planning is crucial to achieving equitable and sustainable economic growth.

The Government of Mozambique has adopted the Green Economy Action Plan,¹ which defines the green economy as an economic model that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological inadequacies. The transition to a green economy also requires institutions to be strengthened and infrastructure developed in the rural areas of developing countries. This includes the elimination of ecologically harmful subsidies and the promotion of regulatory reforms that include the cost of environmental degradation in the prices of foodstuffs and merchandise.

The Government has always seen agriculture as the basis for the economic and social development of the country. It occupies the overwhelming majority of Mozambicans and has proved to be the main driver of the fight against poverty. In Mozambique a green economy also represents an opportunity for sustainable growth, not only in economic, but also in employment terms. This approach is of strategic importance for the development of the country. The Green Economy Roadmap defines three key pillars of green growth: sustainable infrastructure (energy, transport, cities); sustainable use of natural capital (such as land, water and minerals); and strengthening livelihood resilience and the capacity for adaptation (to climate, economic and social change) (Mozambique, 2013).

1.3 Objective of the report

This report seeks to explore the linkages between and contribution of inclusive green economy policies to structural transformation in Mozambique, and to enhance understanding and promote the adoption of inclusive green economy policies that will help to achieve inclusive structural transformation goals in Mozambique.

¹ On 15 December 2013, the Government of Mozambique adopted the Green Economy Action Plan for the transition period 2013-2014.

Specifically, the report:

- (a) Reviews the macroeconomic framework and its responsiveness to inclusive green economy principles and approaches;
- (b) Reviews the structural transformation agenda and identifies and analyses its role and significance;
- (c) Identifies and analyses inclusive green economy policies and strategies that have been adopted and their linkages and consistency with those directly addressing structural transformation;
- (d) Identifies and analyses enabling measures and analytical tools that could be used for integrated assessment of policies and strategies to facilitate the transition to an inclusive green economy and contribute to structural transformation;
- (e) Identifies and analyses challenges and opportunities involved in the adoption of inclusive green economy policies;
- (f) Provides action-oriented recommendations on inclusive green economy policies that would strengthen the country's structural transformation.

1.4 Methodology

The report was informed by a desk review and fieldwork. The desk review served to gather recent literature and enhance the understanding of the key elements of structural transformation and inclusive green economy in Mozambique. The fieldwork was based on interviews with focal points for inclusive green economy policies and structural transformation in order to gain insights into the two processes and arrive at an informed analysis.

A questionnaire was addressed to relevant public institutions, the private sector, and civil society in order to gain insights into Mozambique's green economy transition and structural transformation processes. This was complemented by a review of the literature, which included an analysis of official documents on the two policy themes.

Information was collected on the macroeconomic environment with a focus on: economic and social policies; environmental policies; and government initiatives on inclusive development. The instruments, indicators and methods used in the formulation, implementation, monitoring and evaluation of government policies were crucial for the analysis.

The draft report that resulted from the analysis was presented at a national validation meeting attended by various stakeholders, including representatives of government institutions, civil society, the private sector and academia. The report was finalized on the basis of the inputs and comments made at the meeting.

1.5 Organization of the report

The report has seven chapters. Chapter 2 outlines Mozambique's macroeconomic framework in relation to economic, social and environmental development and its responsiveness to an inclusive green economy. Chapter 3 focuses on its structural transformation agenda and Chapter 4 sets out its

green economy agenda and how it supports the country's structural transformation framework. Chapter 5 discusses enabling measures for an inclusive green economy and their role in fostering structural transformation in Mozambique, and highlights integrated assessment methodologies and tools for analysing an inclusive green economy. Chapter 6 presents the challenges and opportunities involved in the adoption and implementation of inclusive green economy policies that support structural transformation in Mozambique. Chapter 7 concludes the report with policy recommendations.

2. Macroeconomic framework

2.1 Overview of the economy of Mozambique

Economic growth in Mozambique can be seen as falling into two phases. In the post-war decade (1992–2002), government policies focused on reconstruction and laying the foundations of a market economy. After that, the focus was on consolidating the gains and maintaining high rates of economic growth. In the second phase, growth was mainly driven by investment in megaprojects.

During the decade of post-war reconstruction, the share of agriculture (the primary sector) fell from 38 per cent of GDP in 1992 to 20 per cent in 2001, reflecting the rebuilding of the economy, rehabilitation of the Cahora Bassa hydropower station (1995–97), and the construction of the Mozal aluminium smelter (1998–2003), (IMF, 2014). In the last ten years, Mozambique has been among the fastest growing economies in sub-Saharan Africa, with average annual real GDP growth of 7.4 per cent (table 1).

Some indicators of human development, such as per capita GDP, poverty headcount ratio, and life expectancy, have improved significantly. This

strong performance has been supported by determined implementation of credible macroeconomic policies and structural reforms, a favourable external environment, donor support and, in recent years, the discovery and exploitation of natural resources.² The economy of Mozambique, the well-being of its population and its means of subsistence are almost entirely dependent on natural resources, both renewable and non-renewable (IMF, 2013).

Mozambique has been involved in a continuous process of policy reform in an attempt to create a supportive environment for national, continental and international initiatives. In particular, policy reforms have sought to improve governance and thus improve the business environment. The integration of global and regional economic agreements in national programmes is indicative of government capacity to create a policy environment that supports effective and successful implementation of an inclusive green economy (MozSAKSS, 2011).

Table 1: Economic growth and macroeconomic trends (percentage of GDP), 2009-2014

Year	GDP (current \$)	GDP growth (annual %)	GDP per capita (current \$)	Inflation (%)	Fiscal Deficit (%)	Total revenue (%)	Total expenditure (%)	Trade deficit (%)
2009	10,718,503,687	6.1	459	3.4	5.7	17.4	32.2	20.3
2010	10,119,169,260	6.8	422	12.7	4.9	19.6	32.5	20.5
2011	13,197,133,578	7.4	537	9.5	7.2	20.2	33.9	19.8
2012	14,934,374,229	7.1	593	7.2	6.4	20.6	34.4	16.2
2013	15,457,196,860	7.3	598	5.6	6.8	21.1	34.5	16.1
2014	16,385,584,919	7.4	619	5.6	6.4	21.4	34.1	15.8

Source: Compiled from IMF, 2011 and 2014).

² Mozambique has considerable natural resources, including natural gas, coal, mineral sands, hydropower, and probably oil.

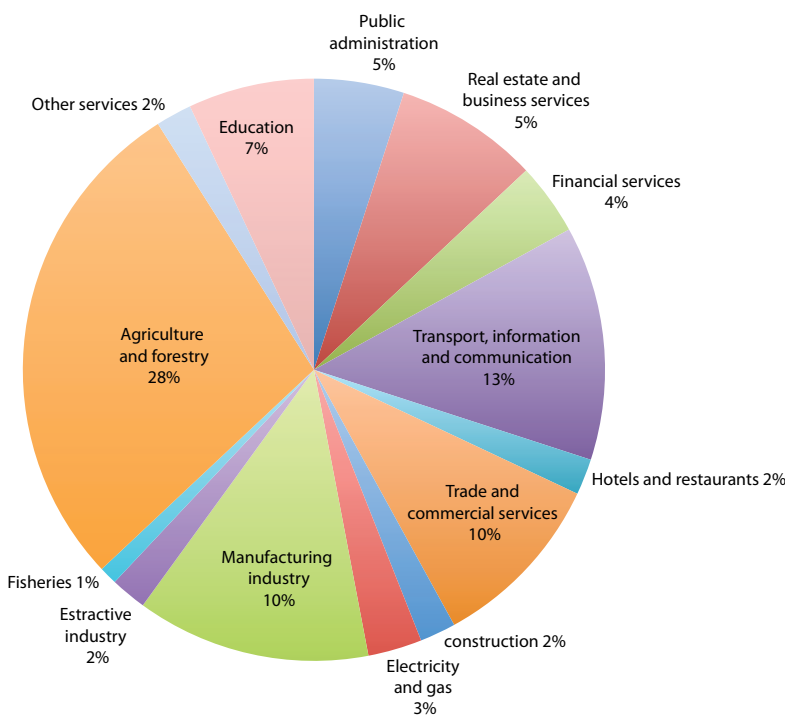
2.2 Economic structure and performance

The Mozambican economy in general and the rural economy in particular are strongly dependent on the exploitation and use of natural resources, which directly contribute more than 33 per cent of national wealth, while the current dynamics of mineral resources and hydrocarbons suggest that their weight in the economy will increase.

Mozambique’s economic growth tends to be influenced more by international developments than by national policy, however: growing South-South trade and an increase in South-South development cooperation will have a strong impact on the national economy. Its geopolitical location is its main advantage in terms of growing South-South trade: the Indian Ocean is an important strategic gateway to global trade and therefore geopolitical power. Half of all containers and 70 per cent of oil traded in the world are shipped via the Indian Ocean (Hofman, 2013).

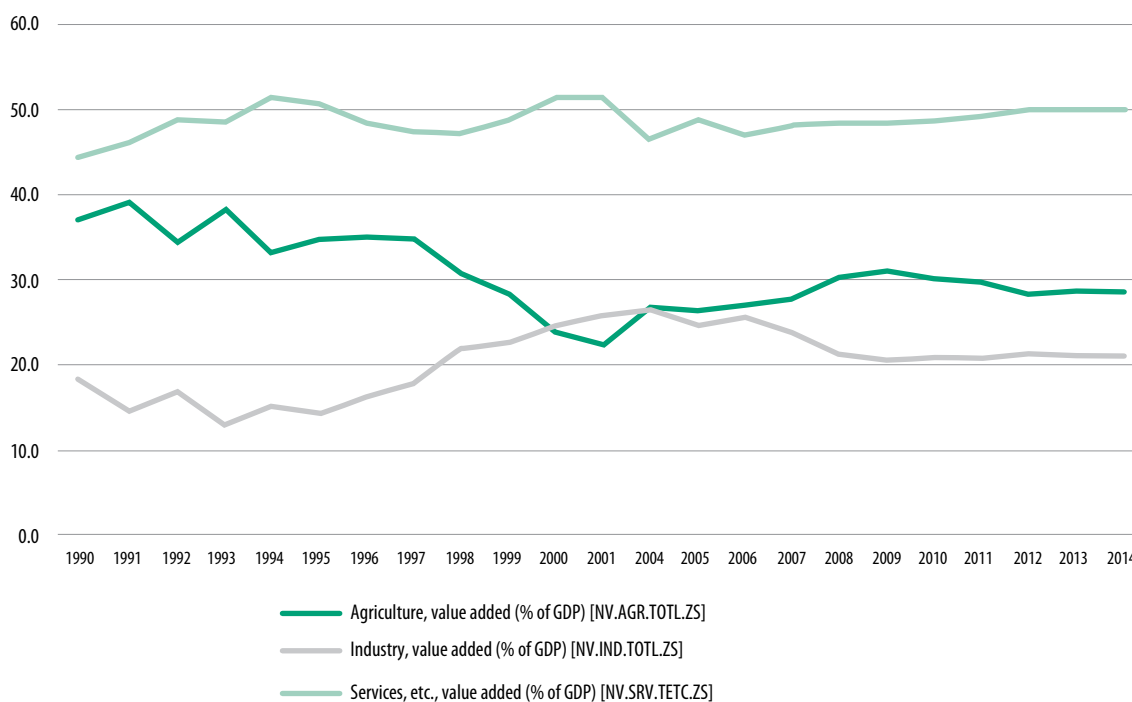
Figures 2 and 3 show the sectoral contributions to GDP. It is significant for the structural transformation of the Mozambican economy that services and agriculture together contribute about 80 per cent of GDP, while industry contributes the rest (figure 3). In the past 20 years, the share of agriculture in GDP has been slightly under 30 per cent, while in the 1990s it was around 35 per cent. Trade and transport and communication services each contribute about 12 per cent (figure 2), but generally the contribution of the service sector has remained stable at around 50 per cent (figure 3). Industry ranks second, with a current share of about 20 per cent of GDP, but the strongest decade of industrial growth in Mozambique was between 1995 and 2004, when its contribution grew from 14.5 per cent to 26.7 per cent, before falling to current levels. This is reflected in the performance of the manufacturing sector, whose contribution to GDP rose from 7.6 per cent in 1995 to 17.2 per cent in 2004, before falling with the rest of industry to 11.3 per cent in 2013 (World Development Indicators, 2014).

Figure 2: Average sectoral contributions to GDP, 2003-2013



Source: Compiled from INE (2004 -2013) and MPD (2010-2013).

Figure 3: Sectoral contributions to GDP, 1990-2014



Source: World Development Indicators, 2014.

The main manufacturing products in Mozambique include wheat flour, food, beverages, aluminium, petroleum products, textiles, cement, glass and tobacco. Almost all manufacturing takes place in the major urban areas of Maputo, Beira, and Nampula. Agriculture continues to play a dominant role in the country, reflected in food and beverage production, with the most important product in terms of commercial value being beer. Mozambique competes strongly with the rest of Africa in the manufacturing of wooden furniture (AfDB and UNDP, 2012).

Overall, the share of agriculture in GDP has been falling, while the structure of employment has also changed substantially towards higher productivity sectors, with the share of self-employed farmers declining from 75 per cent to 68 per cent between 1995 and 2002, and that of non-agricultural employment increasing from 14 per cent to 20 per cent (Brück and van den Broeck, 2006). However, despite its strong and sustained past economic growth, the Mozambican economy has undergone minimal structural transformation (figure 3). Its productive base remains lar-

gely dependent on natural resources, which are concentrated in a few megaprojects, specifically coal, gas and aluminium (IMF, 2013).

Macroeconomic policy has been aligned with the International Monetary Fund Policy Support Instrument and focuses on maintaining economic growth, price and exchange rate stability and implementing a programme of structural reforms (IMF, 2014a). This has helped the country to attract foreign direct investment, particularly in the extractive sector. It should be noted, however, that such investment came on the back of rising commodity prices, particularly of aluminium and energy products, which made coal mining even more attractive for Mozambique. The launch of two megaprojects, the Mozal aluminium smelter (in late 1998) and the Sasol project in the gas sector (in the early 2000s), are associated with a huge inflow of foreign direct investment (OECD, 2013). Annual inflows of foreign direct investment averaged only \$32 million between 1991 and 1995, but grew to an unprecedented \$179 million per annum in the years 1996 to 2000. During the first half of the 2000s, annual inflows averaged \$258

million and then almost doubled in the second half of the decade to a high of \$890 million in 2009 (UNCTAD, 2012a).

The top recipient of foreign direct investment in the period 2001-2009 was the mining sector, with a 43 per cent share of total inflows amounting to \$1,416 million, of which megaprojects received \$580 million for the extraction of titaniferous sands and \$171 million for the extraction of coal (UNCTAD, 2012a). Extractive industries (aluminium, coal, oil and gas) accounted for 83.3 per cent of total foreign direct investment inflows in 2011, most of the linked activities, such as construction and manufacturing, also attracting substantial shares. The link between manufacturing and extractives is too concentrated in one activity, over 92 per cent of manufacturing resulting from foreign direct investment connected with the Mozal aluminium smelter. Most investment originated from Brazil (43 per cent), Mauritius (22 per cent), South Africa (6 per cent), and the rest from the European Union. Agriculture absorbs only 10 per cent of private investment (of which 90 per cent is geared to export crops, including tobacco, cotton, cashews, prawns, sugar, and timber (OECD, 2013).

Fiscal instruments have been used to promote national investment and attract foreign investors. The landmark investment by Mozal in the aluminium smelter was granted the incentives provided to investors in industrial free zones, including a 1 per cent tax on turnover, instead of the standard 32 per cent tax on income, in addition to full exemption from custom duties and sales and circulation tax. The Fiscal Incentives Act of 2009 provides other incentives for: basic infrastructure development; rural commerce and industry; manufacturing and assembly; agriculture and fisheries; hotels and tourism; science and technology parks; large-scale projects (those in excess of Mtn 12.5 billion (\$390 million)); projects in rapid development zones; projects in industrial free zones; and projects in special economic zones (UNCTAD, 2012a).

Fiscal performance has remained strong over the past five years, reflecting stable growth, but the increase in total revenue from 12 per cent of GDP in 2005 to 19.6 per cent in 2010 was in part a result of increased efficiency in tax revenue collection as the country experienced economic growth. The modernization of the tax system and its administration began in 1994 with technical assistance from the International Monetary Fund. A tripartite structure was developed whereby income, consumption and assets are taxed separately. The reforms took place in phases, beginning with reform of indirect taxes between 1994 and 1999, including the restructuring of the administrations concerned (customs, domestic taxation, and the value added tax unit). Later, between 2000 and 2007, direct taxation and the associated administration in the tax department were reformed. The Mozambique Revenue Authority (Autoridade Tributária Moçambicana) was then established, and has jurisdiction over both customs and domestic taxation (IMF, 2009).

Fiscal revenue collection has not always been so impressive. During the civil war, revenue collection was less than 5 per cent of GDP, increasing when peace returned in 1992 to 11 per cent of GDP (IMF, 2009). Although revenue collection soon dwindled to 8.7 per cent, it was clearly a result of unprecedented growth in the economy as peace and security nurtured new investment, while the capacity of the tax administration system lagged behind. The reforms that began in 1994 started to bear fruit in 2001, when revenue crept up to 10.5 per cent of GDP, rising steadily to 14.4 per cent by 2007 (IMF, 2009).

2.3 Economic growth and an inclusive green economy

The recent discovery of coal deposits represents an opportunity to increase the economic growth rate to 7 or 8 per cent a year, opening bright prospects for the development of the country and the poverty reduction (UNDP, 2012). Mozambique has over 32 billion tons of confirmed coal deposits.

Real GDP grew by 7.2 per cent in the first half of 2014, led by the extractive industries, construction, manufacturing, utilities, and financial services (IMF, 2015).

Coal mining in Tete province is attracting millions of dollars in foreign direct investment and has provided direct employment for thousands of Mozambicans. In 2004, Brazilian mining giant Vale was the first to invest in Tete, in the Moatize coal mine megaproject. The company has invested in a \$170 million coal-processing plant, and about \$130 million to upgrade the rail link to Beira and build a dedicated coal export terminal at the port (UNCTAD, 2012a). This project was followed by an agreement with the Mozambican authorities that, through the state railway company CFM, awarded Vale a contract to develop the Nacala Corridor, which crosses Southern Malawi, at a cost of \$1.1 billion.³

The discovery of natural gas is another opportunity to increase the use of clean energy, provided government policies and programmes are directed accordingly (PNISA, 2013). It is estimated that the country has proven natural gas reserves of over 127.4 billion m³, but estimates are rising every year. Offshore reserves of natural gas are understood to be over 1,000 trillion m³ (AfDB, 2012). Three fields of natural gas accumulation have been discovered: at Pande and Temane in Inhambane Province and Buzi in Sofala Province. Pande is already being exploited, some of the gas being exported to South Africa through a pipeline linking Temane to Secunda in Gauteng Province, South Africa, a distance of 865 km, 340 km of which are in South Africa. *Energia de Moçambique*, a local company, is also charged with the production, transmission, distribution and commercialization of natural gas energy in the northern part of Inhambane Province. Thermal stations using natural gas from Pande have been installed in the towns of Vilanculos, Inhassoro and Nova Mambone (Chambal, 2010).

³ <http://www.afr.com/business/mining/coal/vale-starts-vital-44-billion-rail-port-project-in-mozambique-20130203-j16d6#ixzz3r-MDB99Y7> and <http://www.railwaygazette.com/news/infrastructure/single-view/view/vale-starts-work-on-nacala-corridor.html>

In 2011, Anadarko Petroleum (an American Company) announced the discovery of 623 trillion m³ of gas offshore, while Ente Nazionale Idrocarburi S.p.A. (an Italian Oil Company) has announced the discovery of nearly 424 trillion cubic metres of natural gas reserves about 40 kilometres off the Cabo Delgado coast. If these figures are correct, Mozambique will be fourth in the world for natural gas reserves, behind the three giants, Russia, Iran and Qatar. A liquefied natural gas plant would make natural gas Mozambique's main export, and the gas sector is forecast to contribute up to 13 per cent to GDP (AfDB, 2012).

