Submission
in Response to the call for Submissions on:

Aspects related to economic diversification and transformation and just transition of the workforce and the creation of decent work and quality jobs, in the context of sustainable development, with a view to informing the in-forum discussion on possible needs for modelling tools, including capacity-building opportunities, to take place at SBI 47 and SBSTA 47 and the in-forum training workshop on the use of economic modelling tools at SBI 48 and SBSTA 48 (April–May 2018).

Introduction

The consideration of ‘economic diversification and transformation’ in the UNFCCC must be viewed from the perspective that the decisions on what and how to undertake economic diversification and any implied structural transformations, is, at all times, the purview of the national government(s) and their citizens in the context of the right to development and agenda 2030. Just transformation of the workforce and the creation of decent work and quality jobs are also inextricably linked to the nature and process of economic diversification and transformation, the sequencing of the required actions to stimulate the diversification and transformation and as well as the ability (and willingness) of governments to protect and offer relief to the industries and sectors at risk to the negative impact of the transformation. This is a matter of sustainable industrial and economic planning/policy, access to resources/level of retention of resources mobilised domestically, including technology, training and adjustment relief policies. Measures taken to address climate change stimulated by the unilateral action of one party, or under multilateral agreement, can either present obstacles to planned, or, in process programmes of economic diversification or accelerate such processes. It is therefore incumbent on the UNFCCC Parties to address this issue in a proactive, effective and timely manner.

Though the convention does not directly address the issue of economic diversification, it does stipulate that measures to address climate change should be not present adverse economic and social consequences for developing countries. Such an occurrence would indeed create undue burden for developing countries that are already particularly affected by the direct manifestations of a warming planet.

The work on response measures now under implementation with the Improved Forum is meant to try to address these issues in so as parties have clearly identified economic diversification and just transition, decent work and the creation of quality jobs as two stand of work to be pursued under the Forum.

Thus, the purview of the Improved Forum and its raison d’être is the exploration of the nature and consequences of response measures as well to delve into the broad palette of options, and support for undertaking such options. As noted in the decision requesting this submission, the IF will seek to consider possible needs for modelling tools, including capacity–building opportunities (which will take place at the SBs and the training workshop on the use of economic modelling tools at SBI 48 and SBSTA 48, April–May 2018).

1 Additionally the nature of industrial, infrastructure, trade and investment policies is also quite important.
South Centre welcomes this discussion on economic diversification and transformation and just transitions and decent work and quality jobs. This submission focuses on aspect of economic diversification and transformation and the need for modelling tools, systems and processes for assessing response measures with implication for just transformation and decent and quality work.

**On aspects of economic diversification and transformation**

Economic diversification is both a goal and a multi-purpose, multi-dimensional process, depending on the starting point. For developing countries, this can range from countries that seek to link up other economic sectors (agriculture and manufacture) to their extractive sector, to reduce economic vulnerability, increase GDP, diversify outputs (for product sophistication and differentiation), to those that are more focused on diversifying their export basket, both in terms of the composition, volume and direction of trade as well as take advantage of import-substitution opportunities (based on domestic demand). Some may seek diversification through (global) value diversification process, others by a variety of other means. Some countries have more options and degrees of freedom in terms of policy space and finance, while others have limited diversification options, which may be to simply climb the vertical process from commodity to agro-processing.

However, it occurs, there are some common challenges and obstacles to economic diversification facing developing countries. These include:

- **Development gaps set 1:** high levels of poverty across broad swath of the population, challenges around essential services: affordable clean water, modern energy services, sanitation and food security challenges.

- **Development gaps set 2:** in terms of access to technology, finance (with high or low concessionality and co-financing requirements), and human resource development.

- **Development gaps set 3:** this third set of challenge has to do with understanding fully the nature of the economy, through well-established data bases and modelling systems for supporting evidence-based policy decision-making, which is also a constraint, to different degrees, for different countries.

Ultimately, the key aspects of economic diversification include the nature and extent of:

- The domestic power system (well accepted as critical to economic growth and security);
- The natural variability of resources (across space and time, including the ability to use those resources in the face of restrictions on carbon based inputs, i.e., forests, in the context of REDD);
- The built environment;
- Investment in human capacity building or soft infrastructure;
- Local government and community capacity building;
- Job creation and measures to support dislocated sectors & and promote just transition, decent work and quality job development;
- Access to technology and know-how;
- Non-domestic barriers such as trade barriers, technology transfer;

---

2 This may be the case resource-rich developing countries but may be different for SIDS, LDCs, Landlocked developing countries as well as many other countries in Latin America, Africa and Asia.
- Technical assistance;
- Financing; and the
- Availability of planning and policy tools (such as modelling techniques) to guide cost-effective long term planning.

The need for modelling and assessment tools for economic diversification and transformation and Just Transition of the workplace.

It is important that the Improved Forum also focuses its effort and work programme on modelling techniques/simulations and assessment tools to support evidence-based policy making. It is important that the UNFCCC, itself undertake the consideration of developing modelling tools that are relevant to its framework, provisions and decisions.

Yes, there are multiple modelling and assessment tools undertaking by international organisations. However, it is not clear that these are suitable and fit-for-purpose of the conditions faced by UNFCCC Parties of varying national and regional circumstances and with a commitment to implement nationally determined contribution in order to fully implement the Paris Agreement and thus satisfy the objective of the Convention.

