Budgeting for Sustainability in Africa:

Integration of Pro-Poor Environment, Natural Resources and Climate Change to achieve the Sustainable Development Goals

Guidance Manual

November 2016

UNEP

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The Poverty-Environment Initiative of the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UN Environment) is a global UN effort that supports country led efforts to mainstream poverty environment linkages into national development planning. Poverty-Environment Initiative provides financial and technical assistance to government partners to set up institutional and capacity-strengthening programmes and carry out activities to address the particular poverty environment context.

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Contents

Abbreviations

COFOG	Classification of the Functions of Government
IFMIS	Integrated Financial Management Information System
IT	Internet technology
MDA	ministries, departments and agencies
MTEF	medium term expenditure framework
MTFF	medium term financing framework
OECD	Organisation for Economic Co-operation and Development
PEFA	Public Expenditure and Financial Accountability
SAI	Supreme Audit Institution
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme (UN Environment)

1. Purpose of this Guidance on Budgeting for Sustainability

The purpose of this guidance manual is to support African government officials and development partners to integrate pro-poor environment, natural resource and climate sustainability into national and sub-national public sector budgeting and public finance management systems.

The guidance is grounded in the practical experience of public finance management systems as applied in African countries, both Francophone and Anglophone. It draws on examples from Burkina Faso, Malawi, Mali, Mauritania, Mozambique, Rwanda and Tanzania where the UNDP and UN Environment Poverty-Environment Initiative has been engaged over the last decade – as well as other African countries with experience of mainstreaming such as Ghana, South Africa and Uganda. It is intended to complement existing generic guidance on integrating pro-poor environmental sustainability into development planning and budgeting processes (UNDP and UNEP, 2015).

It is important that efforts to integrate pro-poor environment and natural resources sustainability into budgets take place within the broader context of a comprehensive pro-poor environment and natural resources mainstreaming process, as this builds the foundations upon which influencing budgets depends. Economic evidence of the benefits of assigning a higher policy priority to pro-poor environment and natural resources mainstreaming, plus public expenditure reviews that almost always demonstrate that expenditure on pro-poor environment and natural resources mainstreaming is markedly lower than the development benefits justify are key to convincing Finance Ministries that increased budgets for such investments are justified.

1.1 Audience for the guidance

This guidance is intended for Ministries of Finance and Ministries of Planning to inform them of why the environment, natural resource management and climate change matter for sustained economic growth, poverty reduction and security, and what can be done to ensure these areas receive appropriate attention throughout the public budget process.

This guidance is also intended for sector Ministries – Agriculture, Energy, Minerals, Lands, etc.and Ministry of Environment – to help them make the case to Ministries of Finance to increase allocation of public finance to support pro-poor environmentally sustainable programmes and projects.

It serves to highlight that pro-poor environmental sustainability is a cross-cutting issue pertinent to all sectors and not limited to the Ministry of Environment.

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As such, the guidance offers a common knowledge base that can help to bring together two important communities – public sector budget officials and those who work on environment and climate issues in the context of sustainable development.

The guidance is also intended for development partners including the United Nations, Multilateral Development Agencies such as the World Bank and African Development Bank and bilateral development partners who provide technical support to African governments to promote pro-poor sustainability in budgets.

The guidance has a secondary audience in parliamentarians who engage in budget processes and civil society groups and academics who provide technical advice and advocacy on public financial management issues, budget transparency and sustainable natural resource management.

1.2 Rationale for the guidance: why integrate pro-poor environment and natural resources and climate change into budgets

This guidance is needed to strengthen the inclusion of poverty-environment objectives into budgetary decision-making to build and sustain productive natural assets and to tackle environmental problems and climate change. This is intended to ensure that the stream of economic benefits generated from

environment and natural resources are maintained and enhanced, to better achieve development objectives and thus improve human wellbeing.

Natural resources, environmental quality and climate change are key to the development and wellbeing of African countries and their people. Natural resources – agricultural land, minerals, water for agriculture and hydropower, forestry and fisheries – contribute very significantly to employment creation, GDP and exports in many African countries. These natural resources are particularly important for poor women and men, whose health and livelihoods are most dependent on natural resources as set out in Box 1.1.

Box 1.1: What are pro-poor environment and natural resources and climate issues and why do they matter for pro-poor growth, jobs and exports in Africa

- Natural resources – agricultural land, minerals, water for agriculture and hydropower, forestry and fisheries – contribute to pro-poor growth, jobs and exports in many African countries. This includes small scale mining in Tanzania,and Rwanda, fishery livelihoods and exports from Mauritania and Mozambique, forestry based livelihoods and exports from and
- It is vital that the use of these natural resources fully contribute to achieving development goals in African countries and their citizens. Therefore, maintaining and enhancing the stream of social and economic benefits from these resources, and generating fiscal revenue streams from taxes and royalties and then reinvesting these revenues to address key social and development challenges is fundamentally important. The current trend shows that natural resource use decision-making is often based on short-term political-economy gains while the negative long term impacts will reduce future economic prosperity
- These natural resources also contribute to the livelihoods, incomes and well-being for low income households – particularly women and children – and combined with access to capital, technology, markets and strong producer organizations can provide a ladder out of poverty in many African countries
- Sustaining the natural resource base through more sustainable management can ensure that economic development continues now and in the future. Land degradation, deforestation, water scarcity and other negative environmental impacts indicate depletion of resources and long term costs that will negatively affect the economy. The key is defining the extraction rates consistent with the sustainable yield of renewables and having a clear reinvestment plan in the case on non-renewables. This investment plan for non-renewables should ensure a long term stream of financial benefits.
- Natural resource access and distribution – with scarcities in some cases and abundance in others – is also a major driver of conflict - both within and between African countries. So improved and more equitable natural resource management can be a major ingredient for peace and security in Africa
- These issues are becoming more pressing with climate change – which will affect food security, agricultural productivity, water and energy availability, health outcomes and vulnerability to climate related disasters. The desertification vulnerability map of Africa locates the 46 per cent of the area at risk, of which 55 per cent is at high or very high risk (UNEP, 2002).

On the other hand, natural resource vulnerability is characteristic both of Least Developed and Middle Income Countries in Africa and of the poorest people in Africa, and this vulnerability is being exacerbated by climate change. Poorly planned allocation and use of natural resources and lack of attention to climate change, not only inhibits achievement of development goals, but can drive conflict, migration and insecurity.

1.3 Public budget as key process to address pro-poor environment and natural resources and climate issues

Too often pro-poor environment and natural resources and climate are marginalised in the policy process and in particular left outside the "mainstream" of economic decision-making. The budget process is the most important public economic decision-making process – it is the 'acid test' of policies and plans, and enables economic development. The indicators of success for integrating environment and natural resources and climate into the budget process are set out in Box 1.2.

Box 1.2: Indicators of success for integrating pro-poor environment and natural resources and climate into the budget process

The indicators of success for mainstreaming are how far the public planning and budget processes achieve changes in institutions, policies, revenues, expenditures and ultimately behaviours that promote environment and natural resources and climate resilience for poverty reduction and economic development. They are not just environment and climate indicators, but reflect changes in the system for development:

- Institutions: improved integration and coordination, moving from silos to synergies and to more holistic governance and finance rules. For example: engagement of environment in other sector working groups in the planning and budgeting process; engagement of Ministry of Finance in environment and climate budget coding; Environment Ministry engaged in promoting and enhancing environment and natural resources contribution towards development; capacity to monitor impact; performance evaluation that is linked to clear results at different levels
- Policies: integrating pro-poor environment and natural resources and climate needs into sector strategies such as agriculture, including forestry and fisheries and energy infrastructure and social protection policies, as well as local plans ; deploying legislation that operationalises the policy and mechanisms for implementation
- Budget revenues and fiscal reforms: increased levels of government and donor funding for pro-poor environment and natural resources and climate, including through collecting forestry, fishery and minerals taxes and reinvesting taxes in diversification of the economy; removal of subsidies for excessive energy and water use; donor-supported sector-wide approaches for the environment and natural resources and increased donor funds for climate adaptation, including disaster risk reduction
- Private investment: fiscal policy reforms that drive private investment in pro-poor sustainable forestry, improved land management, clean energy and climate resilience.
- Budget expenditures: allocation levels for recurrent and development investments. For example, increased expenditures and investments in pro-poor sustainable land management, forestry management, water management, supply and sanitation, disaster risk reduction and increased access to clean energy.
- Pro-poor environment, natural resource and climate outcomes: in the longer term, outcome indicators could include: improved livelihoods for poor women and men through better natural resource management and climate resilience; improved health through reduced indoor and outdoor air and water pollution; and reduced vulnerability of poor women and men to climate change and its impacts.

1.4 Effective public financial management for addressing pro-poor environment and natural resources and climate issues

It can be challenging to mainstream environment and natural resources and climate issues into the budget process. There are multiple priorities and data requirements deriving from the many policy dimensions involved. And there are human and financial constraints to greater financial investment. This particularly applies if there is limited fiscal space for investments to achieve environment and natural resources sustainability. However this is possible to change with a greater awareness of the central importance of these issues to development and risk reduction and if there is improved fiscal space through economic growth, better management of public expenditures, and greater domestic revenue mobilisation efforts.

This demonstrates that effective public financial management is a pre-requisite for integrating pro-poor environment and natural resources and climate into the budget process. Where the budget is focused on short term crisis limitation it can be challenging to focus on additional, often longer term policy issues such as natural resource management and climate resilience.

1.5 Lessons learnt on integrating other issues into the national budget

This guide draws on the collected experience of Poverty-Environment Initiative and others on integrating pro-poor environment and natural resources and climate into the budget process. Pro-poor environment, natural resources and climate are not the only cross-cutting issues where integration into the budget is taking place. This focus on budgetary integration has been applied to other cross-cutting issues including poverty reduction, gender, strengthened governance, and disaster management and risk preparedness. Much can be learned from these other experiences with mainstreaming in national policies, monitoring systems and in particular budgeting processes; namely about what has worked and what has not and the similarities and differences. Gender mainstreaming is quite advanced in some countries in Africa and can have some particularly valuable lessons as Box 1.3 illustrates for gender mainstreaming in Rwanda.

Box 1.3: Learning from integrating gender into the budget process in Rwanda

Rwanda has a very active programme of integrating gender into the budget that offers lessons for environment and natural resources and climate integration. Since 2008, the Ministry of Finance (MINECOFIN) in Rwanda has worked with sectors to prepare annual gender budget statements. This process resulted from active engagement with parliament and other key stakeholders to persuade MINECOFIN that gender is a priority.

It was decided that a gender budget statement was required as part of budget approval. This has ensured effective implementation. In 2010, the gender budget statement was piloted with four ministries and four districts and extended in 2010/11 to all 30 districts and 16 ministries. Once approved as a concept, the Ministry of Finance developed a number of procedural steps along with necessary systems and formats. First guidance on preparation of the gender budget statement is issued by MINECOFIN with support from the Ministry of Women. This is followed by review and comments on the gender budget submissions during the Budget Commission of parliament. Finally there is an active follow-up process to track effective implementation by the Gender Monitoring Office which facilitates a series of five--day participatory gender audits in the districts. This process is also supported by gender focal points in each district.

Rwanda's gender integration into the budget has already had significant impacts in changing behaviour and transforming the lives of women. These transformations include improvements in girls' education such as reductions in school drops outs as well as declines in maternity and child mortality through better family planning.

Source: Gender Monitoring Office, Rwanda

1.6. Guidance on how to facilitate environment and natural resources and climate integration with development partner support

Given that ENR and climate integration addresses the lack of engagement in ENR and climate by the main government agencies, it often needs to be initially facilitated and catalysed by technical support through for example a development partner. In many African countries, there may have been several such past mainstreaming initiatives (see, for example, Bass 2015 for a review).

Development agencies can provide various forms of technical assistance including:

- Consultants and technical advisors to engage in planning and budgeting processes
- Effective evidence and tools commissioned and well communicated
- Development partners holding active dialogue with government.

This is the process undertaken by the Poverty-Environment Initiative of the United Nations Development Programme (UNDP) and the UN Environment. The Poverty-Environment Initiative aims to change public and private investments through highlighting the economic importance of environment and climate issues in planning, budgeting and investment decision-making at national and sub-national levels. The focus has been on bringing environment and climate to non-environmental ministries focusing on economic analysis, policy and planning – and increasingly the budget process. The Poverty-Environment Initiative is a global joint programme between the United Nations Development Programme (UNDP) and UN Environment that was launched at the 2005 World Summit – see www.unpei.org.

The sections below highlight some of the overall lessons learnt by the Poverty-Environment Initiative through its work on integration of pro-poor environment and natural resources and climate change into planning and budget processes. The rest of this guidance sets out some of the more detailed lessons learned from Initiative at each stage of the planning and budgeting process.

Box 1.4: Lessons learned on mainstreaming pro-poor environment and natural resources and climate change from the UN's Poverty Environment Initiative

Lessons learned include:

- The need to focus on a few high-profile 'flagship' issues for mainstreaming at the start
- The need to get the right institutional partners, notably the Ministries of Finance and Planning, supported by Ministries of Environment and sector ministries such as agriculture and forestry.
- The need to focus on providing economic evidence of the development benefits of investing in environment and natural resources sustainability with an effective engagement and communication strategy within the overall politics of the budget process
- The need for an innovative and sophisticated approach to building in-country capacity including supporting government champions through long term technical assistance embedded in government Ministries and work with and through government processes.
- The need to ensure cost-effective and harmonised support by development agencies.

Source: Steele, 2010

How to tips on selecting a flagship issue for designing a programme of pro-poor environment and natural resources and climate integration

- To identify the right way to engage in the budget process (e.g. institutional partners, which part of the budget process etc.), at the start of the development partner support programme it is important to agree, through a participatory preparatory phase, what are the specific, high priority pro-poor environment and natural resources and climate outcomes that the programme will target for improvement. 'High priority' in this context means accepted, enduring development objectives for the nation, such as improving the health, livelihoods, employment and security of poor women and men

- Tactically it can also be useful to identify issues that have a politically high profile (e.g. with strong interest in the media and in public debates) and also where appropriate to take advantage of the political momentum for addressing climate change (while not being completely subsumed by this)

- This pragmatic and outcomes-focused approach has paid off where it has become clear that generic integration of the full range of "poverty-environment issues" cannot easily be handled, as it can lead to confusion, mainstreaming fatigue and reduced interest among stakeholders as well as a less targeted and effective programme.

'How to' tips for pro-poor environment and natural resources and climate integration across sectors through an engagement strategy with "champions"

- Integrating environment and natural resources and climate is not just a question of "pushing" certain concerns, but also of a "demand-pull". To get this can initially require stimulating "demand" from within government.

- Working with certain key decision-makers or "champions" is key to this, particularly those in ministries of planning and finance and key environment and natural resources related sectors like agriculture. These "champions" are those best placed to influence development planning and budgeting decisions within government – such as directors of planning and budget in ministries of planning and finance, including current or potential reformers within the government apparatus (and where appropriate in broader civil society) who are open and keen to make a difference in terms of improving pro-poor environment and natural resources and climate outcomes. They are usually people who are well-respected within government or civil society. Champions within Parliament can also be very helpful.

- Selecting champions and successful integration of pro-poor environment and natural resources sustainability objectives in general requires a sustained period of relationship-building and developing trust, which is very important for generating significant results as set out in the box

- The champions may be open or even keen to promote reform, but often lack the financial resources, motivation or institutional support within their own bureaucracies to bring about change

- Through the limited resources of a development programme (in this case the Poverty-Environment Initiative programme) but more importantly the independent status and legitimacy that a development partner such as the United Nations can bring – these champions can, in the best cases, become empowered

- This has had effect in a number of countries where reformers have used the Poverty-Environment Initiative programme to push the boundaries of what is politically acceptable to address more challenging pro-poor policies and outcomes.

- Providing champions with concrete economic evidence of the development benefits of more sustainable use of environment and natural resources is also important for empowering them.

1.7 Guidance on exit and institutional sustainability strategies for development agency support: how to institutionalise pro-poor environment and natural resources and climate integration into the budget process

Development partners need to develop effective exit and institutional sustainability strategies to ensure sustained and continuing mainstreaming efforts for integrating pro-poor environment and natural resources and climate to in-country stakeholders in government, as well as academia, civil society and the private sector

This is vital as pro-poor environment, natural resources and climate change must become part of the existing national development agenda, domestic political process and existing in-country institutions rather than a global agenda or one supported indefinitely by a development partner.

To do this requires the process of integration to be permanently institutionalised within government. This requires capacity to be developed and sustained within a number of national and local institutions.

- Ministries of Finance and Planning may need to develop new capacities to integrate pro-poor environment and natural resources and climate change into the budget process, e.g. setting up a climate finance unit in the Kenyan Ministry of Finance
- Line Ministries, such as Agriculture, Tourism, Energy and Transport may need to realise the importance of pro-poor environment and natural resources and climate change and to advocate for their inclusion during all stages of the budget process
- Ministries of Environment, Natural Resource, Disaster Management roles may need to change - moving from traditional regulatory functions and environmental project management to engage in mainstreaming for development and coordination of environment policy across government, with a focus on the budget process
- For these key government agencies, clear responsibility is useful for integration of pro-poor environment and natural resources and climate within the budget with a clear definition of mandate, job descriptions and results that they are expected to deliver (e.g. environment sector interns in Rwanda and environmental focal points in Mozambique)
- High level political support is useful to drive these kinds of reform, for example from the head of state or senior Ministers
- National research and analytical capacity is required in Universities, think tanks and private consultancy firms for sustained research on poverty, environment and climate links to development and the budget process

1.8 Structure of guidance and how to use it

In addition to the generic lessons learnt from integrating pro-poor environment and natural resources and climate change into the budget process. Poverty-Environment Initiative has learnt a series of more detailed lessons at each stage of the planning and budgeting process. The remaining chapters of this guidance set out these detailed lessons.

This guidance is structured around the different stages of the public budget process:

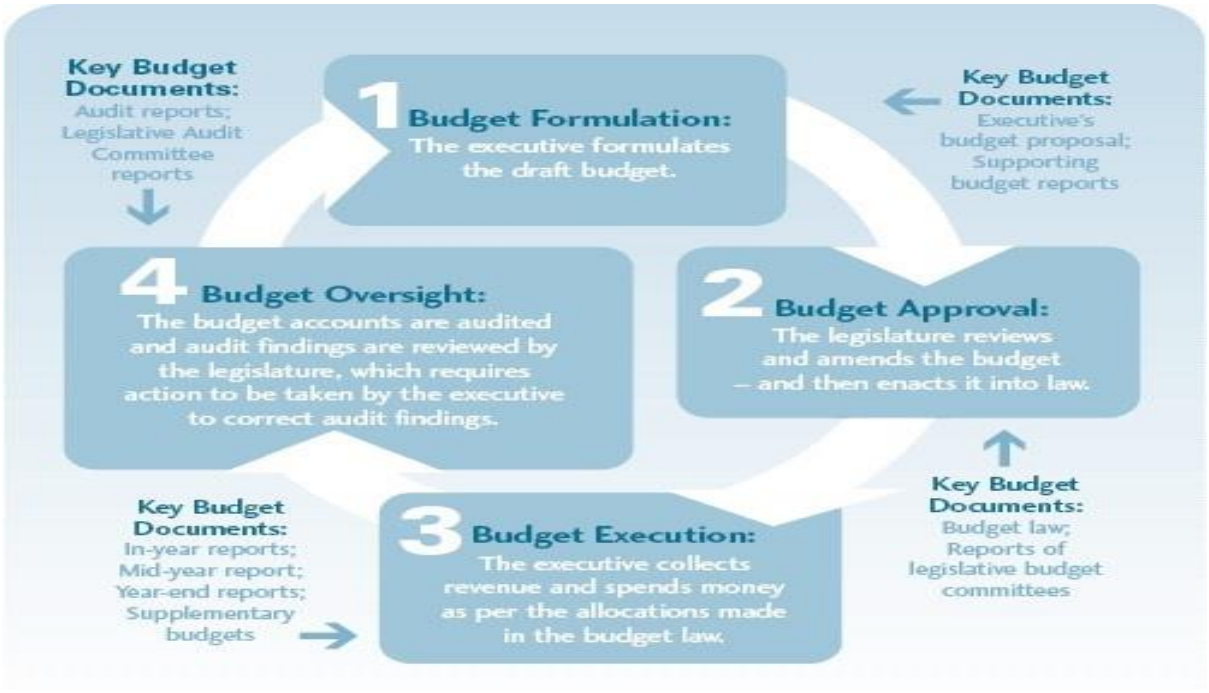
- It starts with an introduction to the planning process at national, sector and subnational level (chapter 1) and then
- An introduction to the overall budget cycle process including Public Financial Management (PFM) reforms (chapter 2).

The remaining chapters go through each stage of the budget cycle as shown in figure 1.1.

- Budget formulation begins with revenue management including raising domestic revenues and receiving international finance (chapter 4) and then
- Budget formulation then proceeds to resource allocation (chapter 5) including the Public Investment Programme followed by
- Budget Approval through the legislature or parliament (chapter 6) then

- Budget Execution including budget classification, internal control, commitments versus disbursement and operations and maintenance expenditures (chapter 7) then
- Budget oversight including audit and expenditure tracking (chapter 8).

Figure 1.1: The Budget Cycle (Ramkumar, 2008)



Each chapter includes:

- summary checklist which highlights the key points of the chapter, followed by
- discussion of where and when to integrate pro-poor environment and natural resources and climate, with
- guidance on how to integrate pro-poor environment and natural resources and climate including

- country examples and
- ‘how-to’ tips and tactics for key steps.

The sections on “where and when to integrate pro-poor environment and natural resources and climate” introduce the relevant aspects of budgeting and are targeted at Sector Ministries and Environment Ministries who may be less familiar with the budget process.

The sections on “how to integrate pro-poor environment and natural resources and climate” focus on the substance of poverty-environment mainstreaming and are targeted at both Ministries of Finance as well as Sector Ministries and Ministries of Environment.

Each chapter of the guidance can be read as a stand-alone section to provide detailed guidance depending on what stage of the budget process is coming up. However, it is important to have a clear understanding of the complete budgeting process set out chapter 2.

This guidance manual is also intended to serve as a reference source for the elaboration of more detailed guidance material for a particular country budgeting process. It is well appreciated that national institutions may wish to elaborate institutional and budget cycle specific guidance and training material that is grounded within existing systems. This has been the case in Mozambique in late 2015 and during 2016 where the Ministry of Finance commissioned the elaboration of a guidance manual in Portuguese on mainstreaming poverty and environment linkages, including climate and gender, into the national budget process. It targets the budget officers of key sector working groups and ministries, and includes the elaboration of training materials and sessions to support staff to apply the budget mainstreaming tools.

2. The Planning Process Linked to Budgets: Pro-Poor Environment, Natural Resource and Climate Integration

2.1 Summary checklist

- *A country's planning process is more effective when linked to budgets*. Therefore integrating pro-poor environment and natural resources and climate should focus on those planning processes that have a strong budget link.
- *Most planning processes in Africa have now started to integrate pro-poor environment, climate and natural resources, at least at the national level, so the focus of this guidance note is on the public budget process.* However, for completeness, this chapter covers pro-poor environment and natural resources and climate integration into the planning process with a particular focus on the link to budgets.
- *Integrating pro-poor environment and natural resources and climate into national and sector planning requires a strong economic case for why environment, climate and natural resources matter for development, growth and poverty reduction.* Effective communication and dissemination of the economic case to policymakers, the media and the general public is essential.
- *To identify how the right entry points for integrating pro-poor environment and natural resources and climate into national and sector planning, it is vital to understand the key actors, steps and timetable for the planning process*. The key steps in the five-year planning process include evaluation, identifying objectives and sectoral targets, indicators, budgets and capacity assessment. At each stage poverty-environment issues should be included. These five-year plans are then be translated into sector and annual plans.
- *It is vital to integrate pro-poor environment and natural resources and climate change across key sectors and within relevant sector working groups, such as Agriculture, Energy and Local Government*. This requires time and skills by the relevant sector staff (e.g. environment focal points) to engage with their colleagues. Ministry of Environment can also play a role to take this forward through dialogue with more powerful sector Ministries. Unfortunately Ministry of Environment officials are often more focused on project management than cross-sector dialogue and coordination, so a change in priorities may be required.
- *Where there are environment and natural resource sector working groups, these can also play a role, but may be need to be made as active and effective as more established sectors such as health and education.* An effective environment sector working group requires particular attention to leadership, organisational effectiveness and sufficient resourcing, given the sector has been routinely marginalised to date. Further, the engagement of the environment sector working group with other sectors is often weak.
- *Integrating pro-poor environment and natural resources and climate into local government planning is important, particularly in countries where decentralisation is well grounded or being put in place*. This may also be considered at other subnational levels such as states within federal governments. It is principally at the local level where the interactions of environment and natural resources and development become real for citizens and where specific trade-offs between objectives need to be made and conflicts avoided. So most local government institutions will have at least a latent desire to mainstream pro-poor environment and natural resources and climate issues – but may lack the organisational structure and financial resources(as well as capacity to do so in a meaningful way.
- *Planning processes are complex political processes*. It will be important to cultivate and engage decision-makers within Government who can actively support pro-poor environment and natural resources and climate integration and "mainstreaming". Mainstreaming is in large part a

process of relationship- and trust-building. Where necessary, government champions can be supported by a technical advisor, consultants and other external expertise. Poverty-Environment Initiative experience is that a trusted and pro-active technical advisor can be a key driver of change by, for example, contributing substantive input to internal government processes.

2.2 When and where to integrate pro-poor environment and natural resources and climate into the planning processes

- Most African countries have planning ministries, planning commissions or planning divisions often within their Ministry of Economics or Finance, or Office of the President or as stand alone Ministries. These planning organisations are responsible for leading and coordinating the planning, implementing and monitoring of long-term economic development in accordance with government strategy and citizens' needs and priorities.
- Planning functions typically aim to implement a long-term vision (20 – 30 years) through concurrent five-year economic development plans. The relative importance of these national planning processes varies depending on their visibility within government, how they are respected in relation to the realpolitik of development, and their functional link to the whole budget process (Kakonge, 2012).
- If the planning functions have a close link to the budgeting and public financial management systems, then they have a stronger potential to direct public and donor financial resources to achieve results. If the planning link to budgets (or to realpolitik) is weak, then there it is likely that budget allocations will not be consistent with planning document priorities.
- Planning organisations typically compile the development budget or Public Investment Programme, which is funded annually by the appropriation or budget act, but which covers more than one year of commitments.
- In many countries the main link between national plan implementation and planning for public expenditure on a multi-year basis is the government's medium term expenditure framework (MTEF). This is typically a three-year forward-looking expenditure plan classified by Ministry or other spending unit, for which the Ministry of Finance (or its equivalent) is the custodian. The MTEF brings together development and non-development budgets[1] into a single resource envelope and aims to match government policy priorities with resource allocation (spending plans to policy objectives ad incorporating a monitoring and evaluation framework) on a comprehensive basis. While many African countries have embarked on MTEF processes, their relevance for actual spending decisions varies.
- The national budget provides the annual expenditure and revenue framework. The annual budget is a legal or statutory process, unlike the MTEF which typically is not. For revenues, the budget will generally include taxation, fees and charges, and sources of financing such as domestic borrowing and donor partner loans and grants.
- Some development partners may choose to by-pass the budgeting process, often based on assessments of fiduciary risk, and provide resources for their programmes sometimes including pro-poor environment and natural resources and climate through non-government organisations (NGOs) or other off-budget mechanisms. Whilst these actions may contribute to the government's policy objectives they are 'off budget' and will not necessarily be considered within resource allocation. Encouraging all resources to be 'on-budget' (i.e. recognised in the annual budget and MTEF) will help to ensure a rounded, comprehensive view of initiatives that are contributing to national objectives.
- Elaborating and executing national and sub-national development plans is often based on sector strategies of the line ministries (e.g. 10-year National Agriculture Strategy). The five-year plan formulation process is usually coordinated by the planning ministry (or commission), with a compilation of sector plans informed by sector strategies and the work of sector working

[11] In some counties it is defined as "recurrent" and "development" budgets

groups. In some countries, a sector working group can comprise technical staff from more than one ministry (or administrative entity), as the sector might encompass several ministries. Often there is an environment sector working group, sometimes also with a cross-sector mandate.

- Elaborating the five-year national plan can also include widespread consultation within and outside government including with parliament, development partners, civil society, the private sector and the wider population.

2.3 Guidance: How to make the economic case for pro-poor environment and natural resources and climate priorities

- For effective integration of pro-poor environment and natural resources and climate in the planning process, it is vital to demonstrate the economic rationale for better environment and natural resources and climate change policies, plans and budgets. Namely that investment in pro-poor environment and natural resources and climate change programmes and projects generates economic benefits for local communities, local government, and national government, and contributes to poverty reduction. Similarly that investments and fiscal instruments can contribute to ensuring that the environment, including key ecosystems, are safeguarded so that sustained economic and social benefits can continue to be realised for current and future generations. That is, unsustainable ENR use reduces economic and social benefits streams and investing in environment and natural resources sustainability maintains or increases economic and social benefits streams.

- As part of their efforts, a number of African countries have been investing in such economic analysis to make the case for pro-poor environment and natural resources and climate integration in several ways:

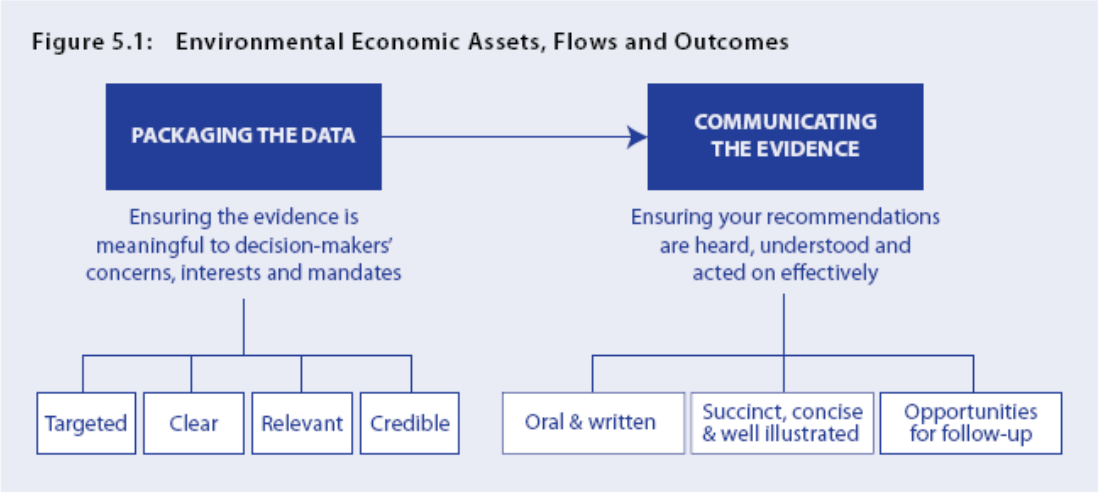
    - One approach t is to estimate the annual costs of neglecting pro-poor environmental and natural resources management on livelihoods and the economy. But this can play into the hands of those who perceive the environment being only about economic costs rather than valuable services and benefits. This cost estimation also requires careful data collection and use of valuation techniques that needs expert environmental economics inputs which may be limited in some African countries. This is shown in the box below on Mozambique.

    - Another component is to assess the direct and indirect benefits of better environmental and natural resource management to livelihoods and the economy. The indirect benefits can be quite broad: for example, expenditure on providing clean water will reduce health sector costs and budget requirements. Here again valuing benefits requires data and different valuation techniques needing expert environmental economics inputs, which may be limited in some African countries.

    - A third component is to measure the amount of expenditure on environment and climate across different sectors and / or government agencies, and not limited to the Ministry of Environment. For instance, the agricultural sector, including livestock and fisheries, can tend to spend on programmes and projects that have a direct link to pro-poor environmental and natural resource management. This has the benefit of showing how environmental expenditures span many ministries and is the responsibility of many Ministries beyond the environment ministry. This approach has been used in the examples from Malawi below. Its techniques are intuitively more straight-forward requiring accounting skills combined with some environmental expertise and it avoids the need for complex valuation techniques.

- Effective communication and advocacy are as important as the technical aspects of the economic studies. This requires effective use of the media, high-level engagement with senior civil servants, and effective communication with eye-catching, accurate numbers that both journalists and policymakers can highlight and remember. Examples may be % of GDP and % of government expenditure spent on pro-poor environment and natural resources. Comparing the results with a nationally known industry may also be a good way to communicate.

Figure 2.1: environmental economic assets, flows and outcomes



Box 2.1: Malawi's environment economic expenditure study targets Secretary of the Finance Ministry

African governments have been supported by the UN's Poverty-Environment Initiative programme with a number of studies that have targeted policymakers. Malawi's 2015 public environment expenditure review (PEER) was reported in the country's leading paper the Daily Times. It highlighted how the government spent US$278 million over six years on environment and natural resources management and responding to climate related and other disasters. The Secretary to the Treasury, Ronald Mangani, is quoted as saying that the study may "facilitate the effective monitoring of the contribution of these sectors towards sustainable development". The report also highlighted that government expenditure was less than that justified by the economic benefits of investing in environment and natural resources and disaster reduction – an earlier Poverty-Environment Initiative Malawi economic study demonstrated that unsustainable environment and natural resources use costs 5.3% of GDP per annum and is leading to increased poverty.

Source: Malawi Daily Times, August 2015

Box 2.2: Mozambique's economic cost study makes the case for pro-poor natural resource management

A study conducted in Mozambique indicated that the country's economy is highly dependent on natural resources (50%) with over 80 per cent of jobs directly related to environment, particularly those of the poorer population groups.

The study estimated a very high yearly economic loss of 17 per cent of GDP (around 45 billion MZN) due to environmental degradation and inefficient use of natural resources. Yet costs to remediate the damages could be around 9 per cent of GDP (around 24 billion MZN) which would certainly produce savings to the economy. This clearly illustrates the need to ask whether neglecting to budget adequately for enforcing environmental legislation (such as EIA and management plans for renewable and non-renewable resources) is indeed a saving – or rather if it is a deferred cost to the economy that will have far reaching consequences in the medium and long run.