The growth dilemma means that Mozambique is trapped between the wish to develop through natural resource extraction and the need for social development and to respect ecological limits. The geographic location and size of the country have endowed it with a whole range of natural resources, the exploitation of which, if not duly mainstreamed in the overall development process, may constitute a danger to the environment and an obstacle to sustainable development. Most investment in the natural resource extraction sector is capital-intensive, so job creation is not keeping pace with growth in the sector. The megaprojects generate few permanent jobs, which means that countervailing policy measures are required. Possible interventions could take the form of leveraging tax on natural resource exploration; strengthening the social components of natural resource-based contracts; and investment in human resources, particularly technical skills (Jones and Tarp, 2013).

These considerations, together with the fact that social development levels and infrastructure quality are still inadequate, make the green economy a feasible alternative planning mechanism able to transfer the wealth of natural capital without creating risk through investment in physical (infrastructure) and human capital. The integrated investment programme (*Programa Integrado de Investimento*) approved in 2013 identifies investment in transport, energy, and irrigation as priorities for Mozambique. More specifically, to bring about inclusive growth, Mozambique requires investment

that contributes to its integration (intra-trade) and allows the country to maximize the benefits of megaprojects (IMF, 2014). This means that sustainable infrastructure development needs to be at the centre of inclusive economic development. This is the goal of sustainable development through the promotion of a balance between economic, social and environmental aspects.

Investment also need to be directed towards poverty eradication through broad-based economic growth that benefits all people. In this context, Mozambique seeks to alleviate poverty through the development objectives defined in the Poverty Reduction Action Plan, Agenda 2025 and its medium-term development plans. The Action Plan has the overarching objective of inclusive economic growth to reduce poverty, specifically focusing on increasing production and productivity in agriculture and fisheries; promoting employment, and human and social development, with macroeconomic measures and good governance as supporting pillars (IMF, 2011a).

With an estimated economically active population of 7,437,056, and a total farming population of 3.8 million in 2007 (Chilonda and others, 2010), Mozambique needs to keep creating jobs for the rural population, which remains dependent on agriculture for their livelihood. Between 2001 and 2008, the number of farmers increased by almost a third, from 3,063,000 to 3,700,000. Agricultural output consists of crop production (78 per cent), forestry (9 per cent), livestock (7 per cent) and fisheries (6 per cent), with the crop subsector growing fastest, at 6 per cent between 2005 and 2009. However, the subsector is hampered by low productivity due to low technology uptake, limited access to financial incentives, and poor access to output markets and value chains (Chilonda and others, 2010). In this regard, the National Agriculture Investment Plan (PNISA) 2014–2018 targets small, medium and large producers with the potential to produce for the market, and small and medium-sized enterprises that market agricultural inputs or technologies (PNISA, 2013).

Under the Agriculture Development Plan, agricultural development will support inclusive economic development based on its natural resource potential, which consists of forest cover of some 39 million hectares, and 36 million hectares of arable land, of which only 3.9 million hectares are cultivated at present (PNISA, 2013). Mozambique will also be able to exploit its ten different agro-ecological zones, making it possible to diversify agricultural production (crop subsector) and have a significant impact on poverty reduction and economic growth. Forest resources are also enormous, making timber exploration a possibility. There is an estimated 22 million m³ of standing timber, with potential to support annual timber production of about 500,000 m³, but this potential can only be realized if problems exogenous to the agricultural sector, particularly infrastructure and market development, are solved (PNISA, 2013).

2.4 Natural resources, the environment and an inclusive green economy

Mozambique has vast economic potential: not only is it endowed with abundant natural resources, it is also strategically located at the crossroads between south-east Africa and the fast-developing emerging markets of south and south-east Asia.⁴ Large-scale exploitation of resources is still in its infancy, but is set to grow strongly in the coming years. The country has an abundance of natural resources: fertile plains that favour agriculture; minerals; huge natural gas reserves and fossil energy resources, such as coal; and vast, virtually untapped, water resources. From north to south, the country is crossed by large rivers (the Zambezi being the largest). These rivers represent great value and potential for agriculture (irrigation), as well as for the production of hydroelectric power. The total capacity of this energy source is estimated at 16,000 megawatts. Probably one of the most valuable natural resources of Mozam-

⁴ National report to the United Nations Conference on Sustainable Development (Rio+20).

bique is its abundant flora and fauna, with a forest area of approximately 40.6 million hectares and 14.7 million hectares of other areas with trees. The country has a spectacular ocean coastline, islands with coral reefs, vast plateaus, plains and tropical jungle (ENDe, 2013).

The discovery and development of natural resources in recent years has boosted growth, and Mozambique is expected to become one of the world's leading exporters of coal and gas within the next decade. This heightens the challenge to manage resources prudently while diversifying the economy and distributing gains more equitably. Although the environment is generally in pristine condition, human intrusion into natural habitats will increase with economic activity: loss of natural habitat, unsustainable natural resource use (ecosystem loss), pollution and degradation of water and soil will become concerns in the near future. For example, wood consumption for fuel is estimated to account for 250 times that consumed by logging operations, but current commercial logging is less than 25 per cent of the legally permitted logging capacity (SIDA, 2011). Deforestation, which is now a very localized problem, may soon become a major issue throughout the country.

Mozambique will face a series of difficult but crucial decisions in the near future, including choosing between different development models by determining the degree of state involvement and control of resources. These decisions will determine whether the massive resource wealth of Mozambique becomes a sustained "blessing", a missed opportunity or, in the worst case, brings about a reversal of recent human development gains in the country.

The recent offshore gas discoveries are one of the largest known gas reserves in the world. According to sector experts, their commercial exploitation is unlikely to start before 2019 because of the huge investment in production and transport infrastructure required (IMF, 2013). The environmental impacts of gas exploration include destruction of sea grass, coral reefs, mangroves and estuaries

caused by construction in the near shore area, as well as offshore issues resulting from drilling the seabed, excavation of mud, discharge of hydrotest water, increased traffic and habitat modification. Other environmental issues identified by the environmental impact assessment of Area 1 of the Anadarko Project include the impact of dredging, modification of intertidal and shallow beaches, and waste discharge (Environmental Resource Management and Impacto, 2014). The mitigating activities recommended by the assessment therefore need to be taken into account, and the Government has to make its position on the impacts clear before implementation begins.

According to a Business Monitor International report, the value of Mozambique's mining sector is expected to increase from \$96.5 million in 2010 to \$667 million in 2015, representing an annual average growth rate of 29.9 per cent (Mining Weekly, 2011). The natural resource sector will therefore be crucial for the development of the country, but priority needs to be given to sustainability considerations in order to enhance the future value of the resources. Through the Ministry for the Coordination of Environmental Affairs (MICOA), the Government should therefore enhance its capacity to strengthen environmental laws and conduct regular environmental audits to verify environmental impacts and compliance with conditions agreed during the environmental licensing of projects.

Current natural resource extraction and exploitation methods, such as those applied in the mineral sector, have high environmental risks. With no appropriate control capacity to cover all types of extraction, Mozambique could face increasing levels of environmental damage. The coal mines in Moatize, for example, have contributed greatly to infrastructure development and improved livelihoods in the surrounding communities, but their environmental footprint cannot be ignored. Another challenge is the resettlement of people which seems to resonate with local authorities, communities and human rights organizations (KPMG, 2013). A recent study by Maennling and others (2014) highlighted gaps in Mozambique's

current environmental regulations that need to be addressed by, for example, imposing environmental standards on the coal mining sector in accordance with international best practices.

Environmental degradation as a result of intensive extraction of other resources is another major concern. Mainstreaming inclusive green economy principles and approaches in the exploitation of resources can help to minimize such hazards and maximize benefits. The other challenge is data: although the contribution of renewable natural resources to the Mozambican economy is very significant, the value of natural resources and their potential are not adequately captured in official statistics. Subsistence agriculture, forestry and fisheries are not included in official national accounts, nor is informal (and illegal) logging.⁵ In order gradually to improve environmental protection and management, Mozambique needs a sustainable approach to land tenure⁶ that takes into account environmental and poverty reduction objectives. Again, land distribution is not sufficiently regulated and is a target for corrupt practices.

Poor households rely disproportionately on natural resources and the environment for their livelihoods and income. The poor are more vulnerable to natural disasters such as droughts and floods and to the ongoing impacts of climate change. Intact, functioning ecosystems provide services, such as food, water and fuel, and climate regulation, on which nations and people rely to earn income from agriculture, fishing, forestry, tourism and other activities, and which are closely associated with food and energy security (UNDP, 2012). An Environmental Affairs Ministry study estimates that the annual economic loss resulting from environmental degradation and the inef-

ficient use of natural resources is 17 per cent of GDP, or \$1.5 billion.⁷ The cost of inaction regarding management of natural resource extraction that does not take due account of social and environmental considerations is therefore too high for Mozambique to ignore.

2.5 Social development and an inclusive green economy

Mozambican society is very diverse culturally, politically and socially, and in regional, economic and subsistence terms. The total population was 23.7 million in 2012 and is growing at an average rate of 2.7 per cent a year. The National Statistics Institute forecasts that the population will reach approximately 33.2 million by 2025 (INE, 2012).⁸ It is an essentially young population (about 65 per cent), most people being of school age and living in rural areas (about 36.4 per cent) (INE, 2013). The sustainable development dilemma facing the Government is to promote an economic transformation that creates jobs and increases human well-being without increasing environmental pressure. The Government also needs to ensure social development for a prosperous future through investment in health, education and vocational training (ENDe, 2014).

Mozambique has made progress in terms of human development, the emphasis being placed on access to water and health care (the country has about 13 doctors and 26 nurses per 10,000 inhabitants) (INE, 2013). It is still very dependent on international donations, however, and is making only slow progress towards poverty reduction and improved quality of life. Despite many years of stable macroeconomic growth, the living conditions of most people have not improved (box 1). While Mozambican society is inclusive in the sense that it does not particularly exclude any social, religious or ethnic group, there is still

⁵ Most of the constraints facing the agricultural and fishing sector are of a structural nature and need to be tackled in order to meet the challenges of poverty and growth. These constraints include a lack of basic services that would allow producers and fishermen to make the best use of the relative abundance of the natural resource base.

⁶ The 1997 Land Act embraces customary African law in its innovative land tenure strategy, giving substantial control to local authorities in the delimitation and allocation of land use rights, dispute resolution, and the subsequent management of resources.

⁷ <http://www.unep.org/newscentre/Default.aspx?DocumentId=2797&ArticleId=10947#sthash.nA3iFnZS.dpuf>

⁸ This means that in 2025 there will be an additional 9.4 million inhabitants, in other words, the population will increase by 39.6 per cent.

an imbalance between the richer southern region and the centre and north (Bertelsmann Stiftung's Transformation Index, 2012).

According to the national food security and nutrition strategy (see chapter 4), environmental quality and climate change vulnerability are major causes of food insecurity in Mozambique. Environmental degradation and climate variability exacerbate malnutrition. The strategy gives some guidance on how an inclusive green economy could increase families' resilience to seasonal variations in production. Investment in production system resilience would ensure that agriculture did not suffer from seasonal variations in the production cycle.

Mozambique is a very young nation in that the majority of the population is under the age of 35. The increase in the budget for social welfare programmes to meet at least some expectations and mitigate social unrest in recent years has been a positive development. Nevertheless, growing food insecurity and rising costs of living are undermining sustainable growth for the 54 per cent of the population living in poverty (Hofman, 2013).

The high demand for Mozambique's resources and land by rising powers could be an opportunity for social development if business enterprises also invest in human resources by offering Mozambicans vocational training.

Box 1: Human development

The literacy rate of adults rose from 45 per cent in 2001 to 56.1 per cent in 2010. Male literacy (70.8 per cent) is higher than female (42.8 per cent). The enrolment rate of girls, both in primary (109 per cent) and secondary education (23 per cent), continues to be lower than that of boys (121 per cent, and 28 per cent, respectively). The prevalence rate of HIV/AIDS in adults in 2011 was 11.5 per cent, continuing to be a major challenge to the country. The infant mortality rate has fallen from 125 to 86.2 per 1,000 live births (PNISA, 2012).

Urban population stands at 31.9 per cent of the total, and it has been growing at 3.3 percent between 2010 and 2015 compared to the national average population growth of 2.5 percent over the same period⁹. This has contributed to great pressure on the environment through the demand for new housing (reducing green areas in the urban belt), pressure on infrastructure and the proliferation of informal settlements in all cities and towns. It has also put pressure on the employment market, which is unable to meet the demand for jobs. Consequently, the number of destitute people has grown, worsening urban poverty. The occupation of spaces in dangerous areas (beside electricity transmission lines, in the protective strip along railways, in areas prone to flooding, and on steep slopes) has also increased.

There has been a significant increase in access to health care, especially in rural areas, from 78 per cent in 2013 to 82 per cent in 2014. In education, substantial progress has been achieved in terms of access and gender parity. Between 2013 and 2014, net enrolment of six-year-old children increased from 76 to 93 per cent (table 2), similar to the change in countries such as Ghana and Namibia. Furthermore, every year more children are in the education system as a whole. Nonetheless, challenges still remain in school retention and quality of learning outcomes. Progress has not been even across all dimensions of social development, with slower progress in water and sanitation.

2.6 Conclusion

The strong performance of the economy in the last decade or so has been supported by the determined implementation of credible macroeconomic policies and a favourable external envi-

⁹ <http://data.un.org/CountryProfile.aspx?crName=mozambique#-Social>

Table 2: Social indicators

Sector	Indicators	2013 planned	2014 planned	2014 achieved
Health	Complete vaccination coverage of children under the age of 12	78%	81%	82%
	Coverage of family planning	24%	27%	28%
Education	Net enrolment of six-year-olds	77.4%	77%	96.3%
	Net enrolment of girls	77.4%	76%	93.2%
Employment	Jobs created	257	183	290.816
Water	Number of sources operating in rural areas	23	20	25
	New connections	52	47	48
Energy	New connections	108	100	118
	Population with access to electricity	39%	42%	45.3%

Source: Compiled from BdPES (2013 - 2014).

ronment. The unprecedented inflows of foreign direct investment in the extractive sector following the discovery and exploitation of natural resources came on the back of rising prices of commodities, particularly aluminium and energy products. The economy has undergone minimal structural transformation, however, and the macroeconomic policy framework has focused on sustaining economic growth and price and exchange rate stability. Although some aspects of structural reform are being implemented, national accounts data and the outlook for the foreseeable future show that the productive base will remain largely dependent on natural resources, concentrated in a few megaprojects involving coal, gas and aluminium.

Structural reform is a priority if the economy is to remain flexible and resilient to external shocks. Fiscal instruments have been used to promote investment and attract foreign investors to the manufacturing sector linked with aluminium and other extractives. Since most investment in the natural resource extraction sector are capital-intensive, however, such incentives are regressive as they do not result in job creation and income for the poor. As an offsetting strategy, the Government has ramped up social spending on basic services, focusing on extending access to water, health and energy in rural areas. The Government is also offering incentives for basic infrastructure

development, rural commerce and industry, manufacturing and assembly, agriculture and fisheries, hotels and tourism, science and technology parks, and large-scale projects. It remains to be seen whether the private sector will respond positively and whether social spending will benefit economic transformation in the long term.

Through a green economy, Mozambique could begin to translate the many years of stable macroeconomic growth into significant improvements in the living conditions of the majority of its people. Many social stressors are increasing social spending, including the exponential growth of the urban population, demand for infrastructure and housing, unemployment, and a growing young population. Some of the social components of tax outlays from exploration of natural resources should be in the form of targeted investment in human resources, particularly the technical skills needed to restructure, diversify and transform the economy. These considerations, together with the fact that the level of social development and the quality of infrastructure are still below the desired level, meant that the country should implement a macroeconomic policy framework that fosters a green economy using wealth from natural capital to drive the transition.

3. Structural transformation agenda

The structural transformation agenda of Mozambique can be traced back to its independence. Since 1975, the country has developed many programmes to boost sectors other than agriculture and services, which were the main sources of revenue for the State and contributed greatly to GDP. An enormous effort was made to bring sectors such as industry, fisheries, and mining into existence. Industrialization was seen as vital to structural transformation and a strategy for it immediately developed. Mozambique was at that time following in the footsteps of many countries across Africa. The main objective was to reduce imports of manufactured goods and exports of raw materials. The plan was to build a processing industry alongside an extracting industry, which required a wide-ranging structural transformation agenda.

The economic policy implemented in 1975 sought to alter the economic structure inherited from the colonial period. Land, health services, education, and law firms were nationalized. During the first decade of independence, the State and external resources were the main drivers of economic growth. Under the planned socialist economy, Mozambique sought to diversify its economy and invested heavily in every sector. Initial production results were positive but all initial improvements were then lost as a result of various factors: the war that broke out in 1976, mismanagement, tight market control by the State, inefficiency, and many others. Programmes such as the Plano Prospectivo Indicativo developed in the 1980s were not enough to revive the economy.

With a crumbling economy, Mozambique formally joined the World Bank and the International Monetary Fund in September 1984 and a new set of structural transformation policies was applied under the structural adjustment banner (Hanlon, 1991). As part of its membership of the Bretton Woods's institutions the country opened its market, neoliberal policies were incorporated in the

structural adjustment programme, and the economic rehabilitation programme adopted in 1987 opened the economy to foreign direct investment. Trade liberalization was accompanied by structural reforms that made the State the regulator and facilitator of the economic activity, instead of a direct operator in the productive economic sector as it had been during the first ten years of independence.

The macroeconomic reforms initiated in 1987 went further in 1994 and were accompanied by profound political transformations. Since then, Mozambique has had continuous growth rates, which can be seen as the result of sound macroeconomic policies complemented by a series of structural policy reforms, strongly supported by donors and favourable global economic conditions, especially commodity prices. In the immediate post-war phase, macroeconomic policy reforms focused on liberalizing the exchange and trade system and reducing fiscal imbalances and the role of the State in the economy. Later on, as market institutions and mechanisms began to operate, macroeconomic policies sought to reduce vulnerability and increase resilience to shocks (IMF, 2013). Although it can be argued that Mozambique has been growing since 1987, it suffered severe setbacks during this period. Examples include the complete destruction of some competitive industries, such as tea (1993), cashew nuts (1994) and glazing (1997), and the almost total disappearance of the textile, construction materials, metallurgy and metal mechanics industries.

3.1 Macroeconomic policy changes and their influence on structural transformation

The country has implemented significant macroeconomic policy changes in the past 15 years influenced by the implementation of the poverty

reduction strategy papers (*Plano de Acção para a Redução da Pobreza Absoluta*). Those policies targeted structural transformation in a broad sense.

Poverty Reduction Action Plan I (2000-2005), aimed to reduce absolute poverty from 70 per cent in 1997 to less than 60 per cent in 2005. Six priority areas were defined: education; health; agriculture and rural development; development of basic infrastructure; good governance; and macroeconomic and financial management. The Action Plan focused on growth over a broad spectrum, with policies aimed at promoting investment and increasing productivity. The philosophy was centred on ideas such as rapid, inclusive and integrated growth. The particular concerns were the weak economic structure, low level of innovation, difficulties of access of distant regions, and the low educational level of the workforce. These were considered major impediments to regional competitiveness and in order to tackle them the Action Plan advocated administrative decentralization as a necessary step towards poverty reduction. Other important issues were employment, housing, transport, the environment, technology and natural disasters.

