Status of Innovations, Technologies and Management of Africa’s Natural Resource

Report to the Ninth Session of the Committee on Sustainable Development (CSD-9)

I. Introduction

1. This report covers activities carried out by the Commission in the area of Innovation, Technology and Management of Africa’s Natural Resources during the biennium 2014-2015. The report includes the status of the implementation of the proposed programme budget for the biennium, and other activities considered as being of interest to member States and partners. ECA’s work under this area focuses on promoting the adoption and implementation of new initiatives in the areas of natural resources management, climate change and new technologies in view of supporting the advancement of economic and social development in Africa. Several milestones have been reached in support of the objective during the biennium.

II. Green Economy and Natural Resource

(a) Introduction

2. This section summarizes activities carried out by the subprogramme in the area of Green Economy and Natural Resource. The main objective of the work in this area is to contribute to the body of knowledge and enhance understanding on the implications of the green economy paradigm for Africa’s transformational agenda. The intent is to inform the formulation and implementation of policies to achieve a green transformation and realize optimal benefits from Africa’s key natural resources and related sectors. This work is carried out within the framework of the Rio+20 outcomes informed by Africa’s development priorities.
(b) Implementation progress

3. **Country case studies on inclusive green growth**: GENRS commissioned country case studies on inclusive green growth in Ethiopia, Ghana, Morocco and South Africa to inform the fifth issue of the Sustainable Development Report on Africa (SDRA-V). The study reports provide a comprehensive analysis of the selected country experiences in the implementation of inclusive green growth related policies and strategies. They describe the overall policy framework and mechanisms to promote inclusive green growth, and document good practices in selected sectors. The case studies also analyze key successes, challenges, and lessons, as well as their implication for policy, including policy options to foster this form of growth in the selected sectors.

4. **Fifth issue of the Sustainable Development Report on Africa**: SDRA-V has been produced under the theme Achieving Sustainable Development in Africa through Inclusive Green Growth. Partner institutions in its production are FAO, UNEP, UNIDO and UNDP. The report provides a holistic assessment of progress towards sustainable development in Africa using an indicator framework that covers the economic, social and environmental dimensions of sustainable development, as well as governance aspects. It examines the challenges and opportunities for inclusive green growth in selected sectors of the economy where targeted investments with accompanying enabling measures could spur inclusive green growth.

5. **Country case studies on inclusive green economy policies and structural transformation**. Mainstreaming inclusive green economy principles in the structural transformation agenda of African countries could spur sustainable structural transformation in the region. But this requires an in-depth understanding of the concepts and principles of inclusive green economy and their effective application to further the goals of structural transformation. In that regard, GENRS has concluded in-depth studies on inclusive green economy policies and structural transformation in five countries – Burkina Faso, Ethiopia, Gabon, Mozambique and Tunisia. The objective of the country studies is to explore the linkages and contribution of inclusive green economy policies and strategies to the structural transformation of selected African countries that are at various uptake levels of green economy policies and strategies.

6. **Report on Green economy policies in Africa**: Inclusive green economy policies and structural transformation in selected African countries. The report will examine the role of inclusive green economy policies in fostering the structural transformation agenda, and provide policy recommendations on the development and implementation of inclusive green economy policies that reinforce structural transformation in Africa. The report will be informed by in-depth studies undertaken in five countries (Burkina Faso, Ethiopia, Gabon, Mozambique and Tunisia), and questionnaire surveys being administered in 10 others (Algeria, Cameroon, Ghana, Kenya, Mauritius, Morocco, Republic of Congo, Rwanda, Senegal and South Africa).

7. **Report on means of implementation for sustainable development targets in Africa**: Enabling measures for an inclusive green economy in Africa. This report, being produced in collaboration with UNEP, explores the implications of the green economy transition for Africa. It identifies and analyses the necessary enabling measures for a smooth transition. These are: institutions and policies; policy instruments; green technology development and transfer; capacity development; and financing inclusive green economy in Africa.
8. **Sustainable Development Report on Africa: Integrated assessment tools and methodologies for inclusive green economy in Africa.** The report aims at enhancing understanding on the application of various tools and methodologies for integrated assessment, taking into account the different stages of the policy cycle and the circumstances and specificities of African countries with regard to statistical capacity, data availability and quality. The climate resilient and green economy (CRGE) strategy of Ethiopia is used as a case study to illustrate the practical application of integrated tools and methodologies to an inclusive green economy related strategy. The report proposes the most suitable methodologies and tools for an integrated assessment of inclusive green economy policies in Africa.

9. **Policy and research papers:** GENRS is producing several policy and research papers on selected inclusive green economy issues. The intention is to ensure the availability of relevant and up to date research results in easily digestible formats to effectively inform policy decisions and actions that foster an inclusive green transformation.

10. **Mainstreaming natural disaster risk reduction (DRR) into national development policies:** The implementation of the project on strengthening capacities of African policymakers to mainstream natural disaster risk reduction (DRR) into national and regional development policies and strategies in Africa is in its advanced stage. The objective of the project is to strengthen the capacities of relevant regional, subregional and national entities to mainstream DRR into regional, subregional and national development strategies to contribute to meeting the MDGs and the attainment of sustainable development goals in Africa. Assessment reports for West Africa, Southern Africa, and the Regional Assessment and synthesis report have been finalized and submitted for editing, translation and publication.

(c) **Results and impacts**

11. Although GENRS was established in 2013, its work on the green economy effectively commenced in 2014, as it had to deliver on outputs that had already been programmed for the 2012-2013 biennium. As such, most of the outputs of its policy and research work are being finalized for publication and dissemination.