Source: Government of Mozambique, 2014

'How to' tips for making the economic case

- Engage policymakers in identifying what policy questions need to be answered, what kinds of information source are most credible, and how data can best be presented
- Compile relevant existing reports from studies previously commissioned by government, universities, civil society and development partners
- Make an initial synthesis that reflects the policy questions to be addressed
- Identify missing information that would be critical to the economic case
- Commission both respected African organisations/consultants and international experts to undertake necessary research to fill information gaps if needed, and/or to pull together a nationally-relevant and credible case for policymakers. Using national Universities and think tanks may take longer than using separate national consultants, but is important to build national capacity to undertake such economic studies and analysis in the future. The international expert can provide international experience on appropriate methodologies, data collection and analysis, help draw in relevant data and methods from similar countries and assist in building national capacity.
- Prepare an effective communication and media strategy, using the most appropriate language, to launch the research findings. Concentrate on the target audience and the key messages. This can include short and concise fact sheets or briefing notes that communicate the key messages to traditional media and the target audience
- Think about how to use modern and social media platforms effectively. Mobile phones, LinkedIn, Facebook, Twitter, Instagram represent opportunities for mass communication and one-to-one communication in ways never achievable in the past
- Use the evidence gathered in a pro-active, energetic manner to convince decision-makers and wider society that pro-poor environment and natural resources and climate sustainability will help achieve development priorities. This includes by targeting key messages according to the audience. For example organise a timely and effective process for meeting with policymakers and other opinion-formers to present and discuss the economic case, and to respond to its findings.

2.4 Guidance: How to integrate pro-poor environment and natural resources and climate in the five year planning process

- Where five year national plans (and in some cases national 20-30-year visions or long-term strategy documents) play an important role in policymaking and budget allocation, then integrating pro-poor environment and natural resources and climate into the planning process is a key first step. This requires following the plan formulation process carefully to provide analysis, data and options at each of the key entry points in the required format.
- Table below sets out some of the key planning activities and what action can be taken to integrate pro-poor environment and natural resources and climate, based on experience in Rwanda and other countries with integrating pro-poor environment and natural resources and climate into the five-year national plan..
    - Engage proactively and substantially in relevant different working groups – not just the main environment and natural resources working group, but others, such as agriculture and energy.
    - Provide substantive input to the drafting of papers and the draft planning document.
    - During evaluation of the previous five-year plan, include an evaluation of progress on the environment, natural resources and on climate change, including poverty-environment relevant sectors like agriculture.

- When high-level objectives for the plan are being agreed, identify sustainable natural resource management, climate resilience and environmentally sustainable development as some of the plan's high level objectives.
- Identify targets for environment and natural resources- related sectors, such as agriculture, mining and energy.
- Identify pro-poor environment and natural resources and climate indicators for monitoring and evaluation including for sectors like agriculture.
- Include a budget for pro-poor environment and natural resources and climate activities in each sector, not only environment
- When capacity is being assessed include pro-poor environment and natural resources and climate capacities. Institutional capacities, including mechanisms, for co-ordination between sectors and between national, sector and district levels should be assessed.

Table 2.1: Integrating ENR and climate in Rwanda's five year Economic Development and Poverty Reduction Strategy (EDPRS I and II)

Planning process activity	Action to integrate pro-poor ENR and climate	Institutional responsibility
Evaluation of previous plan	Evaluate progress on environment, as a cross-cutting issue and as a sector; Identify areas that need strengthening; Develop specific budget reports comprising cross-cutting pro-poor environment and natural resources actions	Ministry of Finance, Environment sector
Agree high-level objectives in each sector	Explore opportunities for pro-poor environment and natural resources and climate to achieve high level objectives	Sectors and environment sector
Create logical flow from high level objectives to specific interventions in every sector	Convert pro-poor environment and natural resources and climate opportunities identified into sectoral activities with targets; Budget call circulars to compel specific references environment and natural resources and climate in budget submissions; Make resources available across ministries for environment and natural resources actions and encourage ministries to bid for these 'new or available' resources	Ministry of Finance, administrative units and line ministries (sector institutions) and environment sector
Strengthen tools for monitoring and evaluation	Include pro-poor environment and natural resources and climate indicators encourage Auditor General to undertake performance and environment audits as part of annual plans	Sectors and independent evaluators
Costing sector strategies	Include programmatic and	Sectors

	costed budgets for sector environmental activities	
Institutional capacity assessment	Assess capacity to identify, classify and implement environment actions	Sectors

Source: Poverty-Environment Initiative Rwanda, 2012 and authors

In addition to the government process, the elaboration of the five-year national plan can also include widespread consultation outside government including with parliament, development partners, civil society, the private sector and the wider population. This can provide further opportunities to address pro-poor environment and natural resources and climate issues and define priorities.

Examples of pro-poor environment and natural resources and climate in five-year plans

When there is active engagement in mainstreaming by stakeholders inside and outside government in the five-year planning process, the results can be impressive. Many five-year plans in Africa now include pro-poor environment and natural resources and climate issues, either as a separate chapter and/or integrated across the plan. In some African national plans, such as Rwanda and Mozambique, pro-poor environment and natural resources have become a key national priority.

Box 2.3: Integrating pro-poor environment and natural resources and climate into Rwanda's five-year planning process

Following initial efforts at integrating environment and natural resources and climate, the first EDPRS (2008-12) states in its executive summary that: "Environmental and land priorities involve ecosystems, the rehabilitation of degraded areas and strengthening newly established central and decentralised institutions. Special attention will be paid to sustainable land tenure security through the planning and management of land registration and rational land use, soil and water conservation, reforestation, preservation of biological diversity and adaptation and mitigation against the impact of climate change."

In the second EDPRS (2015-18), integrating was further advanced. In this second national plan, environment becomes a priority (number 5) through pursuit of a 'green economy' approach with an emphasis on sustainable cities and villages.

Government of Rwanda, 2008 and 2014

2.5 Guidance: How to integrate pro-poor environment and natural resources and climate in annual and sector plans

- Once the national vision or five-year plan has been formulated, it needs to be translated or elaborated into annual plans and sector plans. Key sector plans of high relevance to pro-poor environment and natural resources and climate include agriculture, roads, water and energy. Sometimes environment and natural resources are included as a separate sector.
- Often the annual or sectoral planning process is led by sector working groups for key areas or themes in the planning processes such as Agriculture, Education and Health. These sector working groups are typically co-chaired by government and development partners. Most African countries have between 15-20 sector working groups. Often designated "sectors" can cover more than one Ministry. They are intended to meet at least once a quarter with a range of functions but formulating the sector strategy is a key function
- It is vital to integrate pro-poor environment and natural resources and climate change across the relevant sectors and within their sector working groups, such as Agriculture, Energy and Local Government. This requires time and skills by the relevant sector staff (eg environment focal points) to engage with their colleagues. Technical staff of ministries responsible for environment and natural resources are members of other key sectors that have a direct link to

environment and natural resources, for instance agriculture, water and energy sector working groups.

- Ministry of Environment can also play a role to take this forward through dialogue with more powerful sector Ministries. Unfortunately Ministry of Environment officials are often more focused on project management than cross-sector dialogue and coordination, so a change in priorities may be required. The lack of pro-active and strategic engagement of some Environment Ministries with other sectors is a major challenge to generating and sustaining increased investments in pro-poor environment and natural resources and climate sustainability.
- In addition to the non-environmental sector working groups, environment and natural resources typically have a separate working group as in Rwanda and Malawi. But in some cases it is combined with other areas such as lands and minerals.
- The challenge with all these sector working groups is to make them operational and effective. There are cases, as in Malawi, where the more established sectors such as health and education are more effective, while environment is less active (Taylor, 2014). So it is useful to make sure that the environment sector working group is active and effective, which requires leadership, organisational effectiveness and sufficient resourcing. The box below highlights some of the ingredients of an effective sector working group

Box 2.4: How to make sector working groups effective

The major success factors influencing sector working groups were identified in selected countries as:

- The availability of strong but open leadership
- Dedicated staff for the Sector Working Group Secretariat
- Finances for meeting costs and implementation of planned activities
- Early agreement on a sector strategy
- Arranging regular meetings with consistent attendance
- A mix of participants from inside and outside of government
- Effective time keeping in meetings
- The adoption of evidence-based approaches to discussions
- A willingness to cross sectoral boundaries, and
- Effective coordination among development partners including pre-meetings and a division of labour between development partners.

Taylor, 2014

Examples of pro-poor environment and natural resources and climate in sector plans

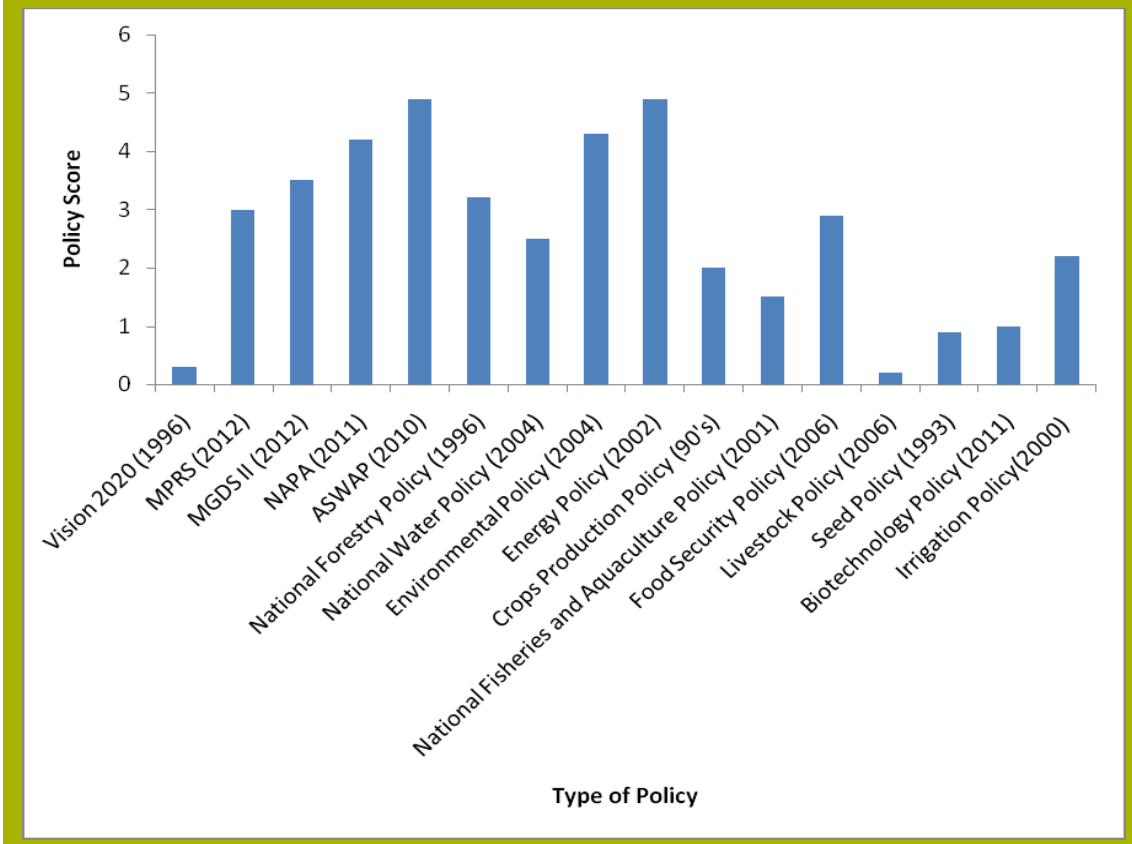
The results of mainstreaming into sector policies can be considerable. This is demonstrated by the example of Malawi's agricultural policy, which integrates climate change comprehensively as shown in the box 2.5. More examples of sectoral integration from Rwanda are shown in box 2.6.

However this integration into the design of sectoral policies is just the first step, implementation is then a crucial key. One way to judge effective implementation is the allocation of sector budgets which include pro-poor environment and natural resources and climate issues. This is addressed in further details in chapter 5 on budget formulation and resource allocation.

Box 2.5: Integrating climate into Malawi's sectoral plans and policies, particularly agriculture

This bar chart shows a review of the extent to which different sector policies in Malawi address climate change – ranging from six points where climate is well addressed, to 0 where climate is hardly addressed. The environment and energy policy addressed climate early on in the 2000s, but other policies did not give much attention. More recent policies such as the Agricultural Sector Wide Approach (ASWAP) in 2011 have recognised climate change. Malawi's ASWAP states that "Climate change effects, droughts and floods, are the major climatic hazards affecting crop production and the fisheries sector and have been responsible for the declining or even drying up of water bodies resulting in low fish production. The possible interventions to mitigate the effects of climate change are many and have been included in the focus areas of the ASWAP" (Government of Malawi, 2011). However integration must not stop here and these policies must be followed through with effective implementation. Indeed, implementation may be more challenging that integrating at the design stage and a dedicated focus on generating change through implementation is critical.

Extent to which Malawi sector policies address climate change



Key: 6 equals high link to climate policy, 0 equal low or no link to climate policy [can we show full key – is this just measured by words in documents', Bojo and Reddy'-style?]

Source: Mwase et al, 2013

Box 2.6: Rwanda's cross-sectoral integration of environment and climate change in agriculture, energy and transport strategies

During the past 5 years the government of Rwanda has made significant progress in mainstreaming environmental and climate change concerns into its sectoral strategies. In 2011, the Rwanda Environment Management Authority (REMA) produced two comprehensive documents with guidelines for mainstreaming climate change adaptation and mitigation, one in the agricultural sector and the other in the energy and infrastructure sector. Below are key features from the government's current agricultural, energy, and public transport sector strategies that show the extent of this cross-sectoral integration and its links with national development:

- **2013/14-2017/18 Agricultural Sector Strategy (Strategic Plan for the Transformation of Agriculture in Rwanda Phase III):**

"In order to foster sustainable agricultural sector in the long term, sound environmental management must be mainstreamed in agricultural practices…to adapt to climate change and consider mitigation activities, both to assist adaptation of rural communities, and perhaps to generate for carbon credits. The 2011 National Climate Change Strategy and Low Carbon Development will also be considered in agricultural planning"

The strategy promotes cross-sectoral collaboration, including with the Ministry of Natural Resources, and lays out key adaptation actions in soil conservation, soil nutrient management and the use of chemical fertilizers, use of pesticides, water management, and the construction of rural feeder roads. Finally, it stresses the opportunities in accessing the voluntary carbon market through the development of agroforestry, reforestation and afforestation carbon offset projects.

- **2013/14-2017/18 Energy Strategic Plan (Strategic Plan for the Transformation of Agriculture in Rwanda Phase III):**

"Rwanda's energy sector is heavily dependent on environmental resources with around half of its electricity coming from hydropower and more than 80% of the population depending on fuel wood for their energy needs. This combined with the country's high climate change and natural disaster vulnerability…mean that efforts to adapt and mitigate against the impacts of climate change and preserve the environment will be required".

To reduce its contribution to global climate change, the country aims to achieve a 25% reduction in its energy's carbon intensity by 2025. Examples of key actions included are: i) reducing reliance on traditional biomass energy from 85% to 50% by 2018 through distribution of improved cooking technologies ii) increasing energy efficiency by requiring that large water consumers install solar water heaters iii) mandating environmental impact assessments and clearance for all power projects iv) planning for disaster risk and mitigation by conducting vulnerability and risk assessments in all energy related projects.

- **2012 Public Transport Policy and Strategy:**

Aims for a transport system that is energy secure and resilient to climate change. Proposed lines of action include: i) establishing regulations and tariffs against vehicle emissions ii) creating a multi-modal transport system that is efficient, sustainable, and socially inclusive iii) reducing the environmental impact of transport infrastructure and development projects iv) increasing capacity of transport system to adapt to future demand and climate change.

Sources: REMA 2011a; REMA 2011b; MININFRA 2012; MININFRA 2015; MINAGRI 2014

2.6 Guidance on how to integrate pro-poor environment and natural resources and climate into local planning

Decentralising government planning, budgeting, implementation and monitoring functions has progressed to very different degrees in African countries. There are important opportunities for

integrating pro-poor environment and natural resources and climate, depending on various factors, notably political will and local government bodies' capacity.

Local level integration: institutional issues

Fiscal decentralisation involves devolving or delegating some responsibilities for expenditure and / or revenues to lower levels of government. One important factor in determining the type of fiscal decentralisation is the extent to which sub-national entities are given autonomy to determine the allocation of their expenditures. Local bodies are 'creatures of statute' and have both powers and duties set out in law. Their discretionary powers may be extensive or limited – the country context determines this.

In terms of working at the local level to influence expenditure on pro-poor environment and natural resources and climate it is important to fully understand budgeting – both revenue and expenditure – responsibilities at the different levels of government. Many argue that decision making should occur according to the principal of "subsidiarity" – that is at the lowest level of government consistent with allocative efficiency (eg the geographic area that internalises the benefits and costs of decision making for a particular public service).

It is principally at the local level where the interactions of pro-poor environment and natural resources and climate change become real for citizens, and where specific trade-offs between objectives need to be made and conflicts avoided. Most local authorities will consequently have at least a latent desire to mainstream pro-poor environment and natural resources and climate change issues. But they are frequently held back by the lack of mandate, capacity or resources.

Given that there are many local units, the most effective processes for engagement need to be identified. In many cases this requires working with the national Ministry of Local Government or its equivalent who will be responsible for local level planning and budgeting. This can be combined with some engagement with specific local units as pilots to demonstrate how pro-poor environment and natural resources and climate can be integrated in local plans and budgets and then "upscaled" to other localities. This "upscaling" can include the inclusion of pro-poor environment and natural resources and climate change in relevant planning guidelines and procedures – and in local level financing and monitoring (as set out below).

Local level integration: planning issues

While some governments have clearly set out procedures for local government, there are often a multitude of donor funded local planning processes involving local level dialogue and prioritisation. Just from a pro-poor environment and natural resources and climate perspective this can include planning for the different sectors including agriculture, infrastructure (i.e. water, and energy) as well as disaster management planning and climate planning such as local climate adaptation plans of action (LAPAs). These many planning processes in a limited area with stretched public officials and a low income population can lead to planning fatigue, duplication and overlap. So pro-poor environment and natural resources and climate change local level integration should seek to promote a more coordinated planning approach and build on existing local planning structures rather than set up new planning committees or structures.

The positive side is that as the local government will be a smaller bureaucracy with most officials in the same geographical location (compared to more dispersed national level officials) the potential for a more integrated approach to planning can be greater than at the national level – as long as these integrated coordinated approaches are encouraged and promoted. It can also be easier to see and measure results in terms of implementation at the local level as the impact on people's lives and livelihoods are more visible in the case of both success and failure.

Many local planning processes seek to benefit from the access to the surrounding population who are intended to benefit from public services and government policy by various types of participatory planning that involve local people directly. This can be useful for pro-poor environment and natural resources and climate if these can be identified as local people's priorities that therefore need greater government investment and attention. This requires ensuring that participatory planning really is what it claims to be - with the involvement of all affected people – women and men, old and young, disabled and able bodied and including those typically marginalised and excluded.

Depending on who is consulted in local planning may generate a quite different set of priorities. For example, wealthy men may in some cases have a higher preference for rural infrastructure especially roads particularly where they can be assured that these roads will reach their houses and in some cases may provide contracts for them to construct the roads. By contrast, poorer rural women may prioritise access to water and sanitation where these are absent as distant water sources and defecation in the open may create security and privacy concerns, while water collection over long distances is a backbreaking and time consuming chore. So participatory planning needs to ensure that the full range of local priorities are identified and acted upon which will often lead to pro-poor environment and natural resources and climate investments. being highlighted.

Local level integration: budgeting and monitoring

With decentralisation in some countries, transfers from central to local government are important. (Viñuela et al, 2014). African countries with large natural resource wealth typically share at least some of this with the state and local governments, as in Ghana and Nigeria (Mogandi, 2008). Assessments should be made of how available those funds are to poor groups contemplating pro-poor environment and natural resources investment, and how of public goods can be better secured through the use of such funds.

Often national government plays an active role monitoring the performance of local government and this can be linked to local government funding. For example national government can link its block grants to local government to a number of criteria and pro-poor environment and natural resources and climate indicators can be linked to these criteria. Or local Majors can have their performance monitored with pro-poor environment and natural resources and climate included as indicators as in the case of Rwanda as set out below.

Top tips to include environment and natural resources **and climate change at the local level include:**

- Production and use of evidence of the development benefits of local level actions to improve pro-poor environment and natural resources and climate sustainability.
- An institutional assessment from a local government perspective of pro-poor environment and natural resources and climate that includes local government mandates, planning and budgeting procedures, bottlenecks in the translation of national level development objectives into local actions plus assessment of local level capacity.
- Identification of the most effective institutional mechanisms to influence local level inclusion of pro-poor E environment and natural resources and climate in planning – e.g. through influencing the national Ministry for Local Government to better include pro-poor E environment and natural resources and climate in the guidelines it produces for districts for the preparation of district development plans. This can also piloting in selected local authorities to demonstrate and “learning being doing” which can then be upscaled through more generic guidance.
- Integration of pro-poor environment and natural resources and climate issues into existing planning processes to promote an integrated approach and avoid a parallel local planning process. Where possible this should include participatory planning processes with a focus on exclusion of those who are typically excluded.
- Production of local government capacity building material and conduct of capacity building that supports the inclusion of pro-poor environment and natural resources and climate sustainability actions in local planning processes.
- Supporting the development and application of local level pro-poor environment and natural resources and climate sustainability indicators – e.g. for inclusion in the district development plans .
- Supporting the inclusion of pro-poor environment and natural resources and climate linked performance criteria for district mayors or other local leaders

Examples of pro-poor environment and natural resources and climate in local planning

While integrating of environment and natural resources and climate is less advanced than at national levels, there are some impressive emerging results in Rwanda.

Box 2.7: Greening district planning in Rwanda

District level planning, coordinated by the Ministry of Local Government and led by the District administration, is a high priority in Rwanda. The UN has provided technical inputs to a programme for 'greening' District Development Plans in Rwanda's 30 districts. Following extensive consultation, environmental priorities are identified and costed in these plans. Some of the environment and natural resources priorities are intended to be included in the performance contracts of the Mayors. Each district also has environmental officers who can follow up on these activities.

Source: Poverty-Environment Initiative Rwanda, 2015; personal communication

However, to really influence the way in which local level planning is done is a challenging task. South Africa has excellent processes for integrating environment and climate into local planning, but the results have been mixed.

Box 2.8: Greening local planning in South Africa

With the second local government demarcation and the Municipal Systems Act in 2000, the government of South Africa introduced Integrated Development Plans (IDPs) as a statutory requirement for all local authorities. IDPs are five-year, bottom-up, multi-sectoral planning instruments, innovative in their holistic approach to economic, social and environmental sustainability.

However, the experience of South Africa suggests that greening development at the local level is not simply an issue of political will and legislation, the potential of which can be cut short by serious institutional and political constraints. IDPs are a relatively new instrument, which as yet have not managed to adequately reflect sustainability either in planning or implementation. This is for a number of reasons, each of which also offers potential areas for improvement.

At a general level, bridging the current educational, professional and institutional chasm between the fields of planning and environmental management would greatly reduce the inefficiencies related to jurisdictional conflicts and overlapping. But IDPs lack specific sustainability provisions such as criteria or monitoring requirements that would help ensure that environmental considerations are translated from vision to action. And they need to be accompanied by the necessary resources, such as data from satellite environmental accounts, and technical capacity – the two major limiting factors in the case of South Africa. Explicit links also need to be established between IDPs and provincial and national budgets, such as the Municipal Infrastructure Grant (MIG) that provides fiscal funding from the National Treasury to IDP projects oriented towards poor communities. The National Treasury could adopt green budgeting measures, to create strong incentives for sustainable development at the local level, along with more fiscal decentralisation so that funding decisions are better aligned with planning.

Sources: Giordano, 2013, Todes, 2004, Todes et al, 2009

2.7 Guidance on pro-poor environment and natural resources and climate indicators in national planning

One of the key areas of national planning is to select appropriate indicators. This requires a judicious balance between brevity and comprehensiveness. Too many indicators will lead to lack of a focused, clear monitoring framework targeting the issues that really count. However too few indicators will lead to ignoring some key pro-poor environment and natural resources and climate issues. As with all indicators, pro-poor environment and natural resources and climate indicators should be SMART:

- Specific
- Measureable
- Achievable
- Relevant
- Time-bound

The agreement of the Sustainable Development Goals (SDGs) provides a new set of 17 goals and 168 indicators to select from by new countries. For pro-poor ENR, the SDGs 14 on life below water, SDG 15 on life on land and SDG 7 on climate change are particularly relevant. However these are a range of useful indicators.

It is clear that the SDGs focus on poverty, environment and climate actions in many of their targets as shown by Table 2.

Table 2. SDG targets that address poverty-environment-climate links[2]

Goal 1: Poverty	**1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance **1.5** By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
Goal 2: Hunger and food security	**2.1** By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round **2.3** By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment **2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
Goal 3: Health	**3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

[2] Table 2 is illustrative, with a limited selection of key poverty-environment-climate related SDG targets. Additional targets could be added, including from the 'means of implementation' targets that form part of each goal.

Goal 4: Education	**4.7** By 2030, ensure all learners acquire knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
Goal 5: Gender	**5.a** Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources, in accordance with national laws
Goal 6: Water	**6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all **6.2** By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations **6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
Goal 7: Energy	**7.1** By 2030, ensure universal access to affordable, reliable and modern energy services **7.2** By 2030, increase substantially the share of renewable energy in the global energy mix
Goal 8: Growth	**8.3** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage formalisation and growth of micro-, small- and medium-sized enterprises, including through access to financial services **8.4** Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead
Goal 9: Infrastructure	**9.1** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
Goal 10: Inequality	**10.1** By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average
Goal 11: Cities	**11.1** By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums **11.6** By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
Goal 12: Sustainable consumption and production	**12.2** By 2030, achieve the sustainable management and efficient use of natural resources **12.4** By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment
Goal 13: Climate	**13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries **13.2** Integrate climate change measures into national policies, strategies and planning

Goal 14: Oceans	**14.2** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans **14.7** By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
Goal 15: Ecosystems	**15.1** By 2020, ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements **15.2** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally **15.3** By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world **15.9** By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts
Goal 16: Governance	**16.3** Promote the rule of law at the national and international levels and ensure equal access to justice for all **16.7** Ensure responsive, inclusive, participatory and representative decision-making at all levels **16.10** Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
Goal 17: Global partnership	**17.7** Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed **17.14** Enhance policy coherence for sustainable development **17.19** By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries

Source: UN (2015)

In terms of country level applications, there has been considerable work to identify appropriate poverty environment indicators as shown by the table from Tanzania.

Box 2.9: Poverty-environment indicators in national planning in Tanzania

Tanzania selected 10 poverty-environment indicators for its national plan, MKUKUTA I (2005—2010). These indicators are:

1. Proportion of enterprises undertaking EIAs complying with environmental regulations
2. Proportion of households whose main income is derived from the harvesting, processing and marketing of natural resource products
3. Proportion of households in rural and urban areas using alternative sources of energy to wood fuel (including charcoal) as their main source of energy for cooking
4. Population with access to piped or protected water as their main drinking water source (30 minutes maximum collection time for walking and filling)
5. Proportion of households with basic sanitation facilities
6. Proportion of schools with adequate sanitation facilities
7. Number of reported cholera cases
8. Total area managed by mandated local institutions for community-based natural resource management
9. Proportion of females from small-holder households with land ownership or customary land rights
10. Total value of revenue received from concessions and licenses for natural resources (forestry, fishing, wildlife, mining).

However, challenges were encountered in applying these indicators due to inadequacies in data collection and analysis.

Source: Poverty-Environment Initiative Tanzania

2.8 'How to' tips for the politics of the planning process and integrating pro-poor environment and natural resources and climate

Integrating environment and natural resources and climate into the planning process is ultimately not a technocratic exercise, but a political-economy one and these tips below provide guidance to engage in the political process of planning:

- Have the resources for a substantive programme – both funds and staff time,
- Generate the evidence of the economic benefits of investing in environment and natural resources sustainability and climate adaptation,
- Engage deeply and proactively in the planning process – with stubborn persistence and attention to detail are important,
- Identify key leaders, politicians, government officials and civil society representatives in the planning processes, including the key institutional units leading and engaged in the process (eg central coordinating unit, sector working group membership)
- Map out the timeframe (e.g. planning commission issuing instructions and key government policy priorities, deadlines for sector work group submissions, presentation of draft national plan) in order to plan when and what kinds of inputs are required, and ensure that deadlines are met

- Identify key institutional, personal, technical and professional relationships in the planning process. Mainstreaming involves a significant process of relationship and trust building
- Identify key pro-poor environment and natural resources and climate policies, strategies, plans and programmes to be included in sector investment plans such as agriculture, energy and transport. Also include these issues in environment and natural resources Sector plans and programmes. This will ensure a link between plans and budgets that is so important.
- Some people can become environment and natural resources "champions": well-placed individuals who are supportive of integrating environment and natural resources and climate and can influence the planning process. They need to be provided with economic arguments and other evidence to make the case for effective integration of environment and natural resources and climate.

3. The Budget Cycle, Pro-Poor Environment and Natural Resources and Climate Integration

3.1 Summary checklist

- *The budget is the single most important public policy for resource allocation* to meet development priorities. So it is vital to mainstream pro-poor environment and natural resources and climate into this budget process
- *The annual budget follows a four-stage cycle* of formulation, approval, execution and oversight. Pro-poor environment and natural resources and climate change can be integrated into each of these stages, as subsequent chapters will demonstrate
- *The annual budget and the Medium Term Expenditure Framework (MTEF)* are closely related within annual and multi-year budget cycles. The budget incorporates sources of funding and planned expenditure on an annual basis, whereas the MTEF sets out expenditure plans, linked to policy priorities, on a multi-year basis.
- *The annual budget and* MTEF represents a critical opportunity to recognise, link and direct planned expenditure of all government spending units (to the extent that each is relevant) to objectives of pro-poor environment and natural resources and Climate policy.
- *But the budget process is not a static cycle: it is subject to ongoing reforms and changes, often with support from technical assistance for public financial reforms (PFM).*
- *Many of these public financial reforms can be used as a vehicle to also integrate pro-poor environment and natural resources and climate issues and for introducing some of the recommendations provided in this guidance, for example:*
    - PFM reforms to increase domestic resource mobilisation can be an excellent vehicle to introduce environmental fiscal reforms
    - PFM reforms to make state owned enterprises more efficient can be a way to also improve their environmental performance
    - PFM reforms to manage for results, such as performance-based budgeting [see later in this chapter) can be a way to integrate pro-poor environment and natural resources and climate criteria in budgeting
    - PFM reforms for aid management can be a way to promote better aid-funded pro-poor environment and natural resources and climate programmes, such as sector-wide approaches for natural resources and climate change.

Thus it is important for those working on pro-poor environment and climate issues to understand and be institutionally linked to Public financial management reforms in order to take forward the integration of pro-poor environment and natural resources and climate. And that is the objective of this chapter which introduces the basic budget process and key public financial management (PFM) reforms.

3.2 Where and when to integrate pro-poor environment and natural resources and climate into the budget process

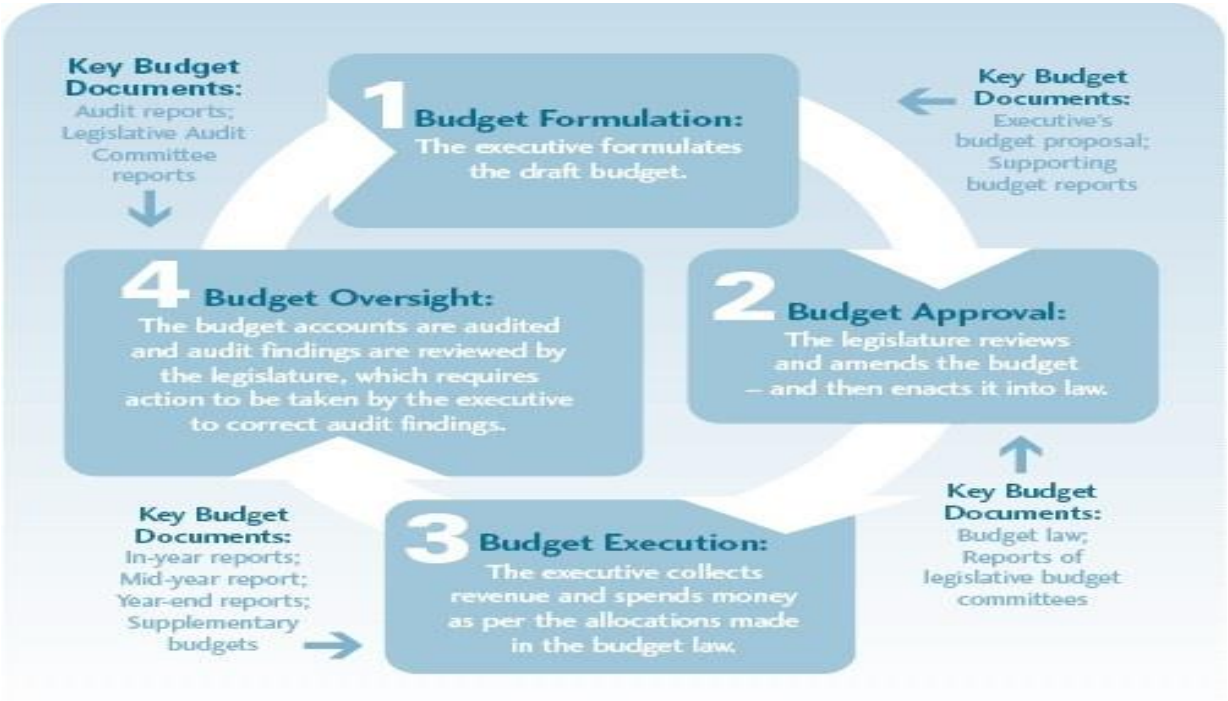
- This section sets out the key steps of the overall budget process to inform those who are less familiar with this process so they know where and when to integrate pro-poor environment and natural resources and climate issues. The following chapters then provide guidance on how to integrate pro-poor environment and natural resources and climate issues into this process.
- *Medium-term budgeting includes:* revenue forecasts and expenditure ceilings for sub units of general government and individual ministries and agencies, as well as baseline estimates for expenditures, which indicate the future costs of current policy

- *The potential benefits of effective medium-term budgeting are well documented.* A well-designed and well-managed framework for medium-term budgeting (MTEF) should contribute to improved fiscal discipline and control, allocative efficiency and cost-effectiveness of service delivery, increased clarity of policy objectives, greater predictability in budget allocation, increased comprehensiveness of budget information and enhanced accountability and transparency in the use of resources
- *The national budget is the single most important policy tool for effective allocation and use of resources* to meet the needs of a country's population. It provides the resources to help implement national policies and plans, and provides at least some of the funding for subnational institutions
- *The national budget covers all of the functions of government* from health and education, to transport, taxes, and interest payment on debt, among others. A full list of the functions of government is set out in GFSM 2014.[3] Administrative structures (ie institutions) to implement these functions vary from country to country
- *The Ministry of Finance has legally mandated responsibility* to compile, present, implement and oversee the government's annual national budget. Subnational institutions play roles, and may also often supplement the national budget with locally-raised revenues within the limitations and powers of their mandates
- *In all countries the national budget has three main objectives:*
    - effective fiscal policy of revenue management and resource allocation to ensure fiscal sustainability (with debt and deficits in line with planned commitments)
    - prioritisation of expenditures to ensure that the allocation of funds meets the needs of the population for public services and other government priorities
    - full value for money, namely economy, efficiency and effectiveness
- *The government budget is most simply understood as a financial plan* which covers the commitments for public sector ministries, departments and agencies (MDAs) and for social and pension commitments which are together financed through a combination of tax resources, donor financing and domestic and international borrowing
- *Pro-poor environment and natural resources and climate actions* are implicit in many actions of Government and are thus included within existing budgets and institutions. Tagging budget lines within each cross-cutting policy area and allocating a percentage of the budget lines, on a qualitative, informed judgement basis, and aggregating the results gives an indication of the resources committed. This can be done on an administrative code (spending unit) basis. (Guidance is set out at Section 5.8)
- *Explicitly pro-poor environment and natural resources and climate budgets are readily identifiable by their administrative classification – examples may be forestry cell and Climate Change Unit. Other units with a less obvious or less direct mandate, such as Agriculture or Public Works, require judgment to be applied to identify a proportion of their budget and spend that may be attributed to pro-poor environment and natural resources and climate change .*
- *The government budget typically does not cover quasi-public organisations* such as State Owned Enterprises and other parastatals which generally manage their finances on a more autonomous basis. However quasi-public enterprises may incur debts during the financial year and these in turn become contingent liabilities for the national budget; and the government budget may include subsidies to State-owned Enterprises

[3] Classification of the Functions of Government (COFOG) https://www.imf.org/external/Pubs/FT/GFS/Manual/2014/gfsfinal.pdf, p. 142

- *A budget is typically divided between the development and non-development budget*. A budget classifies a government's planned expenditures and anticipated revenues, and reflects its policy priorities for the coming year
- *The budget is more than a single document*. It is an on-going cycle delineated by the financial year, and distinguished by different phases – from the formulation to approval through the budget speech made by the Minister of Finance and vote in parliament to execution by Ministries, Agencies and Department and then oversight through the supreme audit institutions
- *Different stakeholders play roles in the budget process* and there are diverse access points to influence budget resources, allocations, and outcomes in this process. Within institutions, budget committees are often formed to manage the process for the sector side.
- The national budget cycle typically has four stages (Figure 3.2), each of which offers opportunities for integrating pro-poor environmental sustainability:
    - 1: Budget Formulation – the executive branch puts together the budget plan
    - 2: Budget Approval – the legislature debates, alters, and approves the budget plan
    - 3: Budget Execution – the government implements the policies in the budget, reports on progress and achievement, and maintains a system of national accounts
    - 4: Budget oversight – through auditing and legislative assessment, a supreme audit institution (SAI) and the legislature account for and assess the expenditures made under the executed budget.
- Subsequent sections of this Manual provide detailed guidance on how to how to integrate pro-poor environment and natural resources and climate into each of these four stages of the budget process.