Poverty Reduction Action Plan II (2006-2009), aimed to reduce absolute poverty from 54 per cent in 2003 to 45 per cent in 2009. All six priority areas defined in the first action plan were maintained in the second. The development strategy focused on three pillars: governance, human capital and economic development. The second action plan was more concerned with national economic integration and increasing production: national production was seen as a fundamental tool for poverty reduction and proper incentives were to be created. It focused mainly on local development by concentrating efforts at the district level, and on small and medium-sized enterprises. It was much more concerned with the private sector than the previous plan and sought to facilitate the overall business environment and improve the business climate in order to encourage domestic and foreign investment as one of its top priorities. The collection of taxes and revenue was another

priority. Other important concerns were gender, HIV/AIDS, the environment, food security and nutrition, science and technology, rural development, natural disasters and mine clearance.

The Five-Year Plan 2010-2014 acknowledged the increasingly important role of private investment in the economic development of the country and reaffirmed the previous government policy initiatives of attracting both domestic and foreign investors. It set out a general poverty reduction strategy that involved tackling both rural and urban poverty.

The Poverty Reduction Action Plan 2011-2014 was adopted as a strategy for implementing the Five-Year Plan. Taking into account the realities on the ground, the Government adopted a new poverty-reduction strategy in which the concept of absolute poverty was eliminated. The main goal now was to reduce the poverty incidence from 54.7 per cent in 2009 to 42 per cent in 2014 and to achieve the objective of inclusive economic growth for poverty reduction. Pro-poor growth was now the key philosophy and food poverty was the major concern. The Government set three general objectives: to boost production and productivity in the agricultural and fisheries sectors; to promote employment; and to foster human and social development. The supporting pillars were: good governance, and macroeconomic measures (macroeconomic and fiscal management). Macroeconomic stability was therefore a central concern. Investment in agriculture was seen as the way to boost productivity in the family sector, while diversification of the economy by supporting micro, small and medium-sized enterprises was seen as a tool for fostering human social development.

Urban Poverty Reduction Plan 2010-2014. Noting that urban poverty was rising rapidly, the Government adopted this plan alongside the five-year poverty reduction action plans. It was a clear indication of the Government's concern to reduce poverty on a broader spectrum. The fundamental objectives were promoting employment,

funding for small and medium-sized enterprises, and social protection. Inequality was considered a growing threat to urban areas. The urban poverty reduction plan has potential for fostering an inclusive green economy and structural transformation in cities.

Agenda 2025 (2013-2025). First approved in 2004 and revised in 2013, Agenda 2025 is an important instrument in that it presents Mozambique's long-term vision on development. Different from previous strategies, the Agenda reflects a broad-based decision-making process that includes civil society. Aimed mainly at poverty reduction, the Agenda, seeks to tackle issues such as human capital shortages in the country by improving education and training, disease control and the provision of basic services. In terms of economic development, it seeks: to modernize the economy through macroeconomic stabilization, rural development increased competitiveness and technological transformation; promote savings and investment; and invest in infrastructure favourable to development efforts. The main economic objectives are: to expand the business sector; enlarge the tax base; encourage the informal sector to become formal; promote investment of national and international capital; to diversify production; and decentralization. Agenda 2025 (in the revised version) recognizes that the exploitation of natural resources in Mozambique does not take into account the principle of sustainability. Malpractice is widespread in every sector, legislation is usually ignored and state fiscal capacity is still weak. Conservation is therefore a core preoccupation of the revised agenda, which is in line with trends in the exploitation of natural resources in Mozambique. They are therefore seen as the main driver of job creation, economic growth and equitable development. Environmental preservation is also a major concern.

National Development Strategy (ENDe) 2015-2035. The main objective is "to improve the population's conditions through economic structural transformation, and expansion and diversification of the production base". The Strategy fo-

cuses on the industrialization process, seeking to bring about integrated industrialization by using appropriate technologies and developing a skilled workforce. Industrialization is seen as the driving force for economic development, creating employment, increasing capital accumulation and boosting other key sectors such as agriculture and fisheries. The development strategy focuses on three pillars: human capital development; development of infrastructure; and institutional organization, linkage and coordination. Structural transformation should focus on development priority sectors, such as agriculture and fisheries, manufacturing, the extractive industry and tourism. In order to push the modernization process forward, ENDe envisages incentives for the private sector and financial mechanisms for public investment.

The Government has implemented a number of fiscal measures to enhance resource mobilization and align government revenue collection with poverty alleviation objectives. In this regard, the introduction of value added tax (VAT) in 1999 was also an important milestone, and was followed by a new and more transparent income tax code in 2003. The revenue authority (Autoridade Tributária de Mocambique) was established in 2005, and Mozambique entered a new phase of reforms to improve direct taxation and reduce distortions and tariff barriers. Expenditure policies focused on prudent management of fiscal resources for the benefit of priority and social sectors, and channelled aid to building infrastructure and assisting the socially disadvantaged (IMF, 2013).

Since its inception the revenue authority has developed a wide range of taxes, including corporate tax, personal income tax, specific consumption tax and customs duties. Taxes are fundamental for state revenues and public investment (in public services and goods: infrastructure, health, education, water, transport, sanitation, and others). Before the authority was established and taxes introduced, Mozambique faced huge shortages of revenue, which meant that the State was heavily dependent on external aid for public investment.

In 1998 the country started to implement an ambitious reform agenda to improve the efficiency of its tax system. Since then, revenue collection has been increasing (AFRODAD, 2011).

Aid dependency has been declining as a result of the increased capacity to collect taxes. The reforms initiated in 1998 have enabled Mozambique to increase revenues steadily from 10.8 per cent of GDP in 1999 to 16.4 per cent of GDP in 2008. Table 1 above shows a steady trend of increased revenue from tax collection. The tax system has been a major contributor to the state budget. Both poverty reduction action plans were favourable to tax reforms as a tool for poverty reduction. Raising domestic resources was fundamental for national development strategies. According to some sources, expenditure has increasingly been funded by internal resources, fiscal resources being of great importance (AFRODAD, 2011). A clear, functional and effective tax system was essential for structural transformation in three key aspects: it improved the business environment; attracted private investment; and promoted production and exports.

The challenge of achieving a green economy and sustainable development with structural transformation differs from country to country, depending on stage of development and policies. For countries with low levels of development like Mozambique, which are commodity-based and where subsistence farming is still the predominant source of livelihood, the challenge involves resolving a specific dilemma: on the one hand, structural transformation is necessary for achieving substantial and broad-based improvements in human well-being but, on the other, structural transformation, together with rising affluence and a growing population, will necessarily intensify environmental pressures through: rising demand for natural resources, including material and energy inputs used in production; the increased waste and pollution; and greater relative reliance on non-renewable resources (UNCTAD, 2012).

According to one theory, structural transformation is essential to the economic growth of most underdeveloped countries. According to this principle, countries should be able to diversify their economic activities, reducing dependency on a specific sector. Industrialization often begins with manufacturing industries with low added value, such as the manufacture of clothing, and then moves to a higher category in value chains, such as automobiles, appliances and electronic goods, gradually moving from the most basic assembly of imported raw materials, to semi-processing and eventually to product design. Manual labour also moves from lower value added sectors to sectors with higher added value, and from informal self-employment to more formal employment contracts.

Over the past decade, the private sector and major projects (aluminium, gas and energy) in Mozambique have had a significant impact on national production indicators and external trade but little on employment and household income. With the entry into production of some of the new major investments, in particular in the mining sector and infrastructure, the Mozambican economy has seen further transformation in the form of a more robust private sector, but most small and medium-sized companies associated with mega-projects are in effect foreign-owned as a result of foreign direct investment. The few national investors are risk-averse in this new environment. There are opportunities, but few of them are seized because lack of incentives and credit, high interest rates, lack of infrastructure, and tax-related issues are impeding a more aggressive posture. The elimination of regulatory barriers and the fiscal burden, a growing qualified workforce, and other policy changes are contributing to slow transformation but more needs to be done.

Table 3: Relating macroeconomic policies and strategies to structural transformation

Policy and strategy	Features supporting structural transformation
Poverty Reduction Action Plan I (2001-2005)	<ul style="list-style-type: none"> • Promoting investment and increasing productivity • Developing basic infrastructure • Strengthening the economic structure • Promoting innovation • Improving interregional accessibility • Raising the educational level of the workforce
Poverty Reduction Action Plan II (2006-2009)	<ul style="list-style-type: none"> • Developing incentives to increase production • Focus on small and medium-sized enterprises • Focus on the private sector • Facilitating the business environment • Encouraging domestic and foreign investment • Collecting taxes to increase revenue • Promoting science and technology throughout the country
Five-Year Plan (2010-2014)	<ul style="list-style-type: none"> • National entrepreneurship development • Infrastructure development • Human capital development • Development of economic and social infrastructure • Promoting and expanding entrepreneurship • Promotion of public and private investment • Stimulating increased productivity through technology transfer, research and innovation • Promoting expansion of banks and microfinance institutions • Removal of barriers to domestic and foreign investment • Promoting the emergence and development of micro, small and medium-sized enterprises • Promotion, creation and development of special economic zones, industrial free zones and zones for tourism
Poverty Reduction Action Plan (2011-2014)	<ul style="list-style-type: none"> • Boosting production and productivity in the agricultural and fisheries sectors • Promotion of employment • Investment in agriculture to boost productivity in the family sector • Diversification of the economy by supporting micro, small and medium-sized enterprises
Urban Poverty Reduction Plan (2010-2014)	<ul style="list-style-type: none"> • Employment promotion • Funding for small and medium-sized enterprises and social protection.
Agenda 2025 (2013-2025)	<ul style="list-style-type: none"> • Modernization of the economy through macroeconomic stabilization and rural development • Increased competitiveness and technological transformation • Promotion of savings and investment • Investment in infrastructure favourable to development efforts • Pushing the informal sector to become formal • Promoting investment of national and international capital • Diversification of production
ENDe (2015-2035)	<ul style="list-style-type: none"> • Infrastructure development and expansion • Expansion and diversification of the production base • Industrialization through integrating sectors such as agriculture and fisheries • Promoting the use of appropriate technologies • Train the workforce

Source: Various Official Documents of the Government of Mozambique.

3.2 Economic structural transformation: agriculture and industrialization

The agricultural, industrial and service sectors all have great economic potential. The challenge lies in transforming an agricultural sector dominated by small producers into a sector characterized by medium and large commercial producers (agro-business), and developing food and manufacturing industries based on natural resources (particularly mining exploration) and tourism.

There are arguments for and against investing in large commercial producers. On the positive side, Mozambique could augment its current production for domestic consumption and export, but it could also face land tenure problems and cripple small producers, who would be cast out because of their lack of competitiveness. Unemployment is most likely to emerge in rural areas. On the other hand, current smallholder farmer techniques make production in the family sector very low, which leaves the country with shortages only compensated for by high food imports.

Growth in the agricultural sector has accompanied the economic growth of the country but has been achieved mainly by extending cultivated areas and absorbing more labour, rather than through technological change and more intensive labour and land use in order to free the labour force for more productive sectors, thus contribu-

ting to economic transformation (MozSAKSS, 2011). Agricultural productivity remains low and competitiveness still needs to improve greatly. The challenge of economic transformation requires an increase in agricultural productivity that will drive the development of a more productive value chain in the non-agricultural sector, such as industry and services.

The main points of the National Development Strategy (2015-2035) that will guide the structural transformation of Mozambique in the coming years are outlined in box 2.

The transformation of agricultural activity is a fundamental element of the industrialization strategy for two reasons: first, because incorporating the rural population in the market economy and increasing agricultural workers' income are necessary conditions for the enlargement of the domestic market; and second, because industrial growth and competitiveness depend upon greater supply at lower prices of agricultural products, both those used as inputs that will directly affect industrial costs, and foodstuffs that will affect the cost of living and therefore the cost of the labour required by industrial activity.

Agricultural and fisheries production is crucial for food and nutritional security and the well-being of the population and contributes around one third of GDP. About 97 per cent of production comes from 3.2 million subsistence farms averaging 1.2 hectares (SIDA, 2010).

Box 2: Structural transformation and industrialization

The National Development Strategy assumes that integrated economic and social development involves structural transformation of the economy to make it competitive and diversified. It adopts a holistic approach in which industrialization is the main means of achieving the goal of prosperity and competitiveness based on an inclusive and sustainable growth model, ensuring that natural assets continue to provide the resources and environmental services on which the well-being and continued progress of the country depend. The National Development Strategy intends to adopt a development paradigm according to which industrialization results from an integrated interaction of forces using appropriate technologies and a skilled national labour force. It is assumed that industrialization must play a key role in boosting the economy by boosting the development of key sectors (agriculture and fisheries), job creation and education and training. The National Development Strategy identifies the main challenges as: increasing the competitiveness of the economy through diversification; investment in development poles; investment in human capital, infrastructure, and research and innovation. (Estratégia Nacional De Desenvolvimento, 2014)

Fishing is an important activity for food security and generating income for households and the country. The fisheries sector faces several constraints, including weak capacity to inspect fishing and lack of knowledge leading to the use of inappropriate fishing gear. Furthermore, the facilities for conserving and marketing fisheries produce are limited in many fishing areas. In order to promote agricultural and fishing production and productivity the priorities are to improve and increase access to production factors, facilitate market access and improve the sustainable management of natural resources (land, water, fisheries and forests) (PARP, 2011).

3.3 Conclusion

The private sector remains crucial for growth in Mozambique, most megaprojects being led by large corporations. Their limited contribution to job creation means, however, that the country needs to support small and medium-sized enterprises to be part of the megaproject value chains in the mining and extractives industry, manufacturing and distribution.

For inclusive growth that reduces poverty, especially among young people and the rural population, the challenge is: to diversify sources of economic growth; integrate capital-intensive megaprojects into the government poverty reduction strategy by linking them to the wider economy; and to develop the agricultural sector. Both increased direct investment and rising productivity are vitally important for agriculture as a foundation for sustainable growth, poverty reduction

and job creation. The sector already employs a majority of Mozambicans, but its productivity and contribution to GDP have not been increasing. A critical mass of the labour force is in the sector, which needs to be linked to the mainstream economy (industry and manufacturing) if the sector is to benefit from structural transformation, through value chains, for example. Employment has been shifting slowly to the more productive sectors, but this too shows a misalignment between the skills required in industry (megaprojects) and in agriculture and the rest of the economy. Investment should therefore be increased in education, skills development and infrastructure, and markets and institutions linking agriculture and industry.

Sustainable development of the country also hinges on how natural resources are managed going forward. Natural resource management will have to be a priority, as most economic activities (coal, gas, aluminium, agriculture, and fisheries) are based on natural resources. Strengthening regulations and the institutions responsible for natural resource management is one way of ensuring sustainable natural resource management. However, the multi-stakeholder nature of the interests involved in natural resources requires concerted efforts by all the government machinery, the public, and non-state actors. For the Government, it is important that the medium-term development plans and macroeconomic policies (fiscal and monetary) driving structural transformation should be intrinsically linked to natural resource dynamics and social development. In particular, inclusive green growth, poverty eradication and sustainable use of natural resources must be in-built policy targets.

4. Inclusive green economy agenda and structural transformation

After emerging from three decades of armed conflict, Mozambique has achieved economic and social progress, and its efforts over the last 20 years in response to the recommendations of the United Nations Conferences on Sustainable Development have resulted in progress towards sustainable development. It also launched a roadmap to a green economy during the Rio+20 Conference, seeing the green economy as a vehicle for achieving sustainable development. The first step Mozambique took in this direction was the environmental legislation which is a starting point for the green economy strategy: the preservation and sustainable use of existing natural resources, waste minimization and management, efficient management and allocation of water resources, preservation of marine and coastal biodiversity and integration of climate consideration in the urban planning process.

The adoption of the Green Economy Roadmap and the Green Economy Action Plan for the transitional period 2013-2014 are clear indications that Mozambique is moving forward in its green economy agenda. Although various steps were taken before these documents were adopted, they send a clear message of intent regarding an inclusive green economy.

4.1 Mozambique's inclusive green economy agenda

In Mozambique, most economic activities, especially those providing means of subsistence for poor people and income generation, depend essentially on available natural capital for food supply (agriculture), tourism, mining, energy, timber, and fishing. A recent study of resources indicates that the natural, renewable and non-renewable capital of the country represents about 49 per

cent of total wealth (Mozambique, 2014). This suggests that it will continue to rely heavily on natural resources.

The Green Economy Roadmap in the Context of Sustainable Development and Poverty Eradication, outlines the steps to be taken in the process of transition to an inclusive green economy by the year 2030, and contains a declaration of intent to accelerate sustainable development in the economic, social and environmental fields. It states that the overall objective of the transition to a green economy is to “make socioeconomic development sustainable, and more resilient to climate change, protecting, restoring and making rational use of natural capital and its ecosystem services for the benefit of current and future generations of Mozambicans”. The goals include “guaranteeing social equity in the distribution of the benefits of natural capital and its ecosystem services” and “exploiting development opportunities that contribute to the reduction of poverty, the creation of green, decent jobs, the restoration of the environment and access to services and clean technologies” (Mozambique, 2012).

The Roadmap identifies three pillars as important for green growth in Mozambique: sustainable infrastructure (energy, transport and cities); efficient and sustainable use of natural capital (land, freshwater and marine, and minerals); and strengthening livelihood resilience and the capacity for adaptation (climate and physical, economic and social). Accordingly, implementation of the Roadmap is in five phases and started in 2012 with its detailed development and expansion to include all sectors, mobilizing resources and partnerships, and development of an integrated implementation matrix for a green economy in Mozambique and a green growth plan. It also included: establishing metrics for the green economy; integrating

Table 4: The Green Economy Roadmap

Phase/year	Selected activities
2012: Detailed development and expansion of the roadmap to all sectors, mobilizing resources and partnerships, and development of an integrated implementation matrix for a green economy in Mozambique, and of a green growth plan.	<ul style="list-style-type: none"> • Drafting an integrated implementation matrix and a green growth plan • Strengthening national awareness and understanding of the imperative to act for a green economy • Creation of a multisectoral national decision-making platform for a green economy • Inclusion of green economy considerations in the national planning and budget system • Coordinating and mobilizing funds, partnerships and resources to support a green economy • Inclusion of green economy considerations in the national development strategy • Establishing a system and indicators for monitoring the transition to a green economy.
2013: Establishment of systems, indicators and metrics, and carrying out the actions listed in the integrated implementation matrix for a green economy	<ul style="list-style-type: none"> • Training sectors for adoption and implementation of the integrated implementation matrix and the green growth plan • Form new units in Government specializing in the green economy (ministries for the coordination of environmental affairs, finance, etc.) • Establishing integrated knowledge about natural capital • Mapping, evaluation and planning of natural capital • Quantification and characterization of the benefits of natural capital in the national economy • Integration of green economy considerations in the national planning and budgeting system; • Coordinating and obtaining funds, partnerships and resources to support a green economy • Design of a sustainable public accounts system including natural capital and the green economy • Monitoring progress in the transition to a green economy • Strengthening national awareness and understanding of the green economy • Adaptation and revision of environmental governance procedures • Promotion of accelerated development zones and research centres for a green economy.
2014: Inclusion of the principles and objectives listed in the integrated implementation matrix for a green economy and the green growth plan in national planning processes to facilitate the first phase of the transition in the next Five-Year Plan (2015-2020)	<ul style="list-style-type: none"> • Inclusion of the green economy in macro planning and budget documents (five-year plan, poverty reduction action plan, and medium-term fiscal scenario); • Distribution of maps and knowledge of natural capital and ecosystem services • Monitoring progress of the transition to a green economy • Promotion of accelerated development zones and research centres with a focus on green technologies
2015-2030 (five-year plans).	<ul style="list-style-type: none"> • Implementation of the green economy from the macro planning and budget documents and periodic assessment of the progress made in implementing it in accordance with the macro documents
2030 (target year)	<ul style="list-style-type: none"> • The Mozambican economy transformed into a green economy centred on people and sustainable, efficient, equitable use of natural capital, a middle-income, inclusive country, based on the right to development, within global limits.

