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

I. Introduction

1. This report covers activities carried out by the Commission in the area of Innovations, Technologies and Management of Africa’s Natural Resources during the biennium 2016-2017. The report includes the status of the implementation of the proposed programme budget for the biennium. 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 and innovations with a view to supporting the advancement of economic and social transformation in Africa. Several milestones have been reached in support of the objective during the biennium.

II. Green Economy and Natural Resources

2. ECA’s work on Green Economy and Natural Resources is aimed at enhancing the capacity of member States to formulate and implement policy reforms with a focus on the most innovative sectors to foster a green economy in the context of sustainable development and poverty eradication. Aligned with both the 2030 Agenda for Sustainable Development and Agenda 2063, ECA’s work in this area focused on policy research, consensus building, advocacy and advisory services to promote sustainable structural economic transformation to realize optimal benefits from Africa’s key natural resources and related sectors in order to achieve poverty eradication, inclusive growth and sustainable development. Accordingly, the following were achieved during the reporting period.

3. ECA together with the Government of Egypt, AUC, and AfDB in collaboration with UNDESA, UNEP, UNDP and UNFPA convened the second session of the Africa Regional Forum on Sustainable Development in Cairo from 17 to 19 May 2016, in preparation for the 2016 session of the High-level Political Forum on Sustainable Development (HLPF). The Africa Regional Forum on Sustainable Development provided a platform for member States to dialogue on the implementation and follow-up of both the 2030 Agenda and Agenda 2063. The Forum strengthened member States’ understanding and capacity on the policy approaches to ensure effective inclusive and integrate implementation and follow-up of the two agenda. In that regard, member States, regional economic communities and major groups reached consensus and adopted key messages comprised of policy actions and measures needed to advance inclusive and integrated implementation and follow-up of the two mutually reinforcing transformative agendas. The key messages adopted by The Forum
formed Africa’s collective input to the 2016 HLPF, where ECA participated and provided substantive support to member States to advocate for and garner international support for the integrated implementation of the two agendas.

4. The subprogramme generated knowledge products and engaged policymakers and experts from member States to adopt inclusive green economy principles and approaches to implement sustainable development goals (SDGs), and to put in place macroeconomic frameworks favourable to a green economy. The outreach of two knowledge products, namely, Macroeconomic Frameworks for an Inclusive Green Economy in Africa; and Realizing Sustainable Development Goals through Inclusive Green Economy has so far involved 21 and 23 member States, respectively, with more than 50 experts directly engaged in consensus building and capacity development.

5. Realizing the Sustainable Development Goals in Africa through Inclusive Green Economy: The subprogramme carried out a study and organized an ad hoc expert group meeting on realizing the Sustainable Development Goals in Africa through Inclusive Green Economy. The report of the study seeks to enhance understanding and appreciation of inclusive green economy as a vehicle for achieving the SDGs and related Agenda 2063 goals. It provides an in-depth analysis of inclusive green economy and its contribution to the realization of SDGs and Agenda 2063; explores inclusive green economy approaches that could lead to the effective implementation of SDGs and Agenda 2063 goals; and contains an analysis of enabling measures to ensure coherent and coordinated design and implementation of inclusive green economy policies and strategies to realize SDGs and agenda 2063 goals. The report offers member States a menu of inclusive green economy approaches that would allow them to achieve the SDGs and Agenda 2063 goals in an integrated and indivisible manner while ensuring the balanced integration of the three dimensions of sustainable development.

6. Macroeconomic Frameworks for Inclusive Green Economy in Africa: The subprogramme also conducted a study and convened an ad hoc expert group meeting on Macroeconomic Frameworks for Inclusive Green Economy in Africa. The report of the study brings to focus the mutually reinforcing nature of macroeconomic and inclusive green economy policies and supports the paradigm shift to a sustainable economic transformation. The report will strengthen the capacity of countries to put in place and promote macroeconomic conditions that are conducive to an inclusive green economy by among others enhancing understanding of the role of fiscal, monetary and financial policies in driving a sustainable economic transformation and development in Africa. The expert group meeting also provided a platform for the experts to foster an understanding and appreciation of past and current macroeconomic policies in Africa, and how they have contributed to economic, social and environmental outcomes.