Figure 3.1: The Budget Cycle (Ramkumar, 2008)



- *Government budgeting (as opposed to the government budget) is the process of allocating resources for providing services and transfers* to all ministries, departments and agencies. It uses a budget classification system which is linked to the economic, administrative and functional areas/responsibilities of the MDAs. (Functional classification is based on GFSM 2014.) There are two main types of budget classifications that typically appear in an

appropriation;[4] administrative and economic. Other potential classifications used include programmatic, activity, output and functional. An example of classification and potentially extensive parameters is shown below for Uganda:

Uganda is a unitary state. The primary subnational government unit consists of 1 City and 79 District Councils, which are divided into Municipal / County Councils, which in turn are divided into sub-counties. Under the constitution, all of these subnational entities enjoy a high degree of financial autonomy.

Figure 3.2: Chart of Accounts Structure – example of Uganda

1 2	3 4 5	6 7 8	9 10 11 12 13 14	15 16	17 18	19 20 21 22	23 24 25 26	27 28 29 30 31 32	33 34 35 36 37 38
Fund	Fund Source	Vote	Cost Centre (Administrative)	Spare	Spare	Project	Spare	MTEF	Account
1 **2**	1 2 **3**	1 2 **3**	1 2 3 4 5 **6**	1 **2**	1 **2**	1 2 3 **4**	1 2 3 **4**	1 2 3 4 5 **6**	1 2 3 4 5 **6**
Fund	Funding source	Ministry/Agency/LG	Directorate or Programme	Unspecified	Unspecified	Project	Unspecified	Objective / Output / Activity	Account class / Item / Sub-item / Sub-sub item / Sub-sub-sub item

3.3 Guidance on how to integrate pro-poor environment and natural resources and climate into the budget process

- *There are many potential opportunities for mainstreaming and integrating pro-poor environment and natural resources and climate into annual budgets and MTEFs:*
    - Influencing the preparation of the guidelines produced by the Finance ministry on budget envelopes and priorities such as Budget call circulars and Budget instructions to include pro-poor environment and natural resources
    - Integrating pro-poor environment and natural resources and climate into MDA budget committees
    - Environment and natural resources desk officers in each MDA during the budget cycle
    - Environment and natural resources liaison points within the Ministry of Finance
    - Budget review by Parliamentary committees
    - Budget speech passages and references
    - MTEF policy narrative requirements in budget submissions
    - Resources made available, on a competitive bid basis, to institutions for pro-poor environment and natural resources and climate actions
    - Specific in-year management reports (and mid-year statutory and non-statutory reports) to highlight pro-poor environment and natural resources and climate spend and progress (achievements)
    - Pro-poor environment and natural resources requirements in significant public procurements
    - Including pro-poor environment and natural resources and climate in budget/expenditure classification

[4] Appropriation is, in law, the assignment of money for a special purpose.

- Compulsory pro-poor environment and natural resources and climate standards in capital project appraisals and approval
- Pro-poor environment and natural resources implications of project interventions (both capital and recurrent; development and non-development)
- Pro-poor environment and natural resources and climate audits by Auditor General.

These opportunities are all reviewed in later chapters of this Manual .

3.4 Where and when Budget reforms can be used for pro-poor environment and natural resources and climate integration

The budget process is not a static cycle, but is subject to ongoing reforms and changes, often with external support. Many of these public financial management (PFM) reform programmes provide entry points for mainstreaming pro-poor environment and natural resources and climate and for introducing some of the recommendations provided in this guidance. So it is helpful to understand PFM reform and be institutionally linked to it, in order to take forward pro-poor environment and natural resources and climate mainstreaming.

- In Africa the Public Financial Management reform programme has been ongoing in many countries for decades. The introduction of medium term expenditure frameworks (MTEF), programmatic budgeting, Integrated Financial Management Systems (IFMIS), and Treasury Single Accounts (TSA) amongst others, has led to some key improvements in a number of countries
- Yet many countries have met with failures or setbacks due to a number of factors such as limited political ownership, capacity constraints, overly ambitious reforms, , stop-start flows of donor support or design flaws. Many of the reforms have been very time-consuming and absorbed large amounts of financial and human resources, with limited returns
- Professionalisation of staff in MDAs remains central to success. This ensures commitment to both competence and ethics on a sustainable basis beyond the limited timeframe of external support. Professional bodies may have in-built codes of conduct for environment and natural resources [5] and climate issues, which may need reviewing and encouraging
- Each country is different and requires a tailor-made sequenced reform programme which does not over-burden the system financially or in its capacity requirements. There needs to be full ownership of the reform programme and a system of ‘quick wins’ to keep morale up and to demonstrate the benefits of sustaining the reforms over the medium and long term
- Identifying short and long term objectives and targets is also essential, along with internal monitoring and evaluation of the reform process. External monitoring can provide excellent tools to undertake during a PFM reform process because this provides an unbiased view of the challenges and opportunities that a country faces in the realm of PFM, and can measure progress of reform over time
- Sequencing of PFM reforms should set out clear priorities and steps, although there is no single best sequencing strategy. Reforms are likely to have a greater chance of succeeding if the political demands, the technical solutions, and the implementation capacities are aligned with each other. In the absence of political ownership perhaps only technical improvements at the margin are possible. With strong political ownership countries can aim high, but their ambitions should take cognisance of the implementation capacity of the country (IMF, 2015)

[5] See CIPS – who offer training and skill building in Including social and environmental criteria in specifications within professional qualifications https://www.cips.org/Documents/Qualifications/Unit_Content_Guides/CIPS_DipProcSupp_WEB%20FINAL.pdf and CIPFA provides a technical advice service to members in *some* environment and natural resources issues - http://www.tisonline.net/environmentalservices/

- A variety of reforms are available to governments to strengthen their Public Financial Management (PFM) Systems including increased domestic resource mobilisation, medium term budgeting, results-based management and performance-based budgeting and reforms to aid management – and links with pro-poor environment and natural resources and climate can be integrated into each of these reforms

3.5 Guidance on how Budget reforms can be used for pro-poor environment and natural resources and climate integration

- There are many links between PFM reforms and improving pro-poor environment and natural resources and climate outcomes as shown in table 3.1:
    - PFM reforms to increase domestic resource mobilisation can be an excellent vehicle to introduce environmental fiscal reforms
    - PFM reforms to make state-owned enterprises more efficient can be a way to improve environmental performance
    - PFM reforms to manage for results such as performance-based budgeting can be a way to integrate pro-poor environmental and climate criteria into budgeting, and
    - PFM reforms for aid management can be a way to promote better aid funded pro-poor environment and natural resources and climate programmes such as sector wide approaches.

Table 3.1: Public Financial Management reforms and their links to pro-poor environment, natural resources and climate change (environment and natural resources and climate change)

Public Financial Reform	Reforms actions	Link to Pro-poor Environment and Natural resources and Climate
Increased domestic resource mobilization	✓ Fiscal policy can be adjusted to meet fiscal deficit and borrowing targets – to ensure fiscal sustainability and pro-growth policies are realized ✓ Tax or other domestic resources are ideally the primary financing source for development, with aid playing a supporting role ✓ Governments can focus on modernizing organizational structures and business processes, enhancing capacity building, and strengthening ownership of tax reforms ✓ Reducing leakage of revenues by, for example, improved governance in the use of environment and natural resources – e.g. reducing illegal deforestation	✓ More sustainable use of environment and natural resources will, in the medium to long term, generate increased economic activity, which will also increase revenue to the government. ✓ Most countries in Africa have low tax-to-GDP rates and high rates of subsidization, especially for natural resources and environment related services ✓ Many countries in Africa are endowed with natural resources. There is a much greater scope to tax these resources efficiently as well as to reduce harmful subsidies such as on fuel, water and electricity ✓ "Environmental fiscal reforms" (EFR) refers to a range of taxation and pricing measures which can raise fiscal revenues (or create incentives and disincentives) while supporting environmental goals
Medium Term budgeting	✓ Medium term budgeting includes revenue forecasts and	✓ Opportunity to include the environment and natural

	expenditure ceilings for sub-units of general government and individual ministries and agencies; as well as baseline estimates for expenditures, which indicate the future costs of current policy ✓ This should contribute to improved fiscal discipline and control, allocative efficiency and cost-effectiveness of service delivery, through increased clarity of policy objectives, greater predictability in budget allocation, increased comprehensiveness of budget information and enhanced accountability and transparency in the use of resources	resources issues in these medium term budgeting reforms ✓ More sustainable use of environment and natural resources will, in the medium to long term, generate increased economic activity, which will also increase revenue to the government.
Reform of State-Owned Enterprises and Government Business Entities	✓ Good governance of state enterprises is key for promoting their financial health, reducing their burden on the budget, containing fiscal risk and reducing externalities	✓ State-owned enterprises are often protected and include many of the most polluting, resource-intensive enterprises. Reforms can reduce pollution and excess resource use
Managing for results and performance-based budgeting	✓ Moving the budget system from a focus on inputs to a focus on outputs and outcomes, together with making budget execution more flexible, has important benefits for line ministries, but also for the Minitry of Finance ✓ Capacity building in line ministries is essential. The transition path involves changing both business processes and institutional dynamics ✓ An appropriate balance is required between control and flexibility, so that service delivery is enhanced without raising concerns of financial mismanagement	✓ Opportunity to include the pro-poor environment and natural resources sector in 'managing for results' reforms ✓ This can include pro-poor environment and climate criteria for results-based management
Aid Management	✓ It is extremely useful that all sources of revenues are included in the government budget. However, owing to various factors, more than half of aid projects and programmes are delivered off budget. If this aid is not reported on (even if it not spent through government systems) for example in the context of an aid management platform which collects information on all activities and projects in the country – it will	✓ Environment and climate are often aid financed so need to be included in any aid management reforms ✓ This can include pro-poor environment , natural resource and climate sector wide approaches

	impede government planning and budgeting processes ✓ Moreover, off budget aid may be spent on areas which are not priorities for the government. They may also result in duplication of government and other donor activities	

4. Budget Formulation and Revenue Management; Pro-Poor Environment, Natural Resources and Climate Integration

4.1 Summary Checklist

- *Budgets depend on fiscal management to ensure diversified and sustainable revenues.* These revenues include domestic sources (such as taxes payable by individuals and corporations, taxes on goods and services, excise duties and fees and charges and domestic borrowing) as well as international development partner sources (typically loans and grants)
- *In countries where revenues fluctuate annually and public debt is high, the focus will be on short-term revenue management so it will be harder to focus on issues such as environment and natural resources unsustainability and climate change, where the impacts may not be immediately visible or will arise in the future*. Improving revenue management should create the fiscal space and generate improved revenues levels to allocate more finances to pro-poor environment and natural resources and climate issues
- *More sustainable use of environment and natural resources will in the medium to longer term generate improved revenue streams for government sustainable use will increase economic activity.*
- *A range of taxation instruments can be deployed to incentivise use of pro-poor environmentally beneficial and climate resilient behaviour, as well as generating domestic revenue for the Government to fund expenditure for pro-poor environment and natural resources and climate improvements*
- *Domestic revenues from environment and natural resources taxation can be increased in Africa through natural resource related fees, royalties and taxation through a more effective system of taxation, higher tax rates, strengthened collection capacity and reduced tax evasion and improved environment and natural resources governance to reduce 'leakages',*
- *Domestic revenues can also be increased by reforming economically and environmentally damaging subsidies while protecting low income households through targeted compensation and spending.* This is particularly relevant in the case of water subsidies which are often paid to water providers as commercial support rather than directly to poor households
- *While there are benefits from using environment and natural resources revenues for the general budget, there are also advantages in ensuring a sufficient proportion of natural resource revenues are used for natural resource management to ensure funding streams from environment and natural resources are maintained.* However, government must recognise that this may lead to available resources driving policy rather than policy being developed independently to address needs
- *Sovereign wealth funds can manage mineral revenues in ways that can reduce exposure to price volatility and can promote macroeconomic stability and generate long-term fiscal revenue benefits after the minerals have been extracted.*
- *International aid is an important source of revenue and aid for pro-poor* environment and natural resources *and climate needs to be managed in ways that support government systems and are on-budget.* This can include sector-wide programmes on pro-poor environment, natural resources and climate where the conditions are right.

4.2 Where and when to integrate pro-poor environment and natural resources and climate into revenue management

This section sets out the key steps of the revenue management process to inform those who are less familiar with this process so they know where and when to integrate pro-poor environment and natural resources and climate issues. The following sections then provide guidance on how to integrate pro-poor environment and natural resources and climate issues into this process.

African governments are recommended to adjust fiscal policy to meet fiscal deficit and borrowing targets, and thus to ensure fiscal sustainability and pro-growth policies are realised. This will improve government's fiscal "space" and allow issues which may not be immediately visible or have greater impacts in the future, such as pro-poor environment and climate change to receive much greater policy attention.

Many countries in Africa are endowed with rich natural resources, such as minerals, fisheries and forests which can generate significant revenue streams if managed sustainably. A number of reports highlight how more sustainable management of resources, including through improved governance can substantively improve economic benefits, including revenue streams to government.

Most countries in Africa have low tax to GDP rates and high levels of subsidies. On the tax side this is often a result of limited capacity for tax administration, extensive tax evasion, a large informal economy and tax concessions and holidays for particular aspects of economic activity. On the subsidies side, this is often the result of political pressure for subsidised inputs such as water, energy and fertilisers, which can have negative economic and environmental impacts. While these subsidies are defended on the grounds of their social benefits, these often quite limited benefits to the poor who may not even receive the subsidised service in question. This economically costly and environmentally harmful subsidies such as those on fuel, water and electricity can be reformed in ways that do not harm poor people through for example targeted compensation and expenditures for poor households.

Aid management is extremely important to ensure that all sources of funding are included in the government budget. However, owing to fiduciary risk and other issues in a number of African countries more than half of aid projects and programmes are delivered off budget. However, this, and off-treasury options, often offer a less well-regulated context than the government system due to weaknesses in NGO and private sector management and regulatory institutions. An objective evaluation using fiduciary risk assessment tools is worthwhile.

Aid should at least be reported on- budget (even if it not spent through government systems) through for example an aid management platform which collects information on all activities and projects in the country. This would make sure that aid is spent on areas which are priorities for the government and avoid duplication of government and other donor activities.

Some donors provide aid on budget in the form of sectoral and general budget support and this can be applied to pro-poor environment and natural resources and climate. If the conditions are right, this type of aid can be extremely useful to support national priorities of the Government either at the general or sectoral level. General budget support will have greatest positive effect when the public financial management systems of the recipient country are strong. This means sound value for money systems, resource allocations that are responsive to priorities, accurate and complete financial reporting, and effective scrutiny and governance should be in place.

General budget support can be committed on a multi-year basis to enable a recipient government to integrate aid resources fully into its medium-term planning and budgeting process. However, the PFM system of the recipient country must be capable of operating beyond the boundary of a strictly annualised system. Many countries require spending approvals to be renewed every year, even for capital projects. Regular monitoring of expenditure throughout the year, triangulated by physical progress reports, is a valuable way to inform management. This can be complemented by annual financial reporting which informs a wider audience about budget performance, including donors, citizens and other stakeholders.

Revenue forecasting is an important part of the budget process – although there is mixed evidence of its effectiveness (IMF, 2005b). Commodity based natural resource revenues and financing for climate change, particularly disaster management, are particularly volatile. Natural resource revenues, for mining in particular, often depend on international prices, while disaster financing depends on donors. It

is recommended that systems be put in place to make these revenues less volatile so that revenue forecasting is more reliable.

4.3 Guidance on how pro-poor environment and natural resources and climate investments will increase revenues

Increased budget allocation for sustainable environment and natural resources management and climate resilience across sectors can increase economic growth (or avoid decline in growth) which – with good Public Financial Management (PFM) – will lead to increased government revenues. For example direct investments in soil and water conservation will increase agricultural productivity, incomes and profits and so should generate more revenue for government. Enabling investments in improving environment and natural resources governance can also significantly increase government revenues.

Environment and natural resources such as minerals, fisheries, forests generate economic benefits which make direct and indirect contributions to government revenues. Sustainable environment and natural resources use maintains the stream of economic benefits and ecological systems, which sustains the flow of revenue to government. Unsustainable use decreases these benefits and revenue flows as they lead to environment and natural resources degradation, declining yields and unviable ecosystems.

Low revenues from environment and natural resources can create a vicious circle, leading to further low expenditures, which consequently reduce revenues still further. Without high revenues, governments will see natural resources as a net drain on the budget, reducing incentives to invest in their management and conservation.

Box 4.1: Low revenues from natural resources reduce the incentives to invest

The link between revenues and expenditures is clearly seen in Africa's forests. Forests in Africa yield very low revenues at less than 1US$/ha compared to an average of 5US$/ha in Asia and South America. In addition, African forest revenues declined between the years 2001-5, while they increased in Asia and South America. Finally, the bulk of these African forest revenues were collected in just three countries. As a result expenditure on African forests is much lower than average-per-hectare expenditures in Asia.

Source: Indufor, 2013

Ministries of Finance could collect a great deal more revenue by improving the capacities and procedures of environment and natural resources-based revenue collection - See African Progress Panel 2013 on Equity and Extractives and 2014 report on Grain, Fish and Money – which highlight the billions of revenues lost each year by African countries rich in natural resources.

4.4 Guidance on how to introduce Natural Resource Taxation

- Ministries of Finance may need to be convinced of the opportunities for improved environment and natural resources revenue collection through rational and objective economic analysis and public expenditure reviews
- Think tanks and Development partners can prepare and use assessments of revenue potential and opportunities for their realisation both in terms of improving collection within existing systems and also through more comprehensive reform to environment and natural resources governance and management. This may also require guidance on good practice on revenue collection eg appropriate royalty rates, other environmental fiscal reforms, examples of environment and natural resources wealth funds (see later in this chapter).

- Governments can put in place an effective system of natural resource taxes which provide incentives for sustainable extraction and effective tax collection and monitoring schemes to enforce. There is a range of different instruments for this, including:
    - taxes on the level of extraction (linked either to physical units by volume, or to economic units by value)
    - taxes on profits
    - taxes on exports
    - state participation in the industry (e.g. partial state ownership)
    - auctions of concessions or the extracted produce

These instruments are often combined (OECD, 2012) as they have different advantages and disadvantages. While in theory some instruments are better for reducing incentives for over-extraction (e. taxes on the volume of extraction) these can be costly to administer as they also provide incentives for tax evasion, so simpler taxes on more easily collected data such as traded exports and/or audited profits may be preferred.

Example of natural resource taxation in Mozambique

A positive story comes from Mozambique which has successfully increased natural resource revenues to be close to the level of public environmental expenditures. This arises with revenues from mining, but also fishing and hunting.

Box 4.2: Mozambique's success with natural resources revenue collection

Estimated **total environmental expenditures** in Mozambique stands at 18,806.5 million MZN from 2007 to 2010, an average of 4.3% of the state budget, and 1.4% of GDP.

By contrast, **total environmental revenues** totalled 1,048.8 million MZN from 2008 to 2010, or 0.4% of the state budget and 0.1% of GDP. However, including **natural resource taxation revenues** (the most substantial of which is for petroleum) would increase the total to 11,546.7 million MNZ (3.9% of the budget and 1.3% of GDP).

There has been a rising trend in natural resource revenue collection, with a significant rise in 2010 with the introduction of fines and the fee for the fisheries development fund. The introduction of mining fees and a doubling of other environment fees also contributed to the rise. By sector, fishing and hunting have contributed the largest proportion to total revenues since 2008 (46%).

MICOA, 2012

4.5 Guidance on how to dedicate environment and natural resources revenues for pro-poor environment and natural resources management

There are arguments for and against setting aside a share of revenues collected for sustainable natural resource management. Such dedicated (or "hypothecated") funds can be justified to ensure a sufficient proportion of natural resource taxes are spent on management and to ensure economic benefit streams from ENR are maintained and preferably increased.

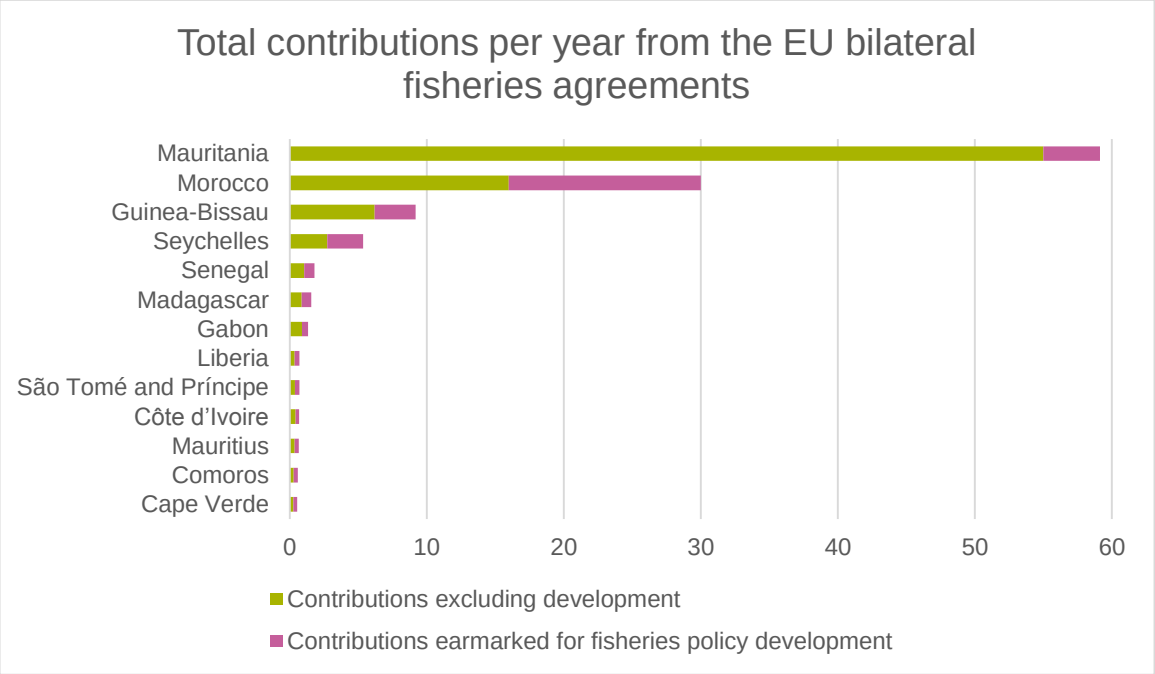
- Generally, Ministries of Finance prefer not to reserve or hypothecate revenues for a particular purpose. Governments have incentives to improve environment and natural resources management and to increase environment and natural resources revenue only when there is a clear understanding of how this can help achieve broader development goals. Thus is it important to establish and manage funds in a manner that contributes to priority development goals
- But once collected, a major challenge for natural resource taxation is ensuring that enough of the revenues collected are actually used to ensure sustainable environmental and natural resource management. This is being addressed in both the fishery and the forestry sector by a number of African countries through dedicating or hypothecating funds for sustainable environment and natural resources management.
- Ministries of Finance are more likely to agree to re-investing in environment and natural resources sectors if there is specific evidence provided on the economic benefits of doing so. For example, the economic benefits of investing fishery or forestry royalties in improving fishery or forestry management. Examples of earmarked fishery funds with EU support are set out below as well as the growing number of forestry funds

How to tips for fishery funds to promote pro-poor fishery management

- Fishery taxation represents one of the most important areas for natural resource taxation in Africa, particularly for West Africa as shown in the table
- One of the major sources of revenues is through fishery access agreements with the European Union. Bilateral fisheries agreements with the European Union (EU) constitute a high – and predictable – source of public revenue for many African coastal states (OECD, 2008)

- They take the form of four to five-year protocols where African countries are financially compensated for the rights of EU vessels to fish in their exclusive economic zone
- Due to concerns regarding fishery overexploitation and uneven competition with local artisanal fisheries, the EU Sustainable Fisheries Partnership Agreements (SFPAs) were instituted in 2004 with the requirement that some share of the EU payments are earmarked for the inclusive development of the partner countries' domestic fisheries sector (CEC, 2001; Gascuel et al., 2004)
- As Figure 4.1 shows, these payments for inclusive fishery development (purple colour in the table) represent a significant portion of SFPAs' annual country compensations, comprising approximately 50% of total financing for Cape Verde, Comoros, São Tomé and Príncipe, Liberia, Madagascar, Seychelles and Morocco, and equalling €30m out of EU's €180m of total contributions
- Invested in administrative and scientific capacity building, these funds aim towards the sustainable management of the partner countries' fishing stocks and the healthy development of their national fisheries sectors.

Figure 4.1: fishery taxes and their contribution for fisheries policy development



Box 4.3 provides an example from the EU-Mauritania Fisheries Partnership Agreement, where part of these funds are being used for the conservation and management of the Banc d'Arguin National Park, an important breeding habitat for many of the country's marketable fish species.

Box 4.3: Mauritania-European Union fishery agreement dedicates revenue for pro-poor sustainable fishery management

The 2006-2012 Fisheries Partnership Agreement (FPA)* signed between the European Union and the Government of Mauritania marks an important precedent in bilateral fisheries agreements, highlighting the multiple – yet mostly forgone – benefits accrued to a country's finances and environment through the sustainable management of its natural resources.

The FPA transferred from the European Union to the government €305 million – 19% of Mauritania's total budget revenue – over the 2008-2012 period for the fishing rights of European vessels in the exclusive economic zone of Mauritania.

Its innovative character lies in its provision that 20 per cent of the total payments is set aside for the development and management of the national fisheries sector, with an extra €1 million per year transferred for the conservation and management of the Banc d'Arguin National Park (BANP). The BANP is the largest marine park in Africa, globally renowned for its rich biodiversity and abundant fish stocks. Its ecological value has been recently emphasised by conservation scientists due to overexploitation and declining fish stocks elsewhere in the country. This agreement acts as an investment that recognises the real economic value of the Park, as the latter supports a higher productivity and thus higher future revenue flows from the fisheries sector. As such, the deal not only secured considerable revenues for the government of Mauritania but also, and most importantly, placed conservation as a core contributor to policymakers' public finance goals.

Despite representing less than 1 per cent of the FPA's total financial compensations, this provision offers lessons for other countries in Africa moving towards a more sustainable and lucrative management of their natural resources. First of all, payments of this type require that clear links between the ecosystem services and the financial benefits involved are established and backed by sound science. In this case, there was data and research available to support the claim that the BANP's ecosystems, designated as a Marine Protected Area, provide nursery and breeding sites for species exploited by Europe. Second, was aligning the Park's well laid-out strategic and management objectives with those of the FPA, imbuing the payments with trust and legitimacy. Third, this initiative was the result of a strong and coordinated effort of lobbying by local conservation NGOs that eventually managed to involve the government, through the Fisheries Ministry, and the European Union, through the Director of the Common Fisheries Policy's international relations. The latter came to champion the idea, playing a catalytic role in its realisation. Fourth, the park served as a well-organised and trustworthy institution, qualities evident in its five-year management plans, its annual reports on fund utilisation, and its links with the Ministry of Environment. The transfer mechanism was also clear, facilitated through the National Treasury and established with the 2007 Finance Law. Finally, the agreement contributed to the creation of a trust fund to be financed by both the government and international donors beyond the EU, attracting additional revenues for insuring the park's conservation against the volatility of budgetary payments.

Source: (Binet et al. 2013)

'How to' tips on Forest funds for pro-poor sustainable forestry

Like fishery, forestry requires sufficient funds to be invested in effective management. One way to achieve this is through forestry funds. The last decade has seen a considerable increase in National Forest Funds (NFFs) around the world, with Africa accounting for 47 per cent of them (FAO 2015).

Table 4.1. National forest funds in Africa

Country	Name of fund	Description

Botswana	Forest Conservation of Botswana and the Botswana Environment Fund	Income received is used for community forestry, reforestation and afforestation, and management planning
Burkina Faso	Fonds Forestier	Holds donations and other income for use in forest, wildlife and fishery projects
Cameroon	Fonds Spécial de Développement Forestier	Formerly received money from multiple sources; now apparently takes money from annual budget allotment to use for forest purposes
Republic of Congo	Fonds d'aménagement et des ressources naturelles	Receives income from multiple sources. Finances work in forestry, wildlife and aquaculture on general forestry administration, research, reforestation and afforestation, management planning, forest-related plan implementation and the promotion of forest-based manufacturing
Côte d'Ivoire	Forest Development Fund	Suggested uses of revenue include: sustainable conservation of national parks and reserves; replenishment; inventory and sustainable management of forest and wildlife; monitoring of forest resources; evaluation activities; and improvements in the sustainable management of forests
Gabon	Fonds Forestier National	Operationalized in 2012. Income from the fund is used to support general forestry administration, market promotion, research, public education, tree nurseries, public participation in government forest policy activities, community forestry, reforestation and afforestation management planning, forest-related plan implementation, promotion of production of environmental services, promotion of forest-based manufacturing and economic development of forest communities
Gambia	National Forestry Fund	Receives money from multiple sources (sale of forest products, forest parks, community forestry, forest fees and royalties, fund-financed projects, general revenues and donations) to support the protection, development and sustainable use of forests and promotion of community forestry
Guinea	Fonds Forestier	A general forest development fund tapping several forest-related income sources, including products from the exploitation of state forests, taxes and fees from the application of forest laws, fines and penalties, the sale of confiscated items, net profits of a public wood-processing enterprise, and loans and donations from state and international organizations

Guinea Bissau	National Forest Fund	Forest management and development. Several forest related income sources (taxes, fines, sale of forest produce)
Kenya	Forest Management and Conservation Fund	Income received is used in the management of public lands (including land purchases), research, tree nurseries, public participation in government forest policy activities, private forestry, community forestry, reforestation and afforestation management planning, and forest-related plan implementation
Lesotho	Forest Fund	Receives all fees collected under the Forest Act, which may be spent on forest management and research, including assistance to private and community forestry
Madagascar	Fonds Forestier National	A special account under private management and directed by a management council with representatives of the state and local governments, non-governmental organizations, and operators
Malawi	Forest Development Management Fund	Receives income from multiple sources, which is spent on forest management, with an emphasis on local communities
Mali	Fonds d'Aménagement et de Protection des Forêts	Receives income for use in firefighting, reforestation and afforestation, and forest-related plan implementation
	Fonds d'Aménagement et de Protection de la Faune	Focuses on the conservation, development and protection of forest and fauna resources. The previous Fonds Forestier National was disbanded in 1993 due to the conditions imposed by the World Bank and the International Monetary Fund in addition to other challenges; in 2009, two new funds were set up. Discussions have been underway since 2007 to establish the Malian Carbon Fund
Mauritania	Fonds National de Développement Forestier	Receives income from taxes and fees, which is spent on reforestation and forest protection
Morocco	Moroccan National Forest Fund	Capitalized through fixed shares of various taxes. Leverages funding for afforestation/reforestation on public, collective and private land, compensating the loss of user rights for local land users, and forest research activities
Mozambique	Forest and Wildlife Development Fund	Receives income from various sources and uses it to fund insect and disease control, firefighting, tree nurseries, private forestry, community forestry, reforestation and afforestation, and the economic development of forest communities

Niger	Fonds d'Aménagement Forestier	Used to support general forest administration, public education, tree nurseries, community forestry, reforestation and afforestation, forest-related implementation, and the promotion of forest-based manufacturing
	Fonds villageoise de manufacturing Développement	
	Fonds au Contrôle Forestier	
Rwanda	National Climate and Environment Fund of Rwanda (environment fund with significant forestry portfolio)	Established in 2012 by law No. 16/2012 as a cross-sectoral financing mechanism. Its ultimate purpose is to spearhead resource mobilization from different sources so that it grows to meet the country's increasing environmental management needs. Sustainable forest management is supported under Window 1: Conservation and Sustainable Natural Resources Management
Senegal	Fonds Forestier National	Receives income from the sale of forest products from government forests plus other sources, which is spent on the protection and conservation of forestry, wildlife and fish resources, reforestation and the restoration of denuded lands in danger of erosion
Sierra Leone	Reforestation Fund	Income is spent on firefighting, tree nurseries, private forestry, community forestry, reforestation and afforestation, and forest-related plan implementation
South Africa	National Forest Recreation and Access Fund	A specialized and quasi-independent fund dedicated to recreation, education, culture and spiritual fulfilment; it is notable for its public participation and transparency provisions
Sudan	National Reservation Fund	Supports management planning and forest-related plan implementation
	National Environment Fund	Supports the provision of environmental services
	Shelterbelt Fund	Supports community forestry and reforestation and afforestation
Tunisia	Fund for Sylvo-Pastoral Development	Supports private and collective efforts to improve forests and pasture lands outside the state forest domain
Uganda	National Tree Fund (Community Tree Planting Programme)	Established in 2003. This fund receives money for establishing tree nurseries, the management of public land, private forestry, community forestry, reforestation and afforestation, and the economic development of forest communities

United Republic of Tanzania	Tanzania Forest Fund	A public conservation trust fund made operational in 2011. It was established as a mechanism to provide longterm, reliable and sustainable financial support for forest conservation and sustainable forest management
United Republic of Tanzania (Zanzibar)	Forestry Development Fund	The income received from various sources is used for a broad range of forest projects; the establishment of the fund requires the approval of Finance Ministry
Zambia	Forest Revenue Fund	Receives income from licences, fees and concessions
	Forest Development Fund	Promotes the wood-processing industry and afforestation and reforestation programmes in the forest sector
	Fund for Joint Forest Management	Supports local forest management efforts

Source: Adapted from FAO (2015). Includes all known NFF s that had been established or were in the process of being created as of September 2014

Despite the promising potential of NFFs in financing the conservation and sustainable management of forests, as well as in supporting poverty reduction and other national priorities, a large number have come to face serious funding and operational challenges. Many have been unable to achieve their intended objectives and, to a lesser extent, have ceased their operations completely. This has partly been the result of insufficient best-practice knowledge gathered and disseminated at a global level, as well as the fact that NFFs greatly vary in form and scope, thus making it difficult to pinpoint a "typical" example. Nevertheless the FAO (2015) recommend important lessons for the interested practitioners and policymakers.