Source: Mozambique, 2012.

green growth into national development planning processes; and adjusting the macro planning and budgeting processes in accordance with the green economy (table 4).

According to the Roadmap, the legal provisions, policies, strategies, programmes and institutions established are fundamental for a swift transition to an inclusive green economy in Mozambique. The focus is on implementing policies around four distinct areas: policies on regulating the conservation, exploitation and management of natural resources; fiscal policies focusing on taxation; investment policies directed towards infrastructure development, training and funding producers; and institutional policies aimed at strengthening national institutions through capacity-building, transformation and best governance practices (Mozambique, 2012).

The Green Economy Action Plan provides the policy framework for the transitional period 2013-2014 (box 3). Together, the two documents provide guidelines for the full integration of the green economy into -Five Year Plan and the national planning process for 2015-2019. The Action Plan was developed with a view to providing specific guidance on the integration of policies to make Mozambique an “inclusive, middle-income country, based on the protection, restoration and rational use of natural capital and ecosystem services, ensuring inclusive and efficient development within global limits”.¹⁰

A major concern of the Roadmap and the Action Plan is efficient use and rational exploitation of natural resources. As indicated in the Roadmap, understanding the value of natural resources and their potential contribution to economic and social development, and managing the risks involved in using them will be crucial for the transition to a green economy. The many different types of natural resources in the country (table 5) include massive areas of fertile arable land, vast areas suitable for aquaculture, forestry, wildlife and fishing resources, important river basins, mineral resources and a long coastline with major economic and environmental potential.

During the transition period, the country has intensified integration of green economy principles into national development plans as envisaged in the Action Plan and Roadmap. Some of the policies adopted or transformed to provide incentives and ensure the transition to a green economy are set out below (table 6). The policies range from sustainable development and environmental conservation policies and instruments, to science, education, and the social sector.

In addition to these overarching strategies, over the years the Government has adopted sectoral policies and strategies that contribute to sustainable use of natural resources, and these too will have to be adjusted in the implementation of the various elements of green growth. According to the Roadmap, national and sectoral policies that

Box 3: Green Economy Action Plan

The Action Plan describes the main actions to be implemented in the transition period 2013-2014: mapping, evaluating and planning natural capital; assessing technical-institutional capacity for the implementation of the green economy approach, including its integration into the planning processes; and identifying sectoral policies that may contribute to a green economy and set priorities among them. The general objective of the Action Plan is to guide the integration of policies, practices and environmentally sustainable actions in planning mechanisms to make Mozambique an “inclusive medium-income country based on the protection, restoration and rational use of natural capital and ecosystem services, ensuring inclusive and efficient development, within global limits”. Its purpose is to prepare the country and all important sectors in order to be able to define and implement key actions that promote and accelerate an inclusive and efficient transition to a green economy, starting with their integration in current and future government plans and development.

¹⁰ <http://www.mz.undp.org/content/mozambique/en/home/presscenter/articles/2013/12/15/mozambique-adopts-green-economy-action-plan-.html>

Table 5: Main natural resources of Mozambique*

Resource	Characteristics
Agricultural resources and soil use	It is estimated that about 36 million hectares (approximately 45 per cent of the total area of the country) have recognized agricultural potential.
Forest, vegetation and biomass	Forests and other native vegetation cover about 62 million hectares or 78 per cent of national territory.
Wildlife	Illegal hunting, war and drought have caused a major decline in the diversity and wildlife wealth of the country. There are indications that some species are now critically endangered or even extinct.
Rivers	Mozambique has a coastline of about 2,700 kilometres on the Indian Ocean, which, together with the Mozambique Channel, constitutes an active marine area with a huge variety of biotic and abiotic resources.
Fishing and aquaculture	Mozambican fishing has an estimated potential of 391,400 tonnes, 42,000 tonnes of which are in inland waters.
Mineral and energy resources	The principal mineral resources are energy minerals (coal and natural gas), metallic minerals (gold, iron and copper) and non-metallic minerals (marble, precious stones and limestone) and mineral water.

Source: Compiled from PEDSA (2010-2019), PNISA (2014-2018) and Environmental Strategy for Sustainable Development.

* Recent discoveries of natural gas reserves in the north of the country bode well for economic growth.

are aligned or would support the transition to a green economy include: the Territorial Planning and Organization Act and policy; biofuels policy and strategy; the new and renewable energy policy and the strategy for their implementation; conservation policy; the sustainable development strategy; the strategy for action on informal settlements; the gender strategy; the environment and climate change strategy; the strategic plan for development of the agricultural sector; the water resources management strategy; the science, technology and innovation strategy; and the national reforestation strategy. There are also important plans and programmes to promote the rational use of natural resources: the national plan of action to control and prevent wildfires; the plan of action to prevent and control soil erosion; the disaster management master plan; the national programme of action to adapt to climate change; and the environmental education, communication and information programme (Mozambique, 2012).

In institutional terms, according to article 102 of the Constitution of the Republic of Mozambique, “the State shall promote the knowledge, map-

ping and evaluation of natural resources and determine the conditions of their use and exploitation, subject to the national interest”. Various governmental institutions have been created to achieve these objectives, including the Ministry for the Coordination of Environmental Affairs, the National Council for Sustainable Development, and the Environment Fund. On the basis of the policies adopted, these institutions form a bridge with all the other development sectors of the country, coordinating the implementation of policies, plans and programmes connected with the green economy.¹¹ The institutional mandate for the implementation of the green economy lies squarely with the Ministry for the Coordination of Environmental Affairs, but green economy units are also being established in sectoral ministries as envisaged by the Roadmap. More importantly, the Ministry of Finance is one of the leading actors in implementation because of the planning and budgeting implications of the transition.

¹¹ National report to the United Nations Conference on Sustainable Development (Rio+20).

Table 6: Relating policies to an inclusive green economy

Policies and strategies	Features supporting an integrated green economy
National Development Strategy (ENDe) 2015-2035	ENDe states explicitly that environmental issues are an important factor in economic growth and poverty reduction. The development of agriculture, industry, infrastructure, energy, tourism, and other activities vulnerable to climate change are to be taken into account in investment planning.
Agenda 2025 2013-2025	Mentions as a critical uncertainty the capacity for managing natural disasters and the effects of climate change. It also acknowledges that agriculture, because it is influenced by the climate, may increase risk.
Poverty Reduction Action Plan 2011-2014	It notes that agriculture and food security are vulnerable to extreme climate events, and sets priorities, including: the construction and rehabilitation of river resource management systems, taking into account the vulnerability of the country to natural disasters; promotion of a strategy for the reduction of emissions through deforestation and forest degradation, and reforestation and the fight against uncontrolled fires, and others.
Energy strategy	The strategy aims to: bring Mozambique into line with internationally accepted best practices on efficient use of energy; raise awareness of good environmental practices; and diversify energy matrix offers, giving particular importance to new and renewable energy sources.
Food and nutritional security strategy 2008-2015	It notes that environmental issues are one of the main causes of food insecurity. Its strategic objectives include: to reduce the incidence of acute and chronic malnutrition by improving health conditions, water, sanitation, and food and nutritional education; to increase household capacity to respond to seasonal variations in production and the physical and economic access to appropriate food.
Social security strategy 2010-2014	The basic social security strategy notes that natural disasters linked to poor management of resources are one cause of poverty and vulnerability. Its strategic objectives include increasing the coverage and impact of basic social protection for the poorest and most vulnerable people.
Action Plan for the Green Economy (transition period) 2013-2014	It describes the actions to be implemented in 2013-2014 as: mapping, evaluating and planning natural capital; assessing technical-institutional capacity for the implementation of a green economy approach, including its integration in planning processes; and identification of sectoral policies that may contribute to the green economy and setting priorities among them.
Action plan for the prevention and control of soil erosion 2008 – 2018	It sets out a strategy for systematic action to prevent and control soil erosion within 11 years.
Sustainable Development Strategy 2007-2017	Seeks to create a common vision for wise environmental management that contributes to poverty eradication.
National Strategy for Adaptation to and Mitigation of Climate Change 2012	The general objective is to “establish guidelines for action to create resilience, including by reducing climate-related risks in communities and the national economy, and to promote low-carbon development and a green economy through their integration in the planning process”.

Source: Various official government documents, and the Mozambique Legislation Portal- www.legisambiente.gov.mz.

4.2 Key sectors for inclusive green economy and structural transformation policies

It is essential to link the inclusive green economy and structural transformation because the structural transformation process should lead to an economically sustainable system in which goods and services are produced continuously, levels of government and external debt remain manageable, and sectoral imbalances that damage agricultural and industrial production are avoided.

The development of manufacturing activities on a national scale will be critical for structural transformation to a green economy in Mozambique, but agriculture and food security, cities and the energy sector have the highest potential and better interlinkages for the transition to a green economy. Whether seen through the National Development Strategy or the Poverty Reduction Action Plan, agriculture holds the key to broad-based economic development that reduces poverty. The green economy is therefore important for instilling ecologically sound practices as the country pursues inclusive economic growth.

In terms of urban development and cities, infrastructure will have to keep pace with population growth. As the economy develops, it is expected that most Mozambicans will be living in urban areas. By 2030, the population will have increased by 15 million to a total of 38 million, 60 per cent of whom will live in urban areas. These developments will push energy demand much higher, so the country needs to increase supply from renewable sources. As of 2008, peak demand for electricity was 400 MW, with almost 70 per cent going to Maputo Province, Gaza and Inhambane (Hankins, 2009). The country should focus on tackling the challenges to structural transformation and creating conditions conducive to an inclusive green economy in the agricultural, industrial and energy sectors.

The first challenge is to transform an agricultural sector dominated by smallholder farmers. The country needs to encourage and support growth from the grassroots up to the level of medium and large commercial producers (agribusiness) and develop a food-processing industry if the goal of becoming a middle-income country is to be reached. The issues facing the agricultural sector include food security, population growth, changes in demand patterns as a result of urbanization, increased household incomes and increased pressure from biofuels. Land management, low productivity, water, input supplies, changing agricultural labour patterns and the increasing vulnerability of the agricultural sector to climate change and losses during and after harvest are further challenges.

Agriculture will remain the main source of sustenance and income in the country since about 80 per cent of Mozambicans are currently employed in the sector.¹² Structural transformation and a green economy therefore hinge on the process of improving agricultural productivity, increasing the supply of food, and improving linkages with industry. Practical actions that will link the inclusive green economy and structural transformation to the agricultural sector include: intensifying agricultural production in the areas with the greatest potential; increasing food production and job creation by extending lines of funding for the sector such as the Agricultural Development Fund and the District Development Fund,¹³ among others; raising awareness of the need to change food consumption habits (consumption of a balanced diet and nutritional foodstuffs); raising awareness about the use of household assets to guarantee food security; mapping soils and agro-ecological zones; controlling the use of agricultural chemicals; introducing new crops and practices; and crop diversification.

¹² INE, 2013.

¹³ The District Development Fund is a Government fund to finance multisector initiatives, essentially aimed at food production and job creation.

The second challenge is to ensure that enough jobs are created in all sectors. More critically, productivity needs to be increased in both the primary sector and industry. Industry is a key driver of structural transformation in Mozambique, and should therefore be the second most important sector for the inclusive green economy. Manufacturing industries based on natural resources (particularly mining and gas exploration) are expected to play an important role in this regard. The Government considers industry a decisive factor in economic development. Mozambique must therefore aim, not simply to achieve industrial development, but also to improve the efficiency of resource use and mitigate pollution and waste. Structural transformation through industry is hampered by low interlinkages between rural areas and industrial clusters as a result of lack of transport infrastructure, lack of information and low productivity in the smallholder agricultural sector. Mozambique must therefore create an appropriate value chain that links primary producers to the industrial sector.

Structural transformation will involve further industrialization of the economy (ENDe, 2013). For structural transformation to succeed, Mozambique needs industrialization to create jobs, increase incomes and foster economic diversification. Commodity-based industrialization could be very useful in ensuring the success of structural transformation. In fact, using the endowment and potential in terms of natural resources and agriculture to foster the industrial sector could be an effective path to structural transformation and the transition to an inclusive green economy. As indicated above, agriculture is the dominant economic sector in Mozambique and transforming the economy with a focus on agriculture could also trigger industrialization if properly linked to the transition to the inclusive green economy.

The third challenge for Mozambique is the growing demand for industrial and household energy. In fact, since Mozambique is endowed with great potential for renewable energy, this also represents a great opportunity for an inclu-

sive green economy to take root. Strong economies consume more energy and Mozambique is following a path towards a strong economy. Sustainable energy production and consumption is therefore urgently needed. The Energy Strategy is in line with internationally accepted practices for more efficient energy use, providing greater access to citizens while also ensuring good environmental practices. The diversification of the energy mix and introduction of new and renewable sources would provide a good foundation for the transition to an inclusive green economy. Plans are under way to extend electricity supply from renewable sources (hydropower, biofuels and photovoltaics) and to develop production capacity from natural gas reserves.

The energy sector is also a driving force in structural transformation. Poverty reduction is highly dependent on energy supply, and developing well-integrated infrastructure is the biggest challenge Mozambique faces. At present, charcoal is the dominant energy source for households and its use is threatening Mozambican forests. High demand for energy resulting from population growth will deplete forests rapidly if proper measures are not put in place to extend modern energy sources to households, particularly those in rural areas that tend to use more biomass energy. Industrial development and investor pressure are additional factors in increased demand for energy. Power outages are so common that they discourage investment in both rural and urban areas.

In order to cope with growing energy demand and reduce the environmental impact of charcoal use, the Government is investing heavily in extending hydroelectric power to every district of the country and new hydroelectric power plants are planned. In addition to rural electrification, the Government has been investing in the distribution of natural gas as an energy source. A liquefied natural gas plant is to be built in the north by a private investor, and distribution lines have been built in major cities such as Maputo. Fossil fuels are also in high demand and have been in short supply. To tackle this issue, the Government plans

to increase petroleum reserves by diversifying sources, building new reservoirs and controlling supplies. Mineral coal is another important energy source abundant in Mozambique, but current use is very low. An attempt to establish coal plants to generate electricity is under way. The use of renewable energy technologies is another important policy Mozambique is trying to implement, but solar energy is not yet widely used. Lack of energy, particularly in rural areas, has been a serious impediment to economic growth and structural transformation.

The fourth challenge is to take advantage of the recent discoveries of natural resources (minerals and gas) to move the development path in the direction of economic transformation linked with an inclusive green economy. Heretofore, such resources have made a significant contribution to growth, but generated only limited employment and social development. Nonetheless, they do provide opportunities for local contractors, both in terms of job creation and knowledge transfer, that have yet to be fully exploited. In this sector, much has been done, from the establishment of a legal framework to implementation and control mechanisms to ensure that mining and the exploitation of hydrocarbons take place transparently and respect socioeconomic and environmental sustainability in order to maximize the benefits to the country (IMF, 2014).

The Technology and Innovation Strategy, the most important regulatory and framework instrument for Ministry of Science and Technology activities, is connected with the inclusive green economy by the need to improve access to modern technologies in the areas of agriculture, renewable energy, education, health, fisheries, industry, and others. The Ministry has conducted various activities, ranging from promoting technological innovation to disseminating technologies, training rural communities in various ways, supporting education and research institutions and (new) scientists. Technological change is central to the process of structural transformation in Mozambique because it is through innovation in the broad sense that

new sectors emerge and upgrading within sectors takes place. Innovation is broadly understood here to mean the introduction of products, processes and organizational systems that are new to a country or firm, rather than new to the world.

The country also faces the challenge of ensuring that policies are coordinated and coherence enhanced, particularly between sectoral policies and overarching national policy objectives espoused in national development plans that mainstream the green economy. The coherence with structural transformation regarding the National Development Strategy and Agenda 2025 lies in the fact that both stress the need to build resilient infrastructure in different sectors such as industry, energy, tourism and agriculture, which will allow an effective structural transformation process in Mozambique through a balanced sectoral contribution to GDP.

Policies and strategies on water resources and the industrial sector clearly acknowledge the fundamental role of sustainable management of natural resources in economic development for the benefit of current and future generations. Measures to reduce water pollution and improve access to safe water are a priority for structural transformation in Mozambique. Increasing access to safe water and developing water-related infrastructure links up with inclusive green economy policies, and will reduce the damage that particularly affects the poor.

Social protection is also being integrated in a new policy framework, and work is under way to rehabilitate conservation areas with the participation of local communities. Mozambique has a public social protection system that is ill-equipped to address the needs of the most vulnerable people. The system currently accounts for less than 0.2 per cent of GDP and covers no more than 8.3 per cent of poor households. One key initiative is unconditional cash transfer to the vulnerable, from which some 150,000 people benefit (AfDB, 2013).

4.3 Linking inclusive green economy and structural transformation policies in key sectors

Structural transformation occurs through factor accumulation, including investment in natural capital, factor reallocation and organizational and technological innovation. A central aspect of the process is a structural change in which new economic activities emerge and others wither away. Structural transformation in Mozambique has been slow and productive sectors are still operating under traditional methods (see chapter III). Few jobs are being created and resources are not moving from traditional sectors to productive secondary or tertiary sectors. Inclusive green economy policies will only succeed if they can stimulate structural reforms that tackle economic growth challenges and also address sustainability and social development needs. Linking the inclusive green economy to structural transformation also requires a more aggressive integrated approach by Government and greater commitment by stakeholders in all sectors of the economy.

Inclusive green economy policies are fundamental for a thriving diversified resource-based economy. The linkage between an inclusive green economy and structural transformation allows the emergence of new dynamic green activities and an increase in the relative importance of green sectors, such as organic agriculture, renewable energy and ecotourism, within a national economy (UNCTAD, 2012a).

Although it can be assumed that Mozambique is following the correct steps towards structural transformation and an inclusive green economy (table 7), it needs to do more if it is to accelerate inclusive development. At present, policies and practices on the ground lack coherence. The challenge is huge and transforming policy into practice will take time. Mozambique needs to accelerate the pace without disrupting traditional practices or imposing too many conditions on those directly tackling structural transformation. Economic growth as it is taking place today has no real impact on structural transformation and is creating few winners and many losers.

Table 7: Relating resource exploitation to inclusive green economy and structural transformation objectives

Sector	Sectoral policy	Features supporting an inclusive green economy	Features supporting structural transformation
Water resources	<p>Mozambique Country Strategy (2010-2015); Water Act (No. 16/91) and its implementing regulations, and the National Water Policy (1995, 2007); Strategic Plan for Rural Water and Sanitation (2007).</p> <p>Objectives: Achieve efficient management and allocation of water resources, including improved water quality</p>	<p>Construction and rehabilitation of infrastructure for river resource management, such as natural dikes, reservoirs, channels, streams, community reservoirs, river water collection systems (gutters and water tanks), and drainage and decanting systems. Infrastructure to be on the scale necessary to protect against flooding.</p>	<p>Make drinking water and basic sanitation accessible to all Mozambicans.</p>

Sector	Sectoral policy	Features supporting an inclusive green economy	Features supporting structural transformation
Agriculture, fisheries, food and nutrition security	Fisheries Master Plan (2012-2019); National Plan to Combat Illegal Fishing; National Agricultural Investment Plan 2014–2018. Main objective: Maintenance of the productive role of the sector in the national economy, the subsistence of the poorest people, as a food source, and in creating job opportunities at a sustainable rate	Promotion of responsible fishing, preservation of marine and coastal biodiversity, maintenance and restoration of stocks at the level of sustainable maximum catch.	Develop fishing and agriculture in order to achieve food security, use agriculture and fisheries to expand employment.
Infrastructure, urban and coastal areas	Environmental sustainable development strategy; National Adaptation and Mitigation of Climate Change Strategy (2011-2025) Main objective: Create the conditions to face complex situations involving multisectoral mandates, where the authorities involved and responsibilities are not clear and when it is necessary to involve different levels of government – local, district, provincial, national and global	The development of urban areas, and green buildings.	Construction or maintenance of infrastructure – roads, bridges, viaducts, water supply and treatment piping and plant, drainage systems, dikes to protect against rising sea levels, electricity networks.
Energy	Strategy for the Development of New and Renewable Energies (2007-2017) Main objective: Develop the use of technology and conversion of renewable energy sources	Adopt technologies that save energy, promote new and renewable sources of energy (solar, wind, hydropower), ensure the availability of and access to low-carbon fossil fuels.	Promotion of electricity generation projects; expansion of the national electricity grid and extension of the Rural Electrification Programme; promotion of the construction of facilities to transport and store petroleum products; and promotion of the expansion of the liquid fuel distribution networks to the poorest zones.