Some modelling tools may meet some conditions, but only a proper technical analysis and rigorous survey of the landscape will tell that. To-date, there has been mainly scoping discussion and qualitative analysis of the impacts of response measures for some countries, particularly African countries.

To-date, most modelling tools are developed for different situations outside of the UNFCCC and many fit the circumstances and policy concerns of developed economies. Though they may show concepts such as energy and development, they do not focus on nuanced issues (i.e., traditional fuels, electrification, economic structural change, income distribution, and informal economies) that are relevant to developing countries. Such models, as noted by Pandey (2002), can offer a starting point for analyzing certain issues in the modern industries of developing countries, like improvement of operations, impact of technology mix, and effects of certain aspects of privatization, (but) their capability for enabling a comprehensive policy analysis for developing countries is limited (Pandey, 2002). Many of these models may need to be calibrated for developing countries' national circumstances, resource constraints and climate and development challenges that either do, or do not exist, to the same degree, in the developed countries for which

---

3 Ummel, for example, argues that ‘advance modelling techniques could save South Africa an estimated $100 million per year (present value) by 2040’, in diversifying to solar and wind power. Ummel, K. (2013) Making Large-scale wind and solar power a reality. The Role of Spatiotemporal Modelling in Enabling Cost-Effective Deployment in South Africa and Beyond. Center for Global Development Brief.


5 This is with regard to energy modelling. Pandey further notes that “(t)his is because they lack in their representation of characteristics that are specific to developing economies. Policy priorities of equity and sustainability, existence of a large traditional sector, transition of population from traditional to modern markets, on-going major changes in the regulatory and competitive structure of energy industries, existence of multiple social and economic barriers to capital flow and technological diffusion, likelihood of huge investments in energy supply over next few decades, long-term uncertainties in domestic policy regime, and importance of decentralized energy planning are examples of characteristics that are specific to most developing economies. Such features need to be explicitly addressed in energy policy models in order to enable a meaningful policy analysis for developing countries. Pandey, R (2002) Energy policy modelling: agenda for developing countries, Energy Policy Volume 30, Issue 2, January 2002, Pages 97-106.
the original models were designed. Model parameters and sensitivities attuned for developed context will not automatically apply to those of developing countries. Additionally, as noted by Pandey, ‘results from a variety of models need to be considered by policy makers of developing countries in order to assess robustness of their decisions.’

Modelling tools are therefore needed that fit and take into consideration the design and methodologies of the model the geophysical and socio-economic circumstances of developing countries. Such models must integrate variables that are relevant to the unique characteristics of sub-groups of countries as well as individual countries. Models should be focused on the cross-border social and economic impacts of response measures on developing countries. There is also a need for continuous evaluation of the modelling and tools to take on board climate uncertainties and risks.

In the context of economic diversification and transformation, there is need for exploring sectoral impacts as well as macroeconomic impacts and distributional impacts on workers, individuals and households, micro and small business, medium-sized and large businesses.

In order to analyse the implicit and explicit challenges of the multidimensionality of development, it is important that the IF, in addition to the topic of economic diversification and transformation and just transition of the labour force consider:

- Further consolidating knowledge building on response measures, and their potential impacts, positive and negative; including what kind of inventory and notification system could be relevant or useful in this area;
- Focus also on exploring the tools for assessing, quantifying and modelling the impacts of response measures, ex post and ex ante, as well as the development of frameworks for determining the scope of relevant data collection, and typology of response measure to enable further analysis and economic modelling to be undertaken;
- Pursue exploration of the following issues over the course of its three year work programme:
  - What available research, modelling and analysis exist with regard to the sub topics covered under the rubric of response measures for each context? Where are the gaps—in terms of information and analysis
  - What are the scope and challenges around economic diversification (for specific country(ies) in the context of specific classes or categories of response measures—sector wise and economy wide at national levels: agriculture, energy, tourism, trade?
  - What kinds of guidelines and case studies could be used in the different regional and sub-regional contexts?
  - Identifying areas of capacity needs and development vis-a-vis the implementation and adjustment to response measures as they are likely to occur pre 2020 and post 2020—Including: What kind of capacities do developing countries need to develop and what kind of technical and other forms of assistance would they be able to benefit from those findings and information?
  - What are the technology needs that would arise from seeking to promote aspects of economic diversification in responses to measures implemented to address climate change?
  - What are the best approaches to ensuring just transition and decent work in responding to the required changes induced as an economy seek to
respond to set(s) of response measures, or more broadly structural transformation?

- What are the frameworks and measures that could be useful in exploring the impacts of applied and proposed response measures on employment, income, economic growth, rates, and living standards in developing countries?

Future response measures with multilateral impact should be assessed during design and before deployment. An assessment checklist can be developed in the following way:

- What, if any, and how much, is the net global climate change impact of the measure? (science basis)
- What are and how much are the adjustment costs that affected countries have to bear on the implementation of response measure?
- What are the trade impacts of the measure? Are they consistent with multilateral rules? How much is the impact of the measure on net foreign exchange earnings of and industrial development policies in developing countries?
- What is the impact of the measure on the fiscal and investment resources of the developing countries? What and how much are the impacts of reduced resources on investment and on the growth of potential national output? What are and how much are the impacts on reduced resources on social development?
- What is the impact of the measure on developing country access to clean technology?