- When setting up a NFF, experience shows that **legal status** plays a critical role in the fund's power and financial sustainability. Those established under higher-level statutes, such as a presidential decree in the case of the United Republic of Tanzania, perform better than those established under the administrative orders of a ministry or other agencies as in Gambia and Uganda. The weak legal status of the latter funds has caused them difficulties in collecting the required remittances from other agencies outside the forest sector
- Regarding **fund design**, aligning an NFF with national forestry and environmental initiatives has been identified as an important success factor, whose absence in the cases of Gambia and Nigeria, among others, has led them to capitalisation problems. In contrast, under an inclusive design, Rwanda's National Climate and Environment Fund (FONERWA), established in 2012, incorporated the existing forest fund in its activities, in addition to conducting a systematic financial needs assessment across relevant sectors and policies. These two steps were strategic in justifying a wide range of opportunities both for the fund's capitalisation and utilisation
- In terms of **capitalisation**, the experiences of Gambia, Uganda and Tanzania stress the major role of keeping a diversified portfolio. The NFFs in these countries have been showing low to moderate capital growth, due mostly to their reliance on just one source of funds, notably revenues from forest products where a large slice of the market is informal and thus escapes taxation. Successful NFFs around the world have been extending their portfolio beyond the public sector into the private sector, donor funds, and funds linked to international initiatives
- Another important design characteristic is the **structure and composition of an NFF's governing and administrative bodies**. In the case of FONERWA in Rwanda, the Fund Management Committee has a concise set of well-defined responsibilities, ensuring the fund's efficient and effective leadership. Its management involves both the public and the private

sector, with the Rwanda Environmental Management Authority responsible for channelling the public funds, and the Rwanda Development Bank channelling private-sector funds. The Tanzania Forest Fund is one of the few NFFs with clear criteria for accepting proposals and disbursing funds, instilling efficiency and legitimacy in how the fund is used

- Finally, towards greater **transparency and accountability**, the Uganda National Tree Fund is creating a board responsible for fund oversight, while South Africa, Nigeria and the United Republic of Tanzania already have strong provisions for external monitoring and oversight in the form of records, reports and audit requirements.

How to tips for natural resource funds to promote pro-poor sustainable management

The following tips are recommended for forest funds (FAO, 2015); but their principles could also apply to other funds such as biodiversity or 'green' funds:

Fund governance structure and management:

- ✓ Establish under high-level statutes such as acts of parliament or presidential decrees
- ✓ Establish as a trust or foundation to allow for autonomy
- ✓ Adopt an inclusive design to be able to reach a wide range of stakeholders
- ✓ Clearly define goals and objectives
- ✓ Flexibility and innovation, with adequate technical and financial expertise
- ✓ Increase awareness and coordination at the highest levels of government to ensure cohesiveness among national forest initiatives
- ✓ Integrate NFF's mandate with national forest and environmental policies
- ✓ Secure championing by political leaders
- ✓ Ensure well-defined and secure tenure systems and property rights

Fund capitalisation:

- ✓ Demonstrate links between NFF and national priorities such as poverty reduction
- ✓ Align domestic policy and institutional frameworks with the requirements of international funding mechanisms
- ✓ Attract investment by the private sector, for example through favourable tax laws and CSR schemes
- ✓ Reduce dependence on forest revenue (taxes and fees) and tap into new sources of income, such as compensation fees and payments for ecosystem services (PES) schemes
- ✓ Strengthen cross-sectoral collaboration, government support and funding to help legitimise the fund
- ✓ Increase coordination among public, private and not-for-profit organisations

Fund utilisation:

- ✓ Be clear on specific target areas and an equitable range of beneficiaries, broadening support beyond governmental forest agencies
- ✓ In the early stages, keep funding options open and let demand inform priorities
- ✓ Make the administrative procedures efficient and simple, keeping operating costs low
- ✓ Ensure technical support is available
- ✓ Increase public awareness of the NFF and its role

- ✓ Reach out to local communities
- ✓ Match incentives and disbursement of funds with investors needs

Oversight:

- ✓ Ensure broad outside-the-government representation in fund management and decision-making towards greater legitimacy, support and synergies
- ✓ Maintain robust accounting, monitoring and evaluation systems, for example through designated specialised bodies
- ✓ Employ independent review and oversight
- ✓ Increase financial and governance capacity of staff
- ✓ Improve public access to information on NFFs

4.6 Guidance on how to reform subsidies for energy and water for pro-poor sustainable use

While natural resources and environmentally harmful activities should be taxed, in practice they are often subsidised, and usually for political economy reasons. For example, in many Africa countries, water and energy for electricity and fuel use are subsidised, as well as the use of fertilisers and chemical pesticides.

These subsidies may be provided on the production side through support to economically weak state owned enterprises and parastatals in energy, agriculture and transport and are often essentially 'bottom line' commercial support to prevent insolvency.

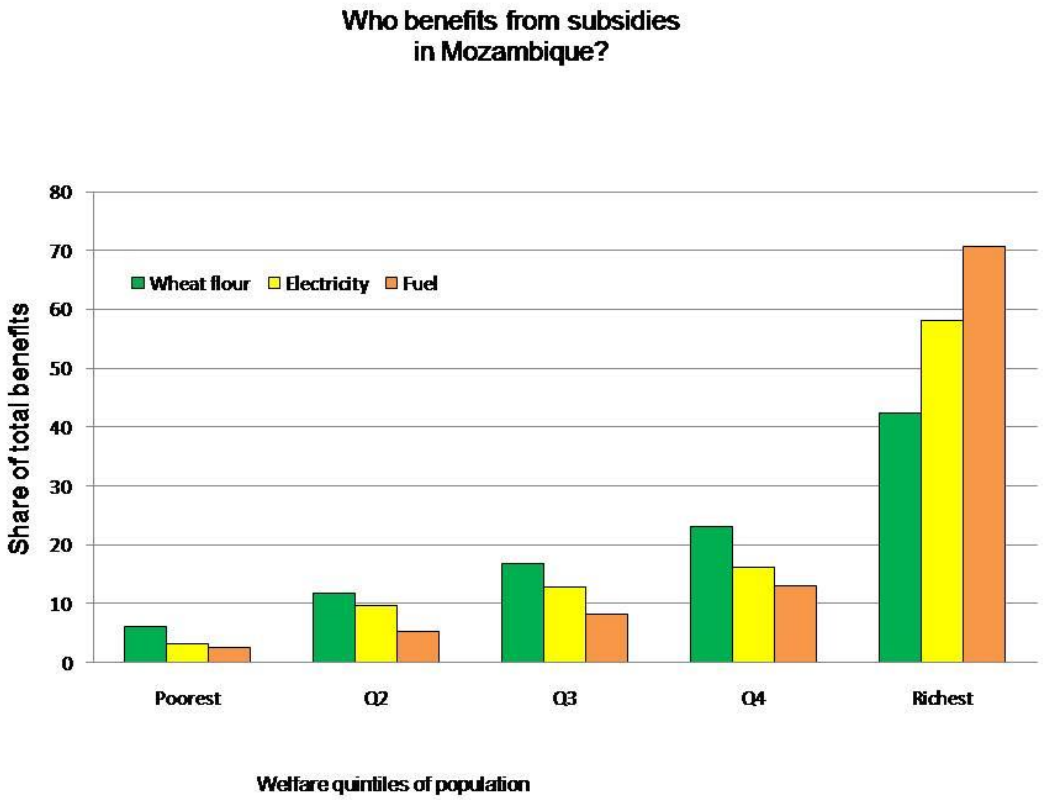
There may also be consumption subsidies. These subsidies are often justified as benefiting the poor, but this is not always the case and furthermore, reducing revenues also leads to under-investment in production and supply (IMF. 2013). Consumption subsidies should, generally, be paid to consumers rather than providers. However subsidy reform is a complex and politically charged process. The following guidance is provided to ensure effective and equitable subsidy reform:

- **Understand the context for reform:** Context includes the underlying social and cultural context (eg a view that water is a "free" good) as well as short-term factors such as a fiscal crisis, a series of environmental disasters or new political leadership, which can all provide the context to make the public and decionmakers more willing to accept the need for reform
- **Promote dialogue and information:** This is important to overcome vested interests and demonstrate the wider benefits of reforms. There is growing research on the regressive nature of many subsidies which can be disseminated through the media
- **Gather evidence of the distributional effects of price-based subsidies:** Much evidence suggests that contrary to the popular perception, these subsidies benefit the rich most. For energy and water, most poor people lack access to these services, so subsidies do not benefit them and are generally regressive. This is illustrated in the table of who benefits for subsidies for water and fuel in Malawi. In Kenya, studies show that if water tariffs are increased from the current level of US$0.58 to the cost recovery level of US$0.99, the vast majority of Kenyan households could afford the basic subsistence level of consumption of 4 m^3/month as this would generate a monthly water bill of US$4. Given that 70 per cent of households with access to piped water are in the top quintile of the income distribution, a tariff below cost recovery is considered regressive. Similarly in Malawi a cost recovery water tariff of US$4 a month is considered to be affordable for 70% of Malawi's population and certainly affordable for the minority with access to piped water (Bayliss, 2013)
- **Use the revenues as compensation:** Compensation to affected industry or consumers, particularly poor households may be important for political acceptability and to ensure equity, but needs to be done carefully to minimise trade-offs by reducing the environmental and fiscal benefits of a reform. This set out further in the next two recommendations.

- **Minimise or avoid costs on the poor** Tariffs can be structured so that they are progressive - providing a minimum basic needs level of supply for poor people at low or even subsidised prices, with progressively higher charges for higher levels of consumption.

- **Target any subsidies in ways that reach the poor:** Subsidies should be properly targeted by paying them through Social Protection budgets directly to poor households. Clarity of the purpose of subsidies should be a critical part of budget formulation: proper classification of budgets is desirable and payments from the budget should be made where they are most likely to achieve their objectives. This approach is demonstrated for energy subsidy reform in Kenya set out in the box below.

Figure 4.2: Who benefits from subsidies in Mozambique?



Source: World Bank, 2010

- **Demonstrate the problem of subsidies in undermining service quality and expansion:** Water tariffs in Africa in 2011 were around US$0.67 per cubic metre, two-thirds of the cost-recovery threshold in many African countries. Tariffs are already relatively high by developing-country standards, but they still only cover operating costs, which can be as high as US$0.60 per cubic metre in Africa, owing to choice of technologies, low population density in rural areas, lost "non-revenue water" and the high cost of inputs. This means that water utilities capture less than 40 per cent of the revenues they need to operate, imposing an economic burden of 0.9 per cent of GDP in the worst cases. Where these costs are not covered by the government, the utility lacks finances to maintain services and expand water coverage (AfDB, 2011)
- **Target the high level of energy and water revenue that is not collected,** but is lost through illegal connections or physical leakage. This so-called 'non-revenue water' can be as high as 30 per cent in some African countries. It may not always be possible to monetise non-revenue water (NRW) entirely, but if NRW can be reduced it should be possible to reduce operating costs and increase efficiencies, and thus enable better natural resource management.

How to tips for subsidy reform

- **Build coalitions for subsidy reform:** Building coalitions during the design of subsidy reform involves assessing the costs and benefits, winners and losers from fiscal reforms and managing perceptions to ensure that the losers are compensated (often using the revenues from the fiscal measures themselves); or that the public clearly understands that any losses are fair:
    - The key players involved in the reform process include the politicians, the government bureaucracy, the affected private and public sector including unionised employees and the household consumers, especially poor households. Within these groups, there are further subdivisions such different ministries within the government or different groupings within the private sector

- Poor people have typically benefited where there has been a clear commitment to use the revenues from environmental fiscal reforms to benefit or compensate poor households. This has particularly been the case for fossil fuel prices changes, where poor households have been seen as an important political constituency to achieve reform

- Development partners can play a role in supporting the evidence base for reform. However, development partners also need to be careful that they are not seen as intervening too closely in a contested domestic political process. This can be counter-productive if it is perceived that reforms are being "pushed" by external agencies.

Box 4.4: Successful energy subsidy reforms in Kenya

In Kenya, reform efforts led to a new energy policy in 2004 with an increase in power tariffs in 2005 to reflect long-term marginal costs, introduction of an automatic pass-through mechanism to adjust tariffs for changes in fuel costs, and reconstitution of the Electricity Regulatory Commission as an independent regulator.

This led to several improvements in the electricity sector. Power generation increased steadily, distribution losses declined, and the number of customers served by grid-supplied power increased substantially. After tariff increases, the average annual increase in power supply in Kenya was over 5 per cent. Line losses declined from 18 per cent in 2005 to 16 per cent in 2011, and the collection rates increased from 85 percent of total power bills in 2005 to 99 per cent in 2011. In all, electricity access increased by nearly 140 per cent between 2005 and 2011.

The political process was achieved through consultation with the unions which managed the loss of jobs, commitments that increased revenues would be used for increased energy access for poorer households and the use of an independent regulator to create a more transparent process.

IMF, 2013

4.7 Guidance on how to integrate pro-poor environment and natural resources and climate into revenue forecasting

Revenue forecasting is key for fiscal management. All domestic taxation is volatile to an extent as it is linked to the domestic economic cycle. But natural resource revenues and aid for climate-related disasters are also linked to international factors. Natural resource revenues, particularly mining royalties, often depend on international price fluctuations, while disaster financing is vulnerable to changing donor political priorities and international public opinion.

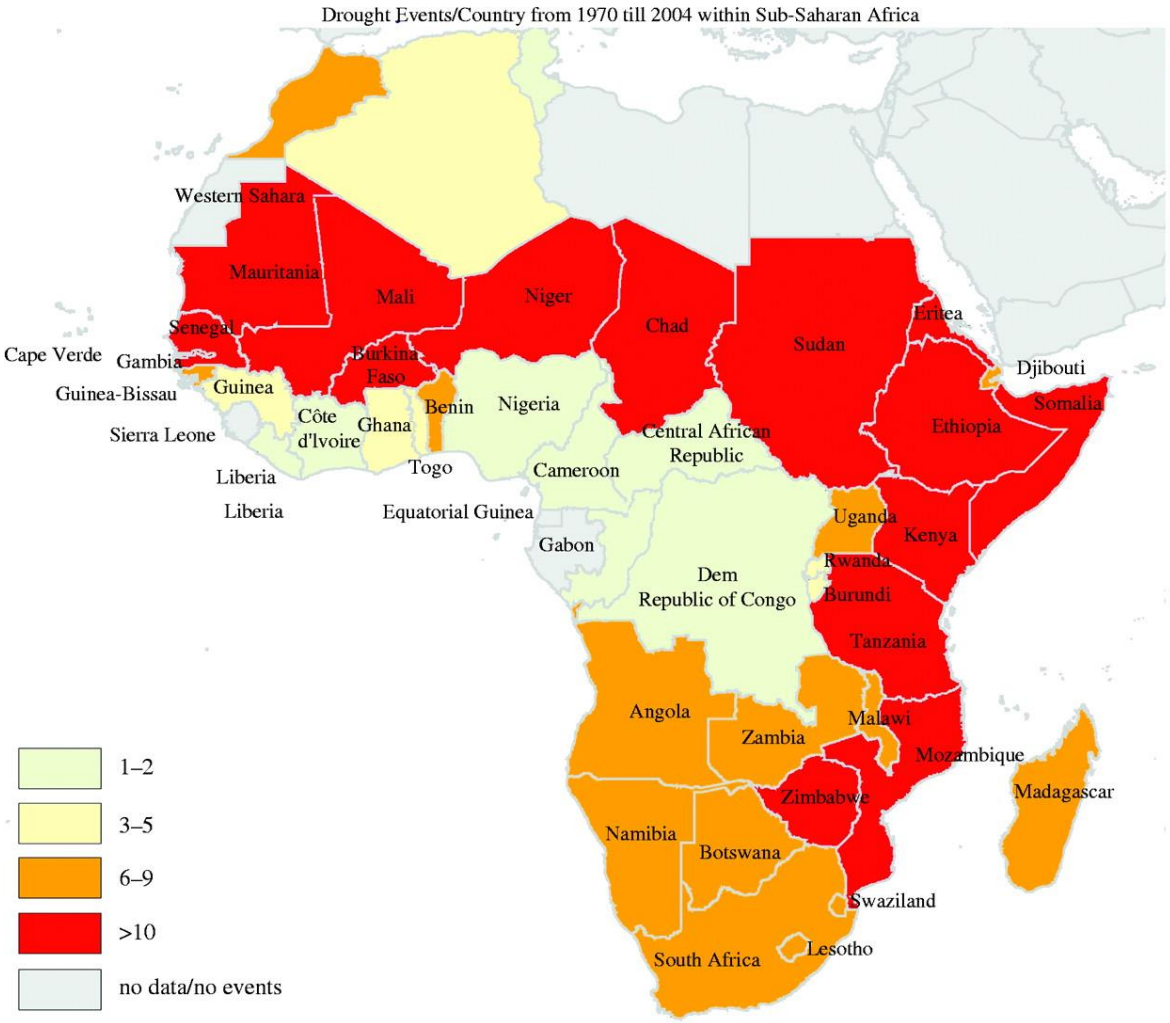
- **Reduce natural resource revenue volatility by effective fiscal management:** Oil and gas, minerals, forestry, fisheries and natural resource-based tourism can provide significant sources of government revenues. Maximising and forecasting these revenues is challenging due to international price fluctuations, driven by global variations in demand and supply. African countries can manage revenue more effectively by effective tax collection, transparency and reduced corruption along with the careful use of the revenues by different tiers of government and over different time periods (now or saved for the future through some form of "fund" as set out in the next section).

- **Set up effective mineral funds to reduce price volatility:** To address oil and gas and minerals price volatility, as well as to ensure macroeconomic stability, many countries are experimenting with sovereign wealth and related funds. Angola, Gabon, Ghana, Mauritania, Mozambique, Nigeria, and Tanzania have some form of oil and gas fund. These have important implications for both poverty and mining. In some cases such as Angola and Gabon, these funds were set up after production had passed its peak. So, with falling production and declining oil prices these funds remain small as a share of GDP. However, these can still be large in absolute terms at over US$1 billion in total capitalisation in Nigeria and Angola. New producers such as Tanzania are also trying the same approach, but it remains to be seen if

these funds will avoid boom and bust cycles and improved fiscal management (Whitehead, 2012 and Olsen, 2015).

- **Stabilise donor contributions for African disasters linked to climate change:** Donor finances for disaster management, which are often linked to climate change, are notoriously erratic. LDCs have received a smaller share relative to other countries, particularly in Africa, and the funds are almost all for post-disaster work rather than disaster reduction. Aid finance for climate-related disasters in Africa remains highly erratic with very low levels of overall financing . For example, the funds available for drought-affected African countries have been very limited. Niger, Eritrea, Zimbabwe, Kenya and Malawi have seen over 100 million people affected by drought over the last decade, but their combined DRR financing has been US$116.5 million – which equals the total sum received by for disaster reconstruction to Honduras alone. (Kellett and Carvani, 2013).
- **Increase donor finance on disaster risk reduction:** Disaster financing is skewed towards post-disaster response. Twelve out of 23 low-income countries each received less than US$10 million for disaster risk reduction over 20 years. These same countries received US$5.6 billion in post disaster response – equivalent to US$160,000 of post disaster response for every US$1 of ex-ante disaster risk reduction. Twelve of the 19 countries that have received only up to US$2 per capita of disaster risk reduction financing over the past 20 years are low-income, with Sub Saharan African countries accounting for 10 of the 12 countries (Kellett and Carvani, 2013).
- **Increase spending on disaster prevention before a disaster:** Overall only an estimated 12 per cent of disaster finance over the last 20 years was spent before a disaster; with 82 per cent spent after the disaster on emergency response, reconstruction and rehabilitation – and this imbalance is much more so in the poorest countries (Kellett and Carvani, 2013). In order to change this equation, and the growing, more predictable disasters linked to climate change, the humanitarian community is experimenting with disaster funds that spend money when disaster warnings are first made – but the sums for this new approach are still small (Coughlan de Perez et al, 2014).

Figure 4.3: Droughts in Africa from 1970 to 2004



Source: Haile, 2005

4.8 Guidance on how to manage donor finance to address pro-poor environment and natural resources and climate issues

- In addition to domestic resource mobilisation, many African countries receive significant funds from international aid flows. These aid flows have several links with pro-poor environment and natural resources and climate. Indeed pro-poor E environment and natural resources and climate remain particularly dependent on foreign aid. Some of these funds, particularly from multilateral and bilateral development partners can be on-budget although they may remain outside the budget, while others are almost always off budget, such as NGO programmes and projects.
- While natural resources, particularly mining, are central to the budgets of many African countries, the same attention is not yet given by African decision-makers to the sustainable management of renewable resources – such as forests, fisheries and wildlife – or to the broader issue of climate change. The result is that these issues are largely left for donor funding by development partners (Muchapondwa, 2014). While donor funding is crucial to close financing gaps it can come with its own challenges. Donor projects may be fragmented with high transaction costs and limited government ownership. This also may lead to a vicious circle where top-up government funding for the environment and climate is seen as a subsidy from

general taxation to environment and natural resources and climate spending, and is thus resented or resisted politically by economic policy makers in Africa.

One way to overcome aid fragmentation is to develop multi-donor sector-wide support (SWAp) with pooled donor funding. Such approaches are not without risks – such as 'substitution' whereby donor funds replace government funds, thus undermining chances of successful sustainability or where donor policy (rather than government policy) drives spending and practices in the sector receiving support

- However SWAps also have some major advantages, grouped around five dimensions as shown below (EC, 2011).

Table 4.2: Ten advantages of sector wide approaches

Policy	1) A clearer sector vision and strategic overview
	2) More effective implementation and consolidation of reforms
Finance	3) A closer linkage between planning and finance
	4) Reduced transaction costs
Co-ordination	5) Better coordination across different stakeholders
	6) Greater involvement of civil society and private sector
Institutions and capacity	7) A clearer overview of institutional roles and responsibilities
	8) Accelerated capacity development
Monitoring and accountability	9) A better information environment
	10) Better governance and accountability of all parties

How to tips for pro-poor environment and natural resources and climate SWAps

Although these pooled donor funding devices are not without bureaucratic difficulty in aspects such as differing disbursement rules, differing financial years and differing audit requirements, they should enable an improved focus on outcomes and should help to avoid duplication and fragmentation.

This is probably best achieved through a written and agreed Joint Funding Arrangement between involved donors and the recipient government. A lead donor should be appointed, perhaps on a rotating basis, for the duration of the arrangement. A lead government institution would also be useful to ensure co-ordination and leadership on the government side in policy and technical aspects of pro-poor environment and natural resources and climate.

Guidance on creating pro-poor environment, natural resource and climate sector wide approaches includes the following (EC, 2011):

- **For government: set up a sector-wide policy and budget with lead institutions and capacity building plan and guided by sector working groups.** The strength of the sector-wide approaches is to take a more co-ordinated approach to government policy, with a clear set of policy objectives and targets for improving government systems. A range of environment and natural resources relevant sectors should be included – not just the core Environment ministry. An environment and natural resources SWAp should include ministries such as agriculture, forestry and water, to reflect the linkages between issues.
- **For donors: set up donor sector working groups and a code of conduct or partnership principles.** Donors may be resistant to taking a more coordinated view among donors. This is particularly challenging during fiscal austerity when aid budgets are under pressure and donors are keen to increase their organisational visibility. Thus an agreed set of partnership principles is vital to establish the rules of the game
- **For government and donors together: agree a reporting framework and joint sector review with clear results-based indicators including improved government systems.** This is at the heart of the sector-wide approach with a way for donors and government to focus on big-picture upstream policy issues to improve sector performance.

How to tips for environment and natural resources and climate sector wide approaches

- **Define the "sector" carefully.** Given that environment, natural resource and climate are cross-cutting, it is not easy to decide on how wide to define the sector. Too narrow limits possibilities, while being too broad can make coordination challenging. Try to ensure that the ministries involved are those that can positively affect performance. In the Africa context, key environment and natural resources sectors include agriculture, forestry and fisheries and energy

The difference between the sector (ie the policy or functional arena that is the focus of effort) and ministries (ie the administrative and institutional entities that will implement the SWAp) is often too vaguely understood or poorly defined. Clarity is key. This speaks to a need for clear organisational structures and clear administrative classification of costs

- **Manage fiduciary risks:** Fiduciary risk will generally be present, often at a high level, with any development activity. This should not prevent an intervention, but it does establish the limits and design of how the SWAp will operate. Mitigations and safeguards should follow the three 'lines of defence' principle[6]:
    - The first line is within *business operations* and may include financial and management reporting, policy information, performance data and system control (including operating manual)
    - The second line is associated with *oversight of management activity* and may include steering committees, donor groups, control units, improvement plans for government, technical assistance and oversight agents in procurement or financial management or other high risk areas
    - The third line is *independent scrutiny* such as external audit or separate evaluations conducted by independent reviewers, spot checks and internal audit
- **Focus not just on short-term results but also medium-term capacity:** With all donor support, there will be emphasis on short-term results, but this must not come at the expense of sustained improved performance through stronger capacity. Support for improving institutional mechanisms, such a co-ordination mechanisms, not just individual capacity is very important. This is important because of high government turnover and vacancy rates in many countries.
- **Establish baselines and set targets:** Baselines are essential to the measurement of progress. Set up well researched, agreed and readily understandable indicators and establish targets. Keep the numbers of indicators small but credible and measureable
- **Strengthen national systems over the medium term:** The sector approach focuses on national systems and strengthening them over the medium term. This should focus on four critical aspects of systems development:
    - Technical solutions (hardware and software and operating processes)
    - Professional skills (ability to operate systems *and* maintain standards of competence)
    - Ethical standards (. demonstrable and sustained commitment to integrity, honesty and transparency in operations)
    - Institutional mandates, functions and mechanisms – such as sector co-ordination mechanisms.
- **Put resources into co-ordination, particularly at the start:** The beginning of a sector approach is especially intensive in terms of time, energy and resources to coordinate government and donors. There should be eventual savings in transaction costs and improved results, but these will take time to appear

[6] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/270485/assurance_frameworks_191212.pdf

- **Ensure that donors are committed:** The sector approach is a medium-term endeavour, where significant up-front investments are made in setting up systems with the goal of later benefits. To make this work, donor support needs to be consistent and predictable.

Some of the ways these recommendations have been followed are illustrated by the Ghana natural resource and environment sector support.

Box 4.5: Example of Ghana's Natural Resource Sector Support

Ghana's Natural Resources Environmental Governance Programme (NREG) provided annual Sector Budget Support for a set of policies and reforms in the inter-related sectors of forestry and wildlife, mining and environmental protection. It was a four-year programme from 2008 to 2011 addressing governance issues for natural resources and environment, with the overall objective of ensuring sustainable economic growth, poverty reduction, increasing revenues and improving environmental protection.

The five participating Development Partners and the government aimed at these direct benefits at the end of five years:

- Improved management of government revenues and finances in forestry and mining
- Reduce illegal logging
- Reduce social conflict in forestry and mining communities
- Integration of environmental considerations into policy formulation and implementation across government, including risks associated with climate change

The evaluation by the World Bank at the end of the project rated it as "moderately satisfactory" and concluded that "Ownership of the NREG Program and associated matrix by the three natural resource agencies, and engagement by Ministry of Finance & Economic Planning have been strong, and is cited as a step-change from the earlier experience in the NRM sectors under a traditional project modality." Some of the challenges of the programme, were its institutional complexity among different government and donors which may have led to increased costs for coordination compared to smaller separate projects.

Government of Ghana, 2010; World Bank, 2011

Sector wide approaches has also been successfully used for environmental service provision as in the water sector of Burkina Faso.

Box 4.6: Burkina Faso's success with a sector wide approach in the water sector

In 2006, a national programme for water supply and sanitation (PN-AEPA) was agreed. This formed the basis of a SWAp in the water sector (PN-AEPA). In 2010, three major donors signed an agreement with the government to establish a sector budget support mechanism for the SWAp.

The SWAp has brought a shared sector vision, with clearer organisation of the sector and division of roles and responsibilities. Allocation of funding now follows priorities more closely. The transaction costs for donors and others are now starting to fall, after a long period of intensive preparation.

There have also been improvements in sector finance. The SWAp developed a sector investment plan, which has helped to prioritise investment and ensure better-coordinated implementation. Financial resources for the sector have doubled since implementation of the PN-AEPA started (up from US$ 61 million to US$ 124 million per year), although the national contributions have not increased as much. There have been substantial improvements in water supply, though this has levelled off. However, there are still gaps in the rural sector, especially for sanitation.

EC, 2011

5. Budget Formulation and Resource Allocation: Pro-Poor Environment, Natural Resources and Climate Integration

5.1 Summary checklist

- *Formulating the budget determines resource allocations so it very important for pro-poor environment and natural resources and climate needs are included.* This can achieved through Budget call circulars which encourage cross-cutting and inter-ministerial and agency inclusion of pro-poor environment and natural resources and climate on a programmatic basis. Guiding principles should be set out in the first and subsequent budget call circulars issued by the Ministry of Finance to all government budget centres.
- *Ongoing engagement in the budget process is very important.* This includes at the national and sector level. For example, if sustainable ENR is a priority in the budget call circular, it is important to influence the agriculture sector budget drafting process so that sustainable land management is prioritised.
- *It is critical for key environment and natural resources sector Ministries, such as Agriculture, Forestry, Water, Fisheries, Energy and Local Government to integrate pro-poor environment and natural resources and climate issues in their budget submissions.* It is actions by these ministries that have the most impact on pro-poor environment and natural resources sustainability, not actions by the Environment ministry.
- *In some case a ministry of environment or natural resources may have* environment and natural resources-*related departments or agencies, such as land, forestry and water under its umbrella. In that case, the ministry needs to engage fully in the budget formulation process at all stages. For example, it needs to* engage with the budget coordinating office of the Ministry of Finance to develop a costed sector strategy for budget submission
- *Environment and natural resources-relateddepartments or agencies must clearly link their budget submission with* environment and natural resources *and other priorities set out in the national development plans, such as for jobs, economic growth and poverty reduction.* The environment and natural resources sector ministries must demonstrate clear connections between strategy, policy and discretionary resource allocations in budget submissions
- *Many African countries have a public investment programme comprising major programmes and projects in the development budget.* This is a key area for Sector Ministries and ENR Ministries have an opportunity to make sure that pro-poor environment and natural resources and climate are included. Malawi, for example, reviewed ways to integrate poverty and environment into the Public Investment Programme, and used this work to revise the relevant Public Investment manual and guidelines.
- *Budget classification is an important step in formulating the budget*. For environment and climate it is possible to “mark” or code climate expenditure so it can be tracked through the budget, aggregated and ultimately compared to input targets (if set) and actual expenditure.

5.2 Where and when to integrate pro-poor environment and natural resources and climate into budget formulation

This section sets out the key steps of the budget formulation process to inform those who are less familiar with this process so they know where and when to integrate pro-poor environment and natural resources and climate issues. The following sections then provide guidance on how to integrate pro-poor environment and natural resources and climate issues into this process.

Integrating of environment and natural resources and climate requires staff to engage on an ongoing basis with the budget formulation process. A large part of this will involve negotiating and agreeing the

development priorities of the country and how resources should be allocated to support them. Key steps of budget formulation are shown in box 5.1 below:

5.1: Basic steps in budget formulation

What are the basic steps in budget formulation process?

- Develop a macroeconomic framework for the budget year (and ideally at least the next two years) of available revenues
- Ministry of Finance allocates this total revenue among line ministries
- Budget department of the Ministry of Finance prepares a budget circular to give instructions to line ministries, with the indicative spending ceiling for each ministry
- Line ministries submit bids to the budget department. Once received there needs to be an effective "challenge" capacity within the budget department to test the costing of budget proposals
- Negotiations at technical and then ministerial level, leading finally to agreement. Where appropriate, Cabinet endorsement of the proposals for inclusion in the budget that will go to parliament.

IMF, 1999

The budget should be prepared in the context of a macroeconomic framework: a medium-term aggregate fiscal policy consistent with government debt and deficit objectives, as well as a developed policy framework reflecting the desired levels of aggregate revenue and aggregate expenditure to be collected and spent for the given financial year and forward years. This stage determines the resources that government has available to fund activities in the coming year with indicative resources, for planning purposes, in subsequent years.

The executive branch of government is responsible for formulating the budget within the available resources, which may include an element of deficit. This deficit may not necessarily be assigned to sectors, although Rwanda did this, having costed its strategy (see box below) within resources made available to ministries.

ENR related Sectors through their institutions will need to reallocate resources based on the ceilings they have been given. This process is often adversarial and final allocations may be arrived at after negotiation or bargaining.