12. The findings of the country studies on inclusive green growth have demonstrated that the application of inclusive green economy principles and approaches can spur growth in key priority sectors of African economies with outcomes in the economic, social and environment dimensions of development. Additionally, the findings of the country studies on inclusive green economy policies and structural transformation in Africa were presented and disseminated to key policymakers and experts in those countries. The intermediate results have been enhanced understanding, multi-stakeholder dialogue, networking and coordination on inclusive green economy policies and structural transformation in the countries.

13. The reports and meetings have permitted the identification of concrete policy recommendations and actions to be undertaken for inclusive green transformation in those countries. Furthermore, the country studies have demonstrated to be of policy relevance to the study countries. For example, Ethiopia considers that the study findings will contribute to informing the country’s successor Growth and Transformation Plan (GTP II). In addition, the country has requested for further engagement with ECA in the application of integrated assessment tools and methodologies to inform the development and implementation of green economy related policies and strategies.
14. The report and expert group meetings on the non-recurrent publication *enabling measures for an inclusive green economy in Africa* explores enablers of the transition such as institutions and policies, policy instruments, technology development and transfer, capacity development and financing. The report also examined the challenges and opportunities for deploying the enablers and proffers policy recommendations towards that end. It engaged African experts and policymakers to validate, and better articulate the necessary enabling measures for inclusive green economy in Africa. An interim result has been rich dialogue with experts in a wide range of fields, knowledge and experience sharing on key enabling measures for inclusive green transition in Africa.

15. The report on *integrated assessment of tools and methodologies for inclusive green economy policies in Africa* provides a comprehensive assessment of integrated assessment tools and methodologies for inclusive green economy policies in Africa. The validation of the report also engaged experts in various fields and helped to enhance understanding, multi-stakeholder dialogue, networking and experience sharing and future research work on such tools and methodologies.

16. As GENRS finalizes and disseminates its research products, engages with knowledge partners, undertakes capacity-building activities, engages in demand driven advisory services to member States, greater direct impact will be observed in the coming years. Sustained engagement with, and provision of more support to target countries will be necessary to achieve the final expected results.

**(d) Lessons learned**

- Improved coordination and collaboration on green economy matters at the national level will ensure policy coherence and effective implementation results.

- Adequate knowledge and understanding of green economy concepts is important to inform policy design and implementation that factors national development context and priorities.

- Effective policy design, implementation, monitoring and evaluation is data and information intensive. This calls for enhanced statistical capacity to generate the data required for green economy analysis.

- Given the multidimensional nature of green economy, the designation of national focal institutions will enhance effective intervention by ECA and partners.

- Green economy is a relatively new concept for which there is a growing number of requests for support from member States. Work on Green Economy therefore requires a wide range of interventions covering many countries to ensure that member States benefit equitably from the work of the subprogramme. Such interventions have significant financial and human resources implications, thus requiring enhanced resource allocation, which could be achieved through a project with a medium term scope. This will help to deepen and broaden the ongoing work.
III. New Technology and Innovation Section (NTIS)

17. The implementation of the work-programme in the area of new technology and innovation (NTI) was focused on conducting research and analytical work to help member States promote the use of innovations and technological systems as an engine of economic growth. ECA, in this area continued to support gender-sensitive strategies for building and sustaining the African digital economy and creating an enabling environment for the knowledge economy through evidence-based research that assists African countries to formulate, implement and evaluate policies and strategies in ICT, innovation and science and technology. Frameworks, publication, policy briefs and other knowledge products were published based on the research outcomes to guide member States with regard to policy and reforms interventions.

Key achievements by NTIS include:

18. A policy guideline for open government data implementation in Africa adopted: To assist African countries “to improve transparency, unlock social and economic value”, given the vast developmental, social and economic gains that have been realized in countries that have moved towards Open Government (OG), especially through Open Government Data platforms (OGD) at national and subnational levels, ECA has developed an analytical study of policy, legal and regulatory environments favourable for Open Government implementation in Africa. The study commissioned by ECA has two facets- a report on the policy, legal and technical requirements for Open Government in Africa, which provides a description of the requisite environment for the implementation of Open Government initiatives in African countries, with a focus on social and economic empowerment of African citizens through the provision of Open Government Data. The second facet of the study was the development of a guideline document or a toolkit with a step-by-step guide for countries wishing to follow best practices for OG implementation within a suitable contextual framework. An Expert Group Meeting on Policy, legal and technical requirements for Open Government in Africa was organized by ECA and the Government of South Africa in Pretoria, from 5-6 June 2014 to bring together open government data experts and policymakers to review the analytical study. The meeting also aimed to discuss policy issues related to the implementation of open government data programmes in Africa as well as lessons learned in African countries and elsewhere. A policy guideline for open government data implementation in Africa has been developed and the implementation phase is planned. The meeting also enabled ECA to gain a greater understanding of member States’ needs with regards to implementing OG and OGD policies in Africa.

19. WSIS+10 Progress reviewed at a High-Level Event: To report on WSIS Follow-up in Africa, ECA prepared a contribution to the report of the UNSG and participated at the WSIS+10 High-Level Event, organized by the International Telecommunication Union (ITU), in collaboration with UNESCO, UNCTAD and UNDP in Geneva, Switzerland, from 9 to 12 June 2014. The objectives of the WSIS+10 High-Level Event was to bring together all stakeholders to review the progress made in the implementation of the WSIS outcomes under the mandates of participating agencies, and to take stock of achievements in the last 10 years based on reports of WSIS Stakeholders, including those submitted by countries, Action Line Facilitators and other stakeholders. The overall major outcomes of the event were: the WSIS+10 Outcome Documents; and the launch of the report of the partnership on measuring ICT for development. This report measures progress in the information society with a very detailed review of each of the targets. As a result, the African delegates requested ECA to support the implementation of the outcome documents as the countries are moving towards
implementation of various activities. ECA shall consider the outcome documents in the respective fields of our work programme and regain its leadership position in ICT4D in Africa.