7. Policy relevant information was distilled from knowledge products produced by the subprogramme and packaged in the form of policy briefs. The policy briefs provide policy research results in an easily digestible format to shape policy decisions and actions to achieve inclusive green transformation and sustainable development. During the reporting period six policy briefs were produced on the following areas that are crucial to shaping policy approaches and actions to implement both the 2030 Agenda and Agenda 2063: inclusive green economy policies for structural transformation in Africa (1); and achieving sustainable development in Africa through inclusive green growth by leveraging the potential in agriculture, energy, industry and trade sectors and harnessing ecosystem goods and services (5).

8. The subprogramme is also in the process of directly supporting Ethiopia with respect to Climate Resilient Green Economy/Growth and Transformation Programme II implementation. In addition, the subprogramme is the process of engaging three countries (Botswana, Zambia, and Zimbabwe) to adopt inclusive green economy and related policies
and strategies to ensure sustainable transformation of agriculture, focusing on the livestock value chain.

9. In order to provide member States with strong and coherent support, ECA continued to partner with AUC, AfDB and UN agencies. The subprogramme has also continued to work with the Green Growth Knowledge Platform to identify and undertake research and policy analysis on green economy; and is strengthening partnership with the Global Green Growth Institute to step up coordinated support to member States in the formulation of policies for the transition to an inclusive green economy.

10. Overall, member States have demonstrated increasing interest in inclusive green economy and inclusive green growth for the promotion of their sustainable transformation and development agendas. This is evidenced by requests made at several regional and global forums, including at sessions of the African Ministerial Conference on the Environment (AMCEN), Conferences of African Ministers of Finance, Planning and Economic Development, the Africa Regional Preparatory Conference for Rio+20, at Rio+20 and the Africa Regional Implementation Meeting on the Rio+20 follow up processes, and the Africa Regional Forum for Sustainable Development. The adoption of the African Green Economy Partnership (AGEP) by AMCEN is a strong signal that Africa is committed to implementing the green inclusive economy agenda to further its sustainable development aspirations. This interest and demonstrated commitment constitute a strategic opportunity that ECA must leverage to effectively deliver its work on green economy.

III. New Technologies and Innovation Section (NTIS)

11. The implementation of the work-program in the area of new technologies and innovation (NTI) was to a great extend focused on conducting research and analytical work to help member States promote the use of innovations and technologies as a means of implementation of their structural transformation agenda. Policy briefs and other knowledge products were published based on the research outcomes to guide member States with regard to policy and reforms interventions. 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. Some of the key achievements by the NTIS include:

12. Senior Experts Dialogue on Science, Technology and Innovation and the African Transformation Agenda: This is the capstone activity of the sub-programme in the area of new technologies. Held every year, it is organized in partnership with a hosting member State and in collaboration with the African Union Commission. In 2015, the sub-programme organized the second Senior Experts Dialogue in collaboration with the African Union Commission and its NEPAD Agency, the Department of Science and Technology (DST), South Africa, the subprogram facilitated the third Senior Experts Dialogue (SED) on the theme “Cities as innovation hubs for Africa's Transformation”. The SED is an initiative of the United Nations Economic Commission for Africa (ECA) designed to support Member States to leverage science, technology and innovation (STI) to drive the structural transformation of their economies. The impetus for the SED comes from two principal sources: a) the general recognition that most of Africa’s development challenges are amenable to resolution through the careful and purposeful application of STI, and b) the recognition by the international community that STI is an important means of implementation of the outcomes of recent UN summits including the Addis Ababa Action Agenda of the Third International Conference on Financing for Development; Rio+20; the United Nations 2030 Agenda for Sustainable Development (SDGs), the Istanbul Programme of Action for Least Developed Countries, and the African Union’s long-term plan for the structural transformation of the continent – Agenda 2063 (AU 2014), along with the continental
Science Technology and Innovation Strategy for Africa 2024 (STISA 2024). Given the interest SED generated, DST and ECA are currently exploring the design and delivery of training course for senior officials and executives of STI, municipalities and planning agencies on how African cities can serve as drivers of innovation and entrepreneurship to meet the goals of Agenda 2053 and the achievement of SDGs.