Results-based budgeting (RBB) or performance based budgeting – as committed to by some countries and regional institutions (e.g. UEMOA in Francophone Africa countries), such as Rwanda in the 2016/17[7] call circular – is a more systematic approach to allocating resources based on results achieved. “PBB sets a goal, or a set of goals, to which monies are ‘connected’ (i.e. allocated). From these goals, specific objectives are delineated and funds are then subdivided among them” Harrison (2003). In traditional terms, organisations start building up their long-term plans and cost those plans into annual budgets that are formed as forecasts. Moving towards a budgetary system where projects and programmes are linked to results is intended to improve the management of public resources “Focusing budgetary inputs on desired results can have a profound effect on the quality and efficiency of public sector service delivery … beneficiaries range from children attending better performing schools to mothers using hospitals and clinics with the personnel and equipment needed to deliver better outcomes” (World Bank).[8]

7 http://www.minecofin.gov.rw/fileadmin/templates/documents/Central_Governement/2016-2017%20Budget%20Call%20Circular/CG%202016-17%20First%20Planning%20and%20Budget%20Call%20Circular.pdf

8 http://siteresources.worldbank.org/NEWS/Resources/FormatResults2010-PREM-SB-New-Results-BasedBudgeting.pdf

Methods of driving PBB or RBB typically rely on pre-agreed standards of performance, such as Key Performance Indicators are often used in this process. Programmatic budgeting capacity is also helpful in implementing RBB.

Increasingly African countries are using or moving towards results-based or performance-based approaches. For most, their budget process is an iterative process whereby each year's budget is more or less a mirror of the previous years, with some adjustment for inflation and new salary costs. Even if the budget is an iterative budget, new projects can still be identified under the capital budget, although these tend to be funded through external resources such as from donor financing or through borrowing from domestic or international markets.

This incremental approach reflects the administrative reality that many expenses are legally committed and are difficult to change – for example, payment of salaries is contractually-based, as is procurement-led supplies and services, including capital payments. This typically leaves little scope for genuine reallocations without substantial commitment to managing change. New resources may come from domestic fees, charges and taxation or development partner sources such as loans and grants.

The process of formulating the budget can last from a few weeks to several months depending on the rules of the country, the level of involvement of each ministry in the budget process, and the number of pre-budget steps which are required by law before the budget can formally be approved by Parliament.

5.3 Guidance on how to prioritise pro-poor environment and natural resources and climate in key sectors through the budget call circular

This is the process to match proposed expenditure needs by sectors and districts with nationally determined budget ceilings and priorities. Typically, the budget office in the ministry of finance coordinates this process, requesting information from individual ministries on their financial needs for the given year. This is often referred to as "bids" and typically will be sought after the first budget call circular. It is a fact of life that bids for resources always exceed the resources available. Decisions must be made on priorities for allocating uncommitted resources.

The definition of priorities therefore matters. In many cases there are environment and natural resources and increasingly climate change objectives in the national development plan and these should be included in the r priority setting of the budget.

The next key step is to encourage line ministries and departments to prioritise pro-poor ENR and climate in their budget submissions, consistent with the national development plan where it includes such priorities. Budget call circulars should encourage cross-cutting and inter-agency inclusion of pro-poor ENR on a programmatic basis. Guiding principles should be set out in the first and subsequent call circulars, perhaps with checklists as illustrated by the examples of Malawi and Uganda in Box 5.2.

How to tips for pro-poor environment and natural resources and climate in budget call circulars

- The Environment/Natural resource-related ministry should engage with Ministry of Finance and the key environment and natural resources relevant sectors from an early stage to ensure adequate priority given to pro-poor environment and natural resources and climate
- environment and natural resources ministries works with Ministry of Finance to prepare a budget check list that sets out pro-poor environment and natural resources and climate change objectives in the national and sector plans by ministry.
- Ministry of Finance to identify pro-poorenvironment and natural resourcesand climate as a priority area for Government based on national development plans, sector strategies and other evidence.
- Environment and natural resources Ministries to propose specific reference to pro-poor environment and natural resources and climate in the call circular, also based on national development and environment and natural resources priorities, backed by additional evidence.
- Ministry of Finance to encourage the development of bids aligned to national strategies – this will help to integrate national strategy with sector based plans, institutions and resources

- Ministry of Finance and Planning to encourage and support cross-institutional co-ordination on cross-cutting pro poor and climate initiatives, under the umbrella of the budget process and with the support of the Finance ministry (e.g. highlight the importance of co-ordination to maximise budget effectiveness and efficiency.
- Ministry of Finance to make resources available on a ring-fenced, competitive basis for implementation of pro-poor environment and natural resources and climate priorities
- Ministry of Finance to allow institutions to keep savings (or reduce savings targets) if resources are re-directed to pro-poor environment and natural resources and climate strategies.

5.4 Guidance on integrating pro-poor environment and natural resources and climate into sector investment plans

Once the budget call has been issued, it is up to sector Ministries to develop sector investment strategies. This is particularly important for sectors where pro-poor environment and natural resources and climate issues arise, such as Energy and Agriculture as shown in the boxes.

Box 5.4: Tanzania's climate smart agriculture investment strategy

In 2015, the government of Tanzania published its **2015-2025 Climate Smart Agriculture (CSA) Programme**, a comprehensive framework envisioning an "*Agricultural sector that sustainably increases productivity, enhances climate resilience and food security for the national economic development in line with Tanzania National Development Vision 2025*". The two main premises of the programme are: i) recognition of agriculture as the main driver of economic growth, development, and implementation of the Sustainable Development Goals (SDGs) and ii) recognition of the sector's inextricable link with climate change, associated with a recent 10-year trend of stagnant yields, driving the expansion of cultivation and thus resulting into further deforestation and land degradation. Below are its six strategic priorities as identified in the document, with a select key target outputs and actions highlighted for each area:

Improved Productivity and Incomes

- Specific (%) increases in yields and production incomes from stable crops, livestock and aquaculture, as well as in the extension and productivity of irrigation schemes
- Specific (%) reductions in post-harvest losses through investment in food storage and distribution infrastructure.

Building Resilience and Associated Co-benefits

- Establishment of CSA knowledge hubs across the country and of a CSA platform with data on available technologies and best practices, to support uptake of CSA
- Development and implementation of at least 5 small-scale CSA projects annually
- Development and implementation of weather-indexed insurance packages, along with effective agro-meteorological infrastructure and Early Warning Systems.

Value Chain Integration

- Development of at least two new commercially viable products from each of the stable crops, horticultural crops, livestock and fisheries by 2050.

Research for Development and Innovations (RDI)

- Increase RDI funding by 50% by 2025, focusing on demand-driven and low-cost technologies.

Improving and Sustaining Agricultural Advisory Services

- Agro-climate information services and use of agro-weather products increased by 40% by 2025.

Improved Institutional Coordination

- Establishment of a joint platform for inter-ministerial collaboration focusing on communications strategy, capacity-building, and monitoring and evaluation.

Besides its extensive list of objectives, the Tanzania CSA Programme contains a number of additional features central to its successful implementation. First, it identifies the key regional and national policies in place that are relevant for its implementation and scaling out, aiming towards effective mainstreaming and harmonization. Second, it maps the roles and responsibilities of all the state and non-state implementing stakeholders involved, in a consistent manner that promotes coordination and accountability. Third, it incorporates a participatory monitoring and evaluation framework which will be integrated with annual work plans and budgets, ensuring that technical and financial reports are delivered on time and that targets are met. Finally, each initiative is accompanied by detailed budget estimates under a 10-year financing framework meant to leverage the necessary financial support from the Government and Development Partners.

In May 2016, the Permanent Secretary in the Ministry of Agriculture, Livestock and Fisheries announced that the implementation of the Tanzania CSA Programme is going to start soon during the 2016/17 financial year. Already the CSA guidelines (meant for both the central government and farmers) are under preparation, identifying suitable crops and technologies.

Source: United Republic of Tanzania 2015

Box 5.5: Senegal and Mail's energy sector investment strategies favour renewables

Senegal and Mail are both sector to re-orientate their energy sector investment strategies to focus much more on renewables. Both have very low electricity access with limited power generation from fossil fuels. But both have abundant supplies of renewables including solar, wind and hydro. Senegal has renamed its Ministry the Ministry of Energy and Renewable Development. It is installing a 20MW solar power plant that will double its installed electricity generating capacity. Meanwhile Mali is building a 33MW solar power plant with World Bank support.

African Business, 2015, http://africanbusinessmagazine.com/sectors/energy/west-african-countries-battle-for-solar-supremacy/

5.5 Guidance on a costed pro-poor environment and natural resources related budget submission

In addition to encouraging other ministries to take environment and natural resources seriously as an integral aspect of what they do, it is important for the Ministries of Environment/Natural Resources to engage fully in the budget process The Ministry should start to plan its resource allocations after the first budget call circular to ensure it has adequate time to complete its submission satisfactorily.

Where there is a Ministry of Environment or Natural Resources with a range of environment and natural resources departments or agencies under its umbrella, such as forestry, lands and water, this ministry should take the lead in bringing together all the natural resource implementation agencies to develop a co-ordinated budget submission. The range of departments under ministries of natural resources or environment varies from country to country as shown in the table.

Table 5.1. Institutional leadership for the budget submission by Natural related agencies

Country	Ministry	Agencies
Tanzania	Ministry of Natural Resources and Tourism (MNRT)	Wildlife Division , Tourism Division, Antiquities (Cultural Heritage) Division, Policy and Planning Division, Forest and Beekeeping Division
Malawi	Ministry of Natural Resources, Energy and Mining	Administration and Management Department (responsible for coordinating all departments under the Ministry), Department of Energy Affairs, Department of Environmental Affairs, Department of Forestry, Department of Geological Survey, Department of Mines, Department of Climate Change and Meteorological Services

Rwanda	Ministry of Natural Resources (MINIRENA)	Rwanda Natural Resources Authority (RNRA) Departments: Lands, Mapping & Registrar of Land Titles, Integrated Water Resources Management, Geology and Mines, Forestry and Nature Conservation. Rwanda Environment Management Authority (REMA) Departments: Administration & Finance, Environmental Regulation and Pollution Control, [Research, Environmental planning and Project Development], Environmental Education and Mainstreaming, Climate Change and International Obligations, Legal Affairs. Another agency under the MINIRENA is the Rwanda Meteorology Agency
Mauritania	Ministry of Environment and Sustainable Development (MDEDD)	
Mali	Ministry of Environment & Sanitation (MEA)	Agency for Environment and Sustainable Development (AEDD), Department of Water and Forests (DNEF), Department of Sanitation and Pollution Control and Nuisance (DNACPN), Agency of the Niger River Basin (ABFN), Department of Administration & Finance, [Planning and Statistics Unit for the Sectors of Water, Urban Environment and National Domain], National Agency for the Management of Polluted Sites of Mali (ANGESEM)
Mozambique	Ministry of Land, Environment and Rural Development (MITADER)	Merger of the former Ministry of Environmental Coordination and the Institutes for Land and Rural Development

A key task for environment and natural resource relevant ministries, departments and agencies, including agriculture, energy, land, water and forestry is to link their budget submission with environment and natural resourcesand other priorities such as food security as set out in national development plans. These environment and natural resource relevant MDAs must demonstrate clear connections between their proposed budget and the national level environment and natural resources and other relevant priorities. There is a risk is that ministries of environment and natural resources may be more focused on environmental “protection” than sustainable natural resource management as a contribution to growth and development. This should not be a *post hoc* rationalisation by the ministries of environment or natural resources to link to the national development priorities, such as job creation and poverty reduction, but should be an integral part of environment and natural resources and climate plans and budgets.

Example of a costed pro-poor environment and natural resources related budget submission from Rwanda

Rwanda provides a good example of a clearly articulated strategy linking to the national development plan with a properly costed budget running across the different natural resource sectors. This strategy was coordinated by the Ministry of Natural Resources as set out below in Box 5.3:

Box 5.6: Rwanda's pro-poor environment and natural resources related budget submission

Rwanda's environment and natural resources strategy states that the…

"Objective of this strategy is to ensure that environment and natural resources are utilized and managed productively in support of equitable and sustained national development and poverty reduction. This will be realized in 5 specific objectives:

1. To increase and sustainably manage ecosystems and forest resources to optimize their economic as well as ecological functions
2. To put in place and operationalise an efficient system of land administration and land management that secure land ownership, promote investment in land for socio-economic development and poverty reduction
3. To ensure that development in Rwanda is undertaken in a manner that inflicts minimal damage to the environment, and building resilience to threats posed by climate change for the sustained support to economic, social and cultural development of Rwanda
4. To secure and provide water of adequate quantity and quality for all social and economic needs of the present and future generations with the full participation of all stakeholders in decisions affecting its management
5. To improve the Geology and Mines sub-sector to contribute optimally and sustainably to the national income and to the social economic welfare of the community.

Unlike many such strategies, a proper costing is included. The costing states that the strategy budget for the planned activities over the next 5 years will cost **RWF 164,341,177,000**.

The total funds available (based on estimated GOR budget ceilings and external financing commitments) is equivalent to **Rwf 67, 733, 648, 000** and total projected cost (based on planned activities fully costed which will need additional financing) comes to a total cost of **Rwf 164,341,177,000**.

This implies that, for the environment and natural resources strategy to be fully implemented we will need to mobilize a total amount of **Rwf 96,607,529,000** (Budget deficit) for the sector to meet its set targets."

Source: Government of Rwanda, 2013

5.6 Guidance on how to integrate pro-poor environment and natural resources and climate into the Public Investment Programme

Many African countries have a public investment programme with major programmes and projects provided for in the development budget. This is where environment and natural resources and climate specialists have an opportunity to make sure their required investments are included. Malawi, for example, reviewed the ways to integrate poverty and environment into the Public Investment Programme, and used this work to revise the relevant Public Investment manual and guidelines (see box 5.7), while Tanzania followed a similar process (see box 5.8).

Box 5.7: Malawi Public Investment programme and poverty environment screening

A review of Malawi's Public Investment programme guidelines recommended the following ways to integrate poverty-environment:

1. Impact on surrounding areas or other off-site areas should be considered during the project formulation and appraisal.
2. Analysis of sustainability should be based on full cost benefit analysis whereby project cost should also include operation costs.
3. Projects have to be overseen by inter-sectoral steering committees which should ensure that necessary complementarities are achieved.
4. During procurement of project materials, the beneficiaries of the project should be involved in procuring the materials where possible and necessary.
5. Local conditions like the environmental risks to project success have to be considered at planning stage to avoid subjecting the project to risk of failure due to the local environmental conditions.
6. The project impact and the adequacy of the project solution of the proposed project have to be assessed critically in order to have significant impact on poverty and avoid over-utilisation of the provided resource.
7. During project implementation, unskilled and semi-skilled labour should be largely sourced from the project area so that the local people are empowered economically and to ensure local ownership for sustainability.
8. The community should be assessed (ie consulted) whether it is willing to accept the project or not and the gender dimension should also be included so that both sexes have a chance to participate in the implementation of the project.

These recommendations were used to revise guidelines for Malawi's Public Investment Programme. The 2015/16 budget guidelines state that: "all new capital intensive projects will be required to conduct an Environmental Impact Assessment (EIA) as part of their planning and ensure that budgets are allocated for mitigation measures in the Environmental Management Plan. Technical support will be available through sector focal persons whose contacts are the Director of Environment Affairs Dept".

Source: Ministry of Finance, Malawi, 2014; Government of Malawi, 2015

Box 5.8: Mainstreaming Pro-Poor environment and natural resources and climate into Tanzania's Public Investment Management Operational Manual

Tanzania's first Public Investment manual was prepared in 2015 by the Planning Commission of its President's Office in an effort to enhance coordination and coherence in the government's management of public investments. It serves as a comprehensive capacity-building tool, open to feedback and future improvements. Below are some of its key features meant to instil efficiency, effectiveness and transparency, as well as consideration of poverty-environment issues throughout the multi-step process of public investment:

Effectiveness

- Required environmental and social assessments should be carried out at the project planning phase, starting with the pre-feasibility study which determines if the project is environmentally and socially viable according to the Environmental Management Act 2004.
- Baseline scenarios should be accurate and conservative, outlining what would happen in case the project is not implemented.
- Target beneficiaries and location of implementation should be specified. Any major risks should be documented and possible project alternatives included in the report.
- Assessments should employ state of the art techniques, based on professionalism and cost effectiveness. Cost-benefit analysis should be comprehensive, taking into account the whole lifecycle of the project, including residual and post-completion impact. Cost estimates should take into account the cost of mitigation measures.

**Note that the features above promote a proactive approach where impact prevention is prioritized over mitigation and/or compensation.*

Efficiency & Transparency

- Recommends that the President's Office Planning Commission creates a Joint Public Investment Management Committee (JPIMC) that will consist of qualified representatives from central ministries, including the Division of Environment, the National Investment Steering Committee, as well as the private sector, civil society organizations and the general public. The JPIMC would provide oversight, procure independent reviewers, and grant project approval.
- Recommends creating a Project database that would facilitate more efficient and transparent monitoring and evaluation.

Participation & Inclusivity

- Describes project formulation as a bottom-up process where projects are identified based on local communities' needs and inputs, also linking output with the priorities of the national development framework.
- The project manager is selected from the relevant project sector. If the project covers multiple sectors, then personnel from those sectors are included as well.
- A monitoring and evaluation specialist is part of the project development team and should have professional experience with environmental and social impact assessments.

Source: President's Office, United Republic of Tanzania, 2015

5.7 Guidance on how to integrate pro-poor environment and natural resources and climate into private sector investments related to the budget

Many budgets are funded not just be public investments, but also by private investments – often in the case of Africa from Foreign Direct Investments (FDI). It has been estimated that 14% of government revenues in Africa come from FDI (UNCTAD, 2015). Just as with public investment, it is important that these large scale private investments take account of pro-poor environment and natural resources and climate issues. Indeed many of these investment are in the primary sector such as mining and other natural resources so have considerable impacts on pro-poor environment and natural resources. Other investments are in infrastructure such as energy and transport so have major linkages to climate change mitigation.

FDI inflows into Africa are growing with emerging economies such as China as a major source. The economic, social and environmental impacts of FDI ultimately depend on the nature of the investment and the regulatory setting of the host countries in Africa. This suggests that a strategic approach is needed with countries' developing an Investment Strategy. African host governments need to ensure that FDI supports national development priorities including pro-poor environment and natural resources and climate issues.

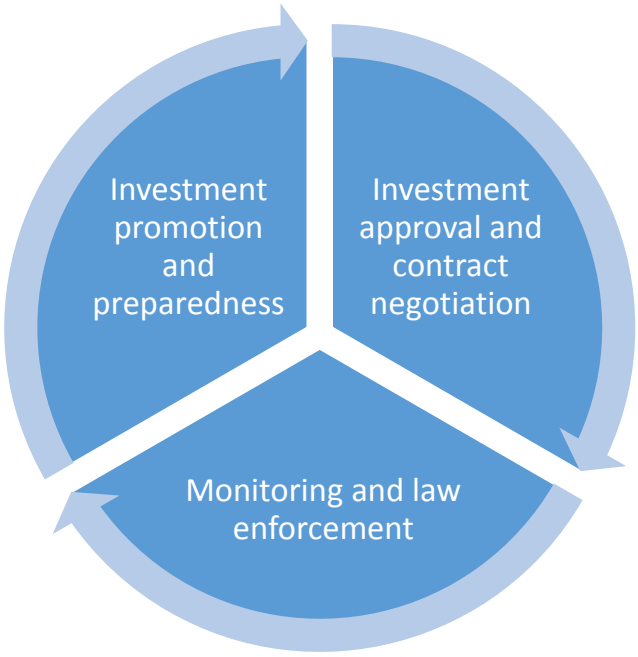
The key to achieve this is to attract responsible foreign investors that want profitable investments, but also want to promote sustainable and inclusive growth. Thus the focus of the Investment Strategy is not only the volume of investment or the number of investors, but their contribution to employment, revenues, technology transfer and sustainable natural resource management. Thus it is the *quality* of the investment that matters more than just its *quantity.*

This will require close coordination between the Ministries in charge of Finance and Planning and the agencies in charge of foreign investment. Sometimes these investment agencies will be in the same Ministry, while in other countries there may be a separate Board of Investment or other such investment agency. It will be important that the agency in charge of investment is also aware of pro-poor environment and natural resources and climate issues and why these should be integrated into the strategy for foreign investment.

The three parts of an investment strategy include (UNDP and UNEP, 2011):

- Investment promotion and preparedness
- Investment approval and contract negotiation
- Monitoring and law enforcement.

Figure 5.1: towards an investment strategy



Pro-poor environment and natural resources and climate issues can be integrated into each of these three steps and this is reviewed further in the following sections.

How to tips on Investment Promotion and Preparedness

- **Host governments should strive to prove a supportive economic and institutional environment, which is the most important factor for attracting FD**I: This includes macro-economic stability, availability of basic infrastructure and a clear regulatory context. This is preferable to excessive tax breaks, which reduce government revenue and may not be the key factor in attracting FDI.
- **A range of policy measures can be used to address imbalances in FDI flows between regions and sectors**: Such imbalances may include attempts by African government to promote natural resource processing and value-addition or to encourage FDI to locate in remote regions. Policy measures to address these imbalances can include fiscal measures, development of special economic zones and associated infrastructure or training for workers.
- **Investment promotion agencies can promote a range of streamlined services including marketing and one-stop-shop facilities:** Marketing can include trade fairs and other publicity to attract responsible FDI. One-stop-shops will include providing access to all the legal and regulatory agencies in one facility or office to speed up the investment application process.
- **Investments in land-intensive activities such as agriculture will need to be carefully managed to ensure pro-poor outcomes**: There is an active debate about the so-called "land-grab" phenomenon. This includes concerns about land sold cheaply to investors with impacts on food security and land conflicts including population displacement. There are also cases when this purchased land is left fallow or undeveloped. The issue was particularly pressing in the mid-2000s when global food prices spiked, but has somewhat declined as agricultural commodity prices have fallen back. There are some examples of good practice emerging as governments in some cases try to improve the outcomes of these agricultural investments.

How to tips on Investment Approval and Contract Negotiation

- **Thorough assessment of proposed investments including formal appraisal and consultation with affected households.** Feasibility studies typically focus on financial rates of return, but it will be important to assess also the economic, social and environmental benefits and costs. Formal negotiation with affected households will be important to avoid any future

conflicts. Often the environmental impact assessment can provide an opportunity for this — but only if consultation with local stakeholders is required and actually happens in practice.

- **Legal contracts between governments and investors can maximise benefits for host countries.** This includes issues related to creation of employment, payment of taxes, technology transfer, welfare of local communities, environmental protection, local procurement and dispute resolution mechanisms. African governments can strengthen their hands with a clear negotiation strategy, strong negotiating team and strong political direction.
- **Increasing transparency such as making some aspects of project approval and signed agreements subject to parliamentary approval or open to the public can also create public and civil society pressure for better contracts.** This is being explored by some countries who are making signed contracts public documents.

Monitoring and law enforcement

- **Monitoring and law enforcement should be a high priority for African host governments**: Weak monitoring and enforcement will mean that contracts will not be followed through and pro-poor environment and natural resources may be ignored. This will require effective sanctions such as suspension of contracts if contracts are being broken.
- **Voluntary third party certification can improve enforcement:** This can include timber or fisheries certification by international bodies which producers, consumers and governments can benefit from.

5.8 Guidance on how to integrate pro-poor environment and natural resources and climate into performance based budgeting

Performance based budgeting can be used as a useful way to integrate pro-poor environment and natural resources and climate as illustrated by Mauritania in Box 5.9 below. Use the SMART acronym when designing an indicator for performance based budgetingDecide what needs to be measured — is it inputs? Number of processes? Quantity of Outputs? – These are easier to quantify and easier to trace to institutional resources. Outcomes and Impacts are longer term measures and causation is difficult to prove

Table 1: 'how to tips' in designing performance indicator

Type of indicator	Description	Example…..	SMART questions
Quantitative indicator	The PI is to be presented as a number – how much was done, how many were delivered etc	The number of trees planted in a forest project	• Is the unit of measurement clearly established? • How is the unit of measurement defined? • Is the business process clear?
Position statement indicator	The PI is presented as an absolute value at a pre-determined point in time.	X Children enrolled in reception classes in a given financial year	• Is the baseline figure accurate? • Is the 'census point' (date) in time readily identifiable in the indicator?
Financial	The PI is presented as an absolute value in	Revenue Collected From The Petroleum	• Is there a target or performance

indicator	expenditure or income	Sector	standard in place?
Incidence indicator	The PI is presented as fraction with a numerator over a denominator. It shows the subject being measured as a % within a defined and known population, usually at a set point in time.	User committees for environment and natural resources community assets set-up by a particular institution (X%)	• Is the population (denominator) known accurately? (ie the number of facilities) • Is the numerator readily countable with confidence? • Can the incidence be determined at the appropriate point in time? • Is the 'census point' in time readily identifiable in the indicator?
Change indicator	The PI is characterised by an action verb and describes the change between two positions.	Awarded secondary school bursaries increased to X thousand in year 2 – from the baseline of Y thousand in year 1	• Is the action verb obvious in the indicator? • Is the baseline (starting point figure) accurate? • Is the end date precise and obvious? • Is the target attainable?
Summary indicator	The PI is presented as a summary of results from a pre-set period – usually a year.	Farmers trained in improved crop husbandry *(during year X)*	• Is the time period (from/to) clear in the indicator? • Is a standard or target set for the quantity in the time-period? • Can the number of units delivered be readily identified? • Can the final objective be identified?
End result and milestone	This indicator is used over a number of years by a	Net enrolment rate at Primary level	• Are the intervening

	Line Ministry and shows the final intended objective as well as the intended position in the coming financial year.	increased from 81.4% in 2007 to 81.8% in 2012 (for example)	milestones made clear in the indicator? • Have intermediate targets been set? • Is the baseline data accurate and how was it calculated? • Can numerator and denominator be measured accurately?
Measurement against a standard (normative)	An expected standard must be established and the indicator is presented as a % achievement	Cyclone shelters Inspected (X partial and Y full inspections conducted)	• Is the standard of performance expected clear in the indicator? (Assume in this case expectation is X % of all shelters?)

The current budgeting system in Mauritania remains the traditional activity based budgets. Moving to programme based budgeting will improve the quality of inter-sectoral coordination, with the goal of implementing joint programmes, involving several departments, such as actions in the field of poverty reduction and the environment. The workshop agreed that the Ministry of Finance should pursue the adoption of a programme-budget approach in future budget cycles with five years to put this in place.

5.9 Guidance on budget classification to include environment and climate[9]

Budget classification is an important step in formulating the budget. For environment and climate it is possible to “mark” or code climate expenditure so it can be tracked through the budget, aggregated and ultimately compared to input targets (if set) and actual expenditure. This is illustrated by Mozambique as shown in Box 5.10 below:

[9] See Chapter 1 and chapter 8 for an extended explanation of coding and classification.

Box 5.10: Mozambique embarks on climate budget tracking system

Following the Public Environmental Expenditure Review, the Ministry of Finance decided to work with the Ministry of Coordination of Environmental Affairs as it then was to develop a climate and environment budget code. Government officials are being trained on how to identify environmental expenditures and then include them within the 2015/16 budget process.

The aim is to introduce the tracking system beyond the government budget (SISTAFE) to include it in the overall classification charts.

Poverty-Environment Initiative Mozambique, personal communication, 2015

Budget tagging is an analytical technique for identifying, monitoring and tracking specified expenditure in the national budget system. This may extend to identifying, reporting, and tracking programmes, projects and activities that are relevant to pro-poor environment and natural resources and climate activity. It is important to note that there are no 'absolutes' in this approach. Results may be subjective, but a well-developed, logical and consistently implemented methodology will enhance year to year and inter-country comparison.

In practice, tagging is implemented in four stages:

- Definition
- Classification
- Weighting
- Designing the tagging procedure.

Definition of Activities: the first stage is to define the activity. For climate related activity some countries use the OECD Rio Markers or definitions set out by Multilateral Development Banks. environment and natural resources activities would typically be set out in the mandates of Ministries or units of government. However, where a unit of government has an indirect or secondary function related to environment and natural resources or climate then the definition of activity and its contribution to the policy objective is important. This should be set out clearly and properly communicated. This is particularly so in the case of a broad cross-cutting policy objective such as support for pro-poor environment and natural resources. Pro-poor definitions are generally broad and may have to be carefully defined to ensure focus.

Box 5.11: How to create definitions of relevant activity and expenditure

- **Establish leadership**: this could be in the Ministry of Finance or Planning Commission. It may take the form of a short life committee or a permanent steering group.
- **Invite Participation**: expertise in Pro-poor environment and natural resources and Climate from within and outside of Government should be invited to participate in the process
- **Build Consensus**: take into account the differing views on definition. Attempt to blend all ideas into a single, recognisable definition.
- **Review and Refine**: circumstances and exceptions may always arise – be open to changing and altering the definition.
- **Communicate Results**: involve stakeholders informatively and proactively and acknowledge their contribution.

Classification of Relevant Expenditure: a method of classifying expenditure related to defined activity should be developed. In climate policy for example, a number of typologies have been developed that assist in the *identification and aggregation* of spend. Examples of a classification in climate include Policy and Governance (PG); Scientific Technological and Societal Capacity (ST), and Climate Change Delivery (CCD, or pillars / themes such as Food security, Social protection and health;

Comprehensive disaster, management; Infrastructure; Research and knowledge management; Mitigation and low carbon management and Capacity building and institutional strengthening have also been used. This frame of reference can then be used to identify relevant (and irrelevant) areas of the national budget which fit the definition and classification. The national budget will typically be classified according to economic and administrative parameters. This identifying classification will give a reasonable indication of where to start on compiling overall figures for each "relevant" policy area.

Box 5.12: How to go about identification and classification

- Look for likely areas in the budget codes. Administrative units such as REDD Cell will be relevant.
- Compile a long list of potentially less obvious areas. Grants to Local Bodies or State-owned Enterprises may fund some pro poor *environment and natural resources* and climate expenditure. If in doubt — leave on the list and eliminate later based on consultation
- Consult with experts on less likely areas for each policy dimension. Grants or less direct spends may still be relevant.

Weighting of Expenditure: when activity is identified and classified as "relevant" it should then be decided what proportion of the expenditure is to be counted. "Relevance" is one way of judging how much to count within a particular budget line. For example UNDP's Climate Public Expenditure and Institutional Review (CPEIR) Guidance[11] sets out the following in relation to Climate Change. This can be adapted to a pro-poor environment and natural resources basis relatively easily:

Level of relevance	Decision on weighting	Guidance for application
High relevance	Weighting more than 75%	Clear primary objective of delivering specific outcomes that improve climate resilience or contribute to mitigation
Medium relevance	Weighting between 50% to 74%	Either (i) secondary objectives related to building climate resilience or contributing to mitigation, or (ii) mixed programmes with a range of activities that are not easily separated but include at least some that promote climate resilience or mitigation
Low relevance	Weighting between 25% –49%	Activities that display attributes where indirect adaptation and mitigation benefits may arise
Marginal relevance	Weighting less than 25%	Activities that have only very indirect and theoretical links to climate resilience

The weighting methodology is a good example of guided but ultimately qualitative and subjective judgement being applied to try to attain consistency for comparison purposes year on year or for evaluation of resource allocations against a national target or standard.

[11] Adapted from UNDP CPEIR Methodological Guidebook (2015)

Designing the Tagging Procedure: design of the tagging procedure should consider the scope and nature of the expenditure to be tagged — essentially this means how the government would like to capture and present the information. Scope may entail decisions relating to on/off budget; recurrent and/or capital or even central versus sub-national government.

Box 5.13: How to decide on a percentage….

Percentages may be fixed or variable within each band. Bases for selecting a percentage within ranges may include an estimate of volume of activity or an estimate the number of staff or time spent on particular activities.

Such information may not always be available — but look in Management Information Systems or other non-financial systems for inspiration.

Other possible bases for 'apportionment' may be floor area within a building — information like this is often available.

These variables will differ from country to country, but issues to consider include:

- The **entry point** to establish budget tagging within the budget process. For example, the budget proposal forms that are returned in response to the Budget Call Circular could be amended to include a budget tag which indicates whether the activity is climate mitigation or adaptation – or need a pillar or theme as with other methodologies. Drop down boxes or fields may be added to software based systems to enable this. This approach has the advantage of encouraging line ministries, agencies and local governments to consider relevant policy drivers early in the budget compilation process. However, off-budget items will not be captured.
- **The level of information to be tagged** should also be considered. This means whether expenditure will be tagged across different classifications[12] such as economic classification (personnel, capital, financial expenses, etc.), programmatic classification (programme/ project/ activity/ sub-activity levels) or administrative classification (ministry/ department/unit). If both budget and expenditure are to be captured, then a common chart of accounts is a highly useful development.

[12] See Figure 3.1: Chart of Accounts Structure – example of Uganda

6. Budget Approval: Pro-Poor Environment, Natural Resources and Climate Integration

6.1 Summary Checklist

- *Parliament, as the legal and democratic authority of the country, plays a key role in approving both the budget and related natural resource legislation.* Parliamentary Environment or Natural Resource Committees, or equivalent, therefore play important roles in reviewing relevant legislation including budgets, as in Uganda
- *In countries with a significant mining industry, parliament can play a major role in how the mining revenues are collected and used, as in Ghana*
- *The Budget Speech, delivered by the Finance Minister to Parliament, is a principal way of communicating Ministry of Finance policy and priorities so inclusion of pro-poor environment and natural resources and climate is a key indicator of successful integration.*

6.2 Where and when to integrate pro-poor environment and natural resources and climate into budget approval

- This section sets out the key steps of the budget approval process to inform those who are less familiar with this process so they know where and when to integrate pro-poor environment and natural resources and climate issues. The following sections then provide guidance on how to integrate pro-poor environment and natural resources and climate issues into this process.
- Once formulated, the budget is approved according to the established national process, which often involves negotiations between the executive and legislative branches of government. Parliament usually has the ultimate approval/veto for the budget
- During the second stage of the budget cycle, the executive's budget is presented to the legislature for consideration (which may include hearings in various budget and parliamentary committees). The budget is then approved by Parliament and adopted into budget law, based on guidance provided under the budget calendar. A country's legal framework will determine the types of changes the legislature can make
- The budget is often presented in the Budget Speech to Parliament by the Finance Minister – in Uganda the MTEF is also presented. The Budget Speech is important for communicating government policy and priorities around fiscal policy, debt and deficit. This inclusion of pro-poor environment and natural resources and climate issues in the Budget Speech is a key indicator of successful integration
- Once the budget is approved, the budget is codified (vote on account) and allocations are made on a monthly or quarterly basis to each Ministry, department or agency (MDA) generally through the integrated financial management system (IFMIS). A publication, often available online, will summarise the appropriation by administrative (ie by each MDA) and economic classification (by each line item)
- Some appropriation documents contain analyses of the budget by gender, poverty or climate policy dimensions. Depending on the country's rules and regulations for budget releases, these can take place monthly or quarterly. Once an MDA receives approval to spend (funds release) they will start spending their budget appropriations based on its sector plans and budget submissions
- The legislative branch of government may first approve a vote on account, which is based on an administrative (or occasionally sectoral or functional) breakdown of the budget, such that a first monthly or quarterly budget appropriation is released in advance of the actual budget being approved. This can undermine the budget process as ideally no funds should be released by Treasury until the formal budget approval process has reached its end. However, it is often the

case that budget calendars are not properly aligned with the fiscal year and that is why these types of situations develop.