Sector	Sectoral policy	Features supporting an inclusive green economy	Features supporting structural transformation
Agriculture, forests and other uses of soil	National Investment Plan for the Agricultural Sector 2013-2017; Agricultural Sector Development Strategy 2010-2019. Main objective: Boost productivity and ensure sustainable use of natural resources; adopt an integrated approach including agriculture, water resources and forest services to the productivity of watershed protection and soil fertility.	Promote conservation agriculture, and mechanisms that lead to the natural regeneration of forests; create mechanisms to prevent the propagation of bush fires, reduce deforestation rates and uncontrolled fires; develop sustainable exploration programmes; regenerate and protect mangroves.	Increase agricultural productivity and income, ensuring food supply.
Transport	Transport Policy, (approved by Resolution No. 5/96); Urban Transport Policy Proposal (targeting major cities); promote the involvement of the private sector in the creation of infrastructure and operation of port terminals and railways.	Increase mobility and accessibility in rural and urban transport (passengers and goods); stimulate the productive and social sectors of the economy through reduced transport costs and travel time, improved access to resources and economic activities contributing to the reduction of poverty; promote the use of natural gas in road transport; promote green transport	Link natural resource production areas and agricultural belts to large population centres; guarantee, through appropriate institutions, road transport in the transportation of passengers and goods; ensure licensing of private economic agents to explore internal and peri-urban routes to urban centres in accordance with existing passenger flows.
Mineral resources	Mining Act (No. 20/2014); Geological and Mining Policy (Resolution No. 4/98); Regulation on the Tax Regime for Mining (Decree No. 5/2008)	Respect for socioeconomic and environmental sustainability; minimize the social and environmental impacts of mining projects; clarifies the distinction between mining activities and processing of raw materials from mining;	Creation of jobs, training, development of community cogeneration of energy raw material for the manufacturing industry and infrastructure development; attract more foreign direct investment to the thriving mining sector by, among others, favourable royalties and taxes, speeding up the mining licensing process and reducing mining investment bureaucracy.

Source: Various official government documents.

Mozambique's vision of maintaining economic growth without exceeding ecological limits stems from the need to manage natural resources sustainably, in particular marine and coastal resources, as a means of reducing poverty levels (PNISA, 2013). The boxes below highlight the relationship between resource exploitation and green economy objectives. These objectives are derived from the National Strategy for the Adaptation and Mitigation of Climate Change (2013-2017); the 2007 Environmental Strategy for Sustainable Development; and the Food and Nutritional Security Strategy and Plan of Action 2008-2015.

4.3.1 Water resources

The long-term goals are to achieve integrated and efficient water management, including improved water quality; to determine strategies for water saving and ecological flows; and to give all Mozambicans access to clean drinking water and basic sanitation. The Water Act and its implementing regulations and the Water Policy are important legal instruments for the management of water resources. The goal is to extend access to clean drinking water to 70 per cent of the population by 2015 (MICOA, 2012).

Plans have been made to ensure access to water with the necessary quality standards. This requires the construction and rehabilitation of infrastructure for river resource management, such as natural dikes, reservoirs, channels, streams, community reservoirs, river water collection systems (gutters and water tanks), and drainage and decanting systems. The infrastructure is to be on the scale necessary to protect against flooding, which may be exacerbated by external heavy rain and the dimensions of cross border river basins. Local water purification techniques will be taken into account.

Objectives: Efficient management and allocation of water resources; improved water quality; water saving and ecological flow strategies; rational protection of aquifers and reserves (PNISA: 2013).

4.3.2 Agriculture, fisheries, food and nutrition security

In agriculture, measures have been set out to: promote conservation agriculture and sustainable forest exploration in order to maximize their potential for carbon capture and storage; promote mechanisms that lead to natural forest regeneration; create mechanisms to prevent the propagation of bush fires; reduce deforestation rates and uncontrolled fires; develop sustainable exploration programmes; and regenerate and protect mangroves, seaweed and marine grass associated with carbon capture and storage potential.

The agricultural survey carried out by the Ministry of Agriculture shows an increase in the main food crops in Mozambique. Maize production rose from 920,000 tonnes in 1996 to 1,214,000 tonnes in 2008, while cassava production rose from 366,000 tonnes to 4,040,000 tonnes over the same period. Bean and groundnut production grew an average of about 6.2 per cent per year. The average annual growth rate for sorghum was 3.1 per cent in the same period (MICOA, 2012).

Nonetheless, the agricultural sector faces enormous challenges that must be tackled. These include the fact that the increase in production has been achieved mainly by increasing the area under cultivation, which puts pressure on forests. Mozambique has a surface area of 799,380 km² of which 54.8 million hectares (about 70 per cent) are covered by forests and woody vegetation (MICOA, 2013).

Objectives: Maintain and increase agricultural productivity and income, ensuring sustainable food supply and ecosystem services; restore ecological resources (water, soil, air and biodiversity); reduce the production of waste and inefficiency in the entire agricultural production cycle; and rational and efficient use of natural resources (PEDSA, 2010).

The Government is determined to increase good quality fishery production and strengthen regulatory mechanisms so that fishing becomes sus-

tainable. Fishing is an important activity for guaranteeing food security and generating income for households and the country. The promotion of responsible fishing in Mozambique is guided by various regulatory instruments, such as the Fisheries Master Plan (2012-2019), the Artisanal Fisheries Strategic Plan, the National Plan to Combat Illegal Fishing, the Fisheries Management Plan, and the Fisheries Research Strategic Plan. The Government has also undertaken an ecological assessment of marine ecosystems along the coast in order to inform decisions on where, how and how much to fish.

Other interventions in agriculture will take into account the agro-climatic characteristics of each area and vulnerability projections. In the southern region, where rainfall is most erratic and expected to decline, resulting in cycles of drought and floods, the emphasis may be on the management of river resources, while in the northern region, where more rainfall is expected, action may be geared towards a better selection of crops, always seeking to promote productivity.

Objectives: Maintain and restore stocks at the level of maximum sustainable catch, and preserve marine and coastal biodiversity; maintain the productive role of the sector in contributing to the national economy and the subsistence of the poorest people, as a food source and employment opportunities at a sustainable rate (PNISA 2013).

4.3.3 Land

The long-term goal is to ensure equitable access to land and management and exploration of natural resources in general in order to maintain their functional and productive capacity for current and future generations because agriculture plays a fundamental role in satisfying the needs of the growing population and is intrinsically linked to poverty eradication. Access to land and other natural resources and secure land ownership are essential for the implementation of an integrated approach to increasing food production and consolidating food security in a manner that is environmentally sustainable.

Objectives: Develop and implement integrated land management and water use plans based on the sustainable use of renewable resources on the basis of an integrated evaluation of socioeconomic and environmental potential; strengthen the capacity of the Government, and local and community authorities to monitor and manage the quantity and quality of land and water resources; significantly reduce deforestation and loss of forest diversity (PEDSA, 2010).

Green economy policy instruments will be implemented that adopt an integrated approach involving all sectors and, in particular, in close coordination with forests, agriculture, transport and urbanization, river resources for the extractive industry, irrigation, water supply and sanitation.

4.3.4 Mineral resources

The extractive industry – mining (coal, precious and semi-precious stones, among others) and hydrocarbons (particularly natural gas) – has developed enormously in recent years, and the Government has done a great deal to regulate the sector. It has established a legal framework and implementation and control mechanisms to ensure that mining and the exploitation of hydrocarbons take place transparently, respecting socioeconomic and environmental sustainability in order to obtain just benefits for the country.

Article 3 of the Mining Act (Nº 20/2014) states that the purpose of the Act is to regulate the transparent use and re-use of mineral resources in harmony with the best and safest mining, social and environmental practices, allowing sustainable long-term development and increased revenues for the State and the communities living near mining projects. The Act shows government concern for the rational use of mineral resources and the well-being of local communities. Under article 20 of the Act, a percentage of state revenue generated by mining activities will be allocated to the development of the communities in the areas where mining activities take place. Also important is the provision that mineral resources must be used for the cogeneration of energy or as raw material for

the manufacturing industry. These measures are all conducive to an inclusive green economy and structural transformation.

Mineral resources have made sizable contributions to economic growth and become a vital part of the economy. Job creation is a priority in Mozambique, where high levels of unemployment and under-employment persist. Employment creation has proved the most effective tool in reducing poverty and promoting a decent standard of living.

The capital-intensive nature of the extractive industry means that there is little large-scale job creation as a direct result of such projects, however. There could be positive spillover through training and on-the-job knowledge transfers, creating job opportunities that otherwise would not exist. Mozal, the aluminium smelter project, has established several training and technical capacity-building programmes for its subcontractors (IMF, 2014).

The extraction and export of coal and gas will bring infrastructure development, mainly in the form of power grids, railways, roads and ports, and these are important for structural transformation and the transition to an inclusive green economy. Going forward, there are both opportunities and risks, and Mozambique needs to maximize the potential benefits by curbing the downside risks. The coal and gas sectors are an opportunity for Mozambique to enhance its strategies and action plans towards inclusive socioeconomic development. The country should also focus on increasing agricultural and fisheries productivity, employment promotion, and social and human development (AfDB, 2013).

4.3.5 Infrastructure: urban and coastal areas

Mozambique intends to develop environmentally sustainable tourism on the basis of internationally accepted standards, acknowledging the possibi-

lity of major pressure on and consequent degradation of coastal and marine ecosystems. Long-term differentiated exploration and use of those areas is expected to mitigate the degradation of these ecosystems and to ensure that they are used sustainably.

Currently, about 35 per cent of the population live in urban areas and the rate of urbanization is about 4 per cent a year. At this rate, it is expected that by 2020, almost 45 per cent of the population will be living in urban areas and that by around 2030 the urban population of Mozambique will be larger than the rural population (MICOA, 2012).

The major part of investment in Mozambique will focus on the construction or maintenance of infrastructure – roads, bridges, viaducts, water supply pipes and treatment plants, drainage systems, dikes to protect against the rising sea levels, and electricity networks, among others. In urban areas, the country intends to reverse the current disorganized growth, introducing technical capacity, resources, planning and management instruments, and ensuring citizens participation in problem-solving because the pace of informal urbanization is threatening health, the environment and urban productivity.

Objectives: Integration of climate considerations in the urban planning process to enable cities to develop their capacity to adapt efficiently to current and future climate impacts, and to take advantage of this to develop, experiment and innovate in their urban planning policies; developing tourism within the limits of the capacity of the ecosystem (ENDe, 2013).

4.3.6 Energy

This includes energy-use mitigation strategies; production and transportation; improved access to renewable forms of energy; ensuring the availability of and access to low-carbon fossil fuels; promotion of initiatives to replace high-carbon and non-renewable fuel with low-carbon or renewable fuel in the transport and productive sectors. The Government advocates clean and

renewable forms of energy to ensure sustainable economic and social development and energy efficiency, especially in rural areas where the majority of Mozambicans without access to electricity live.

The proposed projects will focus on income generation with models that adopt energy-saving technologies for the domestic economy and reduce the environmental impact of the traditional use of charcoal.

The main decisions on the energy sector are contained in the Five-Year Plan (2015-2019), and include: promoting electricity generation projects; expanding the electricity grid and the rural electrification programme, giving priority to the connection of more districts and consumers to the national grid; promoting new and renewable form of energy (solar, wind, hydropower and biomass); promoting the construction of facilities to transport and store petroleum products; and promoting the expansion of liquid fuel distribution networks to the poorest zones (MICOA, 2012).

Objectives: In order to provide incentives for agriculture and small-scale industry in rural areas, promote the use of new models for charcoal production to reduce deforestation; promote solar, wind and biomass energy; and develop river technologies to promote hydropower (Energy Strategy, 2012)

4.3.7 Transport

The geographical position of Mozambique on the Indian Ocean and the existence of natural harbours give the country a major comparative advantage in terms of access to markets, but at the same time huge responsibility in terms of access to the sea by hinterland countries. Transport infrastructure in Mozambique has developed transversally to serve neighbouring countries, with relatively poor connectivity between the north and south of the country and between the transversal development corridors.

The transport sector has regional potential and is undergoing major restructuring. About 70 per cent of goods from the Southern African Development Community (SADC) countries transit through Mozambique's road and rail corridors and the coastal ports (PricewaterhouseCoopers, 2015). The Government has put in place an ambitious programme aimed at rebuilding and expanding the system, including by strengthening maintenance capacity with the support of development partners. The main challenge is to link natural resource production areas and agricultural belts to large population centres (demand) in order to develop new markets that will enhance private sector growth and the competitiveness of small and medium-sized enterprises.

The transport sector, particularly road transport, recorded significant growth in recent years. Such growth needs to respond to development needs, particularly by strengthening linkages with agricultural producers in rural areas. Major developments in the sector include projects worth \$17 billion planned from 2013 to increase rail links to ports and expanding port capacities cargo and traffic handling capacities to allow for greater exports. Transport infrastructure has been expanded from west to east connecting mining and agricultural clusters in Mozambique and neighbouring countries Malawi, Zambia and Zimbabwe to the Port of Beira (PricewaterhouseCoopers, 2015).

Objectives: Considering the potential of natural gas reserves, making this sector green means: promoting the use of natural gas in road transport; promoting transport infrastructure that provides appropriate access to workplaces and the social interaction that facilitates important economic activities, mainly market access by producers; and promoting green means of transport for export and transit goods (ENDe: 2014)

4.4 Good practices and success factors in the development and implementation of green economy policies

4.4.1 Good practices

An integrated policy framework

The inclusion of all sectors in the development and implementation of the Green Economy Roadmap is a trump card for mainstreaming the green economy into national development plans and sectoral strategies. The lead institution in implementation, coordination and monitoring is the Ministry for Coordination of Environmental Affairs, but the active engagement of the ministries of finance and planning, and others are also important.

The multi-stakeholder interests in the green economy help the Government to engage with the public and private sectors and other non-State actors on a variety of fronts. The Green Economy Action Plan, integrated implementation matrix and green growth plan gave stakeholders an opportunity to discuss and agree practical steps for integrating the green economy into national and sectoral development plans. These documents also provide the basis for adjusting macro-planning and budgeting processes and mobilizing resources and partnerships in accordance with the green economy.

Niche sectors

A recurring theme for the Roadmap and the Action Plan is the evaluation of natural resources. The documents have helped the country to translate article 102 of the Constitution of the Republic of Mozambique into practical action on the evaluation of natural resources. This will involve mapping natural resources, soils and agro-ecological zones, promoting land zoning for correct location of economic activities and balanced socioeconomic development. Sectoral policies and strategies will also be adjusted in the implementa-

tion of various elements of the green economy to contribute to sustainable use of natural resources. According to the Roadmap, national and sectoral policies that would support transition to a green economy include territorial planning and organization, which is for planning rural and urban development. Other policies, such as the new Land Act and investment policy, favour community development since they explicitly state that natural resource exploitation revenue is to be shared with local communities and that communities must be involved in decision-making.

Mobilizing resources and partnerships

The Government has identified resource requirements and potential partners in the integrated implementation matrix for a green economy and the Green Growth Plan. Two critical actions stand out as good practices. The first is including the green economy in the National Planning and Budget System. This clearly indicates to external partners the seriousness with which Mozambique is approaching the transition to a green economy. The role of external partners will be to fill resource gaps; they will have no influence on priorities decided by local stakeholders. The second is the coordinating role of the Ministry for Coordination of Environmental Affairs and the Ministry of Finance in mobilizing funds, partnerships and resources to support a green economy.

The country is also relying on the institutions it has established to monitor progress on sustainable development. The National Council for Sustainable Development and the Environment Fund will continue to coordinate the development of the country, coordinating implementation of policies, plans and programmes linked to the green economy. The leading role of the private sector in development is being exploited through public-private partnerships in infrastructure and other large-scale projects. The significant capital investment infrastructure projects require and the lack of government technical capacity to manage large-scale investments have led Mozambique to develop several public-private partnerships to rehabilitate infrastructure (Fischer and Nhabinde,

2012). Examples include the Trans-African Concessions (TRAC), the ports of Maputo, Beira and Nacala, and the Ressano Garcia, Sena and Machipanda, and Nacala railways. The partnerships have enabled the country to attract private investment above state capacity. Although there have been challenges to implementation, the partnerships have improved prospects for structural transformation and massive infrastructure development and restoration.

On 10 August 2011 the Government published the Act on Public-Private Partnerships, Large Scale Projects and Company Concessions. The Act rectifies some of the problems created by earlier legislation. Some of its provisions are unequivocally favourable to structural transformation and an inclusive green economy, such as: a commitment to reducing the risks inherent in each particular project; the removal of restrictions that compromise the viability of projects; the creation and preservation of jobs and the transfer of skills to Mozambican workers and management; potential contribution to the development of national capital markets; the inclusion of Mozambican partners in all undertakings; establishing partnerships between public-private partnerships and small and medium-sized Mozambican firms, and transfer of know-how to such firms; and the requirement that public-private partnerships should establish programmes, projects or actions that promote social development in the communities in which they are located (article 4 of the Act on Public-Private Partnerships) (Fischer and Nhabinde, 2012).

Promoting local content in production and consumption

The use of local materials and simple technologies is visible in some projects. Although the country has no specific legislation on local content, the provisions of the new draft petroleum law 2013 specifically refer to promoting national entrepreneurship, guarantees for internal consumption, and development of local industrial activities, among others.¹⁴ Its predecessor, the Petroleum

Act 2001 specifically conferred preferential rights on Mozambicans in the granting of petroleum concessions, and the market for products and services (USAID, 2013). Technology transfer is thus possible in the context of government efforts to strengthen local business linkages with the private sector, particularly megaprojects and extractives.

On their own, the policies on local content will not facilitate enterprise growth unless local enterprises are empowered to become competitive in both price and quality. Promoting local content will be limited by the fact that some companies are very far from achieving global standards. However, progress has been observed, including the requirement that contractors and subcontractors embed local content procurement plans and local employment in their concession contracts. Some operators are going beyond their concession contracts by investing in local communities, for example financing agricultural seeds, teaching new production techniques and transferring technologies. Local farmers are being trained and those same companies are buying their produce. This is a huge step towards an inclusive green economy and structural transformation. This model of linking local actors with large-scale companies could be replicated in many sectors.

4.4.2 Success factors

The interlinked factors outlined in figure 4 are crucial to success.

Measuring success is no simple matter. Normally, the success of policies and strategies aimed at the sustainable exploitation of natural resources and environmental protection can only be determined by a proliferation of good practices, replication of technologies and rehabilitation of the environment. These cannot be measured easily, but some factors can nonetheless be highlighted as suggesting some limited success.

¹⁴ <http://interfaxenergy.com/gasdaily/article/15913/local-content-mozs-new-petroleum-law>

Figure 4: Success factors



Leadership and political commitment

The launch of the Green Economy Roadmap by Armando Emilio Guebuza during a high-level side event at the United Nations Conference on Sustainable Development (Rio+20) in June 2012 was a clear demonstration of Mozambique’s commitment to transformation. The Government followed up on this commitment by drafting the Green Economy Action Plan and instituting budgetary and policy reforms to match the high-level commitment to transformation.