13. Biomedical Engineering Innovators School Programme: Furthermore, ECA organized the Biomedical Engineering Innovators School Programme in Cairo, Egypt, from 23 – 27 January 2017. The School Programme brought together researchers, students, business leaders and government agencies from 20 countries in Africa to promote innovation and instil entrepreneurial skills in African youths. The school has exposed participants to emerging technologies such as 3D-printing, open source design and rapid prototyping, programming mobile phone to serve as medical devices and advance imagining technologies. Currently, over 600 students are enrolled in biomedical engineering programmes at participating universities across the continent inspired by the initiative.

14. A research study, entitled Innovating for better health: Building biomedical devices innovation capacity in Africa, was undertaken and completed in late 2016. The study shows that new technologies such as three-dimensional printing, offer Africa great opportunities to design and produce medical devices that meet the needs of the continent, especially in rural communities, and can help Africa to participate in the export of healthcare services. The study recommended a number of measures that can help Africa build its technical and industrial base to meet the needs of its healthcare. It showcased how an ECA-led initiative has encouraged universities to collaborate and develop biomedical engineering programmes and stimulate innovation in BME among the youth.

15. Review of Annual Report of WSIS Outcomes in Africa: In accordance to the outcomes of the UN General Assembly overall review on the implementation of WSIS (UNGA Resolution A/70/125) regional commissions are invited to continue their work in implementation of the World Summit on the Information Society at the regional level, the Annual WSIS Regional Follow-up and Review Meeting was held in November 2016. The main objective of the meeting was specifically to (review progress in Africa on each Action lines of WSIS outcomes (b) Discuss challenges encountered in the region in mainstreaming ICT for development with specific reference to the implementation of the Agenda 2063 and the 2030 Agenda of Sustainable Development. The outcomes of this meeting will constitute input to the WSIS Forum 2017 (12-16 June 2017, Geneva, Switzerland) and its open consultation process, WSIS Stocktaking, WSIS Prizes, thereby bringing to forefront emerging trends, opportunities and challenges from the regional layer in a multistakeholder format.

16. An Expert Group Meeting on Emerging issues in ICT in Africa was held in November 2016 and provided a platform for information sharing and collection of regional inputs on the status of Africa and strategic ICT emerging issues of various African countries. What's more the challenges and opportunities in relation with the emerging issues in ICT (cybersecurity, geo-blocking & future of e-commerce, Internet of Things (IoT) and smart cities, financial technology (fintech), big data & analytics, transition to IPV6, Internet governance & net neutrality, and analog to digital broadcasting migration) were discussed in-depth and policy recommendations were forwarded as part of the outcome of the meeting.

17. Review of the Report on Emerging issues in ICT in Africa: The subprogramme carried out a study on Emerging Issues in ICT in Africa. The report provided the status of emerging technologies and the associated issues including the opportunities and challenges. These issues include: cybersecurity, geo-blocking & future of e-commerce, Internet of Things (IoT) and smart cities, financial technology (fintech), big data & analytics, transition to IPV6, Internet governance & net neutrality, and analog to digital broadcasting migration. The report includes also empirical evidences on the ICT emerging issues in Africa with a focus on the identification and review experiences, best practices, lessons learned and innovations from
Africa that would enable to inform policy makers and the private sector in the context of Africa's aspiration for development. The report was reviewed during the EGM on Emerging issues in ICT in Africa.

18. Within the Partnership on Measuring Information and Communications Technology for Development which was launched in 2004 to improve the availability of internationally comparable information and communications technology (ICT) statistics, ECA has been leading the taskforce for e-government indicators and has been instrumental in the development of the core list of e-government indicators and its implementation by developing a manual for using the core list of e-government indicators and producing a training manual for implementers. ECA is also mandated to continue its valuable contribution to data gathering and dissemination including an annual follow up and review of the implementation of the WSIS outcomes in Africa.

19. ECA, is coordinating along with other UN Agencies effective implementation of the United Nations Group on the Information Society (UNGIS). UNGIS serve as an interagency mechanism to coordinate substantive policy issues facing the UN’s system in the implementation of the WSIS outcomes.