6.3 Guidance on how to integrate pro-poor environment and natural resources and climate into budget approval

Parliament, as the apex democratic and legal authority, plays the main role in approving the budget and related natural resource and climate legislation. Often parliaments have agriculture, natural resource, environment and climate committees or equivalent, which will review relevant legislation including budgets; these clearly have potential to ensure the pro-poor environment and natural resources and climate change budget is appropriate.

Box 6.1: Uganda's parliament plays a strong role in reviewing water sector budgets

A review of the role of Uganda's parliament on water and sanitation issues found that the parliamentary natural resources committee had an active role in budget review by recommending the following

1. **Sufficient funds** should be provided to enable Ugandans access clean water and sanitation. Government should intensify its efforts in seeking for donors to finance projects. In cases where donors are not forthcoming local funds should be mobilised. This would definitely reduce government spending in the health sector.

2. **Monitoring:** Government should streamline rehabilitation of boreholes, and funds sent to the Districts for this purpose should be well monitored. The ministry should come up with standard rates for construction of boreholes based on proper surveys, without this contractors will continue taking advantage of "wanainchi". Government should strengthen supervision of water activities in districts. Companies and individuals who provide shoddy work should be black listed and funds recovered.

Source: Water Aid, 2011

In countries, where mining is a significant economic activity, parliament can play a major role in how these mining revenues are collected and used as in Ghana.

Box 6.2: Ghana's parliament scrutinising oil and gas revenues

In November 2014, Ghana's Minister of Finance tabled before the country's parliament the government's 2015 budget and economic policy statement. The budget statement included general economic revenues as well as projections for 2015 petroleum receipts.

For these oil and gas revenues, two parliamentary committees—finance and mines and energy—play key roles. One important issue of debate was the finance committee's discussion of different oil price scenarios. The proposed budget makes projections based on a price of US$99 per barrel—significantly higher than the current Brent crude price.

The committee explored implications for petroleum revenues and the budget, especially given Ghana's cap on withdrawals from the stabilisation fund, which is the financial buffer—generated from oil revenues — to meet any shortfalls in government projections.

A second debate by the mines and energy committee was to begin assessing revenues that will come from gas projects in 2016 and beyond.

Source: Fusheini, 2014

How to tips for budget approval and pro-poor environment and natural resources and climate integration

- The draft budget may be scrutinised by the Climate Change or environment and natural resources related Committees
- This can be done as part of the statutory process and can be included in regulations
- Make the committees more effective with programmes of technical training for members
- Support the committees with a strong, well-staffed secretariat
- Allowing multi-period or multi-year approvals to spend for critical pro-poor environment and natural resources and climate budgets will enable faster and more responsive spending and thus a more even level of service
- Specify the parts of the vote on account that have multi-period approval by referencing the administrative and economic code
- Communicate this in the budget speech and by letter to the institutions
- Programme the IFMIS system to implement the pro-poor environment and natural resources and climate initiatives

6.4 Guidance on how to integrate pro-poor environment and natural resources and climate into the Budget Speech

Environment and natural resources and climate issues may be referenced in the Budget Speech by the Minister of Finance to Parliament as this is a principle way of communicating policy and priority in respect of pro-poor environment and natural resources and climate – as shown in the example from Uganda.

Box 6.3: Uganda: 2015/16 Budget speech sets out pro-poor environment and natural resources and climate priorities of Minister of Finance, 11th June 2015

95. Madam Speaker, as we are all aware, the legal framework for the management of Oil and Gas Resources has been finalised. These include the enactment of the Petroleum (refining, gas conversion, transmission and midstream storage) Act 2013, the Petroleum (Exploration, Development and Production) Act 2013 and the Public Finance Management Act 2015. The relevant institutions, including the establishment of the National Oil Company and the Petroleum Authority of Uganda, are also being finalized to ensure prudent management of the Oil and Gas resources.

120. Madam Speaker, an allocation of Shs. 547.3 billion has been approved for the Water and Sanitation sector. Key interventions will be on increasing access to safe water in rural and urban areas; increasing sanitation and hygiene in rural and urban areas; and increasing functionality of water supply systems. Government will continue to provide safe water and hygienic sanitation countrywide

121. Madam Speaker, in an effort to provide improved urban hygiene, sanitation and protection of Kampala's natural environment there will be an expansion of sewer network coverage within the metropolitan Kampala. The construction of Kinawataka sanitation infrastructure will also be commenced.

122. Madam Speaker, Government's objective in the Water and Sanitation sector is to increase rural and urban access to safe water supply to 65 percent and 100 percent, respectively in financial year 2019/20; as well as increase sewerage coverage to 30 percent in towns with population greater than 15,000 people.

141. Madam Speaker, for environmental concerns, a temporary action has been taken to increase the environmental levy on used motor-vehicles from 20 percent to 35 percent for motor vehicles of 5-10 years old and to 50 percent for those above 10 years. However, this excludes Goods Vehicles.

http://www.parliament.go.ug/new/images/stories/speeches/bud15.pdf

7. Budget Execution: integration of Pro-Poor Environment, Natural Resources and Climate

7.1 Summary checklist

- *Budget execution is the processes by which the financial resources allocated to institutions are directed and controlled towards achieving the purposes and objectives for which budgets were approved, in this case pro-poor environment and natural resources and climate objectives*
- *Procurement policies can promote pro-poor environment and natural resources and climate issues.* An example is for support to small and medium scale enterprises in pro-poor environmental service provision, such as water and sanitation
- *In many African countries, budgeted commitments by Ministry of Finance in the budget do not match the lower actual sums disbursed by line agencies*. This can particularly affect pro-poor environment and natural resources and climate programmes. This can be addressed both by convincing Ministries of Finance that pro-poor environment and natural resourcesis a priority and by ensuring that line agencies (such as agriculture and energy) do not underspend on their pro-poor environment and natural resources and climate projects
- *To make sure that managers of spending units or Ministries execute the budget well, including for pro-poor environment and natural resources and climate, they must exercise good governance through transparent processes, controls and accountability mechanisms which are accessible to everyone*
- *Internal control can help to assure climate-sensitive and environmentally friendly ways of working, as well as managing fiduciary risks in executing the budget*
- *Donors tend to prefer capital projects with visible, quick results.* Asset management and financial sustainability are also often neglected disciplines at the design and implementation stages for many donor funded projects including pro-poor environment and natural resources activities which are often donor financed. However, budgets for operations and maintenance of pro-poor environment and natural resources projects can be structured and managed to ensure effective implementation by altering their character from variable to fixed costs built on longer-term, legally binding commitments with external (or even internal) contractors

7.2 Guidance on Where and When to integrate environment and natural resources and climate in budget execution

This section sets out the key steps of the budget execution process to inform those who are less familiar with this process so they know where and when to integrate pro-poor environment and natural resources and climate issues. The following sections then provide guidance on how to integrate pro-poor environment and natural resources and climate issues into this process.

Objectives of budget execution

Budget execution is the processes by which the financial resources allocated to institutions are directed and controlled towards achieving the purposes and objectives for which budgets were approved. The process involves compliance with both legal and administrative requirements. Essentially, this is the implementation phase of the annual Public Financial Management cycle. The objectives of the budget execution phase are:

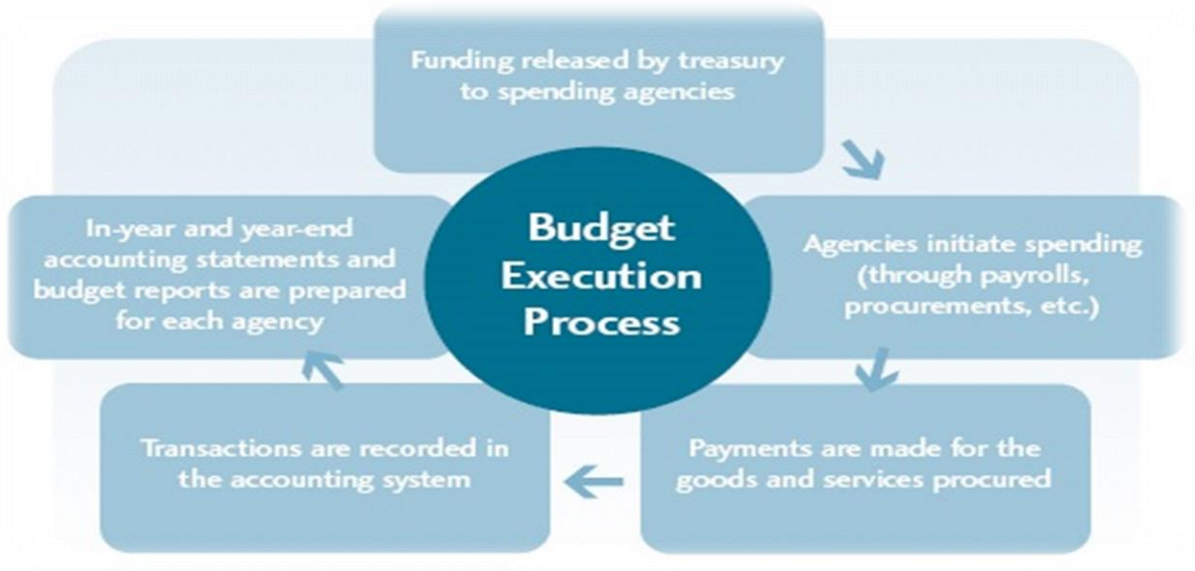
- To implement the budget as formulated and authorised with as little distortion as possible, but to adjust to changing circumstances (e.g. unanticipated shocks such as natural disasters) by modifying the budget as necessary during the year

- To ensure that budget modifications ("virements[13]") during the year are done with due regard to legal process, after careful consideration of the facts, transparently and in a way that promotes government's chosen objectives
- To provide a context for spending institutions which is conducive to orderly budget execution, ensuring that there is an appropriate balance of controls between line ministries and central ministries
- To ensure that the budget is executed with due care, economy, efficiency, effectiveness and in an orderly and ethical manner
- To contribute to the achievement of government economic and social objectives in the sectors of the economy benefiting from budget funding
- To provide a means of achieving the macroeconomic goals of fiscal policy (e.g. to achieve a target deficit and level of borrowing).

The process of budget execution

The process and components of budget execution are shown below[14]:

Figure 7.1: components of budget execution



Budget execution is an annual process implemented by the Ministry of Finance and line ministries. The lowest level of implementation is a 'spending unit' which is an administrative sub-unit of a line ministry. The process is governed by rules and operates to a timetable that enables cash resources to be made available to spending units (institutions) in order for them to function and deliver services to beneficiaries. Broadly, the process follows these steps:

- Initial authority to spend ("funds release") is released to institutions in line with the value and classification of their approved budget. This approval to spend is phased (on a monthly or quarterly basis) depending on national practices and the nature (e.g. fixed or variable, legally committed or otherwise) of the classifications involved

[13] An administrative transfer of funds from one budget line to another undertaken during the financial year

[14] Source: (Ramkumar, 2008)

- Spending units acquire goods and services through procurement systems and pay staff via payroll. Payment systems such as cash advances, direct electronic cash transfers and cheque payments are used to settle liabilities ("settlement") arising from spending
- In many African countries subsequent funds release events are conditional upon spending units spending their original release in full. If a spending unit has not spent its release in full the treasury function of the Ministry of Finance may withhold some or all of the next release until commitments are made or liabilities settled to the value of the original authority to spend
- Settlement of liabilities is effected by the Government Treasury by cheque, electronic transfer or by cash advances given to a third party such as an agent or a government official. The Government Treasury is often decentralised and may have multiple bank accounts. In some countries, including Nigeria, Kenya and South Africa, an operational apex bank account consolidates all receipts and payments. This is called a Treasury Single Account (TSA)
- A TSA is a unified structure of government bank accounts that gives a consolidated view of government cash resources. Based on the principle of unity of cash and the unity of treasury, a TSA is a bank account or a set of linked [bank] accounts through which the government transacts all its receipts and payments[15]
- In most countries unspent budget balances at the end of the financial year are forfeited by spending units ie they cannot be carried forward to a subsequent accounting period. In countries with no TSA this will mean that cash is ''swept'' back to the central treasury bank account at the year end
- Classified receipts and payments are monitored by the Accountant General during the year on a frequent and regular basis. Some countries produce a daily paper or on-line report of aggregated receipts and payments
- At the level of spending units, reports may be produced by the Accountant General for management monitoring purposes on a monthly, or quarterly basis
- In some spending units a separate record of expenditure is also maintained. This record should be reconciled to the Accountant General's record on a frequent and regular basis, at least monthly, to ensure the integrity of information used by the spending unit's management to monitor expenditure
- Virement of resources between administrative units and economic items should be controlled by strict criteria and approved prior to formal adjustment to budgets. Justification should be provided prior to executing changes. As virement represents a departure from the activity and resources approved by Parliament at the beginning of the year, it should be properly controlled, transparently disclosed and within limits of delegated authority
- Annual Financial Statements are a statutory requirement in most countries and must be published within a specific timescale. They are compiled within a financial reporting framework such as IFRS[16] or IPSAS[17] and are produced by the Accountant General. These statements are independently audited by the Auditor General and are presented to Parliament (see chapter 8).

[15] Treasury Single Account: Concept, Design, and Implementation Issues Sailendra Pattanayak and Israel Fainboim (IMF 2010) - https://www.imf.org/external/pubs/ft/wp/2010/wp10143.pdf

[16] International Financial Reporting Standards (IFRS) is a single set of accounting standards, developed and maintained by the International Accounting Standards Board with the intention of those standards being capable of being applied on a globally consistent basis—by developed, emerging and developing economies—thus providing investors and other users of financial statements with the ability to compare the financial performance of publicly listed companies on a like-for-like basis with their international peers.

[17] The International Public Sector Accounting Standards Board (IPSASB) develops IPSAS, accrual-based standards used for the preparation of general purpose financial statements by governments and

Limitations in budget execution processes

Although a rather smooth process of budget execution has been described so far, it is the case that many African countries will report a high level of budget variance at the end of the financial year. Budget execution figures will not match the approved budget, with consequent effect and impact on activity and achieving general objectives.

There are many reasons why the budget as executed may be lower to that which was committed by Parliament. In the case of pro-poor ENR and climate, this illustrates areas that may need attention in the context of assessing the outcomes of pro-poor ENR and climate change budgeting. Good governance through internal control is key. To reduce variation between commitments and execution requires transparent processes, controls and accountability mechanisms including being accountable to the public, which can help improve budget execution.

Some points to consider are set out in Table 7.1

Table 7.1: Possible reasons for deviations between budget and outturn

Cause	Explained…
Limited budget planning and cash management practices	• Budgets are based on unrealistic revenue and expenditure projections due to limitations in the macro-fiscal framework and its projections • There are dual budget systems (development and non-development for example) meaning there are separate and conflicting mechanisms for compilation • Future and contingent liabilities are not covered in the budget (financial provisions or accounting reserves for these should be created as a risk management response) • Financial coverage of the budget is seriously incomplete, meaning there are activities and income streams that are not recognised or incorporated within the annual approved budget • The budget timetable is compressed, allowing little time for parliamentary scrutiny. This arises due to weak compliance with timetables • Ministry of Finance does not effectively plan cash flows throughout the Fiscal Year resulting in crisis spending late in the financial year at the expense of early and orderly implementation of the budget • MDAs may not have ready access to cash during the early quarters due to late approval to spend • Phasing of funds release may not properly match the behaviour of costs
Constrained Public Financial Management Systems	• Expenditure control is limited , the government releases funds from the treasury to a recipient MDA which does not have the capacity to spend their budgets • There is no single central treasury account and there may be thousands of bank accounts sitting with unused funds leading to cash management problems and the accumulation of arrears • The accounting framework, usually cash-based, does not provide useful management information, such as tracking commitments • Only part of the budget is included under the IFMIS so a full picture of budget expenditures is not available • In some countries there is a parallel budget in operation which is not subject to the normal controls of the national budget • Procurement systems and practices lack compliance and fail to be

other public sector entities around the world. Through these standards, the IPSASB aims to enhance the quality, consistency, and transparency of public sector financial reporting worldwide. There is also a stand-alone cash based financial reporting standard produced by IPSASB

	completed effectively • Virement is poorly understood and inappropriately applied
Governance and institutional impediments	• Lack of commitment to meet budget targets and weak accountability by high-level authorities to hold wrong doers to account • High levels of corruption where funds are used for non-budgeted items or simply disappear from the system • The Ministry of Finance is unable to enforce fiscal discipline over spending units, which may be protected through political patronage systems especially at the decentralised level • "Virement clauses" and supplementary budgets are routinely used to shift funds within government or spend additional money within a program or agency • There is weak coordination between budget institutions for example the government is divided through a Ministry of Planning and Ministry of Finance and there is a lack of coordination across budget functions • There is a weak legal framework which makes prosecuting corruption and other forms of financial mismanagement • There is fragmentation of mandates and unclear or confusing division of responsibility in policing of financial mismanagement; For example some countries have an anti-corruption commission, an anti-money laundering agency and police, thus creating reporting and referral issues for citizens • External audit is poorly resourced, lacks trained staff in financial, performance, compliance and IT audit; audit reports are delivered late, may be observation based, superficial and adversarial and are therefore not useful • There is no enforcement by the executive to implement SAI recommendations • Internal control systems and internal audit are ineffective and compliance by MDAs is weak

7.3 Guidance on budget commitments versus disbursements in pro-poor ENR

One of the key steps to effective budget execution is to ensure that projects and programmes are well implemented in line with budget commitments. One good case study is a large multi-donor funded project for climate smart agriculture in Rwanda.

Box 7.1: Rwanda's pro-poor sustainable agriculture programme

The Land Husbandry, Water harvesting and Hillside irrigation LWH project, a US$ 113.3 million and multi-agency collaborative effort with the Government of Rwanda, was launched in 2009 as a response to the increasing vulnerability of Rwandan farmers. Due to increasing demographic pressures, cultivation has been expanding towards the hillsides where productivity is low and the land is highly susceptible to soil erosion. At the same time, irregular rainfall patterns due to climate change have been exposing farmers to higher risks and losses, against which most of them are lack insurance due to insufficient capital. To address such a complex issue, the LWH project invested on a number of CSA initiatives to a 101 pilot watersheds covering 1.6% of the country's arable land. On the productivity front, land conservation and irrigation practices and technologies were introduced, including terraces and reforestation/afforestation. On the mitigation front, hillside irrigation was powered through hydropower electricity and hand-operated pumps. On the adaptation front, there were capacity-building trainings on farming as well as business skills, meant to increase resilience and livelihood options for small-scale farmers. Greater access to microfinance through the creation of farmers' groups and credit cooperatives were also end-products of the LWH project. Overall, 2,689 households and more than 100,000 people benefitted from the programme, for example through steep increases in crop yields and job creation for 22,000 farmers.

Through these initiatives, the LWH project addressed many of the country's development priorities as laid out in key national policy documents such as the Economic Development and Poverty Reduction Strategy (EDPRS), the Strategic Plan for the Transformation of Agriculture in Rwanda (PSTA III), the Irrigation Master Plan (IMP), the National Adaptation Programmes of Action to Climate Change (NAPA), and the National Strategy for Climate Change and Low Carbon Development (NCCLCDS). It targeted priority areas such as reduction of poverty, higher food security, rural development and income-diversification, integrated water resource management, and modernization of Rwandan agriculture through transition from subsistence to commercial activities.

Beyond the LWH project, numerous other CSA initiatives are taking place at a national level, for example the development of drought-resilient pastures, a weather-based index insurance program, subsidized loans and microfinance. These policies require strong institutional cooperation both horizontally (between Ministries and the Rwanda Environmental Management Authority) and vertically (international development agencies, the Development Bank of Rwanda, local farmers' syndicates). They also require tapping into multiple funding sources both national, such the National Fund for Environment and Climate Change (FONERWA), and international through multilateral, bilateral and private actors. Finally, they require scaling out, which is particularly challenging when the majority of farmers are small scale and lack the capital required to adopt them. For this reason, a top priority for CSA programmes in Rwanda right now is expansion of credit, loans and insurance schemes, for a drastic increase in their outreach, impact and contribution to the country's development targets.

Sources: World Bank 2015; MINAGRI 2014; Republic of Rwanda 2011; MINITERE 2006

However effective implementation is not always the case. In many African countries, the budgeted commitments by Ministry of Finance in the budget differ from the lower actual sums disbursed by line agencies. This can particularly affect environment and natural resources and climate programmes for the following reasons:

- Low priority by Ministry of Finance given to environment and natural resources and climate change allocations means the latter may be vulnerable to reallocation to higher priority allocations like health, transportation or energy
- Underspending on E environment and natural resources programmes (e.g. natural resource related agencies fail to spend all their budget) which may result in reduced allocations in future. Underspending may be caused by the complexities of integrated environment and natural resources projects with lack of clear institutional mandates, multiple permissions needed and weak capacities for integrated working.

Lower and delayed disbursement can have particular impacts on natural resource investments and maintenance when seasonality and/or complete coverage is important as shown in the box.

Box 7.2: Low disbursement of forestry budgets

A World Bank Public Expenditure Review of the forestry sector found low rates of disbursement in forestry projects. Reasons given for this included the following:

- Delays in the disbursement of budgeted funds by the Ministry of Finance
- Difficulties in complying with the different requirements of the numerous Development partners concerning procurement and administrative procedures
- Internal institutional weaknesses involving the various executing agencies (including weak implementation plans), compounded by a weak monitoring system for tracking the delayed disbursements of approved funds.

In Kenya, "Releases to the [Forest Department] have not been timely, especially given the seasonality of forestry operations. These releases are also erratic and lower than the actual annual provision in the printed budget"

World Bank, 2011a

This needs to be addressed by convincing Ministries of Finance that environment and natural resources is a priority and ensure that line agencies do not underspend on environment and natural resources projects by building capacity so that the complex requirements of disbursement can be met.

7.4 Guidance on operations and maintenance funds for pro-poor environment and natural resources programmes

A challenge of donor dependency is that donors prefer capital projects with visible, quick results. Asset management and financial sustainability are often neglected disciplines at the design and implementation stages for environment and natural resource projects such as forestry.

Maintenance budgets are vulnerable to reduction, reallocation or neglect of implementation as they are genuinely variable costs. Commitments are often made on an 'as and when' basis rather than on a legally binding and regular basis (such as payroll, loan interest or capital payments to contractors).

If budgets are not legally committed then proactive management action is required to spend. Where budget execution activities such as procurement systems may have a tendency to be overly bureaucratic or lethargic, especially for multi-agency activities such as in environment and natural resources and climate change , this may take what seems to be disproportionate effort and time for what is relatively small sums of money.

A World Bank review of forestry expenditures (2011a) concludes that: "A common feature in many developing countries is the failure to provide sufficient recurrent funds to service the demands of capital spending (for example, to meet the requirements for operations and maintenance) thus undermining the overall quality of investment in the sector. This is particularly the case in the forest sector, where Development Partners provide much of the budget. There is widespread evidence of investments being undertaken with the support of Development Partners, with insufficient regard for the government's capacity to maintain them."

The review (World Bank, 2011a) continues: “Operations and Maintenance funding in forestry departments in developing countries is often inadequate for two reasons. First, public employment pressures mean that wages and allowances tend to dominate the recurrent budget. Because wages are fixed in the short to medium term, the effect of any funding shortfall on nonwage recurrent expenditures, including Operations and Maintenance, is amplified. Within nonwage recurrent expenditure, Operations and Maintenance is particularly vulnerable because in any one year it is a discretionary expenditure; except for times of crisis, it can be put off until the following year. Even where Operations and Maintenance expenditures are included in the budget, they are vulnerable to reallocation in emergencies owing to their readily variable nature, until Operations and Maintenance itself is in crisis.”

Maintenance budgets can be structured and managed to ensure a better chance of implementation by altering their character from variable to fixed costs. Fixed costs may be derived by creating projects with longer-term, legally-binding commitments with external (or even internal) contractors. This approach will create clear resource allocation imperatives and implementation incentives that reduce the risk of reallocation or failure to implement.

Longer-term financial commitments for maintenance may also be integral to financing instruments involving private capital and Public Private Initiatives or Public Private management arrangements. This is often the case with energy or water utilities that charge users for units of supply.

How to tips for asset management plans and pro-poor environment and natural resource programmes

- Identify mission critical assets – not all assets are of equal importance to the delivery of services. A simple classification could ‘core’ and ‘non-core’ assets
- The most critical assets may not be the biggest or most expensive. Consider what each asset does when deciding on criticality
- Prioritise maintenance and management of mission critical assets to support service demands
- Prolong critical asset life by implementing planned maintenance schedules
- Set timescales for longer term rehabilitation, repair, and replacement decisions
- Develop security and safety policies to protect each critical asset.

7.4 Guidance on including pro-poor environment and natural resources management in procurement

Procurement policies play a crucial role in determining how large amounts of public funds are disbursed and so can be an effective method for promoting pro-poor environment and natural resources and climate issues. For example environmental service provision can be done in ways that use small and medium scale enterprises (SMSEs) where poor women and men are typically employed. This may require specific approaches to avoid these SMSEs being pushed aside by larger enterprises. An example is given in the box for support to small and medium scale enterprises in sanitation l service provision – with an example from water and sanitation programmes in South Africa.

Box 7.5: Procurement for pro-poor sustainable water resource management by South Africa's Ministry of Water

South African Minister Nomvula Mokonyane on 11 May 2016, presented to Parliament and the people of South Africa the Budget of the Department of Water and Sanitation for 2016/17. In her speech the Minister declared "We are committing ourselves to fundamentally transforming the sector and ensuring that our people do not solely benefit as tap openers but play a meaningful role."

In the year 2015/16 the department spent a total amount of R13.5 billion on the procurement, of which only minimal amount of R2.2 billion was spent on SMMEs. "This must change" the Minister committed "In its annual performance plan, the department has committed to including a 30% set aside for qualifying small enterprises" she added.

In future, the procurement process will ensure that women, youth and persons with disabilities are specifically targeted. Together with the water boards and entities the department will invest in skilling, especially young people to build dams and deliver sanitation infrastructure.

South Africa, 2016, http://allafrica.com/stories/201605120760.html

7.6 Guidance on including environment and natural resources and climate in budget classification

Budget classification is key to track and report on budget execution. Budget classification is governed and controlled by a Chart of Accounts – the relevant international standard is the Government Finance Statistics Manual (GFSM 2014[18]). The chart of accounts typically comprises two main dimensions – Administrative (ie spending unit) and Economic (i.e. salaries, supplies etc.).

The administrative dimension is useful in identifying the location of climate or environmental spend. The level of detail in the administrative chart may be determined to give more information.

GFSM 2014 also sets out the Classification of Functions of Government (COFOG). Most governments report to the International Monetary Fund (IMF) annually based on this dimension. The environmental protection dimension of COFOG sets out a range of standard climate and environmental classifications (see Section 705 page 158+). A mapping mechanism is required to reclassify transactions from the economic / administrative bases used by governments to COFOG. This can often be achieved automatically in Integrated Financial Management Information Systems (IFMIS). Most countries in Africa have an IFMIS capable of this activity.

Further dimensions which may be mapped from the administrative and economic 'coding block' used to classify transactions may include, on a discretionary basis, a policy dimension (climate, for example), a programme dimension, a legal dimension, a geographical dimension and many others as required to meet reporting needs.

Climate expenditure reviews (see chapter 8) are now being institutionalised through a number of countries, such as Mozambique, which are starting to "mark" their climate expenditure so it can be regular tracked through the budget. (See also Section 5.8 on how to tag budgets and expenditure)

Classification of budget and expenditure is governed by the internationally accepted standards on classification as published by the IMF. The new standard was published in 2014.[19] A challenge to

[18] https://www.imf.org/external/Pubs/FT/GFS/Manual/2014/gfsfinal.pdf

[19] https://www.imf.org/external/Pubs/FT/GFS/Manual/2014/gfsfinal.pdf

functional[20] classification of climate actions is that climate is not recognised as a functional category within the classification, thus governments must ensure that ENR is adequately represented within its administrative chart of accounts. The GFSM, however, recognises a number or relevant functions[21] including:

- 705 Environmental protection
- 7051 Waste management
- 7052 Waste water management
- 7053 Pollution abatement
- 7054 Protection of biodiversity and landscape
- 7055 R&D Environmental protection[22]
- 7056 Environmental protection n.e.c.[22]

7.7 Guidance on integrating pro-poor ENR and climate into internal control

International Standards of Supreme Audit Institutions (INTOSAI) defines internal control as "a management tool used to provide reasonable assurance that management objectives are being achieved."[23] Or more simply as "the process by which an organisation governs its activities to effectively and efficiently accomplish its mission."[23] Internal control is integral to all operations and is 'built-in' rather than 'built-on' to processes. Internal control is sometimes called management control.

It can support climate-sensitive and environmentally-friendly objectives and ways of working by ensuring that these are built in to how the budget is executed and implemented.

Managers in government spending units are responsible for establishing effective control in their organisations as part of their stewardship responsibility over the use of government resources. The tone that managers (known as "tone at the top") set through their actions, policies, and communications can result in a culture of either positive or lax control.

Planning, implementing, supervising, and monitoring are fundamental components of internal control and these activities may be carried out routinely, without thinking of them as part of a broad control context that helps to ensure accountability, but that is precisely what they are. Internal control helps to provide reasonable assurance that the organisation:

- Adheres to laws, regulations, and management directives
- Promotes orderly, economical, efficient, and effective operations and achieves planned outcomes
- Safeguards resources against fraud, waste, abuse, and mismanagement
- Provides quality products and services consistent with the organisation's mission
- Develops and maintains reliable financial and management information and fairly discloses this information through timely reporting.

[20] The Classification of Functions of Government (COFOG) is a detailed classification of the functions, or socioeconomic objectives, that general government units aim to achieve through various kinds of expenditure.

[21] See Annex A page 143 of GFSM 2014

[22] Note: R&D = research and development; n.e.c. = not elsewhere classified.

[23] http://www.issai.org/media/13337/intosai_gov_9120_e.pdf *International Standards of Supreme Audit Institutions* 9120 Internal Control: Providing a Foundation for Accountability in Government

Management staff in spending units are responsible for establishing an effective internal control framework. Internal control can help to assure climate-sensitive and environmentally-friendly ways of working as well as managing fiduciary risks in budget execution. An illustrated checklist is set out below:

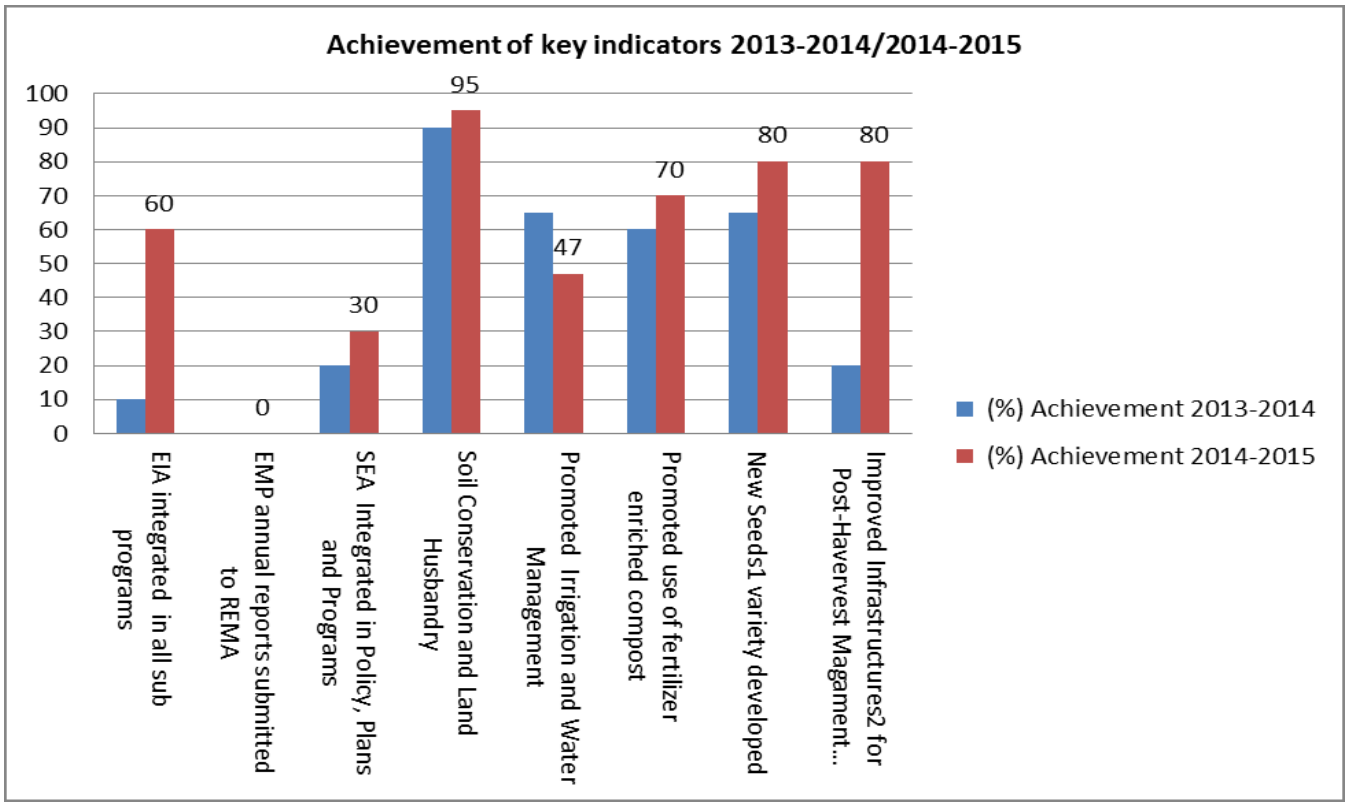
Table 7.2: Establishing a climate and ENR relevant internal control framework

In establishing the framework, has the Ministry….	Climate and ENR relevant potential inclusions and considerations
Assessed the risks that it faces (both financial and ENR)?	The spending unit risk register should identify all risks faced by the unit. Risks may include climate and environment threats including floods, failure of defences and extreme weather events. Risks should assess probability x impact on a 1 – 5 scale and plotted on 5x5 matrix. Mitigations, safeguards and responses to risks should also be noted.
Identified control objectives to manage the risks?	Control objectives describe a process AND *how* an operational activity should be carried out. Typical examples include: • Pay salaries *on time* • Calculate payments *accurately* • Classify transactions *correctly* • Maintain assets *securely*
Established control policies and procedures (ie control activities) to achieve the control objective?	Control activities are the policies, procedures, techniques, and mechanisms that help ensure that management's response to reduce risks identified during the risk assessment process is carried out. In other words, control activities are actions taken to minimize risk. • Are climate sensitive and environmentally friendly ways of working always identified and explained within all operating procedures? • Do all operating manuals make reference to climate sensitive and environmentally friendly ways of working?
Created a positive control context?	The 'Tone at the Top' should be positive and supportive of ethical, environmentally friendly and climate sensitive processes and ways of working. • Has the head of the administrative unit made a statement, or statements, that is supportive of ethical operations and zero tolerance of fraud and corruption? • Does the statement show commitment to environmentally friendly and climate sensitive ways of working? • Does the statement encourage staff to maintain and demonstrate ethical standards and professional integrity in respect of climate and ENR?
Maintained and demonstrated a level of skill necessary to help ensure effective and efficient performance?	Training and HR policies should be revised regularly. • Is there regular training and capacity development activities addressing climate sensitive and environmentally friendly ways of working? • Are capacity development opportunities in climate sensitive and environmentally friendly ways of working available to all staff? • Are standards of competence in respect of climate sensitive and environmentally friendly ways of working set out in training policies?
Established a means of continually monitoring the operation of the organisation's internal control practices?	Management should have means of monitoring the implementation of climate sensitive and environmentally friendly ways of working: • Has the ministry established working committees to monitor climate sensitive and environmentally friendly

	ways of working? • Has a special administrative unit been established? • Are supervisory practices and supervisors aware of responsibilities in respect of climate sensitive and environmentally friendly ways of working?
Communicated legal requirements to all staff in respect of ENR?	Organisations should comply with legal requirements in respect of ENR: • Have all staff been made aware of obligations in respect of ENR? • Is knowledge of ENR updated regularly?
Established an independent internal audit function for evaluating the effectiveness internal control practices?	Internal Audit should report on assignments conducted during the year and on an annual basis to management: • Has internal reflected climate sensitive and environmentally friendly ways of working in its testing and assignment plans? • Is the head of internal audit aware of standards and policies in respect of climate sensitive and environmentally friendly ways of working?

