POLICY LESSONS FROM PROMOTING SCIENCE, TECHNOLOGY AND INNOVATION FOR DEVELOPMENT

INFORMATION NOTE on the UNCTAD side event at the Economic and Social Council Annual Ministerial Review

4 July 2013

During an UNCTAD side event at the summer session of the Economic and Social Council in Geneva, Switzerland, held on 4 July 2013, experts argued that science, technology and innovation (STI) policy action was vital for development, but noted that both policy design and implementation posed significant challenges for policy-makers.

The event, organized by the UNCTAD Division on Technology and Logistics, brought together several experts on STI policy and interested parties to discuss the design and implementation of national STI policies. Experts presented lessons learned for ensuring increased effectiveness in the design and implementation of STI policies in developing countries. Participants shared their national experiences in STI policy.

The discussion drew on UNCTAD experience in conducting country STI policy reviews, as well as on the national experiences of Ghana and other developing countries.

Ms. Anne Miroux, Director of the Division, explained the methodology behind the UNCTAD STI policy reviews of developing countries. The methodology emphasizes the importance of a systemic consideration of STI issues, the need for formal mechanisms to involve all STI stakeholders and the need to adopt a long-term perspective. Mr. Angel Gonzalez-Sanz, Chief of the Division's Policy Review Section, outlined the elements that promoted successful policy outcomes and the key challenges faced in designing and implementing STI policies in developing countries. Mr. George Essegbey, of the Science and Technology Policy Research Institute under the Council for Scientific and Industrial Research in Ghana, spoke about the lessons from the country's experience with an STI policy review and implementation of STI policies and programmes. Mr. Jean-Eric Aubert, an independent expert on STI policy, provided his perspective on the types of STI strategies pursued by different groups of countries and the challenges that they were facing.

Among the challenges being faced, experts identified the need for real high-level political support with a focus on longer-term development rather than short-term deliverables; coordination across government ministries along with industry, research institutes and universities; achieving buy-in from diverse stakeholders that support innovation; addressing weaknesses in wider "framework conditions" that went beyond narrowly defined explicit STI policies; overcoming a traditional, narrow focus on science and technology without binding them to innovation; and making policy in the absence of adequate indicators to judge policy impact. The widely different contexts among various groups of countries and the imperative to adjust policies over time to maintain progress were additional complexities that policymakers had to face. One strategy was to start with pilot projects, then gradually scale up those that proved successful. This process often took several years, but the process could be substantially longer in low-income countries than in more developed countries.

Several elements were identified as important to promote success in the process of undertaking and producing country STI policy reviews. High-level commitment in a country and a clear purpose of mind by national policymakers were central. The timing of the exercise was likewise critical, with unpredictable changes in circumstances, such as changes in key personnel following elections, sometimes proving determinant. Finding ways to address the inadequacies typically encountered with innovation indicators was often an issue. Collaboration with other agencies could promote success by bringing in additional financing and/or expertise. However, a lack of support through development programmes that largely neglected STI policy could be a debilitating factor.

The experience in Ghana was illustrative, where a recent UNCTAD-supported policy review process had helped to build support for STI policy action and led to concrete actions aimed at STI development. These included the creation of the Ministry of Environment, Science and Technology, the design of a national STI policy, the integration of STI policy into the national development plan and the creation of an STI programme to support the implementation of STI policies. These were true achievements, but much still remained to be done. Progress was not simple or automatic; it required persistent commitment and high-level support.

Delegates from several countries present at the event shared their experiences, highlighting that action could follow STI policy reviews. In two developing country cases, policymakers had designed programmes to support STI development following STI policy reviews with support from UNCTAD. Another country reported difficulty in reaching the stage of designing an implementation programme and achieving real progress. In general, there was a consensus that while policy design presented challenges and successful implementation remained a challenging process in developing country contexts, STI presented significant opportunities for productivity gains, faster growth and more inclusive and sustainable development.