WISER brief abstracts:

1. Brief 1: Policy making 2.0 – The role of weather information

Summary
Policymaking is a challenging exercise, which seeks to prioritise national investments between sometimes competing objectives driven by a vision and development goals. The extent to which socio-economic and environmental performance are interconnected makes the processes of issue identification and policy formulation increasingly more complex. In addition, uncertainty about future events, such as climate variability and change, makes monitoring and evaluation a crucial component. The probabilistic nature of climate information complicates the allocation of costs and benefits. Overall, the effectiveness of the policymaking process and the outcomes of policy implementation are affected by various factors that are complex and uncertain. On the other hand, the methods that are most commonly used to inform the policymaking process primarily use historical information to gain a better understanding of future trends, as data is a key measure of progress. While this approach generally provides useful insights for sectoral policies, where inertia prevents sudden changes on a yearly basis, it falls short when considering system-wide policy outcomes. This is because of narrow scope of the assessment, as well as the lack of integration (or cross-sectoral coverage) of the approach used, which also lacks appreciation for uncertainty. In other words, sectoral policies should be formulated to maximize simultaneously socio-economic performance and environmental conservation by contributing to more resilient and inclusive outlooks.

A recent study by the Economic Commission for Africa (ECA) recommended that “policy planning for sustainable development and inclusive green economy requires capturing the existing inter-linkages between economy, society and environment that are dynamic (within a governance framework) over the medium-to-long term. This requires the adoption of integrated cross-sectoral tools that can capture the dynamics of systems.” In addition, policy effectiveness is greatly influenced by weather and climate extremes, as well as behavioural responses to these occurrences. Accounting for weather and climate information through the use of integrated and systemic methods of analysis is critical and allows for decision makers to develop balanced portfolios of interventions, and tap into new opportunities for development that increase resilience, while mitigating the negative impacts of a warming climate.

2. Brief 2: Complementarity between PA CIS SEB model and S2S forecasting

Summary
Weather events are having tangible negative impacts on socioeconomic development at the national and subnational level as well as on ecological integrity. Policy effectiveness is affected by climate change, with investments yielding outcomes below expectations. The incorporation of weather information in development planning allows for anticipation of vulnerabilities and plans for resilience.

Specifically, downscaled seasonal forecasts have the potential to influence the decision-making progress. An integrated information system with the capacity to handle large amounts of data to
coordinate efforts would be vital in guiding the development of climate resilient policies. When this information is taken into account and policies are formulated, considering system-wide performance and resilience over time, extra-budgetary expenditure would decline (allowing to better and more effectively allocate available resources) and new opportunities for socioeconomic progress would emerge. The Pan-African Climate Information System Socioeconomic Benefits model (PA CIS SEB) has been created with this goal in mind. It is a flexible tool that covers a variety of sectors and performance indicators. As a result, it complements existing efforts by providing an integrated view of the likely outcomes of policy implementation across social, economic and environmental indicators.

3. Brief 3: Budget allocation inefficiencies

**Summary**
The annual budgetary process is a complex activity. It needs to balance the short-term priorities with long-term goals of all ministries. In addition, it needs to be aligned with the national vision and with country-wide medium-term development plans, as well as with short-term political directions. Finally, being a centralized process, the harmonization of funding across budgetary items in most countries is ultimately carried out by the Ministry of Finance, which is evaluated against very specific economic performance indicators. As a result, the annual budget is typically allocated to projects that would lead to short-term economic benefits, and much less to interventions that would guarantee resilience. There are additional side effects to using this approach: a short-term and narrowly focused process that maximizes economic growth may negatively impact social inclusiveness and environmental preservation. Similar side effects have emerged more frequently in recent decades, and are the result of the use of processes and policy analysis tools that primarily focus on sectoral performance, in isolation from other dimensions of sustainable development. Commonly used tools are by design not capable of integrating the climate information and to assess the impacts of extreme weather events like floods on economic performance, across sectors and actors. Similarly, these tools cannot assess the increase or decline in resilience associated with budget implementation. An integrated analysis is required to capture climate vulnerability and resilience, and provide further insights on the system-wide outcomes of policy implementation.

4. Brief 4: Resilience and socio-economic development

**Summary**
The concept of resilience has gained prominence during the last decade. This is the case not only for climate change, but also for social and economic development. If a system is resilient, then it is capable of withstanding internal and external shocks. Examples include fluctuations of Gross Domestic Product (GDP) due to the volatility of energy prices, the change in agriculture yield as a result of changing seasonal precipitation. Despite the growing recognition of resilience in the global policy discourse, its use in policymaking is often lacking, especially in the context of climate change. This is primarily because of the uncertainty about the emergence of future internal and external shocks, and the resulting investment risks (i.e. related to uncertain returns of investment). Two main facets of resilience are currently mostly unaccounted for in
policymaking: sectoral and systemic resilience to climate change. On the other hand, the private sector has made encouraging steps addressing the resilience of global supply chains. The incorporation of weather information in decision-making, through the use of a systemic approach, would allow to identify and estimate the advantages of improving resilience. This is especially important when dealing with development planning, where systemic resilience emerges from the connections existing across social, economic and environmental indicators.

5. Brief 5: Contribution to the SDGs

Summary
In 2015, United Nations Member States adopted the Sustainable Development Goals (SDGs) that aim to end poverty, protect the planet, and ensure prosperity for all. The achievement of these 17 goals will demand continuous effort, as well as a new approach to development planning.

Specifically, till now, policymaking has focused on sectoral policies, which may work well in isolation but neglect potential negative impacts on other sectors. As a result, the implementation of such policies may strengthen the performance for some goals and hamper others. Planning for the attainment of all the goals requires a systemic approach to ensure that policies are well aligned and complementary. This implies that policy outcomes are measured and assessed across sectors and actors, as well as across all the Goals. A systemic approach allows for the identification of potential synergies across policy options, and anticipates the emergence of undesirable side effects. When considering climate change, accounting for weather and climate information is of crucial importance for achieving the Goals.