An example of effective control is available from Rwanda which shows how the National Environmental Management Authority (NEMA) conducts monitoring of the implementation of pro-poor ENR and climate integration in all sector implementation – in this case in Agriculture sector implementation. The figure shows how key indicators have risen for all indicators from 2013/4 to 2014/15.

Figure 7.2: Rwanda's monitoring of implementation of pro-poor ENR integration in Agriculture sector plans and budgets



Source: REMA, 2015

Tips on how internal control can enable better integration of pro-poor ENR and climate issues

- Insert clauses into duties in job descriptions that require pro-poor ENR and climate awareness

- Include knowledge requirements for pro-poor ENR and climate as a core competence for promoted posts
- Operating procedures can be 'friendly' or sensitive to pro-poor ENR and climate objectives.

Risk assessment

- Establish risk registers in key institutions
- Identify and evaluate risks to pro-poor ENR and climate integration and implementation
- Evaluate the hazards and risks
- Develop responses (treat, tolerate, transfer, terminate).

'Tone at the Top'

- Tone at the top statements influence ways of working and operating standards
- Positive statements by leaders in the Civil Service (in addition to the budget speech) encourage integration of pro-poor ENR and climate issues into institutional activity

Tone at the top statements encourage compliance and also raises awareness

8. Budget Oversight: Pro-Poor Environment, Natural Resources and Climate Integration

8.1 Summary checklist

- *Budget Oversight is the final stage of the annual budget cycle and here pro-poor environment and natural resources and climate needs to be integrated into the monitoring and assessment of expenditures against budget commitments*
- *Financial reports and financial statements on the budget can highlight pro-poor environment and natural resources and climate as a policy or programmatic area*
- *Internal audit and external audit interventions may emphasise different aspects of scrutiny, such as compliance, performance, internal control or financial audit; but pro-poor environment and natural resources and climate can be included in each of these*
- *Oversight institutions or supreme audit institutions can foster the integration of pro-poor environment and natural resources and climate issues in budgeting and public finance management systems*. By providing oversight they can help with:
    - Promoting cross-institutional collaboration through performance audit
    - Promoting transparency in financial accounting and financial reporting
    - Promoting reliability and confidence in financial reporting
    - Promoting an orderly and ethical approach to implementation
    - Reducing natural resource leakage and corruption
    - Encouraging value for money
    - Accountability for policy decisions and policy outcomes
    - Accountability to citizens for environment and natural resources sustainability and equity based outcomes
- *The mandate of the supreme audit institutions (SAI) is an important entry point for environmental audit.* To make this clear and to raise profile, the SAI mandate should refer to environmental auditing, as in Kenya
- *Donor-led interventions are a valuable source of assessment of the overall control context and of fiduciary risk*. These can include assessment of pro-poor environment and natural resources and climate related expenditures to ensure they are:
    - Are used for the intended purposes
    - Achieve value for money
    - Are properly accounted for
- *Environment and climate public expenditure and institutional reviews (CPEIRs) are an analytical tool for engaging with Ministries of Finance to review links between planning and budgeting institutions, policies, resource allocation and expenditure on environment and climate change.* Climate reviews to date in Africa and summarised in this chapter show that environment and climate expenditures range from 1–15% of government expenditure and 0.2-1.8% of Gross Domestic Product.

8.2 Where and when to integrate pro-poor environment and natural resources and climate in budget oversight

This section sets out the key steps of the budget oversight process to inform those who are less familiar with this process so they know where and when to integrate pro-poor environment and natural resources and climate issues. The following sections then provide guidance on how to integrate pro-poor environment and natural resources and climate issues into this process.

The different aspects of budget oversight and their description are set out in Table 8.1: Aspects of budget oversight..

- Once the budget cycle process has started, expenditure reports need to be provided to line ministries on a quarterly basis – and to the SAI on an annual basis for audit purposes. In some countries there is a budget policy committee in Parliament, which has specific responsibility for monitoring public expenditures
- Once all transactions have been recorded, aggregated and classified for the financial year, the Accountant General prepares the annual financial statement of the institution in line with an IPSAS framework that presents the total expenditure for the year
- The SAI conducts a financial audit and gives an opinion on the fair presentation or truth and fairness of the financial statements
- When financial statements are often not presented for audit, and/or the auditor's reports are not submitted or delayed to Parliament, this undermines the effectiveness of the recommendations of Parliament or the Public Accounts Committee (PAC). So compliance with statutory timetables promotes accountability. Timely evaluation and corrective action are critical to linking lesson learned to revised allocations and improved processes
- Ultimately the Parliament through its specific committees must ensure that:
    - Citizens are represented and are able to bring their needs, goals, problems, and concerns to the policymaking process and exercise oversight
    - Legislation and government policies are implemented effectively, according to the original intent, and within the parameters of the rule of law.

Table 8.1: Aspects of budget oversight

Component	Definition	Description of Budget Oversight Activity
Parliament / Public Accounts Committee (PAC)	A committee in the legislature (Parliament) that studies regularity (compliance, financial and performance) and other audits performed and reported by the SAI.	The committee may invite ministers, permanent secretaries or other ministry officials to the committee for questioning, and issue a report of their findings subsequent to a government budget audit. Based on their findings, PACs often make recommendations to government ministries requiring that they change certain policies and procedures to improve their operations.
Supreme Audit Institution (SAI)	Supreme Audit Institutions[24] audit the activities of the government, its administrative authorities and other subordinate institutions. The SAI is independent of Government and is headed by the Auditor General.	The SAI will conduct financial audit (audit of annual financial statements), performance audit and compliance audit. Within each strand of audit activity, there is relevance to scrutiny of environment-related activity. In addition to activity that is integral to financial, performance and compliance auditing –

[24] As set out in the Lima Declaration (http://www.issai.org/media/12901/issai_1_e.pdf) International Standards of Supreme Audit Institutions Number 1

		there are four INTOSAI auditing guides (not standards) specifically related to environmental issues.[25]
Accountant General/ Financial Controller General	The Accountant General prepares the annual financial statements of Government and of its constituent institutions to the extent of the mandate and allocation of business of the government	Annual Financial Statements are prepared based on the expenditure made each financial year. Financial statements are prepared and presented based on a financial framework, typically based on International Public Sector Accounting Standards (IPSAS[26]) or a national equivalent.
Internal Audit /Audit Committee	Often reporting to an Audit Committee, internal audit is an independent, objective assurance activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.[27]	Internal audit is a management service. It scrutinises activity and reports on assurance to management of Ministries, departments and agencies. In some governments Internal Audit is based within MDAs while in others it is based in the Accountant General's Office. Internal Audit activities may encompass scrutiny financial transactions, assessment of financial systems, evaluation of value for money and evaluation of internal control.
Donor Partner Evaluations	Donor partners provide financial aid, technical assistance and other support in various ways to help implement environmental programmes. Some tools used by donor partners are listed opposite and explained in more detail below in Table 8.2: Tools and resources for oversight and scrutiny of ENR budget	Oversight activity by donors, which is shared with Governments includes: Public Expenditure Reviews Public Expenditure Tracking Surveys Public Expenditure and Financial Accountability Assessments Fiduciary Risk Assessments
Other government agencies and institutions	Central government has a number of institutions which may have an oversight role in respect of budget activity – these vary from country to country and mandates are also diverse. However, some examples are listed opposite.	Oversight activity by central government may include: Anti-Corruption Commission Statutory Citizens' Forums (e.g. Public or Social Audits

8.3 Guidance on how to integrate pro-poor ENR and climate into the audit process

The final stage in the annual budget cycle is largely driven by accountabilities and scrutiny. However, it provides valuable intelligence that is used to improve and refine subsequent financial and resource planning. Learning lessons from this process helps with future budget implementation, including around pro-poor ENR and climate expenditure.

[25] ISSAI 5100-5199 Guidelines on Environmental Audit (http://www.issai.org/4-auditing-guidelines/guidelines-on-specific-subjects/

[26] https://www.ifac.org/public-sector

[27] The Institute of Internal Auditors (https://na.theiia.org/standards-guidance/mandatory-guidance/Pages/Definition-of-Internal-Auditing.aspx)

The mandate of the Supreme Audit Institutions (SAI) is an important entry point for environmental audit. Some SAIs have an explicit statement in their mandate to conduct environmental audit – Kenya for example.[28] For avoidance of doubt, an explicit mandate for environmental audit will raise the profile of and endorse the activity.

The annual and strategic plans of the SAI (and internal audit) should include assignments and assurance or regularity work related to environment and natural resources and climate. Ongoing commitments to review environment and natural resources should be made. A policy commitment by the SAI to devote a proportion of resources to compliance of performance audits in environment and natural resources and climate is a useful starting point. Audit manuals for performance and compliance should also have a section on environmental and climate audit.

The SAI's training plans should include activities on the audit of environment and natural resources and climate. Resources are available on the INTOSAI-WGEA website for each of the guidance papers set out in Table 8.2.

There is a lot of scope (and guidance) for the Supreme Audit Institution (SAI) to undertake special evaluations of environment and natural resources and climate activities and INTOSAI has provided extensive resources and guidance for this purpose – see Table 8.2.

The SAI should review management (line ministry or institutions of government) activities that aim to measure whether public funds have been spent for their intended purpose and have met standards of value for money – economy, efficiency and effectiveness.

The Accountant General should prepare reports on the accounting, financial and budget execution status of the year's expenditures for this purpose. Administrative and functional classifications present an opportunity for aggregation into programmatic information. ENR and climate should be explicit within functional charts of account.

To integrate environment and natural resources and climate, these reports are important as they enable direct comparison of expenditure with budget and with physical progress and activity. This is a basis to triangulate what was achieved as a result of the expenditure, and to what extent the intended outputs and outcomes were achieved. The SAI should review the management processes involved.

Additional checks and verifications can also be put in place. For example parliamentary committees will check budget performance against budget targets and objectives. The PAC may also be supported to scrutinise certain aspects of the environment and natural resources or climate budget. Orientation for new members of PAC is a potentially valuable entry point.

Other evaluations may be performed, if not necessarily on an annual basis, such as Public Expenditure Reviews (PER), Performance Expenditure Tracking Surveys (PETS), and Public Expenditure Financial Accountability (PEFA) evaluations. If the government has a programme with the IMF, it will be evaluated against IMF-agreed programme targets.

Oversight of budgets is important to the Ministry of Finance and line ministries for accountability and performance purposes and is integral to results based budgeting, programme budgeting and performance based budgeting.

How to tips for effective use of the auditor general's reports for pro-poor environment and natural resources and climate

- Environment and natural resources and climate specific performance audit reports present useful analysis and recommendations that will improve performance
- Regularity reports present internal control issues that, if addressed, will improve processes in the institutions
- Establish a specific function to oversee implementation of the Auditor General's recommendations – this may be an audit committee or similar initiative

[28] http://www.environmental-auditing.org/tabid/127/CountryId/251/Default.aspx

- The committee should report to the head of the institution directly.

8.4 How to tips: Tools for oversight of pro-poor ENR and climate expenditures

The institutions involved in oversight of pro-poor environmental and natural resources budgets employ a number of tools to conduct their scrutiny and construct their evaluations. A selection is set out below, comprising the three components of SAI regulatory audit and further guides and resources made available via INTOSAI:

Table 8.2: Tools and resources for oversight and scrutiny of ENR budget

Tools and Resources	Explained….	How it works….
ISSAI 200 - Financial Audit (Audit of Annual Financial Statements) [29]	Carried out by the Supreme Audit Institution (SAI), the purpose of an audit of financial statements is to enhance the degree of confidence of intended users in the financial statements. [29]	[Enhanced confidence in published] financial statements is achieved through the expression of an opinion by the auditor as to whether the financial statements are prepared …… in accordance with an applicable financial reporting framework … are presented fairly ….. or give a true and fair view, in accordance with that framework. [29]
ISSAI 300 - Performance Auditing[30]	As carried out by SAIs, performance auditing is an independent, objective and reliable examination of whether government undertakings, systems, operations, programmes, activities or organisations are operating in accordance with the principles of economy, efficiency and effectiveness and whether there is room for improvement.[31]	Performance auditing seeks to provide new information, analysis or insights and, where appropriate, recommendations for improvement. Performance audits deliver new information, knowledge or value.
ISSAI 400 - Compliance Auditing[32]	Conducted by the SAI, compliance auditing is the independent assessment of whether a given subject matter is in compliance with applicable authorities	Compliance auditing enables the SAI to assess whether the activities of public-sector entities are in accordance with the mandate, powers and allocated authority[33] governing those entities. The SAI will report on the degree to which the audited entity complies with

[29] As set out in ISSAI 200 – Fundamental Principles of Financial Auditing (http://www.issai.org/media/69910/issai-200-english.pdf)

[30] http://www.issai.org/media/69911/issai-300-english.pdf

[31] As set out in ISSAI 300 – Fundamental Principles of Performance Auditing paragraph 9 (http://www.issai.org/media/69911/issai-300-english.pdf)

[32] http://www.issai.org/media/12955/issai_400_e.pdf

[33] Authorities may include rules, laws and regulations, budgetary resolutions, policy, established codes, agreed terms or the general principles governing sound public-sector financial management and the conduct of public officials. Most authorities originate in the basic premises and decisions of the national legislature, but they may be issued at a lower level in the organisational structure of the public sector. (Paragraph 28 of ISSAI 400 – Fundamental Principles of Compliance Auditing - http://www.issai.org/media/69912/issai-400-english.pdf)

		established criteria.
ISSAI 5110 - Guidance on Conducting Audit Activities with an Environmental Perspective[34]	Guidance used by the SAI, the term "environmental auditing" is a convenient label generally used to describe one of a plethora of activities, such as management audits, product certification and governmental control measures	Sets out how environmental issues may be taken into account within the regularity (performance, compliance, financial audit) work of SAIs: (i) Auditing government monitoring of compliance with environmental laws (ii) Auditing the performance of government environmental programmes (iii) Auditing the environmental impacts of other government programmes (iv) Auditing environmental management systems (v) Evaluating proposed policies and programmes
ISSAI 5120 - Environmental Audit and Regularity Auditing[35]	The guide sets out how the components (financial, performance, compliance) of SAI auditing are applied by the SAI in environmental auditing.	During an audit of financial statements, environmental issues may include the following: • Initiatives to prevent, abate or remedy damage to the environment • The conservation of renewable and non-renewable resources • The consequences of violating environmental laws and regulations • The consequences of vicarious liability imposed by the state. Compliance auditing with regard to environmental issues may relate to: • Providing assurance that governmental activities are conducted in accordance with relevant environmental laws, standards and policies, both at national and international (where relevant) levels. Performance auditing of environmental activities may include ensuring that: • Indicators of environmental-related performance (where contained in accountability reports) fairly reflect the performance of the audited entity • Environmental programs are conducted in an economical, efficient and effective manner
ISSAI 5130 - Sustainable Development: The Role of Supreme Audit Institutions [36]	Sets out the concept of sustainable development and assesses the role that SAIs might play in auditing national progress towards sustainable development.	The guideline is in four parts: **Part 1** provides essential background including defining sustainable development as development that reconciles social, economic and environmental objectives (three objectives) and how the concept of sustainable development may be reflected in the strategies, policies and operations of governments

[34] http://www.issai.org/media/13004/issai_5110e.pdf

[35] http://www.issai.org/media/12984/issai_5120e.pdf

[36] http://www.issai.org/media/12988/issai_5130e.pdf

		Part 2 explains how governments have set about developing frameworks and national strategies for pursuing sustainable development objectives, and considers the opportunities these might offer to SAIs for review **Part 3** examines how the concept of sustainable development has been applied to individual policies or programs, and the role played by SAIs in auditing how well this has been done **Part 4** considers the steps SAIs may need to take to develop their ability to undertake audits in the field of sustainable development
ISSAI 5140 - How SAIs may co-operate on the audit of international environmental accords[37]	Sets out how SAIs may co-operate and collaborate on the audit of international accords.	Guidance on how to plan and conduct joint audits in this area. It explains the type of audit that may be collaborated upon between SAIs and sets out some methodological content
Internal Audit Annual Reports and Management Letters	Reports of audit findings, conclusions and recommendations arising from assignments conducted in specific areas by internal audit.	Internal auditors conduct assignments during the year and report these to management. Internal audit reports are valuable as they are an independent view separate from institutional management and processes. An ENR internal audit, among other things, may review and report systems, quality assurance systems, internal control, value for money and policy implementation.
Auditing Forests: Guidance for Supreme Audit Institutions[38]	A guide developed by the INTOSAI[39] Working Group on Environmental Audit (WGEA[40]) for use by SAIs that provides guidance on auditing the forestry sector. The guidance covers management and public policy tools used by governments.	It describes what forests are, why they are important, what the threats to forests are, and what action governments are taking. It suggests a process for choosing and designing forest audits, and sets out practical guidance, information, and case studies related to audits of forests.
Auditing Biodiversity: Guidance for Supreme Audit Institutions[41]	Guidelines developed by INTOSAI-WGEA to help SAIs audit biodiversity and to educate auditors on the nature of biodiversity and the reason it has to be audited.	The guidance describes the major role that SAIs can play by auditing their government's actions and reminding them of their commitments. The guidance presents case studies to SAIs to help them learn how others have approached this audit topic, which involves large amounts of public funds.

37 http://www.issai.org/media/13180/issai_5140_e.pdf

38 http://www.environmental-auditing.org/LinkClick.aspx?fileticket=fbx%2fbAIVeFU%3d&tabid=172&mid=579

39 The International Organization of Supreme Audit Institutions (INTOSAI)

40 http://www.environmental-auditing.org/Home/tabid/36/Default.aspx

41 http://www.environmental-auditing.org/LinkClick.aspx?fileticket=WJWCKyYayx8%3d&tabid=242

Auditing the Government Response to Climate Change[42]	Guidance material developed by INTOSAI-WGEA for SAIs to use to audit governments' management of climate change. The main objective of the Guide is to encourage SAIs to conduct climate change audits and to support them in that context. The guide sets out essential key questions and information needed in the planning phase of an effective and goal-oriented climate change audit.	The guide includes background information, such as a description of sources of greenhouse gas (GHG) emissions, relevant international environmental agreements and domestic programmes; mitigation of GHG emissions, including emissions trading systems; adaptation to the impact of climate change; special considerations for developing countries; and measurement, verification and reporting.
INTOSAI-WGEA paper "Towards Auditing Waste Management"[43]	The paper gives an overview of waste management issues and gives SAIs the information they need to conduct audits of waste issues.	The paper presents: • Concepts and definitions related to waste • Environmental and health problems caused by waste • Examples of waste management systems in several different countries, • Experiences gained in the INTOSAI community from waste management audits • It also contains a large selection of problem areas and gives some ideas for selecting the scope for an audit on waste management
INTOSAI WGEA guidance and environmental auditing tools: Addressing Fraud and Corruption Issues when Auditing Environmental and Natural Resource Management 44	The paper gives an overview of fraud and corruption risks in the environmental and natural resource sectors and gives SAIs the information they need to address these risks when conducting environmental audits	The paper presents • Examples on possible impacts of fraud and corruption in the environmental and natural resource sectors, with focus on forestry, fisheries, water management and biodiversity • Central definitions and concepts relating to fraud and corruption • Basic questions relating to internal controls and fraud and corruption illustrated with a case from the oil sector • The most important elements in a fraud and corruption risk assessment illustrated with examples from the environmental and natural resource sectors • Audit procedures to follow up identified fraud and corruption risks illustrated with five scenarios relating to land management, procurement in coal extraction, allocation of public grants to tree planting, climate mitigation

42 http://www.environmental-auditing.org/LinkClick.aspx?fileticket=c0u4iUMLYvU%3d&tabid=241

43 http://www.environmental-auditing.org/Portals/0/eng04pu_guidewasteall.pdf

44 http://www.environmental-auditing.org/LinkClick.aspx?fileticket=7%2fYFUCz%2f6Bk%3d&tabid=282

		measures and management of oil revenues
INTOSAI WGEA Paper - Auditing Water Issues Experiences of Supreme Audit Institutions[45]	The paper sets out auditing options that fit with the traditional role of SAIs, namely assessing whether public money was spent according to the rules and if it was used economically, efficiently, and effectively for auditing of water issues by SAIs.	A good starting point for audits by SAI are the instruments used to carry out the national water management strategy and to reach national objectives. Frequently occurring types of audit noted in the guidance are: • Compliance with national environmental laws and regulations by government departments, municipalities, and/or other bodies • Implementation of environmental programmes • Evaluation of impacts or effects of existing national environmental programmes • Environmental effects of non-environmental programmes • Government environmental management systems. Depending on the mandate of the SAI, the general environmental policy towards water management and the evaluation of impacts or effects of proposed national environmental programmes can also be a starting point.
Public Expenditure Reviews (PER)	Public Expenditure Review (PER) is a diagnostic tool used to evaluate the effectiveness of public finances. PERs typically analyse a government's expenditure over a period of years (often three or five) to assess their consistency with policy priorities, and what results were achieved. The objective of a PER is to establish a baseline understanding of key fiscal management and policy challenges, highlight priority reform areas for policymakers, and set the agenda for the next phase of budgetary planning.	A PER may analyse government-wide expenditures or may focus on a particular sector such as climate or environment and some governments include PERs as part of their budget planning cycle. By examining how public expenditure was allocated and managed, governments and donors are better able to assess not only the impact of their investment, but also the effectiveness of budget planning and execution. PERs help diagnose spending problems and help countries develop more effective and transparent budget allocations. [46]
Public Expenditure Tracking Surveys (PETS)	**Public Expenditure Tracking Survey (PETS)** is a quantitative survey of the supply side of public services. The unit of observation is typically a service facility and / or local government and frontline providers. The survey	PETS trace the flow of resources from origin to destination ("end to end") and determines the location and scale of anomaly – if this exists. They are distinct, but complimentary to qualitative surveys on the perception of users to service delivery. PETS highlight not only the use and abuse of public money, but also give insights into cost

45 http://www.environmental-auditing.org/Portals/0/eng04pu_guidewater.pdf

46 Adapted from World Bank Definition http://wbi.worldbank.org/boost/tools-resources/public-expenditure-review

	collects information on facility characteristics, financial flows, outputs (services delivered), and accountability arrangements. PETS data can have multiple uses and can be a valuable diagnostic tool in the absence of reliable administrative or financial data.[47]	efficiency, decentralisation and accountability.
Public Expenditure and Financial Accountability (PEFA) Assessments	The PEFA framework provides the foundation for evidence-based measurement of countries' PFM systems. A PEFA assessment measures the extent to which PFM systems, processes and institutions contribute to the achievement of desirable budget outcomes comprising: aggregate fiscal discipline, strategic allocation of resources, and efficient service delivery.	PEFA identifies seven essential pillars of performance in an open and orderly PFM system. The pillars are: **Budget reliability**. The government budget is realistic and is implemented as intended. This is measured by comparing actual revenues and expenditures (the immediate results of the PFM system) with the original approved budget. **Transparency of public finances.** Information on PFM is comprehensive, consistent, and accessible to users. This is achieved through comprehensive budget classification, transparency of all government revenue and expenditure including intergovernmental transfers, published information on service delivery performance and ready access to fiscal and budget documentation. **Management of assets and liabilities**. Effective management of assets and liabilities ensures that public investments provide value for money, assets are recorded and managed, fiscal risks are identified, and debts and guarantees are prudently planned, approved, and monitored. **Policy-based fiscal strategy and budgeting.** The fiscal strategy and the budget are prepared with due regard to government fiscal policies, strategic plans, and adequate macroeconomic and fiscal projections. **Predictability and control in budget execution.** The budget is implemented within a system of effective standards, processes, and internal controls, ensuring that resources are obtained and used as intended. **Accounting and reporting.** Accurate and reliable records are maintained, and information is produced and disseminated at appropriate times to meet decision-making, management and reporting needs. **External scrutiny and audit.** Public finances are independently reviewed and there is external follow-up on implementing recommendations for improvement by the

[47] Adapted from World Bank Definition - http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/EXTPCENG/0,,contentMDK:20507700~pagePK:148956~piPK:216618~theSitePK:410306,00.html

		executive.
Fiduciary Risk Assessment (FRA)	A Fiduciary Risk Assessment is a compliance tool and is an evaluation conducted by donors when providing financial aid. An FRA will typically evaluate all points on the PFM cycle against pre-set levels of gross and net risk.	Fiduciary risk comprises the risk that: • Funds are not used for the intended purposes • Do not achieve value for money • Are not properly accounted for. Fiduciary risk can be driven by many factors, including lack of capacity, competency or knowledge; bureaucratic inefficiency; and/or active corruption. Fiduciary Risk Assessment methodologies recognise gross and net risk by assessing safeguards and mitigations to fiduciary risk.

8.5 Examples of performance auditing and pro-poor ENR and climate

The SAI reports on value for money through conducting a performance audit. The benefits of performance audit are demonstrated by a report from the SAI of Rwanda, which highlights wide variation in costs of managing land in government projects in different locations. This is shown in Box 8.1.

Box 8.1: Rwandan focus on efficiency of public spending

Assessments from Rwanda found that there were significant variations in the costs of managing land in different locations. The report concluded that:

"Price variations may be acceptable by location. However, there are instances which should invite minds of inquiry when unit costs for similar interventions greatly differ. The main lesson is that the government must introduce value-for-money audits in addition to analysing public expenditure by execution rates. The latter may conceal inefficiency."

REMA, 2010

The Auditor General of South Africa has played an active role in value for money including a review on the Department of Environment's use of consultants, which led to a clear commitment to change behaviour as set out in Box 8.2.

Box 8.2: South Africa's Auditor General Performance audit of the Department of Environment

As part of a performance review of consultancies in government, the Auditor General included the Department of Environmental Affairs. The review noted that:

"The department did not perform comprehensive needs determinations, including analyses of market-related costs and project estimates, prior to commencing with projects. Estimated project costs were merely limited to the available budget rather than having been based on actual needs. Furthermore, the consultancy contracts sometimes related to unknown fields of work, which also contributed to the inaccurate estimates. As a result, 10 consultants were appointed at materially higher costs than internally estimated. The combined estimated cost for 10 projects was R22.8 million, but the combined contract amount was R41.2 million. The average increase between the estimated cost and the contract cost was 81% per project".

In response the Department accepted all these concerns and agreed in future:

"The appointment of consultants at materially higher amounts than estimated and the significant delays in the appointment process of consultants has been addressed by the responsible officials and the chairperson of the departmental bid adjudication committee. The department will instruct the project managers to link the milestones/deliverables with the progress payment to monitor performance and submit project reports to management. The department has introduced a mechanism of monitoring where close-out reports and questionnaires completed by project managers would have to be submitted. This will enable the department to refer to these documents when future procurement decisions are taken."

Auditor-General South Africa, 2013

8.6 Examples of auditing of policy decisions and policy outcomes – compliance auditing of pro-poor environment and natural resources and climate

Testing for compliance with laws, regulations and policies is a part of the regulatory work of the SAI. This is illustrated by the detailed audit of hunting revenues in Tanzania by the Auditor General set out in Box 8.3.

Box 8.3: Tanzania's Auditor-General compliance audits Ministry of Natural Resources and Tourism collection and use of hunting revenue

The Auditor-General of Tanzania conducted a compliance audit in 2014 of selected government Ministries including the Ministry of Natural Resources and Tourism (MNRT). The report focused on hunting revenues given their importance to the national and local economy. The report was quite critical and noted that:

"The MNRT does not fully ensure that the wildlife law is effectively enforced to minimise illegal use of wildlife animals. This was contributed by allocation of resources without strategically focusing on the identified hotspots for anti-poaching; not all stakeholders were fully involved in the law enforcement; inadequate monitoring of hunting activities; and complexity in the proportional distribution of collected revenue to parties."

National Audit Office, Tanzania, 2014

The finding by the Tanzanian Auditor General also demonstrates that audit reports can crosscut the financial, performance and compliance components of regulatory work to good effect. The report looked

at the connection between policy and resource allocation, compliance with law and regulation and the value for money consequences of these shortcomings.

Box 8.4: South Africa's parliamentary select Committee compliance audits the Ministry of Agriculture on forestry

The Select Committee of the South African Parliament on Agriculture reviewed progress of the Ministry with a focus on forestry.

Ms Z Jongbloed (DA) wanted to know if the Department of Agriculture, Forestry and Fisheries (DAFF) had statistics for areas afforested by small-growers, and how small-growers survived during the 10-year period of waiting for their harvest.

Dr M Tau, Deputy Director-General in Forestry and Natural Resources Management, replied that figures for areas planted are standing at 3193. Regarding how small-growers survive while waiting for harvest, the Agro-forestry Strategy would be finalised this year in order to look at things like agro-processing so that they could be involved in it while waiting.

Mr Z Mandela (ANC) asked how far DAFF had gone in implementing the 100 000ha and 40 000ha of forests to be realised in the Eastern Cape and KwaZulu-Natal. He further wanted to know what the Department is doing to assist communities and traditional leaders that had vast land that could be used for forestry.

Dr Tau reported that progress in the Eastern Cape and KwaZulu-Natal has not been satisfactory. Licences had been issued to cover only a certain thousand hectares. The Department is waiting for water licence approvals. On community beneficiation, a White Paper was being developed to encourage community participation. A debate was taking place between the Department, community representatives and traditional leaders about the use of land for forestry.

South Africa, 2016, https://pmg.org.za/committee-meeting/22206/

8.7 Guidance on how to track efficiency and effectiveness through Environment and Climate Expenditure Reviews

Environment and Climate Public Expenditure and Institutional Reviews are an analytical tool for engaging with ministries of finance to review links between planning and budgeting institutions, policies, resource allocation and expenditure on environment and climate change.

The CPEIR methodology has been used in OECD countries. The United States and European Union already publish regular climate expenditure information and in the case of the EU it has set a target for increasing this climate expenditure. The United States has published data on federal climate expenditures since 2003 showing that ministries such as energy and agriculture are big spenders but so is the Department of Defence. The EU budget is now being tracked for climate expenditures from their current level of about 3 per cent of the total budget with the aim to reach 20 per cent of the total budget.

Developing countries are now undertaking Climate Public Expenditure and Institutional Reviews, a number with Poverty-Environment Initiative support. Reviews to date in Africa show that environment and climate expenditures range from 1–15% of government expenditure and 0.2-1.8% of GDP as set out in Box 8.4.

Box 8.4: Climate and Environmental Expenditure Reviews in Africa

- **Malawi:** Total expenditure on environment and natural resources and climate change between 2006 and 2012 was US$278 million. The average national expenditure on environment and natural resources and climate during the six-year period was equal to 3.15 per cent of the national budget or 0.96 per cent of the country's GDP (Ministry of Finance, Malawi, 2014)
- **Mozambique:** Total environmental expenditure is estimated at 18,806.5 million MZN from 2007 to 2010, an average of 4.3 per cent of the state budget, and 1.4 per cent of GDP (MCOA, 2012).
- **Ghana:** Climate change relevant budgeted expenditure of GH₵ 637 million (approximately US$210 million) in 2014. Climate change relevant expenditure is approximately 2 per cent of government expenditure and 0.5 percent of GDP (Asante, 2015)
- **Ethiopia:** Climate change-relevant spending was reviewed for 2008 and 2012, and the estimated average annual percentage share of such expenditure over the four years was 15 per cent of total government expenditure, representing 1.8 per cent of GDP (Eshetu, 2014).
- **Uganda:** Total spending on climate change-relevant activities is estimated at less than 1 per cent of government expenditure over the period 2008/9 – 2011/12, which is equivalent to 0.2 per cent of GDP (Tumashabe, 2013)

Lessons learned from Climate Public Expenditure and Institutional Reviews

CPEIRs have demonstrated that, even in some low income-countries, a substantial and growing share of public finance for climate change is being raised domestically – however these expenditures are often not well coordinated and managed, despite representing a developmentally significant policy area and commanding substantial resources.

Climate expenditure is made through many ministries, as diverse as Ministries of Local Government, Environment, Water Resources, and Energy and through social protection programmes which have not been strategically linked to climate policies and planning. There is a need to look beyond just the Ministry of Environment to see the wide engagement of line ministries in climate expenditures – and how these other ministries can be more strategically linked to climate adaptation and mitigation objectives.

Some climate expenditure, such as national climate funds, have funded stand-alone climate projects instead of providing top-up funds for the additional costs of climate adaptation and mitigation to sector budgets through the budget process. There has been a proliferation of stand-alone climate funds which has undermined the objective of mainstreaming climate within the planning and budgeting process.