20. **A framework for assessing STI Readiness/Country Profiles developed.** To enable member States assess their national innovation system, ECA has developed a methodological framework for assessing STI Readiness of countries and Country Profiles. The main elements of the STI Readiness/Country Profile Framework include: (i) economic and innovation performance; (ii) STI policy; (iii) STI actors competencies and capacity to innovate; (iv) actors’ interactions; (v) human resources for innovation; and (vi) STI policy governance. To assess the implementation and usefulness of the framework, Kenya and Nigeria were used as case studies and was reviewed by experts, representatives of RECs, AUC, ECA and UNESCO, who attended the Expert Group Meeting held in Addis Ababa, Ethiopia from 23-24 June 2014. Participants called on ECA to take advantage of existing STI data sets, popularize the framework and consider national and regional use of the framework.

21. **Promoting youth innovation and entrepreneurship:** To stimulate innovation and entrepreneurship among young people, ECA conducted two outreach activities. The first was a series of online discussions conducted in English and French on various issues that could stimulate innovation among the youth. The second is a summer school that brought together 43 students teams representing 112 students from 10 universities in Africa with innovative engineering concepts to improve maternal health in Africa. The students were exposed to entrepreneurship and technology commercialization training and design and rapid prototyping of medical devices at a meeting organized in Tanzania, from 12-16 December 2014.

22. **Senior Experts Dialogue (SED) on Science, Technology, and Innovation and the African Transformation Agenda:** SED was held from 21-22 July 2014 in Abuja, Nigeria. It was jointly organized by ECA and the Government of Nigeria with financial support from the Governments of Norway and Finland. Senior policymakers, technology and innovation leaders from academia, the private and public sectors, the international development community and other opinion makers and leaders (from within and outside Africa) examined collectively the directions in which science, technology and innovation can be carefully and deliberately deployed to support and accelerate the African transformation agenda and contribute to agreed societal priorities.

23. **The Global Multistakeholder Meeting on the Internet Governance Forum (IGF):** The Global Multistakeholder Meeting on the Internet Governance Forum (IGF) was held in Istanbul, Turkey from 1-5 September 2014. ECA participated at the Forum and shared the African perspective. This year’s main theme, Connecting Continents for Enhanced Multi-stakeholder Internet Governance reflects the collective mission of the IGF community to foster an accessible, open, secure and trustworthy Internet. Based on this, ECA organized two sessions during the event - one on “Internet as an engine of growth and development” and the other on AIGF Meeting: Future of Internet and Perspective for Africa. These sessions provided opportunity to deepen the understanding of the elements of the areas of focus, expected results and corresponding vital activities that will need to be put in place to achieve the expected outcomes. It was recognized that a valuable leadership of ECA in the Internet Governance issues as well as to bring diverse African stakeholders together and thus provides them the opportunities to share vision on the role and importance of Internet Governance for the development of the continent, and to discuss IGF issues namely the new developments around the IG environment globally such as the US intention on the transition of key IANA functions, etc.
24. **Assessing the contribution of ICTs to recent economic growth performance in Africa:** To assist African countries to understand the contribution of information and communication technologies to Africa’s recent economic growth performance and to explore how that contribution can be further enhanced, ECA has undertaken an empirical assessment study on “Assessing the contribution of ICTs to recent economic growth performance in Africa” and country studies from Ethiopia, Ghana, Nigeria and Senegal. The studies provided quantitative evidence of the sector’s contribution to Africa’s economic growth and made recommendations for consideration and adoption by African governments and other stakeholders in Africa's development. These studies were reviewed by experts, representatives of member countries, RECs and IGOs, Academias, and other regional and international organizations who attended the Expert Group Meeting held in Addis Ababa, Ethiopia from 23 to 24 September 2014. The participants also explored ways through which the contribution of ICTs to Africa’s structural transformation can be enhanced. They provided comments and inputs into the several studies and highlighted several issues including: the need to look at incentives to attract foreign companies, adequate economic models to measure the ICT impact on the economic growth. For the way forward on accelerating the contribution of ICT to the economic growth, a number of recommendations were made to be considered in the work of the ECA.

25. **“Innovation and Knowledge Trends in National Development Policy and Implementation: Towards Improved Access to Broadband in Africa”:** To enable member States to assess the state of broadband infrastructure and services, national and regional broadband policies and strategies including the role of broadband in regional integration, ECA has produced an analytical policy research report on “Innovation and Knowledge Trends in National Development Policy and Implementation: Towards Improved Access to Broadband in Africa”. The report identifies key issues and challenges that the continent need to address in order to improve access to broadband in Africa and also provides findings and recommendations for considerations by African policy- and decision makers. Experts who attended the Expert Group Meeting held from 18 to 19 December 2014, in Addis Ababa, reviewed the analytical policy research it undertook on the topic and discussed the key issues relating to the trends in Africa of innovation and knowledge generation with a focus on the role of improved access to broadband. Participants critically examined and discussed key issues that impacted the uptake and use of broadband in Africa and provided policy recommendations and inputs for ECA, its member States and other stakeholders to consider. The main recommendations made by participants focus on: (a) Policy policies and strategies; (b) Universal access to broadband; (c) Harmonization of policy and regulatory frameworks; and (d) Regional backbone infrastructures and exchanges.