20. ECA continues to play an active role in strengthening the enabling environments for effective and practical ICT and STI policies and actions toward developing a greater collaboration and cooperation with all stakeholders and relevant organizations within the Internet community including ITU, ICANN, AUC, Smart Africa, IGF, etc.)

STI for the MDGs Technology Facilitation Mechanism

21. One of the major outcomes of the Addis Ababa Action Agenda (AAAA) of the Third International Conference on Financing for Development was the establishment of the Technology Facilitation Mechanism (TFM) by United Nations member States. The TFM was formalized in the Outcome document of Agenda 2030 in which member States committed to convene an annual multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals (SDGs) (STI Forum) as a powerful pathway to bring science, technology and innovation to serve as a means of implementation of the SDGs. The STI Forum is convened once a year under the auspices of UN ECOSOC. ECA, as a member of the Inter-Agency Task Force (IATT) of the TFM, has worked to ensure and promote African contributions to and participation in the Forum. ECA has served as the co-organizer of STI Forum sessions and is contributing to the development of an online technology platform for member States.

22. In the context of inter-divisional collaboration, the sub-programme contributed to the research and production of the Seventh issue of the ECA analytical report Assessing Regional Integration in Africa (ARIA VII) which “explored the nexus among regional integration, innovation and competitiveness.” In addition to shedding light on the inter-relationship between innovation and national competitiveness within the framework of regional integration, the report made recommendations on human capital development and on how countries could develop a vibrant intellectual property framework/ecosystem.

Advisory services

23. Upon request, advisory support to member States and RECs were provided. ECA is supporting the Republic of Guinea Bissau to develop their national ICT master Plan and ICT Policy and the Republic of South Sudan to undertake to undertake a review of its ICT policy as well to set up South Sudan’s STI and governance and policy-making structures. ECA supported ECOWAS and the Niger Parliament to prepare and organize the Parliamentary Forum on the harmonization of political and legal ICTs frameworks in the ECOWAS region for development as well as to prepare the work of the assessment panel of the competition for innovation price. Staff members of the section were also active in making presentations at international and national conferences including the Fourth Commonwealth Biennial
Global Conference on Small States, the Africa Regional Conference of the World Intellectual Property Organization (WIPO) and Transform Africa.

24. Different initiatives are also being implemented under this cluster to support knowledge generation, these include: (i) Research on innovation hubs (tenants, managers and government agencies/owners) in Africa to determine their contribution to development, governance, institutional and organizational structures, and effectiveness in promoting innovation and entrepreneurship (Algeria, Kenya, Tunisia and South Africa); (ii) "ECA is working closely with NEPAD in research and contribution to knowledge generation in developing tools for measuring innovation. So far, a number of frameworks have been developed and field surveys undertaken to test the frameworks on assessing "national innovation comprehensiveness" (Cameroon, Tanzania and Zimbabwe) and "innovation in the informal sector" (Cameroon, Zambia and Zimbabwe) as part of the African Science, Technology and Innovation Indicators (ASTII) initiative. In addition, a core set of indicators have been identified for monitoring the implementation of STISA 2024. Two joint publications with the NEPAD Agency are currently in preparation, one on “Innovation policy comprehensiveness in Africa”, and the other on “Measuring Innovation in the African Informal Sector”.

IV. **African Climate Policy Center (ACPC)**

25. Through the African Climate Policy Center (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. Its assistance to this end has included providing guidance and technical support to member countries in the context of the Paris Agreement on climate change, the 2030 Agenda for Sustainable Development, Africa’s Agenda 2063, the Sendai Framework for Disaster Risk Reduction and the African Small Island Developing States (SIDS) Accelerated Modalities of Action (SAMOA) Pathway. As regards the Paris Agreement, ECA activities have primarily focussed on assessing the effects of the agreement for Africa and the implications of Nationally Determined Contributions (NDCs) as a mechanism for emissions reductions, adaptation and mainstreaming climate change into development planning.

26. At national levels, ECA continued to support the African SIDS (Guinea-Bissau, Seychelles, Cape Verde) in numerical weather prediction (NWP) and early Warning Systems (EWS); In Liberia a climate change strategy is being finalized; Technical and advisory services provided to the Government of Senegal in implementing various climate research and adaptation projects;

ECA provide technical and advisory services and training to community radios stations in Rwanda, Cape Verde and Cameroon on analytical reporting on climate resilient practices. These stations have produced more than 160 radio programmes as well as dozens of seedlings to inform citizens on issues related to climate change and development.