Many countries still fund negative-impact climate expenditures which have the effect of increasing climate change, such as incentives for clearing forestry carbon sinks, subsidies for fossil fuels and to construct infrastructure on climate vulnerable flood plains. These "negative expenditures" undermine efforts to adapt to and mitigate climate change – but there are efforts under way at reforming such expenditures while avoiding social impacts. While it is important to track the positive expenditures that countries are making to mitigate and adapt to climate change, these expenditures may be dwarfed by the negative expenditures. It is important that these negative expenditures are also tracked, assessed and then reduced in ways that avoid adverse social effects.

Furthermore, some planned positive climate expenditures have not been cost-effective and countries such as Indonesia are now starting to assess the quality of their climate expenditure in terms of reduced greenhouse gas emissions and reduced vulnerability to climate change. According to most cost curves for carbon abatement, expenditures to sequester carbon look to be more cost effective (per unit of GHG reduction) than changes in energy use. Given limited budgets, these cost effective measurements are important and need to be used more by countries to assess the quality of their climate expenditures.

References

AfDB (2011) http://www.infrastructureafrica.org/key-msg/sector/underpricing-water-costs-18-billion-year-subsidies-do-not-seem-be-reaching-poor-yet-c

Africa Progress Panel, 2014, Grain, Fish, Money, Financing Africa's Green and Blue Revolutions, http://app-cdn.acwupload.co.uk/wp-content/uploads/2014/05/APP_APR2014_24june.pdf

Andrews, M, Cangiano, M, Cole, N, de Renzio, P, Krause P, and Seligmann R, July 2014, This is PFM, CID Working Paper No. 285 http://www.hks.harvard.edu/content/download/69282/1249938/version/1/file/285_Andrews_This+is+PFM.pdf

Felix Ankomah Asante, Simon Bawakyillenuo, Neil Bird, Nella Canales

Trujillo, Cynthia Addoquaye Tagoe and Nicholas Ashiabi (2015) Climate finance in Ghana

Overseas Development Institute (ODI), London and the Institute of Statistical,

Social and Economic Research (ISSER), University of Ghana. http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9684.pdf

Auditor-General of South Africa (2013), Performance Audit, https://www.agsa.co.za/Portals/0/PA_Audit/AGSA_Consultancy_Report_National.pdf

Bainomugisha A, Mushemeza, E, (2006) Monitoring Legislative Representation : Environmental Issues in the 7th Parliament of Uganda, ACODE, https://www.africaportal.org/dspace/articles/monitoring-legislative-representation-environmental-issues-7th-parliament-uganda

Bayliss k (2013) Financing Water in Africa https://www.soas.ac.uk/economics/research/workingpapers/file86432.pdf

Belward, B. Bisselink, K. Bódis, A. Brink, J.-F. Dallemand, A. de Roo, T. Huld, F. Kayitakire, P. Mayaux, M. Moner-Girona, H. Ossenbrink, I. Pinedo, H. Sint, J. Thielen, S. Szabó, U. Tromboni, L. Willemen (2011) Renewable Energies n Africa http://publications.jrc.ec.europa.eu/repository/bitstream/JRC67752/reqno_jrc67752_final%20report%20.pdf

CABRI (2007) Are we asking the right questions? Embedding a medium-term perspective in budgeting: legacy systems and legal framework practice in the francophone and anglophone traditions

CABRI (2008) Budget Practices and Procedures inn Africa http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/CABRI%20AfDB%20ENG.pdf

Catalyst, H (2007) REPOA, TGNP. "Follow the Money: A Resource Book for Trainers on Public Expenditure Tracking in Tanzania." 2007. Retrieved on July 8, 2007. /resources/library/PETSManual.pdf

Clear (?) Performance Based Budgeting Manual, Clear

CMI, Anti-corruption and accountability in anglophone versus francophone governance traditions

CSS (2008) http://www.css.ethz.ch/fsk/policy_consultancy/Grafiken/CSS_Analysis/No-38/CSS-Analyses-38-Africa-Natural-resources.jpg

E. Coughlan de Perez, B. van den Hurk, M. van Aalst, B. Jongman, T. Klose, and P. Suarez (2014), Forecast-based financing: an approach for catalyzing humanitarian action based on extreme weather and climate forecasts, http://www.nat-hazards-earth-syst-sci-discuss.net/2/3193/2014/nhessd-2-3193-2014.pdf

Daily Times (2015) August http://www.unpei.org/sites/default/files/Disasters%2C_Environment_Drain_K142.9bn_Malawi..pdf

Department for International Development (2004)). “Characteristics of Different External Audit Systems.” Policy Division Briefing. 2004. Retrieved on April 13, 2007. http://www.dfid.gov.uk/aboutDFID/organisation/pfma/pfma-externalaudit-briefing.pdf

European Commission (2011) Study of Sector Wide Approach in the water sector

Eshetu, Z., Simane, B., Tebeje, G., Negatu, W., Amsalu, A., Berhanu, A. Bird, N., Welham, B. and Canales, N. (2014), Climate Finance in Ethiopia, http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8995.pdf

FIRST CLASS CRISIS. China's Criminal and Unsustainable Intervention in Mozambique's Miomba Forests (2014), Environmental Investigation Agency.

Fölscher A (2006) Introduction: African Experience with Budget Reform, OECD Journal

http://www.oecd.org/gov/budgeting/43470033.pdf

Fusheini, A (2014), Inside the MP's Toolkit: Approaches to Budget Analysis in Ghana, http://www.resourcegovernance.org/news/blog/inside-mps-toolkit-approaches-budget-analysis-ghana

Gondo P (2014), A review of forestry financing in Africa, http://www.un.org/esa/forests/wp-content/uploads/2014/12/Forest_Financing_Africa_Gondo.pdf

Government of Ghana (2010), http://www.fcghana.org/page.php?page=303&section=28&typ=1

Government of Malawi (2011), Malawi Agricultural Sector Wide Approach, *A prioritised and harmonised Agricultural Development Agenda: 20/11/2015*
ftp://ftp.fao.org/tc/tca/CAADP%20TT/CAADP%20Implementation/CAADP%20Post-Compact/Investment%20Plans/National%20Agricultural%20Investment%20Plans/Malawi%20Post%20Compact%20Investment%20Plan.pdf

Government of Malawi (2015), Budget Guidelines for 2015/16 Budget

http://unpei.org/sites/default/files/Guidelines%20for%20the%20Preparation%20of%20the%202015%2016%20budget%20Malawi.pdf

Government of Uganda (2014), third Budget Call Circular

http://www.budget.go.ug/budget/sites/default/files/National%20Budget%20docs/THIRD%20BUDGET%20CALL%20CIRCULAR-FINALISATION%20OF%20BUDGET%20ESTIMATES%20FOR%20FY%202014-15.pdf

Government of Rwanda, Environment and Natural Resource Sector Strategy
http://www.minecofin.gov.rw/fileadmin/templates/documents/sector_strategic_plan/Environment_Natural_Resource_SSP_Oct_13.pdf

Haile, M (2005), Weather patterns, food security and humanitarian response in sub-Saharan Africa
http://rstb.royalsocietypublishing.org/content/360/1463/2169

Harrison G (2003), Performance-Based Budgeting in California State Government: a blue print for effective reform, October 2003

IBP (2006), De Renzio, Paolo, Vitus Azeem, and Vivek Ramkumar. “Budget Monitoring as an Advocacy Tool: A Case Study on the Uganda Debt Network.” International Budget Partnership. 2006. Retrieved on February 21, 2007.

IDS (2004), The budget as theatre – the formal and informal institutional makings of the budget process in Malawi

IMF (1999), Guidelines on Public Finance Management (1999)
https://www.imf.org/external/pubs/ft/expend/index.htm

IMF (2005), Technical assistance evaluation: Public Expenditure Management Reforms in Anglophone African Countries.

IMF (2005b), Revenue Forecasting – how is it done?, https://www.imf.org/external/pubs/ft/wp/2005/wp0524.pdf

IMF (2007), Manual on Fiscal Transparency, by the IMF, available at http://www.imf.org/external/np/fad/trans/manual/gloss.htm

IMF (2013), Energy Subsidy reform in sub-Saharan Africa, https://www.imf.org/external/pubs/ft/dp/2013/afr1302.pdf

IMF (2015), PFM Reform: Lessons, Promises and Tears. IMF Blog

Indufor (2013), Forest Financing in African countries, http://www.un.org/esa/forests/pdf/facilitative-process/Africa_Macro_2.pdf

INTOSAI (2010), Auditing Forests, Guidance for Supreme Audit Institutions, http://www.environmental-auditing.org/LinkClick.aspx?fileticket=fbx%2FbAIVeFU%3D&tabid=128&mid=568

Kakonga, J (2012), Planning Commissions in Developing Countries, Resurgence and Effectiveness, Global Policy 12th November 2012, http://www.globalpolicyjournal.com/blog/12/11/2012/planning-commissions-developing-countries-resurgence-and-effectiveness

Kellett, J. and Caravani, A. (2013), Financing Disaster Risk Reduction: A 20 Year Story of International

Aid, http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8574.pdf

Lienart Ian (2003), A comparison of two public expenditure systems in Africa, IMF Working Paper http://www.imf.org/external/pubs/ft/wp/2003/wp0302.pdf

MCOA (2012), Ministry for the Coordination of Environment Action, Directorate of Planning and Studies, Public Environmental Expenditure Review, Mozambique 2005-2010, August 2012

http://www.unpei.org/sites/default/files/dmdocuments/Mozambique%20PEER%20Full%20English.pdf

Ministry of Finance, Economic Planning and Development (2014), Malawi, Report on Poverty Environment in the Public Investment programme, http://www.unpei.org/sites/default/files/e_library_documents/Report_on_Mainstreaming_Poverty_and_Environment_in_the_Public_Sectior_Investment_Programme_Malawi.pdf

Ministry of Finance, Economic Planning and Development (2014), Malawi, Joint Public Expenditure Review of Malawi's Environment and Disaster Risk Management Sectors

http://www.unpei.org/sites/default/files/e_library_documents/NOVEMBER%202014%20ENRM%20AND%20DRM%20PER%20REPORT.pdf

Matteo Morgandi (2008), Extractive Industries Revenue Distribution at the subnational level,

http://www.resourcegovernance.org/sites/default/files/Extractive%20Industries%20Revenues%20Distribution%20at%20the%20Sub-National%20Level.pdf

Muchapondwa, E., (2014), Aid and the environment in Africa, A synthesis of eight case studies

March 2014, WIDER

Mwase, W.F., Jumbe, C.B.L., Gasc, F., Owiyo, T., Nyaika, J., Kwapata, K., Manduwa, D. and Maonga, B. (2013), Assessment of Agricultural Sector Policies and Climate Change in Malawi – The Nexus between Climate Change Related Policies, Research and Practice, http://www.climdev-africa.org/sites/default/files/DocumentAttachments/Agricultural%20policy%20Review%20Vs%20Climate%20Change-Malawi_Draft_0.pdf

National Audit Office, Tanzania, (2014), Specialised Audits, 2014, http://www.nao.go.tz/?wpfb_dl=112

OECD (2005), Code of Ethics and Auditing Standards, by the International Organization of Supreme Audit Institutions, http://intosai.connexcc-hosting.net/blueline/upload/1codethaudstande.pdf

OECD, Glossary of Economic Terms, http://stats.oecd.org/glossary/index.htm

OECD (2001) “Best Practices for Budget Transparency.” http://www.oecd.org/dataoecd/33/13/1905258.pdf.

OECD (2006) “Why is Procurement Important?” OECD Factsheet. 2006. http://www.oecd.org/dataoecd/35/58/37766795.pdf

Olson, R. (2015), Sub-Saharan Africa’s sovereign wealth funds struggle in era of low oil http://blogs.ft.com/beyond-brics/2015/02/25/guest-post-sub-saharan-africas-sovereign-wealth-funds-struggle-in-era-of-low-oil/

Potter, B. and J. Diamond (1999), *Guidelines for Public Expenditure Management* (Washington: IMF), http://www.imf.org/external/pubs/ft/expend/index.htm.

Poverty-Environment Initiative Rwanda, http://www.unpei.org/sites/default/files/e_library_documents/Rwanda-Mainstreaming-ENV.pdf

Rakner, L., Mukubvu, L., Ngwira, N., Smiddy, K. (2003), Budget as Theatre in Malawi http://www.odi.org/sites/odi.org.uk/files/odi-assets/events-documents/3554.pdf

Ramkumar V (2005), A Citizens’ Guide to Monitoring Government Expenditures, Open Budget Initiative, http://internationalbudget.org/library/publications/guides/our-money-our-responsibility/our-money-our-responsibility-part-1/

REMA (2010), Public Environmental Expenditure Review http://www.unpei.org/sites/default/files/PDF/Rwanda_PEER_finalreport.pdf

Schiavo, Campo, S. & Tommasi, D. (1999), Managing government expenditure (Manila: Asian Development Bank), http://www.adb.org/documents/manuals/govt_expenditure/.

Tumushabe, G., Muhumuza, T., Natamba, E., Bird, N., Welham, B., and Jones, L. (2013), Climate finance in Uganda http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8622.pdf

Taylor, A J (2014), Review of the Functionality of Sector Working Groups in Malawi, A Report Prepared for The Government of Malawi, Ministry of Finance Economic Planning and Development, Department of Economic Planning and Development, ..

United Nations Department of Economic and Social Affairs, (2000), Division for Public Economics and Public Administration. “Transparency and Accountability in Government Financial Management.” http://unpan1.un.org/intradoc/groups/public/documents/UN/UNPAN000234.pdf

UN (2012), Millennium Development Goals http://www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf

UNCTAD (2015), World Investment Report, http://unctad.org/en/PublicationsLibrary/wir2015_en.pdf

UNDP and UNEP (2011), Managing Private Investments in Natural Resources: A Primer for Pro-Poor Growth and Environmental Sustainability https://www.unpei.org/sites/default/files/publications/LR%20PEI%20Private%20Investment%20Primer%20(1).pdf

UNDP and UNEP (2015), Mainstreaming Environment and Climate for Poverty Reduction and Sustainable Development: A Handbook to Strengthen Planning and Budgeting Processes - http://www.unpei.org/knowledge-resources/publications/mainstreaming-environment-and-climate-for-poverty-reduction-and-sustainable-development-a-handbook-to-strengthen-planning-and-budgeting-processes#sthash.BMwikGDX.dpuf

UNEP (2002), GEO 3 http://www.grida.no/publications/other/geo3/?src=/geo/geo3/english/149.htm

UNEP 2006, http://www.grida.no/graphicslib/detail/export-of-fisheries-products-in-africa_cf02

UNEP (2015). Fiscal Space Scoping Study for Mozambique. Green economy project.

Viñuela,L., Kaiser, K., and Chowdhurie-Aziz, M. (2014), Intergovernmental Fiscal Management in Natural Resource–Rich Setting, http://www-

wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2014/10/17/000470435_20141017094054/Rendered/PDF/913430WP0P11450ource0Rich0Settings.pdf

Water Aid (2011), Working with Parliament on Improving WASG Governance in Uganda

Whitehead E, (2012), Rise of the African sovereign wealth fund. *http://www.thisisafricaonline.com/News/Rise-of-the-African-sovereign-wealth-fund*

World Bank (2001), Managing Public Expenditure – A Reference Book for Transition Countries, http://www1.worldbank.org/publicsector/pe/befa05/OECDGlossaryBiblio.pdf

World Bank Institute (2005), The Role of Parliaments in the Budget Process.

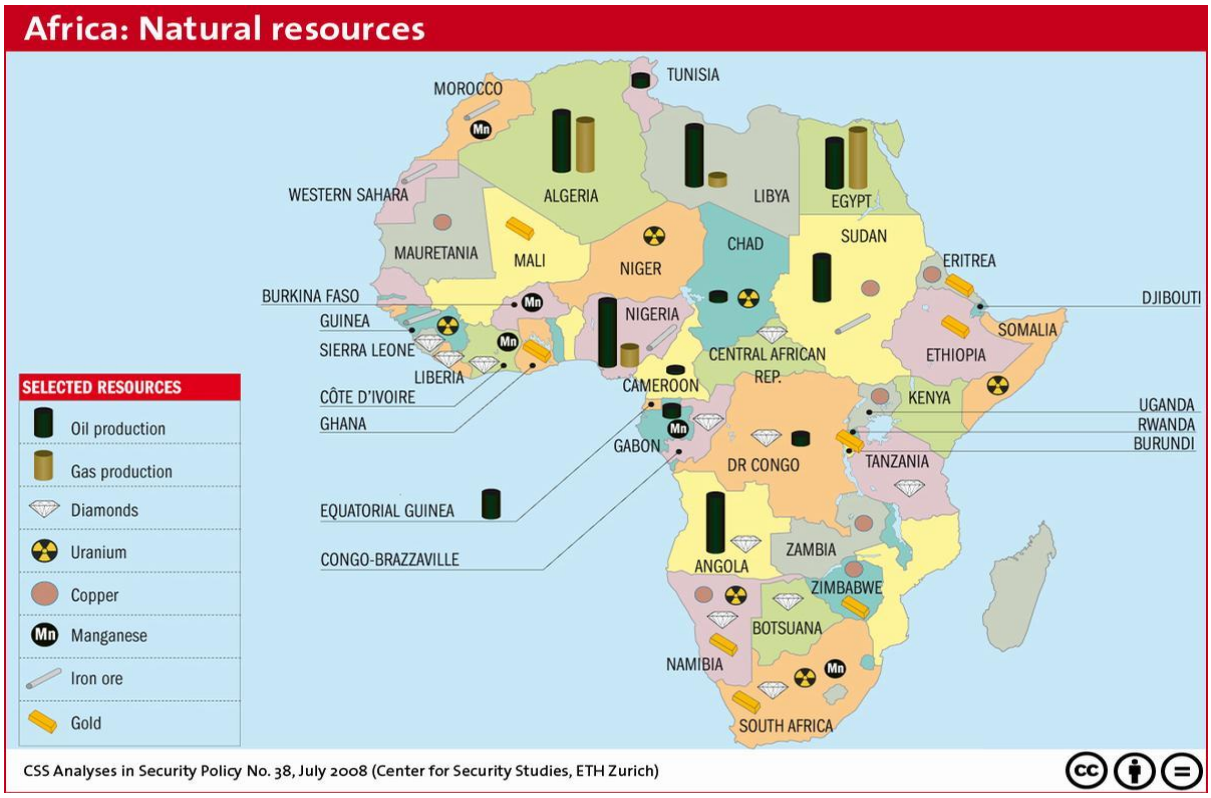
World Bank (2008), Mozambique, Higher Fuel and Food Prices, Impacts and Responses for Mozambique http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2009/06/30/000333038_20090630233410/Rendered/PDF/474550ESW0MZ0P1C0Disclosed061291091.pdf

World Bank (2011a), Forestry Sector Public Expenditure Reviews http://www.profor.info/sites/profor.info/files/Forest-Sector-PER-review-PROFOR.pdf

World Bank (2011), Implementation Completion Review of the Ghana NREG programme, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/01/12/000333037_20120112013538/Rendered/PDF/ICR19470P102970C0disclosed010100120.pdf

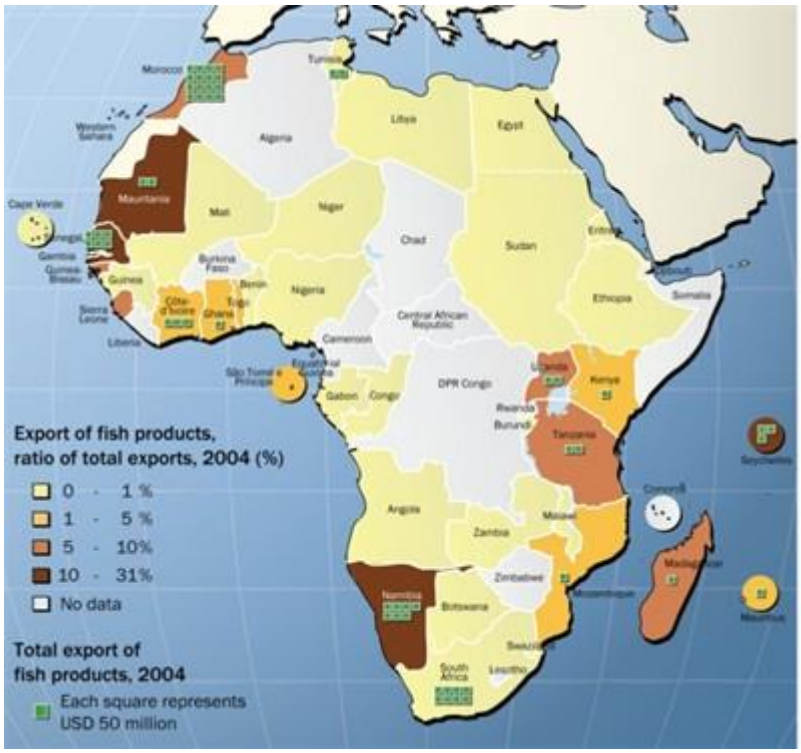
Annex 1: Why environment, natural resources and climate matters for economic development, poverty reduction, security and the SDGs in Africa

- Natural resources – agricultural land, minerals, water for agriculture and hydropower, forestry and fisheries – contribute to jobs, GDP and exports in many African countries



- It is vital that these natural resources are a blessing and not a curse for African countries and their citizens– for that capturing the value of these resources through taxes and royalties and reinvesting to address key social and development challenges is fundamental. The current trend shows that decision making is based on short political economy gains while the long term impacts will affect the prosperity of the countries
- These natural resources also contribute to the livelihoods, incomes and well-being for low income households — particularly women and children — and combined with access to capital, technology, markets and strong producer organizations can provide a ladder out of poverty
- Sustaining the natural resource base through better environmental management can ensure that economic development continues now and in the future. Deforestation and other negative environmental impacts indicate depletion of resources and long term costs that will negatively affect the economy. The key is defining the allowable resources extraction of renewables and clear reinvestment plan in the case on non-renewables.

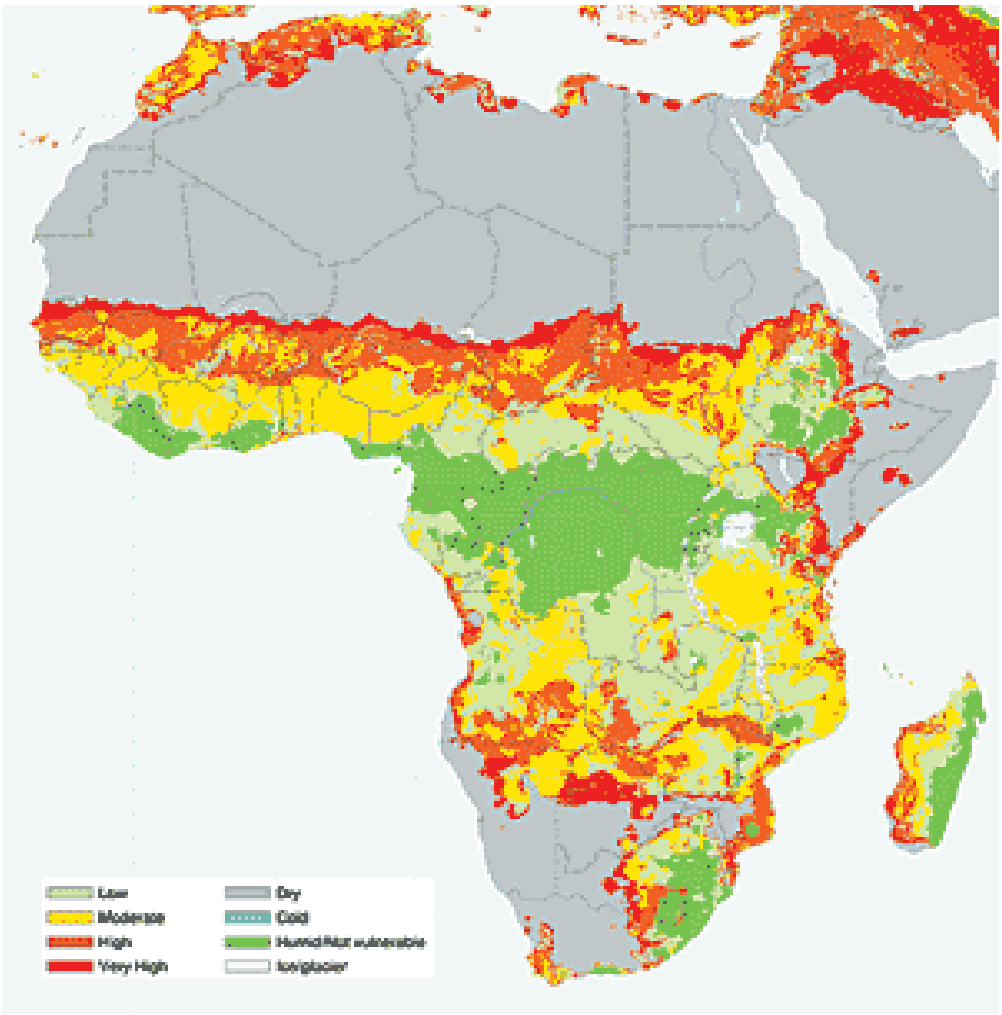
Africa's fishery exports



UNEP, 2006

- Natural resource access and distribution — with scarcities in some cases and abundance in others — is also a major driver of conflict both within and between African countries. So improved more equitable natural resource management can be a major ingredient for peace and security
- These issues are becoming more pressing with climate change – which will affect food security, agricultural productivity, water and energy availability, health outcomes and vulnerability to climate related disasters. The Africa desertification vulnerability map of Africa locates the 46 per cent of the area at risk, of which 55 per cent is at high or very high risk (UNEP, 2002).

Africa desertification vulnerability map



UNEP, 2002

- These issues of environment, natural resources and climate change have been given prominence in the recently agreed Sustainable Development Goals (SDGs) – see table below. SDG One focuses on ending extreme poverty which will need to take account of the natural resource base that Africa's poorest farmers – many of them women – depend on.

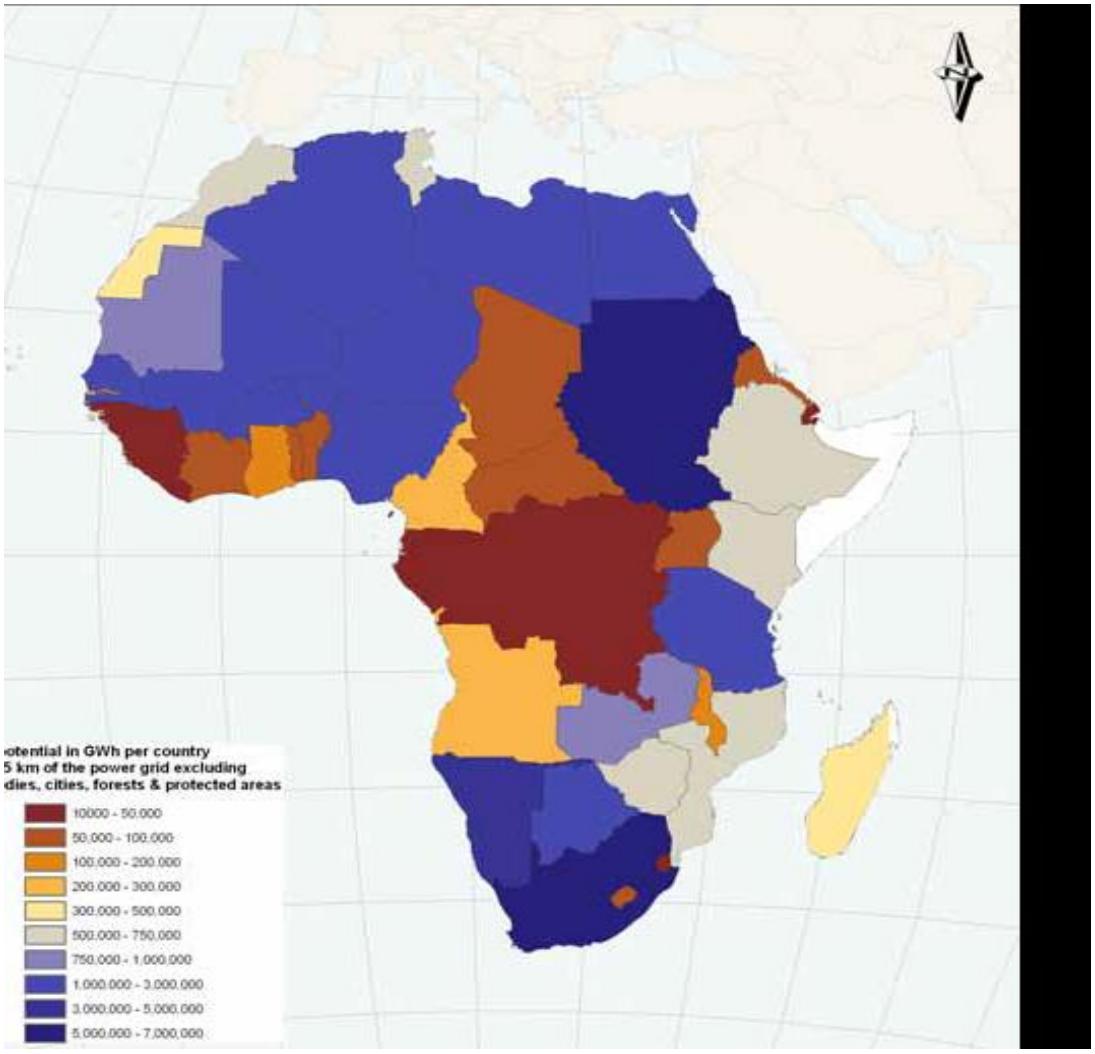
SDG targets that address poverty-environment-climate links[48]	
Goal 1: Poverty	**1.4** by 2030 ensure that all men and women, particularly the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services including microfinance **1.5** by 2030 build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

[48] Table 2 is illustrative, with a limited selection of key poverty-environment-climate related SDG targets. Additional targets could be added, including from the "means of implementation" targets that form part of each goal.

Goal 2: Hunger and Food Security	**2.1** by 2030 end hunger and ensure access by all people, in particular the poor and people in vulnerable situations including infants, to safe, nutritious and sufficient food all year round **2.3** by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment **2.4** by 2030 ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality
Goal 3: Health	**3.9** by 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination
Goal 4: Education	**4.7** by 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles…
Goal 5: Gender	**5.a** undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources
Goal 6: Water	**6.1** by 2030, achieve universal and equitable access to safe and affordable drinking water for all **6.2** by 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations **6.4** by 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply to address water scarcity, and substantially reduce the number of people suffering from water scarcity
Goal 7: Energy	**7.1** by 2030 ensure universal access to affordable, reliable, and modern energy services **7.2** increase substantially the share of renewable energy in the global energy mix by 2030
Goal 8: Growth	**8.3** promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage formalization and growth of micro-, small- and medium-sized enterprises including through access to financial services **8.4** improve progressively through 2030 global resource efficiency in consumption and production, and endeavour to decouple economic growth from environmental degradation in accordance with the 10-year framework of programmes on sustainable consumption and production with developed countries taking the lead
Goal 9: Infrastructure	**9.1** develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with affordable and equitable access for all
Goal 10: Inequality	**10.1** by 2030 progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average
Goal 11: Cities	**11.1** by 2030, ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums **11.6** by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management

Goal 12: SCP	**12.2** by 2030 achieve sustainable management and efficient use of natural resources **12.4** by 2020 achieve environmentally sound management of chemicals and all wastes … and significantly reduce their release to air, water and soil to minimize their adverse impacts on human health and the environment
Goal 13: Climate	**13.1** strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries **13.2** integrate climate change measures into national policies, strategies, and planning
Goal 14: Oceans	**14.2** by 2020, sustainably manage and protect marine and coastal ecosystems to avoid adverse impacts, including by strengthening their resilience, and take action for their restoration, to achieve healthy and productive oceans **14.7** by 2030 increase the economic benefits to SIDS and LDCs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
Goal 15: Ecosystems	**15.1** by 2020 ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands… **15.2** by 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase afforestation and reforestation by x% globally **15.3** by 2020, combat desertification, and restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation neutral world **15.9** by 2020, integrate ecosystems and biodiversity values into national and local planning, development processes and poverty reduction strategies, and accounts
Goal 16: Governance	**16.3** promote the rule of law at the national and international levels, and ensure equal access to justice for all **16.7** ensure responsive, inclusive, participatory and representative decision-making at all levels **16.10** ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
Goal 17: Global Partnership	**17.7** promote development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries… **17.14** enhance policy coherence for sustainable development **17.19** by 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement GDP, and support statistical capacity building in developing countries
ANALYSIS:	Analysis of the above SDG targets reveals a common concern for nine p/e/c issues: **Rights, access, employment, natural capital, resilience technology, resilient institutions, finance, metrics and mainstreaming**

A closer look at the potentials of Africa's resource base reveals opportunities — such as the rich renewable resources — hydro, solar, geothermal and wind that many African economies enjoy — and from which they can benefit from inward investment, growth and achievement of the SDGs. The graph shows that potential wind production energy amounts to 40000 TW per year when considering a cut-in value of 3.5 m/s. By contrast the currently actual available wind energy power in Africa is estimated at about 9 TW, reaching 166 TW for 2020 and 587 TW to 2030. (EC, 2015).



Available wind energy in Africa (Belward et al, 2011)

- This emerging agenda of Green Growth and Climate Resilience has received growing attention from African political leaders. It has broadened the range of questions being asked about the best use of natural, social and financial capital, and also broadened the criteria for judging success from $/GDP to wider measures of wellbeing. It has also opened up longer-term questions of the kinds of infrastructure investment that will be most sustainable, efficient, and equitable and reduce risk. Most countries are now considering green economy strategies, often within the context of the national development plan and budget, and are adding new questions to the kinds of assessment done of NDPs:

Independent IIED facilitation of national GE dialogues have used the following framework to ensure the debate does not miss or diminish a dimension. The checklist has been used in (a) preparing a background paper for each national dialogue and/or (b) as an internal facilitation guide:

Framework of integrated GE outcomes: points a-c are the principal outcomes, with d-f means to achieve them[43]:

a) **Human wellbeing:** decent jobs, health, livelihoods, freedoms, culture – as well as income

b) **Climate and other ecological limits not exceeded:** reducing carbon levels; and operating within the eight other planetary boundaries (biodiversity, nitrogen cycles, etc)

c) **Equity:** inclusion of stakeholders in process, economic activity, and benefit-sharing – especially those who are most dependent on natural resources and vulnerable to environmental risks

d) **Economic growth:** in those sectors and areas where it is most needed to support and sustain a-c

e) **Sustainable natural resource management:** improving natural resource productivity per person to achieve a-d

f) **Resilient systems:** sustaining all 6 capitals to allow system 'bounce-back'; adaptation to climate change, diversification, risk management, effective institutions and financial security to enable a-e

Principal source: Bass 2013

Examples of mainstreaming tools from selected countries

- Rwanda environment budget checklist
- Mozambique mainstreaming checklist.