26. **Best practices in R&D financing:** African Heads of State and Government committed themselves to raise gross expenditure on R&D to at least 1 per cent of gross domestic products. Emerging data suggests that most countries on the continent have been unable to meet this AU threshold. For this reason, ECA is undertaking a research to identify good practices in mobilizing public and private financing for R&D. To meet this goal, an expert group meeting on “Expert Group Meeting on Best practices in financing R&D in Africa: Evidence from a subset of countries” was organized between 15 and 16 December 2014. The main goals were to undertake a critical review of the draft study and suggest possible improvements; create awareness; and facilitate exchange of national and regional practices and experiences in mobilizing R&D funding.
27. “WSIS+10 and Beyond: outcomes and perspectives for Africa”. The United Nations system and agencies, international agencies and regional organizations commenced a systematic ten-year review of the WSIS outcomes in 2013. It is in this context that ECA, pursuant to its mandate to promote the economic and social development of its member States, has undertaken a review of the ten-year implementation of the World Summit on the Information Society (WSIS) outcomes in Africa. The report identifies achievements and gaps against the 11 WSIS action lines and examines key issues, challenges and lessons from ten-years of WSIS implementation in Africa including policy and strategic actions for recommendations beyond 2015. Over 70 participants involving government delegates from 27 member States, Regional Economic Communities (RECs), International and Regional Organizations, civil society, international and academic institutions who attended the Africa Regional Review of WSIS entitled “WSIS+10 and beyond” held from 14 to 16 April 2015, in Addis Ababa, Ethiopia reviewed the report on ‘Ten-year Review of the Implementation of the World Summit on the Information Society (WSIS) Outcomes in Africa, prepared by NTIS and a series of country studies carried out in selected countries including Cameroon, Ghana, South Africa and Tunisia. In addition, the meeting was also enriched through a series of presentations from countries, RECs and UN and other international agencies reflecting on the ten years of implementation of the outcomes of WSIS. The meeting reviewed and shared lessons learnt and made recommendations on key priorities for post-2015 WSIS agenda in the context of the AU 2063 agenda. The outcomes of the meeting were submitted as inputs to the eighteenth session (May 2015, Geneva) of the Commission on Science and Technology for Development (CSTD).

28. Meeting with the South Sudan delegation: The meeting was held on 22 January 2015 at ECA. The objective of this meeting was to enable government representatives from South Sudan to have a better understanding of the role and mission of ECA in supporting African countries as well as to explore the possibility of getting institutional support to set up a lead agency to coordinate and drive the government’s STI policy and programmes. Several pertinent issues related to the development of STI policy, the issue of cyber crime were also discussed with the delegates.

29. Policy Research: Different series of research studies including publications/reports and policy briefs have been produced and published. It includes policy briefs on: (i) Tackling the challenges of cyber security in Africa; (ii) Measuring e-government: key policy instruments for information society development; (iii) Can e-commerce facilitate the growth of small and medium-sized enterprises in Africa?; (iv) Building biomedical engineering capacity for improved health-care outcomes in Africa; and (v) Using national inventors’ associations to accelerate the adoption of technology and innovation in Africa.

30. Manual on measuring e-government: A manual on measuring e-government was finalized to support the efforts of countries to compile the core e-government indicators.

31. Challenges and lessons learnt: Several member States have increasingly demonstrated interest in new technologies and innovation to address their transformation agenda and continue to rely on the support ECA provides in adopting new policy measures and implementing new technologies in this sector in transforming their economic development. This requires additional resources. Furthermore, while social and economic development is increasingly driven by the digital revolution, African countries have stepped up efforts in embracing new technologies and innovation to drive their transformation agenda. Among others, cyber-security, open government data, measuring the impact of ICT on economic
growth, ensuring universal access to broadband, transforming government services and other socioeconomic sectors through e-government, e-health, e-education, e-employment, e-agriculture, e-environment, and e-sciences are among key priorities that member States identified for future growth and transformation. With regard to net-security, cyber-security has become a growing concern in Africa affecting businesses including small and medium enterprises. In order to expand the opportunities and horizons offered by ICTs in Africa, there is a need to put the necessary legal and regulatory environment in place. In addition, measuring and benchmarking the knowledge economy is gaining momentum on the continent.

32. **ECA support sought in policy research and capacity-building:** In facilitating further regional integration, member States are also keen to get ECA support through policy research and capacity-building/knowledge-sharing on the adoption and harmonization of policies at regional level for deploying new technologies and innovation for development priorities.

### IV. African Climate Policy Centre

33. Through the African Climate Policy Centre (ACPC), ECA has continued its support to member States in addressing challenges of climate change in key development sectors, by putting in place appropriate plans and mechanisms to take into account climate risks in national development priorities, policies, strategies and programmes. Assistance provided included knowledge generation consensus and capacity-building activities, in the areas of energy efficiency, loss and damage, climate resilience agriculture, and support relating to how countries can harness gains from blue and green economies. The achievements during the period under review include:

34. **Building climate resilient economies:** ECA launched different initiatives for building climate resilient in twenty seven (27) countries whose implementation is at different stages. These countries are: the six (6) African Small Island Developing States (SIDs), five (5) countries of the East African Community (EAC), fifteen (15) countries of the Economic Community of West African States (ECOWAS), and Mozambique. Work on enhancing the capacity of national meteorological and hydrological stations for climate change adaptation, climate monitoring and early warning, which started in the three pilot countries (Ethiopia, Rwanda and the Gambia) continued, although the procurement of equipment to strengthen the utility of climate information took much longer than previously planned. When completed, this entire process will contribute significantly toward: (i) improved data collection and analysis; (ii) improved dissemination of rainfall intensity, temperature, solar radiation and humidity; (iii) well packaged data for agriculture, water, energy and road infrastructure sectors; and (iv) production of short-term climate outlook and forecast to the public. Principally, the work done on data rescuing is slowly gathering pace and the three pilot countries have been able to improve work on satellite detection, seasonal forecasting and data rescuing. Collaborative work between ECA, the International Research Institute for Climate and Society (IRI), national meteorological agencies and regional climate centres, has resulted in a simultaneous improvement in the availability, access and use of climate information in the pilot countries. The initiative, called Enhancing National Climate Services (ENACTS), focuses on the creation of reliable climate information that can be used in national and local decision-making.