27. ECA also facilitated the creation of two regional collaborative user-driven research frameworks for: (i) Southern Africa and (ii) East African and the Horn of Africa. The two networks were established as a result of the climate science two consultative meetings organised by the Climate Research for Development (CR4D) hosted by the |African Climate Policy Center (ACPC) of ECA. The main objectives of these networks are to design the continent climate research priorities and to advance current knowledge frontiers, bridging the gap between social and biophysical research, between research and application, towards the delivery of a coordinated climate research agenda for Africa that brings research outputs to address user needs.
28. Furthermore in collaboration with IRENA, the African Development Bank and the UNFCCC, ECA conducted three regional expert meetings that brought together policy makers, CSOs, development partners and the private sector to assess the renewable energy components of the Nationally Determined Contributions (NDCs) to climate action by African countries and assist Member States achieve coherence in their commitments and to identify and promote opportunities for accelerated renewable energy deployment for climate action.

29. The high points of the ECA work during the period were: (i) the organization of the Sixth annual Conference on Climate Change and Development in Africa (CCDA-VI) from 18-20 October 2016, and (ii) the leading of Africa participation at the twenty-second Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) (COP22) held in Marrakech, Morocco from 7-18 November 2016. Over three hundred participants representing various interest groups on the continent including governmental and non-state actors, academic, media, women, lawyers and youths have underscored the need for African member-states to integrate the Paris Agreement into Africa’s development agenda and other global governance frameworks.

30. Participants urged Africa to engage with and embrace the Paris Agreement within the framework of it’s development aspirations as underscored in Agenda 2063, which embodies the vision of the “Africa we want”, and the 2030 Agenda for Sustainable Development, which sets global targets with a vision of “leaving no one behind”. They were also of the view that most of the intended nationally determined contributions (INDCs) submitted by African states require urgent revision ahead of the coming into force of the Agreement as many of them were vague and inconsistent with national development priorities.

31. At COP22, ECA in partnership with the Africa Development Bank (AfDB), the African Union Commission (AUC), and the New Partnership for Africa’s Development (NEPAD) hosted the African Pavilion, a platform for the voices of the continent to be heard. The Pavilion embodies the united front of an Africa “speaking with one voice” in articulating its interests given the high stakes of climate change negotiations.

32. Africa Day event was held at the Pavilion on the dual themes of “Moving from Commitment to Action with Nationally Determined Contributions (NDCs)” and “The Africa Renewable Energy Initiative: Moving Forward.” The day was Presided by the President Alpha Condé of the Republic of Guinea; also attended by the Presidents of Botswana, Ian Khama; Liberia, Ellen Johnson Sirleaf; Togo, Faure Gnassingbe, Ministers from the continent, heads of Pan African Institutions; the African Union Commission, the African Development Bank, the Economic Commission for Africa, NEPAD Planning and Coordinating Agency and; development partners.

33. The presence of heads of state at COP22 and the Africa Day event further demonstrated the importance placed on securing the continent’s interests within the global climate governance mechanism and in defining the roadmap to reduce global temperature rise to ‘well below’ 2oC goal, considered by the Intergovernmental Panel on Climate Change (IPCC) as the threshold for averting dangerous changes to the climate system. COP22 was also an opportunity for ECA to present to development Partners, the Commission climate five years Action Agenda, under the three-partite partnership of Climate for Development in Africa (ClimDev-Africa) which involves ECA, African Union Commission and the Africa Development Bank.
V. African Mineral Development Center (AMDC)

34. Through the African Mineral Development Center (AMDC), the Commission continues to provide an organizational platform for operationalizing the African Mining Vision (AMV). 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).

35. During the reporting period, the Center continued to assist the member States in integrating their mineral sector into national economic and social activities through a twofold approach, in line with the Africa Mining Vision (AMV) and its Action Plan. First, AMDC continued to build expertise and knowledge base in mining sector through evidence-based policy research and analysis. Second and in parallel to building an extensive knowledge base, the Center labored to build technical and analytical capacity in designing, implementing and evaluating effective mineral development policies and regulatory frameworks across the continent.