The current momentum should be considered in light of Mozambique’s unique history as a country that has only recently emerged from civil war. From 1974 onwards, Mozambique planned and mobilized efforts to develop the country, eradicate poverty and achieve structural transformation. The planning processes have also helped to identify target groups and priority development issues. Success factors include the Local State Organs Act, the establishment of local decision-making committees to manage natural resources, and the permanent dialogue between communities and Government (for example, the local risk management committees, natural resource management committees and local advisory councils).

In 2012, as a result of feedback from leaders and stakeholders, the Government prepared a strategic environmental evaluation for the coastal region with a view to harmonizing intervention plans and sustainable use of natural resources, as the coastal area is rich in natural resources, including biodiversity and mineral resources. The agro-ecological zoning process is also under way in order to establish the planning bases of land use for various purposes, with an emphasis on agricultural uses. One of the most important factors in the success of this process is the Green Economy Action Plan and policy guidelines for the development process, as part of the Green Economy (for example, the National Development Strategy, the Five-Year Plan and Poverty Reduction Action Plan).

Strong institutional foundation

The institutional landscape supporting sustainable development in Mozambique is quite rich. It includes various governmental institutions created under the Ministry for the Coordination of Environmental Affairs, such as the National Council for Sustainable Development, and specialized institutions to be created during implementation of the Roadmap. Specifically, the green economy units set up in sector ministries are improving the coordination of central government inter-

ventions. These, together with a review of sectoral policies, will strengthen national institutions through capacity-building, transformation and best governance practices (Mozambique, 2012). Some institutional reforms are based on legislation passed to facilitate a swift transition to an inclusive green economy.

Mobilizing resources and partners

Despite the vicissitudes the country has suffered since independence, caused essentially by the long civil war, it has persisted in its efforts to achieve sustainable development, and has some good practices that are assisting the process of adopting an inclusive green economy, including the commitment to mobilizing resources and partners for its development programmes.

Mozambique places domestic resource mobilization at the centre of its development model. For example, after the passage of the Local State Organs Act, the Local Initiative Investment Fund was set up to finance local initiatives. Through this initiative, small and medium-sized enterprises are still being financed. The Fund aims to fill the gap left by microfinance institutions and banks that are risk-averse, particularly to ventures in rural areas. In 2014, capital expenditure as a percentage of total government expenditure rose by 12.8 per cent, although part of this increase was earmarked to fund repairs to infrastructure damaged by floods. Since 2012, however, low inflation has enabled the Government to take an expansionary

fiscal stance, and this has helped to open the way to a green economy. Moreover, the expected addition of 600,000 new taxpayers will help to fulfil projection of domestic financing of the total budget at 64 per cent, and donor support at 13.2 per cent (AfDB and UNDP, 2014).

Technical capacity

Significant scarcity of human, financial and technological resources remain an additional challenge to designing and implementing strategies, plans and programmes to make sustainable development a reality. Institutions exist but they are understaffed and the majority lack sufficient skilled workers both at central and local government level to train those in need of new skills. The Ministry for Coordination of Environmental Affairs and the Ministry of Finance have shown leadership and filled most of the technical gaps in reviewing relevant sectoral plans and strategies. Some of the capacities built during the development of local adaptation plans, climate vulnerability capacity assessment, and strategic environmental assessment of the coastal zone are being used to build a critical mass of staff able to train others at central and provincial levels in planning, monitoring and evaluation.¹⁵ Public sector staff are being trained at local and central levels and the State is investing in human resource development by sending staff to colleges, universities and technical schools or by inviting those institutions to train staff in their local areas.

¹⁵ <http://www.gcca.eu/national-programmes/africa/gcca-mozambique>

5. Enabling measures and analytical tools

As previous chapters have shown, the transition to an inclusive green economy and the structural transformation envisaged have been slow. That alone is an indication of weaknesses in the policies, strategies and programmes being implemented. To overcome the inertia, new and enhanced enabling measures are needed. Stimulating producers to engage with an inclusive green economy and push structural transformation forward can only be achieved if appropriate incentives are in place. The legislation, strategies, plans and programmes introduced, the institutions set up, and the processes for preparing periodic environment status reports on sector performances provide some basis for a smooth transition to a green economy in Mozambique but they are not enough.

If the appropriate conditions for fostering an inclusive green economy and structural transformation are to be put in place, the Government must invest in training, education, technology and the dissemination of information in order to enhance the skills, knowledge and production techniques of producers. Empowering primary sector producers is an essential but insufficient condition of success. It is also essential to involve the private sector, but this can only be achieved by appropriate investment conditions: it is well known that the creation of the right conditions for investors can contribute to a more rapid transition to an inclusive green economy and structural transformation. Some measures are in place that may improve and facilitate the transition but the private sector and those operating in the smallholder agricultural sector are not using them to their advantage. While the former is risk-averse, the latter lacks information. In fact, neither the private sector nor households have adequate information about green economy opportunities.

Enabling conditions are conditions that make green sectors attractive opportunities for investors and businesses. In the previous chapter we presented some policies that can be called enablers of an inclusive green economy and structural transformation, but others also need to be considered.

5.1 Enabling conditions

5.1.1 Institutional commitment

The institutional approach advocated by the State is intended to establish implementation mechanisms. All laws, norms, policies and strategies need to be implemented by appropriate institutions adequately prepared to deal with these issues. Specialized institutions to work towards each of the objectives set must be established or transformed. Institutional policies aimed at strengthening national institutions through capacity-building, transformation and best governance practices are being developed (Mozambique, 2012). It is no easy matter to build and strengthen institutions and requires investment. The challenge is for them to be represented at all levels – district, provincial and national; and in order to tackle adequately all the issues, the institutions must grow in size (representation) and capacity (human capital).

In order to advance local structural transformation and an inclusive green economy, institutions should be in active contact with businesses operating in the exploitation and production of natural resources. Institutions should generate and provide the necessary information, services and training, and set guidelines as needed. They should be ready to support private initiatives, monitor economic activities, enforce laws and stimulate entrepreneurs to engage in sectors that

can contribute to a green economy. Planning processes, establishing performance indicators and property rights, establishing judicial and administrative remedies and other policies all require institutional capacity. Inter-institutional cooperation is another challenge Mozambique faces in implementing an inclusive green economy and structural transformation. Overlapping initiatives, policies and strategies are common, requiring cooperation among several institutions.

The Roadmap and the Action Plan show the commitment of the Government to supporting and sustaining an inclusive green economy. All the institutions concerned are making the necessary adjustments to facilitate an inclusive green economy. Some are adjusting existing policies and practices in the light of best practices. Norms, laws and strategies are being reviewed and devised to facilitate an inclusive green economy and structural transformation. As an example, the Ministry for Coordination of Environmental Affairs is ensuring that all development projects are subject to an environmental impact assessment, especially in the areas of tourism, forest exploration, wildlife and roads. The objective is to achieve a green economy by introducing the following safeguards:

- Ensuring that environmental considerations, including the use of natural resources and biodiversity, are integrated in plans, programmes and sectoral policies, according to the National Sustainable Development Strategy;
- Promoting, at different levels, the planning of integrated use of resources;
- Promoting sectoral legislation and the establishment of norms and criteria for sustainable use of natural resources;
- Identifying, through the Government and other relevant institutions, possible sources of funding to support environmental sector programmes;
- Promoting the participation of the private sector in the funding of environmental initiatives;
- Promoting community management of natural resources.

These measures provide opportunities to increase use of renewable energy, particularly solar power, but there are also weaknesses. There is a lack of technical and institutional capacity (in almost all sectors, education being the weakest in terms of policy –human development). In the extractive industries, the Extractive Industries Transparency Initiative led to the establishment of a committee consisting of representatives of Government, oil and mining companies and civil society.

5.1.2 Legal framework

A transition to a green economy requires the Government to adopt legal and institutional frameworks that: make investment and public expenditure in areas that stimulate transformation of economic sectors a priority; promote investment based on responsible exploration of natural resources; impose taxes and market-based instruments to change consumer preferences and promote green business investment and innovation; and promote investment in human development, capacity-building and training.

The green economy has a basis in the Constitution of the Republic of Mozambique, which lays down principles for the economic, environmental and social fields. In the economic field, it states: “The economic policy of the State shall be directed towards the construction of the fundamental bases of development, the improvement of living conditions, strengthening state sovereignty and the consolidation of national unity through the participation of citizens and efficient use of human and material resources”, for which harmonious and inclusive development is a precondition.

In the environmental field, the Constitution States: “The State shall promote the knowledge, mapping and evaluation of natural resources and determine the conditions of their use and exploitation, subject to the national interest”.

In the social field, the Constitution lays down principles concerning access to health, education, social security, the environment and quality of life for citizens, including the promotion and development of women in all spheres of political, economic, social and cultural activity, and the social protection of vulnerable people.

The legal framework includes the Water Act, Land Act, and Environment Act, the main objectives of which are to define the general legal regime for the protection and conservation, use, exploitation, control and oversight of water, land and the environment.

In order to guarantee the right to the environment, land and water within a sustainable development framework, the country has adopted various policies for the integration of environmental, economic and social objectives in sectoral policies, including prevention and control of pollution and erosion, rational exploitation of natural resources safeguarding their capacity for renewal, and promoting land zoning in order correctly to locate activities, and balanced socioeconomic development.

Although there is already a strong legal framework regulating these areas, there is a need for more specific legislation on natural resource exploration and extraction. New regulations and incentives to self-regulation need to be introduced and existing ones reviewed in order to consolidate a vision of sustainability and social responsibility in the market and in public management.

The rule of law is crucial if private initiatives are to take shape (OECD, 2010). An unregulated business environment is not conducive to an inclusive green economy and structural transformation. Effective regulation will stimulate economic growth by attracting investment, stimulating innovation, inspiring structural reform, opening markets, encouraging entrepreneurship, and so on.

Property ownership rights and laws and women's rights to land are also fundamental and must be clear. The Land Act is a step forward, but more

needs to be done to encourage investment and innovation. Clear compensation mechanisms can help to develop investor trust. Rights of access to any privately or publicly-owned property is needed to attract investors to Mozambique. Investors will not enter a market unless they believe their rights will be protected. Similarly,, people will not become committed to a green economy unless they have access to services. The Land Act also covers community rights to land and resources. Promoting conservation without respecting indigenous traditions is counterproductive and will cause great harm to communities. Clarifying ownership rights can therefore contribute greatly to structural transformation and an inclusive green economy.

5.1.3 Policy frameworks

Policies are also very important for translating the intentions of the State into actions that can be coordinated at institutional level. Inclusive green economy policies can have a huge impact on structural transformation. Regulatory policies on the conservation, exploitation and management of natural resources can stimulate better resource exploitation (table 8), while establishing product standards will compel producers to adopt new production techniques and force them to adjust to market needs. Regulatory policies force producers to 'think big' and are intended to provoke changes in the business environment, improving access to markets and limiting distortions. They also facilitate transparency and clean competitiveness across the country. This is fundamental if producers are to feel protected and therefore take more risks.

Macroeconomic policies

Fiscal policies are important if an inclusive green economy is to have a significant impact on structural transformation because they affect private sector behaviour in the form of investment and production decisions. High taxes can cause economic stagnation and reduce investment, but optimal and innovative taxes can boost it. Fiscal

policy can also act as a form of control in bringing about an inclusive green economy and structural transformation, and controls are essential if malpractices re to be avoided or punished. The desire for structural transformation should not blind the State to its obligations towards sustainable development. Taxes should therefore be imposed in order to encourage corporate and entrepreneurial responsibility, as well as to raise revenue to boost social expenditure. Ecological taxes and tariffs are designed to protect the environment and facilitate an inclusive green economy, while tax exemptions and preferential taxation are designed to promote structural transformation by attracting investment.

Of course, fiscal policy is also designed to sustain government development strategies by increasing revenue that will culminate in public spending (salaries, investment, social infrastructure and so on) but discretionary taxes of those involved in exploiting natural resources must be seen as protective measures to reduce emissions, waste and harmful economic activities. With fiscal policies in place, producers will be forced to apply clean and efficient technologies, to innovate and address environmental concerns. Fiscal policy can be a catalyst of an inclusive green economy and structural transformation.

Fiscal incentives are taxes or subsidies aimed at stimulating economic activities or investment in a particular sector, such as industrial development, manufacturing and green agriculture. They are most often adopted to influence investment and spur economic growth. Mozambique has some fiscal incentives in place, to promote exports and to promote investment. Both types of incentives have the potential to stimulate an inclusive green economy and structural transformation. Fiscal incentives to promote exports are currently given to large exporters in the industrial sector. Companies that import essential products also enjoy tax incentives. Some companies enjoy tax reductions on imports and exports, for example. Special economic zone developers and enterprises are exempt from customs duties on imports of construction materials, machinery, equipment, accompanying spare and accessory parts and other goods used in the framework of a licensed special economic zone activity. Investors in the manufacturing industry enjoy exemption from duties on imports of raw materials to be used in manufacturing. Investors in the assembly of motor vehicles, electronic equipment, computer and communications technology and others enjoy exemption from customs duties on imports of materials to be used in the industrial production process (Mozambique, 2009).

Table 8: Policy options for a green economy

Examples of policy options for a green economy

Regulatory approach	Fiscal approach	Investments	Institutional approaches
Limits on emissions and effluents; Conservation areas; Management through best practices; Land-use zoning; Product standards; Markets for natural capital and ecosystem services; Fishing quotas.	Ecological tax reform; Ecological tariffs; Taxes affecting development; Tax credits and exemptions; Preferential taxation.	Green infrastructure; Training and development of the workforce; Subsidies; Research and development; Loans; Purchases and public expenditure; Subventions and aid; Technology transfer.	Transition planning; Performance indicators; Property rights; Judicial and administrative remedies; Certification of value chains; Eco-labelling; Access to information.

Source: Green Economy Roadmap (2012), page 22.

Investment Policies

Investment policies geared to infrastructure development, and training and funding producers are another important means of achieving an inclusive green economy and structural transformation. Public investment in infrastructure is crucial: roads, railways and telecommunications can increase access by poor people to markets and information. The provision of energy and water is another key factor in an inclusive green economy and structural transformation. Public investment functions as a subsidy to producers in all sectors. As the International Monetary Fund has said, public investment supports the delivery of key public services, connects citizens and firms to economic opportunities, and can serve as an important catalyst of economic growth. Infrastructure coverage and quality have stimulated production, competitiveness and supply and demand. More remains to be done as Mozambique is still in dire need of infrastructure. Large discrepancies in infrastructure coverage and quality persist across the country, impeding the development of an inclusive green economy and structural transformation in some rural areas.

The development of a green economy requires skilled workers so the Government must invest in education. More than half of Mozambicans have none of the skills needed to work in a modern economy. It is very difficult to fill vacancies in some specialized fields. Linking education and training to job opportunities has also been difficult, and training people to develop green activities is proving a challenge (CEDEFOP, 2009). An inclusive green economy will not emerge and structural transformation will not take place if people are unaware of their responsibilities. It is essential for the Government to finance training programmes and implement a major shift in education programmes. As was pointed out above, an inclusive green economy and structural transformation will depend on the adoption of green technologies, and those technologies will need to be developed and applied by skilled people, ranging from engineers, scientists, architects and planners to the working-class, and farmers.

As table 8 shows, investment policies are wide-ranging and include research and development, loans, subsidies, subventions and aid, purchases and technology transfer, all of which require public funds. Mozambique has little leverage to deal with all these issues simultaneously, so a step-by-step approach is appropriate.

Market incentives

Mozambique has some market incentives conducive to an inclusive green economy and structural transformation, most of them directed towards private companies involved in mining, agriculture and industry. Incentives come in various forms: tax exemption, subsidies, grants and loans. Attracting investors to rural areas is still a great challenge, but the expansion of financial services such as microfinance banks, commercial and investment banks, has enabled the country to stimulate the emergence of micro and small enterprises at the district level. As to licensing activities, permits can be issued or withdrawn according to a company's activities and social, economic, financial, environmental and other impacts.

Investment permits are granted within three days of application on a devolved scale depending on the size of the proposed project. For instance, the governor of a province can grant permits to national investment projects with a value not exceeding the equivalent of Mtn 1.5 billion (approximately \$52 million), while the authority of the director-general of the Investment Promotion Centre is needed for national or foreign investment projects of a value not exceeding the equivalent of Mtn 2.5 billion (approximately \$86.5 million). Investments where the total amount involved does not exceed the equivalent of Mtn 13.5 billion (approximately \$467 million) require the authority of the minister who oversees the planning and development of the particular sector. Investment projects exceeding Mtn 13.5 billion that require land with an area greater than 10,000 hectares, investment projects requiring a forest concession of an area greater than 100,000 hectares, and any other projects with foreseeable political, social, economic,

financial or environmental implications take up to 30 days and require Cabinet authorization (Lex Mundi, 2012).

5.1.4 Participatory governance and increasing the role of major stakeholders

Participatory governance brings together the Government and non-governmental stakeholders to develop ideas on how to transition to a new green economy. It means giving people a voice. Public policy formulation and implementation should involve all stakeholders. Mozambique has gone through some institutional changes but participation remains a major challenge. Decisions are still made at the top, with little or no contact with the base (the public), which results in enormous resistance as most decisions are incompatible with current practice. The inclusive green economy and structural transformation are about change and change must be negotiated. Institutions must therefore be ready to negotiate. The private sector and civil society are key players that could contribute greatly to achieving an inclusive green economy and structural transformation.

Role of the private sector

The private sector, which has made a significant contribution to national economic growth, has been called upon to participate actively in the management of natural resources and to take action as part of environmental preservation efforts.

In the last few years many private sector companies have started to allocate more resources to social responsibility and environmental issues as public relations activities. Although some companies act responsibly most of the time, many national companies are not interested in social responsibility and try to extract benefits and profits by harming natural resources and exploiting employees and people. Mozambique needs more agreements and legislation to encourage companies to move towards social and environmental responsibility.

Small and medium-sized enterprises make up more than 90 per cent of businesses in Mozambique¹⁶ and, because they tend to be more labour-intensive than large enterprises, they have a significant impact on employment. Their corporate social responsibility and environmental responsibility practices therefore have a significant impact on society as a whole, even if their contribution to the overall production of goods and services is not so great. Most tend to serve local markets and are not exposed to international pressures or incentives. In addition, civil society organizations tend not to be very concerned with their actions, preferring to devote their limited resources to the larger corporations with greater impact.

Encouraging new, green practices requires incentives for businesses. Less attention has been paid to green financing for small producers and microenterprises in Mozambique, which can have important spillover benefits for local economies and poverty reduction. Incentives do not always have to be financial: for small farmers, land tenure reform could be an incentive to more sustainable practices.

Role of civil society

Civil society is composed of organizations that seek to influence governmental and company decision-making and the distribution of resources. They aim to be opinion leaders and pressure groups and initiate strategic change by raising public awareness through the media. Such organizations represent the interests of a small or large section of society and advocate for society as a whole.

Civil society organizations have an unquestionable role to play in social change and their growing influence makes them key players in generating structural transformation and campaigning for an inclusive green economy. They can be a driving force in accelerating transition, at the same time campaigning for responsible policy-making and decision-making. They are important

¹⁶ In INE Mozambique, and in www.ipeme.gov.mz

at every phase of policy formulation, and participate in the decision-making, implementation and evaluation processes. They are therefore able to ensure that the transition benefits society as a whole. In Mozambique civil society organizations have become more open to cooperating with the Government and companies to improve the business environment, the natural environment and social change. They are of assistance to the Government in relation to green economy issues because many of them are familiar with the way in which resources are used and traditional community practices. They also intervene within communities to raise awareness of environmental issues.

Civil society organizations operating in the agricultural sector are playing a very important role in the transition to an inclusive green economy. They focus mainly on agricultural extension and have increased its geographical coverage and the number of farmers reached. They have also created job opportunities for agricultural technicians. They are involved in dialogue and advocacy to encourage people and companies to accept their social responsibility.