35. **Strengthening climate data, information and service infrastructure:** A total of two (2) servers, forty three (43) desktop computers, twenty (20) hydrological instruments with telemetry, five (5) scanners, fifteen (15) external storage devices, one (1) Automatic Water
Level Recorder (AWLR) with complete accessories and three (3) contact free radar flow measurement system with complete accessories were procured and installed in the three pilot countries i.e. Ethiopia, the Gambia and Rwanda. Different training and capacity-building activities were undertaken to ensure effective use by the beneficiaries. They have improved understanding and capabilities in packaging climate and related environmental data, information and services for policymakers, policy support organizations, and the population at large.

36. **Building Climate Resilient Small Island Developing States (SIDS):** This year, ECA took bold and innovative step towards analyzing the impacts of climate change on African SIDS, which are some of the most vulnerable countries on the continent. As a follow-up to requests from African SIDS and as recommended by different regional and international forums, ECA significantly increased its support on climate change adaptation for the African SIDS, (Cabo-Verde, the Comoros, Guinea-Bissau, Mauritius, Sao Tome and Principe, and Seychelles). Activities implemented include research and capacity development in identifying sustainable development choices, in line with recommendations contained in the Barbados Programme of Action and the Mauritius Strategy for Implementation. ECA also facilitated climate proofed development needs assessments and consultation missions in all African SIDS. The main objectives of the missions were to: (i) identify priority interventions aimed at building country resilience to climate change and address residual loss and damage; (ii) discuss with government authorities and other stakeholders to identify knowledge gaps; and (iii) agree on modalities and collaborative framework for ECA support. The reports revealed that all the six African SIDS are highly vulnerable to climate change, both to extreme events like cyclones and slow onset processes such as sea level rise. The changes are set to worsen over the next century and SIDS will likely require support in order to assess and address the resulting loss and damage. As a result of these reconnaissance missions, ECA published two strategic regional frameworks to support science-informed policy process in the SIDs entitled: “Climate Change in the African Small Island Developing States: From Vulnerability to Resilience - The Paradox of the Small” and “Unlocking the full potential of the blue economy: Are African Small Islands Developing States ready to embrace the opportunities”. ECA pathway in the United Nations conference on Small Islands Developing States, and events held to increase the visibility of African SIDS and create a policy influencing space that will enable discussions on blue and green economies potential have been omitted.

37. **Support to Africa’s participation at the United Nations Secretary-General’s Summit:** The Centre also led in the preparations for ECA’s remarkable participation in the United Nations Secretary-General’s Summit on Climate Change and Africa’s participation in the Summit of Small Island Developing States (September). At the Summit, specific side events were organized to infuse Africa’s perspectives in discussions. The side events were major promotional avenues for five intellectual contributions to the climate change discourse previously research and published by the subprogramme. The High-Level Ministerial panel discussion on African Small Island Developing States (SIDS) was held on the sidelines of the Third International Conference on SIDS; while the pre-Climate Summit event was on the theme: **Moving against the tide: Africa rising to seize climate change opportunities.** Three Heads of State and African Ministers attended the event.

38. **The Fourth Climate Change and Development in Africa (CCDA-IV):** The high point of ACPC’s work was the organization of the fourth annual Conference on Climate Change and Development in Africa (CCDA-IV) which was attended by more than 400 participants. The Conference was held for the first time outside ECA headquarters – in
Marrakech, Morocco. Predictable organizational complications notwithstanding, the holding of CCDA-IV in Morocco had the advantage of taking Africa’s most important climate change event to a region that has not been the focus of ECA major activities.

39. **CCDA-IV** was held under the theme “Africa can Feed Africa Now: Translating Climate Knowledge into Action”, and coincided with declaration of 2014 as the Year of Agriculture and Food Security by the African Union Commission. It created a platform where stakeholders deliberated on how science, policy and practice could be enhanced to address the challenges of climate change in Africa as well as how Africa can feed its people and sustain its growth momentum in the face of climate change. Opportunities to accelerate the growth rates of agriculture which remains low despite the commitment made in ending hunger by 2025 were also explored. The Conference provided the first real opportunity for dialogue between climate research and user-communities on the key features of the CR4D. It was agreed that ACPC, the ClimDev-Africa secretariat, would partner with the AMCOMET and serve as the secretariat for the CR4D. The role of this secretariat was further discussed in Geneva in November 2014 during a meeting between the World Meteorological Organization (WMO), the Global Framework for Climate Services (GFCS), AMCOMET, and the ACPC. The parties agreed that the official launch of CR4D would happen during the AMCOMET high level meeting in Cabo Verde in February 2015. In addition, a mechanism for selecting the CR4D scientific advisory committee was initiated.

40. In addition to participating in the technical sessions during the Conference, CDSF also used the occasion to launch the first call for proposals. This was done at a special dinner event at which speakers including Raphael Edou, Minister of Environment, Climate Change and Reforestation, Benin, H.E. Moses Sebunya, Ugandan Ambassador for Morocco, Algeria, Libya and Tunisia and Mr. Ken John, Coordinator of Special Programmes in OSAN. All the speakers expressed deep gratitude to the donor partners, especially the European Union, the Nordic Development Fund and the Swedish International Development Agency, who had capitalized the fund to euro 30 million.

41. **COP-20 Lima, Peru:** ECA, through the ACPC continued to support African countries and the African Group of Negotiators (AGN) to UNFCCC Conference of Parties. During the period under review, it provided technical backstopping and advisory services for AGN and policymakers. Two main events were jointly organized by ClimDev-Africa partners: The Africa Day and the ClimDev-Africa Dinner Dialogue. The theme of Africa Day was “Africa in a post-2015 new climate change agreement”. The event was attended by nearly 250 participants which included AMCEN ministers, members of the AGN, UNFCCC focal points from African countries, secretariats of other Ministerial Conferences such as AMCOW and AMCOMET, NEPAD and development partners and media representatives. It was chaired by the vice-president of the United Republic of Tanzania, Dr. Mohamed Gharib Bilal; which led to discussions on a post-2015 new climate change agreement in the context of Africa. It created a platform for sharing information and knowledge on past, existing and planned initiatives on climate change adaptation and mitigation.

42. The ClimDev-Africa Dinner Dialogue was also held on 10 December 2014. The theme of the Dialogue was: “Providing climate services for Africa’s transformation agenda- in what ways can we do more and better?” It also brought together a high level delegation from the three partner institutions, African ministers, donors to ClimDev-Africa, climate science experts, policymakers, the private sector and the media. The Dialogue deliberated on measures and mechanisms that could be employed to strengthen National Hydro
Meteorological Services (NMHSs) and to build partnerships to expand and sustain the provision of climate services that can contribute to Africa’s resilience and transformative development.

43. **Supporting Africa’s participation in global climate governance:** The ACPC is providing critical technical backstopping support to the African Group of Negotiators (AGN) to ensure that key research findings are fed into negotiation strategies and reflect essential pivots for a common African position. Specifically, the ACPC is supporting a stocktaking exercise on Africa’s journey in the climate change negotiations since Kyoto, as a reference point to understand the historical trajectory of major COP decisions and their implications for Africa vis-à-vis Africa’s evolving needs and priorities. A reference book scanning through 20 years of Africa contributions in the global climate negotiations will constitute a guide for strategically shaping the agenda for Paris and beyond. In addition, the ACPC is providing legal support to African negotiators through a young lawyer initiative. This initiative is expected to generate a critical mass of contributions from African lawyers as well as increase their exposure to the complexities of the negotiation process by enhancing their ability to draft supporting legal text.

44. **Harmonizing the elaboration of Intended Nationally Determined Contributions (INDC) to Emissions Reduction:** In the first quarter of 2015, ACPC launched a support programme to assist countries in fulfilling their obligation to submit INDCs by October 2015. Commencing with an expert group meeting on 10-11 April 2015, the programme seeks to develop a harmonized methodological framework to guide the preparation of INDCs. ACPC is working with a pool of international and national experts from the countries which have requested support to jointly review the methodological approaches currently proposed for INDCs by different organizations. A proposed comprehensive methodological framework that will integrate INDCs into short, medium and long term development planning on the continent was adopted.

45. **ClimDev-Africa Youth Programme:** In order to capitalize and harness Africa’s predominantly youthful demography in climate change response, ECA recently launched a youth platform for climate change in Africa. Following the intergenerational aspect of climate change, the goal is to engage youths in designing climate change solutions. Following the energy reigns among the youths and their skill sets and training, the programme hopes to provide a helpdesk using this platform to support concrete implementation of climate change actions in countries.

46. During the period under review, ACPC as the Centre responsible for establishing the policy basis of the ClimDev-Africa programme witnessed a radical transformation with increased demands from countries in Africa. These new obligations has forced ACPC to remain responsive and nimble in order to translate demands from member States into services that will increase resilience of countries in Africa. It is in this context that the ACPC received requests from the governments of Benin, Liberia, the Democratic Republic of the Congo, Mali, Sao Tome and Principe, Senegal, Seychelles, Mauritius, Cabo Verde, the Comoros and Guinea-Bissau. It also received requests from the Regional Economic Community (REC), including the Economic Community for West African States (ECOWAS) and the East African Community (EAC). As a result, ECA facilitated climate proofed development needs assessments and consultation missions in all African SIDS and in Mali. The main objectives of the missions were to (i) identify priority interventions aimed at building country resilience to climate change and address residual loss and damage; (ii) discuss with government
authorities and other stakeholders to identify knowledge gaps; and (iii) agree on modalities and collaborative frameworks for ECA support. Two main agreements to support identified priority responses were initiated with Senegal and Benin.

47. In addition to these activities, ACPC steadily improved on the number of communication activities and products designed for awareness raising across Africa. The evidence and information provided by these products, as well as the various deliberative dialogues organized by all the three Partners have had a positive impact on African member States and institutions.

V. African Mineral Development Centre (AMDC)

48. Through its institutional role as the current host of AMDC, the Commission continues to provide an organizational platform for operationalizing the African Mining Vision (AMV) and facilitating the long-term institutionalization of AMDC. Overall, the AMV, which was adopted by African Heads of State and Government in 2009, represents Africa’s concerted, strategic vision for systematically optimizing linkages between the Continent’s natural resources sector and its broader socioeconomic development aspirations. In particular, AMDC provides technical expertise for domesticating the AMV in member States and coordinates AMV implementation, in partnership with the African Development Bank (AfDB) and the United Nations Development Programme (UNDP), under the tutelage of the African Union Commission (AUC).