5.2 Analytical tools for integrated evaluation of inclusive green economy policies and strategies

Policies must generate outcomes, so it is crucial to evaluate outcomes in order to determine the merits of policies. Evaluation enables the relevance, impact, utility, effectiveness and sustainability of policies to be understood in order to inform future policymaking, improve regulations and legislation, avoid implementation problems and advise decision makers.

In order to evaluate an inclusive green economy and structural transformation, agreed evaluation tools are required to ensure common practices at the international level. Because there are no internationally agreed tools and every country has its own methods policy outcomes can be very diffi-

cult to assess. In the absence of a common unified tool, many countries use a multiple-tool approach. Mozambique has some tools that could be used for integrated evaluation of inclusive green economy policies but there is lack of capacity to evaluate economic losses in the event of natural disasters, and of tools to evaluate contingency plans and assess long-term risks. It is important to improve intersectoral coordination and the quality of redistribution of resources from the State budget to the provinces, particularly funds for infrastructure.

The most appropriate tools for the evaluation of inclusive green economy policies and strategies in Mozambique are:

5.2.1 Country statistical and sectoral reports

These reports are useful for collecting information to enable challenges and opportunities in various economic sectors, contribution to GDP (value added), job creation, and environmental impacts to be understood. They are also used to track poverty, inequality, and vulnerability indicators. Such reports include:

- The annual report on the economic and social plan (BdPES), which currently contains programmes related to a green economy;
- The forest inventory and mapping of risk and disaster zones by the Ministry of State Administration and the National Disaster Management Institute;
- The annual budget execution report, which provides information on business sectors that receive funds for development activities related to an inclusive green economy;
- The integrated investment plan report, which provides information on government investment channelled into inclusive green economy transition processes;
- Poverty and social impact analysis - to promote evidence-based policy choices, by explicitly including poverty and social impacts in the analysis of policy reform.

5.2.2 Surveys

Surveys can be used to identify key economic and social challenges and opportunities for an integrated evaluation of inclusive green economy policies, and other policies. Examples include: demographic and health surveys, which provide representative national household data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition (the latest available is 2011; 2014 is on-going);¹⁷ labour force surveys by the National Statistical Institute of Mozambique (Instituto Nacional de Estatística - latest available annual statistical report is 2014);¹⁸ national agricultural surveys conducted by the Ministry of Agriculture (the latest available is 2008);¹⁹ and enterprise surveys conducted by the World Bank (the latest available is 2007).²⁰

5.2.3 Human development index

The human development index is a summary measure of average achievement in three basic dimensions of human development: a long and healthy life, being knowledgeable, and having a decent standard of living. These three dimensions are very important to an evaluation of an inclusive green economy. The United Nations Development Programme produces human development index reports. The latest available for Mozambique is 2008.²¹

Mozambique's human development index value for 2014 is 0.416, which puts the country in the low human development category. The country is ranked 180 out of 188 countries and territories. Progress has been slow, with an average annual increase of about 1.66 per cent between 1980 and 2014. The country's 2014 value of 0.416 is be-

¹⁷ <http://dhsprogram.com/what-we-do/survey/survey-display-467.cfm>

¹⁸ <http://www.ine.gov.mz/estatisticas/publicacoes/anuario/nacionais>

¹⁹ <http://fsg.afre.msu.edu/Mozambique/survey/index.htm>

²⁰ <http://www.enterprisesurveys.org/data/exploreeconomies/2007/mozambique>

²¹ <http://hdr.undp.org/en/search-reports?country=MZ>

low the average of 0.505 for countries in the low human development group and below the average of 0.518 for countries in sub-Saharan Africa (UNDP, 2015).

5.2.4 Strategic environmental assessment

Strategic environmental assessment is a systematic decision support process that aims to ensure that environmental and possibly other sustainability aspects are properly taken into account in policymaking, planning and programming.²² The Government of Mozambique is using strategic environmental assessment in the design of a strategy to help drive sustainable development that will safeguard and ensure the conservation of invaluable natural assets, local communities and their traditions. It is also using it in response to growing conflicts of interest along its coast. These conflicts include current hydrocarbon surveys in Cabo Delgado province and Inhambane. Seismic survey activities and hydrocarbon prospecting have raised claims in several sectors such as tourism, fisheries and conservation areas. Strategic environmental assessment is an integrated process that will deliver a coastal development strategy, an environmental database for different purposes at subregional level, and a framework for increased dialogue and alignment of sectoral policies and development objectives (Partidário and others, 2012).

At the request of the Ministry for Coordination of Environmental Affairs, the Netherlands Commission for Environmental Impact Assessment advised on the environmental assessment of infrastructure for the transport of bulk goods from a titanium smelter in Chibuto, north of Maputo. A strategic environmental assessment was recommended to provide an integrated assessment of all interests to inform a decision on transport infrastructure. Although the outcome was unclear, the assessment resulted in an action plan that

²² Environment and Climate Change Policy Brief – Mozambique

included: identification of strategic assessment pilot applications; awareness-raising, training and technical capacity-building for those involved in the pilots; and evaluation of the pilots, leading to recommendations on the application of strategic environmental assessment and guidelines for Mozambique (OECD, 2006).

This process is important for Mozambique because of the urgency of harmonizing economic activities with the preservation of a balanced environment and territory planning, and the need to lay down regulations and guidelines to ensure that economic development activities take place, but that the environment remains protected. Sectors or activities considered in the coastal zone assessment include: hydrocarbons; mining; ports and transport; fisheries; preventing conflicts over land; and inappropriate use of resources.

5.2.5 Integrated environmental and social impact assessment

Greater Maputo Water Supply Scheme conducted an integrated environmental and social impact assessment of a project located in Maputo province covering several rural and peri-urban human settlements in the Moamba District and the Machava Municipal Administrative Post (Matola Municipality). Such an assessment is important when cross-cutting themes need to be taken into account when assessing the environmental and social impacts of a project. Like environmental impact assessment, integrated environmental and social impact assessment is a structured approach to obtaining and evaluating environmental information to inform decision-making. The information essentially consists of predictions of how the environment will change if certain alternative actions are implemented, and advice on how best to manage environmental changes if a particular alternative is selected and implemented (UNEP, 2004).

The recommendation was that the project could be implemented and operated without having significant impacts on the bio-physical environ-

ment if the proposed mitigation measures were implemented. In order to reduce the impacts on flora and fauna to a minimum, the main recommendations were: to use existing roads and tracks, especially when crossing natural habitats; and that crossings of wetlands and rivers should be carried out during the dry season in order to minimize the impacts on the aquatic environment, (Ministry of Planning and Development, 2013).

5.2.6 Poverty and social impact analysis

Poverty and social impact analysis is an important feature of the new approach to supporting poverty reduction in developing countries. It involves the analysis of the intended and unintended consequences of policy interventions on the well-being of different groups, with a special focus on the vulnerable and the poor. In Mozambique it was used to analyse the impact of a possible rise in fuel tax. Increasing a tax is bound to increase poverty, if considered in isolation. In this case, the magnitude of this effect was analysed. Many key Mozambican stakeholders argued that any increase in the fuel tax would have a major effect, but the study concluded that the aggregate short-term impact of a rise in fuel tax on poverty would be modest. Nonetheless, it also recommended that, if the Government decided to increase the tax, it should do so in a way that minimized economic disruption by introducing any increases at times when world prices were falling, so that a rise in fuel tax would not cause an immediate increase in fuel prices (Nicholson and others, 2003).

5.2.7 A computable general equilibrium model for Mozambique

A computable general equilibrium model was developed for Mozambique as part of the project Macroeconomic Reforms and Regional Integration in Southern Africa, and applied for the first time by Arndt and others (2000). The model's

main features replicate those of the model developed by the International Food Policy Research Institute (Lofgren and others, 2002).

The calibration of the model uses a social accounting matrix for 1995 constructed from primary National Statistics Institute data, including national accounts data for 1991 to 1996. The data includes product balance statements for 184 commodities, and value added and tax information for 26 sectors. These data are supplemented by data from the Mozambique Anuário Estatístico, which provides information on exchange rates, government expenditure (broken down into recurrent and investment expenditure), tax revenue, remittances, and aid as a proportion of the government budget (Tarp and others, 2002).

Computable general equilibrium models are important for analysing the impacts of policy changes on an economy. The advantage of a general equilibrium model over a sectoral or partial equilibrium model is that the impacts are economy-wide and so include all possible feedback from all economic activities and actors. In the study by Tarp and others (2002), the model was found to be capable

of explaining many salient aspects of the performance of the Mozambican economy in the post-war period. Reductions in aid inflows were shown to have significant welfare implications. It also revealed that lack of access to financial markets, combined with a continuing lack of export market penetration and low export transformation, were structural problems likely to be accompanied by forced reductions in the absorption of imported and domestically produced goods.

It is important to note that the study was done before significant foreign direct investment flows to the mining and gas sectors began, so some of the conclusions may not apply in the current economic environment. Structural transformation is an ongoing process, however, so some of the key findings are still relevant, although certain conclusions may change because of the importance accorded to industry and manufacturing. Nevertheless, the finding that the agricultural sector is crucial to any satisfactory development process in Mozambique and that agricultural development has the potential to achieve the twin goals of growth and improved income distribution remains valid and consistent with this report.

6. Challenges and opportunities

Mozambique is experiencing a rate of economic growth that represents an enormous opportunity for poverty reduction and development, but it faces growing inequality, poverty and deprivation, which are equally great challenges. Another challenge is to avoid environmental degradation while pushing for economic growth and structural transformation.

Several sectoral policies acknowledge the green economy as an important objective towards which different stakeholders (public, private and civil society) could contribute practical actions, as well as an overarching programme to promote policies and strategies for the green economy. Nonetheless, there are still few such actions because of the weak coordination between sectors and the weak integration capacity of related issues in the planning and budgeting documents and actual implementation, which results in sporadic and less effective action. It is now urgent to coordinate action for the transition to a green economy.

6.1 Challenges

Funding investment

Recession at the global level is a great challenge to inclusive green economy and structural transformation policies in Mozambique. The country still relies on foreign direct investment and official development assistance to finance programmes and policies at all levels, from central to local government. Given the current financial instability, much investment is frozen or halted. This could have drastic consequences for an inclusive green economy and structural transformation. Finding resources to invest in infrastructure, public services and programmes is the biggest challenge Mozambique will face. Funding subsidies, loans and grants will be another major challenge in the years ahead. The country is

in no position to be able to expand its financial support or assistance to anyone involved in working towards an inclusive green economy and structural transformation.

Infrastructure development

The success of inclusive green economy and structural transformation policies depends largely on the availability of infrastructure, which has an enormous impact on the overall production process by helping to reduce production costs and improving efficiency. In Mozambique, industrial take-off will definitely be hampered by infrastructure shortages, which are an obstacle to economic growth, development and poverty reduction. Lack of roads, bridges and railways prevents the establishment of connections between producers and markets and makes transportation costs very high. Lack of infrastructure, especially connecting cities and rural areas, also results in high prices.

Institutional strengthening

The many institutional weaknesses obstruct progress towards an inclusive green economy and structural transformation. A lack of human resources (almost total at the local level), financial incapacity, governance issues such as corruption, and other factors are major impediments. Some institutions are unable to adopt norms and practices adapted to the new environment. Above all, institutional weaknesses impede policy formulation, implementation, monitoring and evaluation. For evaluation, institutions must improve data collection and build credible indicators to measure achievements and setbacks.

Technological development, innovation, research and development

Bringing about an inclusive green economy means changing technology in order to produce without harming the environment. For that to happen, technologies that respond to local realities need to be developed. It is unsustainable to

import technologies, so Mozambique will have to develop its own. This will be challenging because there are insufficient technicians and scientists to deliver new technologies to those engaged in exploitation of natural resources. Investment in research and development is very limited because of financial constraints. Although Mozambique is investing in new seeds resistant to drought and other disasters, the country lags far behind international standards of research and development.

Education, training and skills

Significant investment in education and training is required to give people the skills they need to be able to work towards an inclusive green economy and structural transformation. Mozambique's education and training system and infrastructure are very limited. Very few people receive any technical education because of years of low investment in the sector. Changing this will require a major paradigm shift on the part of the leadership of the country. The Government is aware that investment in technical institutions is essential, but is constrained by its financial capacity.

Access to information

Progress towards an inclusive green economy and structural transformation is dependent on access to information. Getting information to the right place at the right time is a challenge for institutions, particularly when dealing with communities at local level. At present there are few mechanisms for information delivery, so people at local level are unaware of the strategies and policies being adopted. The State must do more to reach these people: it is responsible for raising awareness so the dissemination of information should be at the centre of all policies, strategies and programmes.

Participatory governance and coordination with key players

Bringing stakeholders to the table at all levels will be challenging. The top-down decision-making model that persists in governmental institutions works against participatory governance. Some institutions are open to participation, but others are averse to it. Participation in decision-making

is linked to democratic development. Mozambican democracy is still very young and institutions are still tied to old practices and behaviour. Specific forums to engage all interested stakeholders should be created to stimulate participation.

Broaden fiscal and market incentives

Many fiscal market incentives are in place but Mozambique still lags behind other States in the region. According to the World Bank (2013), Mozambique has taxes and tariffs that harm its economy by discouraging national and international investment. The challenge is to reduce unnecessary taxes and adopt measures to attract investors to Mozambique.

Poverty and food insecurity

Poverty is at the centre of inclusive green economy and structural transformation strategies but is also a challenge to them. Poor people may resist concepts and formulas that do not respond to their immediate needs. Poverty is challenging because it is at the root of bad practices in agriculture, fisheries, extraction activities, and so on. The absence of basic services, information, infrastructure and education prevent poor people from taking responsible action. Along with poverty, food insecurity is at the heart of practices harmful to the environment because hunger will drive people to adopt inappropriate technologies to produce food. Burning practices are jeopardizing soils and biodiversity in rural areas, making soils unproductive.

Natural disasters and climate change

Mozambique is prone to natural disasters, such as floods and cyclones, that affect the national economy and households, and may hinder progress towards an inclusive green economy and structural transformation by, among other things, destroying important infrastructure such as roads and bridges. The agricultural sector faces enormous challenges because of natural disasters and climate change. Extreme weather events, such as heavy rains, excessive heat and drought have an impact on agriculture and industry alike. Climate change is a serious threat to economic and so-

cial growth and to environmental and ecological preservation.²³ The challenge is to ensure that the planning processes, at local, community, district, provincial, national and sectoral levels, take climate change into account in the various instruments and in the Social and Economic Plan.

6.2 Opportunities

Natural resource endowment

Large natural resources have been discovered in Mozambique in recent years. The discovery of enormous coal reserves in the Tete basin and in Niassa, huge gas reserves in the Rovuma basin and other mineral resources in other areas of the country show the enormous potential of its resource endowment. The coal and gas reserves are among the largest undeveloped reserves in the world. Arable land is also abundant, and there is water for irrigation.

Mozambique's natural capital consists of fertile soils, abundant river resources, dense forests, marine and fish stocks and wildlife. The country as a whole has a diverse stock of capital capable of generating multiple income flows in various sectors. If well managed, the natural renewable resources will last beyond the non-renewable ones and may ensure satisfaction of the needs of future generations. A diversified assets base is an excellent starting-point for a resilient and competitive economy.

Energy potential

Mozambique has vast energy potential. National hydroelectric potential is still unexplored, while the potential for renewable energy generation (solar, biomass, and wind) is enormous. Proper energy production and delivery will be essential to boost progress to an inclusive green economy and structural transformation. Investment opportunities in the energy sector could boost the Mo-

zambican economy in the near future. According to the Ministry of Energy, in order to develop its vast resources, the Government has launched several major initiatives, such as: the Mphanda Nkuwa hydropower plant, with a planned capacity of 1,500MW; the Cahora Bassa north bank dam, with a planned capacity of 1,245MW; coal thermal power plants connected to mining projects in Moatize, with a planned initial capacity of 2x300 MW and an installed capacity of 2400 MW, and Benga, with a planned initial capacity of 300MW and an installed capacity of 2000 MW. In southern Mozambique it is planned to install about 420MW of natural gas-fuelled thermal power plants: Resano Garcia (175MW), Gigawatt (100MW), Maputo (100MW) and Kuvaninga (45MW) (Manda, 2012).

Current economic growth pattern

Periods of economic stagnation are incompatible with progress towards an inclusive green economy and structural transformation, while periods of economic growth present a window of opportunity for businesses to grow. The rapid economic growth that Mozambique is experiencing is challenging in the sense that producers must be guided into adopting practices that prevent environmental degradation. As Mozambique has many regulations on environmental protection, it is wise to use current investment patterns to impose compliance with them at an early stage so that businesses start in a rule-based environment. The capital-intensive nature of current economic growth patterns and the accompanying introduction of modern technology and employment opportunities will also stimulate structural transformation. Mozambique has an opportunity to turn its rapid economic growth into poverty reduction.

Existing policies and strategies

The existing policies and those being incorporated in sectoral plans constitute guidance for the integration of policies, practices and environmentally sustainable actions to create the necessary basis for the implementation of effective green growth in Mozambique. Effective implementation of the green economy is planned to run from 2015 to 2030 (Mozambique, 2012).

²³ Mozambique is one of the countries most affected by climate change. Extreme weather events, such as drought, floods and cyclones, are occurring with increasing frequency, and this is having a cumulative and devastating impact on an insufficiently prepared population.

Market opportunities

The demand for goods and services in Mozambique is rising in response to economic growth but supply is limited. National and international companies are expected to fill supply gaps in the market and, in the absence of credible competitors, could make enormous gains. It is essential to capitalize on this opportunity. Geography and demographics are changing consumption patterns as the centre and the north of the country undergo economic transformation and growth and a new generation of consumers is entering the market.

The growing informal sector represents another opportunity to foster structural transformation. Informal sector productivity is not accounted for in GDP analysis but is a huge contributor to economic development and poverty reduction. Mozambique needs to regulate this sector and give it semi-formal status. It offers opportunities for tax collection, employment, increased private initiatives, and to fill gaps in the market. Mechanisms to help informal entrepreneurs to become formal or semi-formal should be available, especially to small and micro entrepreneurs.²⁴ The facilitation process would involve offering them incentives to introduce new management practices focusing on sustainable development, and respecting ecosystems.

Tax revenues and royalties

Fiscal income and royalties from the extractive industry could be invested in the transition to the green economy by expanding physical capital (sustainable infrastructure) and developing human capital (a more productive labour force, with better education and health), thus creating economic and social resilience among Mozambicans. However, as Aaboe and Kring put it, most large-scale foreign investment enjoys substantial fiscal incentives, which significantly reduce their contribution to revenue. The main megaprojects contribute little to the state budget because they

enjoy wide-ranging exemptions. Moreover, some companies avoid paying taxes through schemes outside state control (Aaboe and Kring, 2013).

Regional cooperation

Regional cooperation offers opportunities to build on a wider range of assets, reduce dependency on external markets and create economies of scale, especially for investment in capital-intensive sectors such as renewable energy. Investment in strategic actions to transform specific sectors like agriculture can make a major contribution to job creation, poverty reduction and environmental protection.

International support

The inclusive green economy and structural transformation are currently on the agenda of the international community, so support for national initiatives is available. Countries willing to advance in this direction will find their policies, strategies and programmes accommodated. It is vital for the country to seize this opportunity.

Generally speaking, an inclusive green economy represents an opportunity for sustainable growth for Mozambique in employment as well as in economic terms. It can generate new jobs and business opportunities, not only in high technology sectors but also by transforming traditional sectors, such as agriculture, industry, tourism, waste-recycling, and construction. A green economy gives the country the opportunity to invest in young people so that they can live in a green way, and is also an opportunity for the private sector because it can develop products and services that are served by small and micro-enterprises and the community. The private sector can fill niches that will not be targeted by big business, including marketing that highlights 'locally made' or other qualities that cannot be mass-produced. A green economy is an opportunity to invest in innovation, and in advanced technology, for example.