49. Through AMDC, the Commission has methodically enhanced the adoption and implementation of new initiatives in the area of natural resource management, which are aligned with the AMV. Pursuant to its mandate to provide technical support for implementing the African Mining Vision, AMDC has registered major achievements. These are described below.

50. An overall context to frame the existence of the AMDC and its overarching aspirations will be necessary before going into the specifics. Indeed, the specifics should support some of the action mentioned in the framing section.

51. Support Country Mining Vision (CMV): Significant progress was made in the process of developing and establishing CMVs in the United Republic of Tanzania, Ghana, Guinea, Guinea-Bissau and Ethiopia. Progress in each of these countries is summarized below.

52. The United Republic of Tanzania: In setting up AMDC in-country operational framework for strengthening overall stakeholder participation and influence in mineral sector decisions, the Centre established an Agency to Agency Agreement with the UNDP Country Office. Subsequently, planning and strategy meetings were held with key operational partners on the ground, for example UONGOZI Institute and the Ministry of Energy and Minerals. In addition, following Mozambique’s experience, the Mineral Value Management (MVM) has been administered in the United Republic of Tanzania and the results have been analyzed. Responses were collected through a survey undertaken in 14 regions in the United Republic of Tanzania. In addition, a public survey was carried out through the mobile networks, in order to obtain multidimensional perspectives on value creation in the United Republic of Tanzania’s mining sector. With technical support provided by AMDC, UNDP Tanzania and WEF, a report was prepared on the feedback obtained in the course of administering
the MVM. This MVM groundwork provides evidence-based findings that will inform the CMV process in the United Republic of Tanzania. The Centre expects that in the course of 2015, findings from the administration of the MVM tool will be addressed during a High-Level Political Dialogue to launch the CMV process in the United Republic of Tanzania. These findings will help drive discussions and inform the debate among stakeholders, thus enhancing consensus towards the design and implementation of a Tanzania Country Mining Vision.

53. **Ghana:** Following the provision of requested technical orientation and guidance from AMDC, the Government of Ghana has made official request to AMDC to assist in the formulation of CMV; consultations and preparatory work is currently underway to launch the process through a High-Level Event/Roundtable, which is expected to take place in 2015.

54. **Guinea:** AMDC conducted a scoping mission to Guinea in order to lay the groundwork for rolling out a CMV process. AMDC’s support for the CMVs will be a critical component of a wider support initiative which will include initiatives for: (a) capacity-building initiatives for contract negotiations; (b) establishment of policy and legal frameworks for the improved management of oil and mineral resources; (c) human and institutional capacity development; and (d) construction of a laboratory/centre of excellence in geological information systems within Public-Private Partnerships. In partnership with WEF and UNDP country offices, AMDC will support the administration of the MVM tool as well as the organization of a High Level Roundtable. AMDC is also supporting the Government of Guinea in producing a Corporate Social Responsibility Baseline Strategic Assessment. A High-level workshop on CSR for the mining sector in Guinea is currently being organized. The workshop will, among other things, review and provide commentary on the CSR Baseline Strategic Assessment and provide input into the content and process for the long-term CSR Programme in the context of the Africa Mining Vision (AMV) for Guinea.

55. **Guinea-Bissau:** Preparations for the design and launching of a CMV process for Guinea-Bissau are ongoing. During an official visit (October 2014) undertaken to Bissau by the Executive Secretary of the Economic Commission for Africa, it was determined that the CMV will be part of ECA’s comprehensive technical assistance and support package to Guinea-Bissau. Subsequently, AMDC conducted preliminary desk research and analysis of the country’s mining sector. Preparatory planning was also initiated for a mission to identify details of the required support, as well as timeline and activities for the CMV process.

56. **Ethiopia:** AMDC, in close cooperation with the World Bank and UNDP Country Office, supported the organization of the First Ethiopian Forum on Extractive Industries, which took place from 7 to 8 October 2014 and discussed a strategic mining assessment funded by the Government of Canada.

57. **Linkages, investment and diversification:** To advance its goals and expected outcomes in this workstream, the AMDC initiated plans for developing a compact with the private sector. The proposed compact with the private sector, on implementing the AMV is a prime example of how Public-Private Partnerships can be instrumental in realizing mutually beneficial implementation of the AMV and Country Mining Vision. Building on the work carried out during this reporting period, towards developing this compact, the next step will be to formulate a concrete compact that establishes responsibilities for the parties; provides practical benchmarks for assessing our progress towards fulfilling these responsibilities; and presents a framework for optimizing AMV benefits to the private sector and other stakeholders.
58. AMDC has also developed a systematic programme for “Engaging the Private Sector for Inclusive Extractive Industries and Sustainable Value Chains in Africa.” The programme would help examine and prioritize linkages in Africa’s mineral extraction and natural resources sectors, contributing to ongoing efforts at answering the central problem of how to leverage the latter industries to support, encourage, facilitate and drive broad-based and suitable economic growth and development, both transnational and in key case study states.

59. **Knowledge products:** Different knowledge products and analytical tools are being produced to support evidence-based policy processes and decision-making in the mineral sector particularly the implementation of African Mining Vision (AMV); these include: (i) “Regional Initiatives on Extractives in Africa: Leveraging the Africa Mining Vision for quality of governance”; (ii) template and methodology to guide the migration of the Africa Mining Vision (AMV) to country level policy and regulatory frameworks; (iii) gap analysis of African Geological Survey Organizations (GSOs) capacities; and (iv) “A Country Mining Vision Handbook: Domesticating the Africa Mining Vision”.