The green economy approach in the extractive industry helps to mitigate the environmental damages that this type of industry brings and

²⁴ Young people in Mozambique face various challenges that frequently result in difficulties finding formal and decent employment, so most resort to the informal labour market.

requires its development to depend on the provision of infrastructure and services that cause the least possible harm to the environment, the creation of the highest possible number of jobs and the improvement of the living standards of the highest possible number of people.

The green economy also optimizes the benefits of the sustainable use of natural resources in terms of both public services and economic returns, and provides the opportunity to protect natural eco-

systems. Environmental degradation and poverty in Mozambique can both be tackled by applying green agricultural practices. Roughly 80 per cent of the population depends on agriculture for a livelihood, the vast majority of them living in rural areas on less than \$1 a day. Increasing farm yields and returns on labour, while improving ecosystem services (on which the poor depend most directly for food and livelihoods), will be crucial to achieving these goals.

7. Conclusions and policy recommendations

7.1 Conclusions

This report has outlined the great efforts Mozambique has made towards sustainable development. It has also stressed the positive impact of the implementation of strategies and actions to bring about structural transformation and, more recently, an inclusive green economy.

After emerging from three decades of armed conflict, Mozambique has achieved economic and social progress, and reflects its efforts over the last 20 years in response to the recommendations of Rio and Johannesburg sustainable development conferences. Nonetheless, the country is vulnerable to various shocks and prone to natural disasters, including floods and drought. In order to harness the opportunities and overcome challenges, it has to build on past successes and learn from the challenges to implementation of previous policies and strategies. The private sector will remain crucial for economic growth. The national economy has considerable potential in the primary sector, driven by natural resources, but their limited contribution to job creation means that support must be given to small and medium-sized enterprises to enable them to be part of the value chains of the natural resource sectors in the mining and extractives industry, manufacturing and distribution. The main challenge is to develop industries that enable sustainable exploitation and transformation of these resources. Two major challenges inherent in the exploitation of mineral resources are the need to ensure that the exploitation remains sustainable and for careful management of the population's expectations. Thus, interventions in natural resource-based sectors should be responsive to local needs, as local populations have very high expectations given the scale of investment and government engagement in the sector.

The adoption of the Green Economy Roadmap and Green Economy Action Plan for the transitional period 2013-2014, are clear indications that Mozambique is moving forward in its green economy agenda. Various steps taken prior to the adoption of these documents sent a clear message about Mozambique's intention regarding an inclusive green economy. Challenges remain in the implementation of the Roadmap and lessons will be learned along the way. There are also opportunities to be seized, particularly through lessons learned elsewhere by other countries that are also implementing green economy strategies. However, the assessment of these lessons and the translation of their implications into interventions in Mozambique will depend on the quality of institutions and policies put in place to drive the transformation.

The Government and all the stakeholders must work together to achieve an inclusive green economy. The establishment of a platform in which the stakeholders – the Government, the private sector, civil society, and academia – participate for the transition to a green economy will be critical. In order to advance towards local structural transformation and an inclusive green economy, institutions should be actively engaged with businesses operating in the exploitation and production of natural resources. Local communities, as well as businesses and industry, should be involved in the process. Involving communities and stakeholders also means negotiating with, listening to and consulting them.

Institutions should generate and provide the necessary information, services and training, and issue guidelines as needed. The lead taken on the green economy by the Ministry for Coordination of Environmental Affairs is commendable but greater involvement by other lead ministries

is required, particularly the ministries of finance, agriculture, and industry, since these sectors will play vital roles in the green economy given the resource requirements and the implication of the transition for both agriculture and industry. The transition would also benefit from increased environmental protection and management skills and knowledge. The proliferation of technologies means that knowledge of them is essential to enable policymakers to devise the right policy instruments to ensure that development is sustainable. Incentives for innovation and technology development and transfer would help to improve productivity.

This study has shown that there is a significant disconnect between economic development and structural transformation, and this will persist as long as poverty and social development remain low priorities. Although the country has made progress in human development, with greater emphasis on access to water and health care, more needs to be done to eradicate poverty. In particular, inclusive green growth, poverty eradication and sustainable utilization of natural resources must be inbuilt targets of national development policies. The country is attracting a great deal of investment resources in the natural resources sector, but very little in manufacturing and agriculture. It is important to diversify investment and attract resources to sectors that will accelerate structural transformation and inclusive growth. Investment also needs to be directed towards poverty eradication through shared, broad-based economic growth that benefits all people.

Policies and strategies should be based on objective data and impact assessments. Pilot programmes may have to be implemented to test feasibility. Impact assessment studies should follow to see how stakeholders respond to those strategies and policies and evaluate whether or not it is worth introducing them on a wider scale. The rural subsector is very important as it is not just a source of raw materials and labour, but also a consumer base for a growing economy. Given

that over two thirds of the population live in rural areas and are largely dependent on agriculture for employment and livelihood, the role of the rural economy in stimulating overall economic growth and poverty reduction is critical. Structural transformation should make agriculture and rural transformation priorities through enhanced interlinkages with industrial clusters. This will require upgraded transport infrastructure, access to information and increased productivity in the smallholder agricultural sector.

7.2 Policy recommendations

The Green Economy Roadmap is the starting-point for implementation of a transformative agenda that ties together national development objectives and sustainable development goals. There are other policies and strategies that Mozambique can adopt to strengthen the transition process and the link between an inclusive green economy and structural transformation. These should seek, among other priorities, to: establish a basis for development capable of reconciling the indispensable economic growth with sustainable use of natural resources, social justice and higher living standards for people; create jobs; increase the productivity of materials; increase water use efficiency; reduce carbon emissions; increase the weight of renewable energy in the overall energy mix; and improve air quality.

Structural transformation based on the country's rich natural resources and pristine ecosystems should be guided by an integrated approach that views the environment and human resources as valuable assets in the development of the country. Management of the transition is not the exclusive responsibility of the Government, a specific organization or group of individuals, but one that should be shared by the whole society. This implies a set of harmonized actions carried out in a spirit of shared responsibility. Practical actions and commitments need to be spelt out for the private sector and the Government, and institutions put in place to manage the transition. Some

of the key actions for the success of structural transformation and an inclusive green economy in Mozambique are set out below.

Accelerate implementation of the Roadmap and reform of existing policies in line with the green economy agenda. Inclusive green economy policies will only have a positive impact if they can stimulate wider structural reforms that address both the economic growth challenges and the sustainability and social development needs of Mozambique. The country should enhance coherence of existing and new policies, and facilitate reforms identified by new policies. Particular effort should be devoted to improving the coordination of plans and programmes with clear environmental impacts and the evaluation of the country's natural resources.

Improve stakeholder engagement, particularly local communities, in issues related to use of natural resources and development projects that impact their local environment. Public policy formulation and implementation needs to bring together every stakeholder. Strengthening regulations and the institutions responsible for natural resource management is one way of ensuring sustainable natural resource management. However, the multi-stakeholder nature of interests in natural resources requires concerted efforts by the whole government machinery, the public, and non-State actors. It also requires institutions to be strengthened or established to implement, oversee and evaluate the policies, strategies, programmes and actions adopted under the green economy in the country.

Develop agribusiness and the processing and manufacturing industries that have links with the rest of the economy in order to support the transition to an inclusive green economy. Enterprise development should start at the grassroots in the agricultural sector dominated by smallholder farmers with limited market presence. If the goal of turning Mozambique into a middle-income country is to become a reality, growth by micro, small, medium and large com-

mercial producers (agribusiness) and the development of the processing and manufacturing industry (food processing, metallurgy, etc.) should be encouraged and supported.

Address the lack of technical, financial and human capacity in the country to implement the green economy. Build technical and institutional capacity in all sectors and expand the scale of implementation or replicate green projects across the country. The Government needs technical capacity to adopt and implement policies, manage public investment, collect data, monitor and evaluate programmes and produce reports.

Invest in and develop human resources for structural transformation and an inclusive green economy. The high demand for Mozambique's resources and land by rising powers could offer an opportunity for social development if business enterprises also invest in human resources by training Mozambicans and improving their professional education over the long term.

Stimulate increased productivity through technology transfer, research and innovation. Technological change is central to the process of structural transformation in Mozambique because it is through innovation in the broad sense that new sectors emerge and upgrading within sectors takes place. The country should build on its successful activities and interventions, such as national entrepreneurship development, the Poverty Reduction Action Plan II, and the technology and innovation strategy, to stimulate productivity through technological development and transfer, and innovation.

Develop incentives for private sector investors in the green economy. A financial mechanism for public investment and private sector support should be created in line with the National Development Strategy and the imperative of implementing the Roadmap. This can be achieved by reviewing the Fiscal Incentives Act, maintaining in particular incentives for sustainable infrastructure development, industry, agriculture

and fisheries, or promulgating new, broader fiscal measures to capture more sustainable activities. Non-fiscal incentives are equally important, as the availability of credit and low interest loans, the provision of infrastructure, elimination of regulatory barriers and other policy changes may stimulate private sector involvement and spur the transformation.

Make communication and awareness-raising an integral part of the implementation strategy for the Green Economy Roadmap. Since information must reach everyone concerned, Mozambique has to take every possible measure to

promote and support the green economy. The Government should invest in the dissemination of information, and education and training in order to enhance producer skills and knowledge and broaden stakeholder acceptance of the green economy.

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ANNEX: Structural transformation and inclusive green economy strategies in Mozambique

Annex table 1 Structural transformation strategies

Structural transformation strategy, year adopted, time frame	Main goals	Priority sectors	Purpose of the strategy	Implementation (status, challenges, linkages with a green economy)
<p>National Development Strategy (ENDe) 2015-2035</p>	<p>Improve population's economic structural transformation, expansion and diversification of the production base.</p>	<p>Human capital development, infrastructure, agriculture and fisheries, job creation, manufacturing industry, extractive and tourism industry.</p>	<p>This strategy focuses on the industrialization process. It seeks to accomplish industrialization using appropriate technologies and developing skills in the Mozambican workforce. Industrialization is seen as the driving force for economic development by creating employment, increasing capital accumulation and boosting other key sectors, such as agriculture and fisheries.</p>	<ul style="list-style-type: none"> ENDe explicitly states that environmental issues are an important factor in economic growth and poverty reduction. For the development of agriculture, industry, infrastructure, energy, and tourism, among other activities vulnerable to climate change, they should be taken into account when planning and implementing investment. Practical actions that link an inclusive green economy and structural transformation in the agricultural sector include: intensifying agricultural production in areas with the greatest potential; implementing food production and job creation actions by opening lines of funding for the sector, such as the Agricultural Development Fund and the District Development Fund; raising awareness of the need to change eating habits (a balanced diet and nutritional foodstuffs); raising awareness about the use of household assets to guarantee food security; mapping soils and agro-ecological conditions; controlling the use of agricultural chemicals; introducing new crops and practices; and diversification of crops. Industry is another key driver of structural transformation in Mozambique and links to an inclusive green economy. The Government considers industry a decisive factor in economic development. The country must therefore aim, not simply to achieve industrial development, but also to improve efficiency of resource use and mitigate pollution and waste. Measures to reduce water pollution and improve access to safe water are clearly a priority for structural transformation in Mozambique. Increasing access to safe water and developing water-related infrastructure links with inclusive green economy policies, and will reduce damage that particularly affects the poor.

Structural transformation strategy, year adopted, time frame	Main goals	Priority sectors	Purpose of the strategy	Implementation (status, challenges, linkages with a green economy)
<p>Agenda 2025 2013-2025</p>	<p>Presents Mozambique's long-term vision for development. It was the result of a long process involving the participation of representatives from all parts of the country, and an independent product of Mozambican civil society, although the Government endorsed it. Its principal aim was to develop a national vision that all major segments of society could subscribe to, and to outline a policy framework that would help move the Mozambican economy and society towards fulfilment of that vision.</p>	<p>Sought to tackle issues such as human capital shortages by improving education and training, disease control and the provision of basic services to the population. In terms of economic development, it sought to modernize the economy through macroeconomic stabilization, rural development, increased competitiveness, and technological transformation, to promote savings and investment and invest in infrastructure favourable to development efforts. The main economic objectives were: to expand the business sector; broaden the tax base; push the informal sector into formalizing; promote the investment of national and international capital; diversification of production; and decentralization.</p>	<ul style="list-style-type: none"> It was in perfect alignment with the natural resource exploitation practices in Mozambique, so natural resources were seen as the main driver of employment creation, economic growth and equitable development. Preservation of the environment was also of great concern. 	<ul style="list-style-type: none"> It indicates as a critical uncertainty increased capacity to manage natural disasters and the effects of climate change. It also acknowledges the probability of greater risk in agriculture because it is so dependent on climate. With regard to structural transformation and an inclusive green economy: programmes to train and assist farmers to meet higher product quality standards, including food safety standards and contractual requirements on delivery times. Assurance of swifter and more secure procedures that involve legal title to land use.

Structural transformation strategy, year adopted, time frame	Main goals	Priority sectors	Purpose of the strategy	Implementation (status, challenges, linkages with a green economy)
<p>Five-Year Plan 2011-2014</p>	<p>Acknowledges the increasingly important role of private investment in the economic development of the country and reaffirms the Government's previous policy initiative of attracting both domestic and foreign investors.</p>	<p>Education, health, infrastructure, agriculture, good governance, legality, macroeconomic and financial policies and international trade.</p>	<ul style="list-style-type: none"> Implementation and monitoring take place through existing planning systems: economic and social plan and the state budget. Each year the economic and social plan puts in place goals and activities consistent with the objectives of medium-term instruments. The state budget determines the level of activity to be funded. Both generate reports that provide the basis for monitoring and evaluation. 	<ul style="list-style-type: none"> Structural transformation is necessary for achieving substantial and broad-based improvements in human well-being. Structural transformation, together with rising affluence and a growing population, will necessarily intensify environmental pressures through increasing demand for natural resources, including both material and energy inputs used in production, increasing waste and pollution, and an increasing relative reliance on non-renewable resources (UNCTAD, 2012). Transform agriculture from a sector dominated by small producers into a sector characterized by medium and large commercial producers (agribusiness), and develop food and manufacturing industries based on natural resources (particularly mining exploration) and tourism. Agricultural productivity is still poor and needs to be much more competitive. Economic transformation requires an increase in agricultural productivity that will drive the development of a more productive value chain in the non-agricultural sector. ENDe explicitly states that environmental issues are an important factor in economic growth and poverty reduction. For the development of agriculture, industry, infrastructure, energy, tourism and other activities vulnerable to climate change, should be taken into account when planning and implementing investment.

Structural transformation strategy, year adopted, time frame	Main goals	Priority sectors	Purpose of the strategy	Implementation (status, challenges, linkages with a green economy)
<p>Poverty Reduction Action Plan (PARP) 2011-2014</p>	<p>Reduce the incidence of poverty from 54.7 per cent in 2009 to 42 per cent in 2014</p>	<p>Agriculture, in order to boost the productivity of the family sector; economic diversification; job creation; creation of linkages between foreign investment and the local economy; supporting micro, small and medium sized enterprises; fostering human and social development</p>	<ul style="list-style-type: none"> Mozambique's economic growth tends to be driven more by inter-national developments than by national policy: growing South-South trade and an increase in South-South development cooperation will have a strong impact on the national economy. The recent discovery of coal deposits represents an opportunity to increase the economic growth rate to 7 or 8 per cent a year. This would open up bright prospects for development and poverty reduction (UNDP, 2012). The discovery of natural gas is an opportunity to increase the use of clean energy. 	<ul style="list-style-type: none"> Challenge: directing government policies and programmes towards renewable energy

Annex table 2 Inclusive green economy strategies

Structural transformation strategy, year adopted and time frame	Main goals	Priority sectors and intervention areas	Purpose of the strategy	Implementation (arrangements status, challenges, opportunities), linkages with structural transformation strategies
<p>Green Economy Roadmap (2012) 2012-2030</p>	<p>Accelerate sustainable development in the economic, social and environmental fields.</p>	<p>The transition process requires a commitment to establishing strong regulations and norms that create incentives leading to green economy activity and the removal of barriers to green incentives. The main vision of the Roadmap is consolidated in the Green Economy Action Plan.</p>	<ul style="list-style-type: none"> The Roadmap is an expansive overview of the action needed to guarantee transition to an integrated green economy model. The imperative for action is based on the need to ensure sustainable intergenerational public security through the conservation of natural capital stocks and flows The Roadmap also aims to strengthen the ability of the country to achieve equitable and inclusive green growth, essentially providing national guidelines within the interdependent context of global natural capital dynamics. 	<ul style="list-style-type: none"> The policy challenge is to transform the economic structure while increasing human well-being and minimizing resource and pollution intensities. In other words, high-quality growth must be achieved by decoupling increases in the level of material throughput – and consequently pressure on the environment – from improvements in human well-being. Environmental degradation and poverty can be tackled simultaneously by applying green agricultural practices. Roughly 80 per cent of the population depends on agriculture for a livelihood, the vast majority of them living in rural areas on less than \$1 a day. Increasing farm yields and returns on labour, while improving ecosystem services (on which the poor depend most directly for food and livelihood) will be crucial to achieving these goals.

Structural transformation strategy, year adopted and time frame	Main goals	Priority sectors and intervention areas	Purpose of the strategy	Implementation (arrangements status, challenges, opportunities), linkages with structural transformation strategies
<p>Green Economy Action Plan (2013) 2013-2014</p>	<ul style="list-style-type: none"> The general objective is to guide the integration of policies, practices and environmentally sustainable actions in planning mechanisms to make Mozambique an “inclusive medium-income country based on the protection, restoration and rational use of natural capital and ecosystem services, ensuring inclusive and efficient development, within planetary limits. The purpose is to prepare all important sectors of the country in order to be able to define and implement key actions to promote and accelerate an inclusive and efficient transition to a green economy, starting with their integration in current and future government plans and development. 	<ul style="list-style-type: none"> Mapping, evaluation and planning of natural capital. Tackling the lack of technical, financial and human capacity; technical-institutional capacity for the implementation of the green economy approach, including their integration into the planning processes. Identification of sectoral policies that may contribute to the green economy and setting priorities for their implementation. Enhancing policy coherence between existing and new policies. Facilitating reforms identified by new policies. Analyse and strengthen tools for a transition to a green economy. Reduce the vulnerability of Mozambique to natural disasters and other climatic and environmental factors and improve the management of the green economy component in this situation. Take advantage of the catalytic role of African organizations in the green economy agenda. 	<ul style="list-style-type: none"> It describes the actions to be implemented in 2013 and 2014: <ul style="list-style-type: none"> (i) mapping, evaluation and planning of natural capital; (ii) tackling the lack of technical-institutional capacity for the implementation of the green economy approach, including its integration in planning processes; and (iii) identification of sectoral policies that may contribute to a green economy and setting priorities for their implementation. 	<ul style="list-style-type: none"> Produce television and radio shows, arrange public debates and other means of raising awareness of the principles, responsibilities and benefits of a green economy in the private sector, civil society, academia and local government. Identify practical policy actions to advance the green economy agenda and pursue poverty reduction targets. Develop education programmes on the green economy. Adopt green economy policies in planning processes

Structural transformation strategy, year adopted and time frame	Main goals	Priority sectors and intervention areas	Purpose of the strategy	Implementation (arrangements status, challenges, opportunities), linkages with structural transformation strategies
<ul style="list-style-type: none"> • National Strategy for Adaptation to and Mitigation of Climate Change (2012) 	<ul style="list-style-type: none"> • The general objective is to promote a green economy. • Establish action guidelines to create resilience, including by reducing climate risks, in communities and the national economy; and promote low-carbon development and a green economy by integrating it in the planning process. 			