60. In addition, UNDP, as an implementing partner of the AMDC, hosted a meeting on “Implementation of the African Regional Project on Extractives in Support of the Africa Mining Vision” that reviewed the draft Step-by-Step Guide in support of the CMV Handbook. The meeting also reviewed progress made towards domesticating the AMV in eight African countries: Angola, Guinea, Lesotho, Mozambique, Rwanda, the United Republic of Tanzania, Uganda and Zambia, and reaffirmed the partnership between UNDP, ECA, AUC and AfDB as implementing partners of the AMDC.

61. In the context of the Work Bank’s African Minerals Geosciences Initiative (AMGI) or the so called “Billion Dollar Map”, the AMDC has been engaging the African geology community. Outcomes of this collaboration included the establishment of a “technical working group” to address issues of geological information including the AMGI.

62. **Africa Mining Indaba** was held in Cape Town, South Africa, on 9-14 February 2015. The ADMC organized a Ministerial Symposium and sponsored a “Dinner Dialogue” in collaboration with the AUC. The Ministerial Symposium featured Commissioner Fatima Acyl as key note speaker and discussed “Shared benefits in implementing the AMV”, a theme which highlighted the need for collaborative partnerships; continuous dialogue; and new models of doing business with mining companies in Africa.

63. **Illicit Financial Flows (IFF):** Furthermore, the issue of Illicit Financial Flows out of Africa has become a major impediment to its development, as estimates show that these could be as high as $50 billion per annum. Most are commercial transactions especially arising from the natural resources sector through tax evasion, and often outright abuse through mis-pricing. Against this background, the AMDC launched a project to review tax design and management in four mineral exporting African countries namely, the Democratic Republic of the Congo, South Africa, the United Republic of Tanzania and Zambia. The project will specifically review the regulatory and fiscal policy frameworks in the above countries especially as it relates to mineral taxation and its impact on the domestic mobilization of revenue from the mineral sector. The study is expected to lead to proposals for optimized tax regimes and possible tax policy and regulatory proposals. The project is being implemented collaboratively with the Macroeconomic Policy Division at ECA and will strengthen the outcomes of the High-Level Panel on IFF, led by President Thabo Mbeki.
64. **Gender and Mining Initiative:** In collaboration with the Africa Centre for Gender and Development (ACGD) at ECA, the AMDC also launched gender and mining research study to review existing policy, legal and regulatory frameworks in the mining sector, including ASM, and propose recommendations that integrate gender equality and equity in mining policies, laws, regulations, standards and codes; thereby advancing women’s economic empowerment. It also aims at exploring opportunities for productive collaboration between large-scale mining corporations and small-scale mining operations.

65. **Building human capital and institutional capacities:** The AMDC supported three short courses conducted by the African Institute for Economic Development and Planning (IDEP) which like the current AMDC, is a part of ECA. These training courses consisted of: Mineral Policy and Contract Negotiations for Parliamentarians and Civil Society Members; Mineral Economics; and Mineral Governance. The course on Mineral Policy and Contract Negotiations for Parliamentarians and Civil Society Members was held on 11-22 August 2014 in Dakar, Senegal. The course had the overarching objective of: providing African Parliamentarians and the Civil Society Members from West Africa who were engaged in the extractive industries, with the knowledge, skills and capacities they required to design and manage mining policy for the development of their countries, subregions and the continent. The courses on Mineral Economics and Minerals Governance were held concurrently between 24-29 November 2014. These courses were for participants from Eastern and Southern Africa and were conducted with additional support from the University of Johannesburg. The objective of the Mineral Economics course was to develop the expertise of participants on how to analyze the economic issues affecting the minerals sector at national and corporate level to: create sustainable economic exploitation of the mineral wealth of a country; and ensure economic stability and social upliftment in the region due to corporate activities. The course on Mineral Governance was intended to develop the expertise of participants to explore options available for a more developmental governance system and structure for controlling and maximizing national returns from mineral wealth within the context of the Africa Mining Vision.

66. Other activities undertaken include supporting the International Mining for Development Centre (IM4DC) Workshop on Improving Mining Tax Administration and Collection Frameworks. Finally, AMDC supported a short course on contract negotiations held by the World Bank, IISD, and the African Legal Support Facility in Burkina Faso, from 27-31 October 2014.

**VI. Lessons Learned**

67. The Special Initiatives Division programme delivery during the period has been successful in many areas. The programme made substantial progress in investing in research and analytical work to help foster innovations, promotes resource efficiency and value addition to Africa’s natural resources, while ensuring the sustainable use of ecosystems, goods and services and building resilient economies to climate change effects.

68. There is increased demand from member States and Regional Economic Communities (RECs) for analytical inputs, capacity-building and policy advice to formulate and promote policies, strategies and programmes to support their efforts to growth towards low carbon development pathway.
69. Several member States have increasingly demonstrated interest in new technologies and innovation to address their transformation agenda and continue to rely on the support ECA provides in adopting new policy measures and implementing new technologies in this sector in transforming their economic development.

70. Empirical policy analysis is an essential basis for policy recommendations. It is critical to engage all possible stakeholders, including government, private sector, non-governmental organizations and the civil society as early as possible in the studies. The role of the government is fundamental in policy analysis and implementation. Each of the studies revealed that governments are not necessary apathetic to engaging stakeholders in policy development and implementation.

71. Given the ongoing work on green economy and growth, there is a need for effective and sustained engagement with peers and experts within and outside ECA. In addition, member States, ECA and other partners need to ensure adequate mechanism for securing sustained funding for supporting their transition to inclusive green pathway move from policy to sustained implementation plans.

72. More attention should be paid to gender equality, the value of women and youth’s knowledge and the importance of integrating women and youth into various interventions at all levels and in all sectors.