36. During the reporting period, 21 knowledge products were produced. These studies and briefs aimed at demonstrating and substantiating the merit and worth of the AMV as the foundation for transforming the mining sector in the region, involving a plethora of stakeholders ranging from government officials to representatives from private mining companies. Studies such as “Impact of Illicit Financial Flows on Domestic Resource Mobilization: Optimizing Revenues from the Mineral Sector in Africa” (January 2017), “Optimizing Domestic Revenue Mobilization and Value Addition of Africa’s Minerals: Towards Harmonizing Fiscal Regimes in the Mineral Sector” (November 2016), “Assessment of Mineral Regimes in the East African Community: Aligning Frameworks with the African Mining Vision” (January 2017) and “African Geological and Mineral Information Strategy” (August 2016) exemplify the nature, scope and significance of integrated policy questions that AMDC has tackled with during its main phase of implementation, aiming to build data-driven knowledge base around transparent mineral sector governance, harmonized fiscal regimes, environmental protections and integration with the regional value chains.

37. AMDC’s knowledge products have been widely distributed both in hard and digital copies to a plethora of stakeholders and interested parties including but not limited to government officials, civil society organizations, mining companies and academics. Almost 8,600 hard copies of AMDC’s major policy research studies have been distributed to these stakeholders during the reporting period. In addition, the visibility of the Centre’s research and capacity building activities has been relatively sustainable with the various social media tools that the Centre is increasingly using to engage its constituency on issues pertinent to minerals development, value chains and linkages across sectors. A significant illustration of this is the AMDC’s featuring on the cover page of Mining Weekly whereby the Center’s mobilization of efforts across the continent have been praised.

38. Parallel to producing knowledge to be consumed by a variety of policy actors, the Centre has organized, delivered or/and coordinated 17 training workshops, expert group meetings and high level policy dialogues whereby a total of 395 (female: 99, male: 296) state officials, mining practitioners, private sector and civil society representatives have been trained and advised to improve their knowledge of and engagement in the mining sector. These technical assistance or advisory services focused on issues central to AMV including but not limited to fiscal harmonization, contract negotiations, mineral sector governance and
artisanal and small scale mining. Since its inception, depending on the country’s needs and the degree to which its mining sector is integrated to the national economy, AMDC has provided demand-driven and evidence-based menu of policy options and advisory services. For example, while Kenya, Mali and Niger were supported to develop new mining codes, the Center has engaged Malawi, Lesotho and Sierra Leone as the new entrants to the sector in developing AMV-inspired, strategic mineral development policies and regulatory frameworks. The focus of these country-level policy dialogues has also been demand-driven. For example, Chad, the Democratic Republic of Congo, Equatorial Guinea, Malawi and Niger requested AMDC’s assistance in managing and monitoring complex contract negotiations with a view to improve revenue generation.

39. As a result of AMDC’s analytical and advocacy work on the domestic articulation and operationalization of the AMV at the national level, many countries have developed or are in the process of developing Country Mining Visions (CMV) for harnessing natural endowments for sustainable development. The Center’s policy research and advocacy activities have now reached to 36 member States, increasing from 24 countries during the previous reporting period (i.e., 50% increase in a period of 9 months) and now covering 70% of the region.

40. A detailed account of AMDC’s engagement in a few country cases during the reporting period is necessary to demonstrate how the mining countries are gradually transforming their policy space in line with the AMV. First, a high level policy dialogue provided to the Government of Malawi through the task force on contract negotiations inspired the Ministry of Natural Resources, Energy and Mining to review its 1981 Mines and Minerals Act (MMA), its associated regulations and eventually develop a new Petroleum Policy. This task force assisted the Ministry in strengthening its enabling environment through primarily strengthening the country’s capacity to engage in complex contract negotiations. Second, the Center has been working with the Government of Ghana to conduct an in-depth analysis of its mining sector to develop evidence-based industrial linkages across sectors and contribute to the country’s vision to become a trade and instruct regional hub.

41. In addition to its concerted efforts to domesticate AMV by way of CMVs in several countries across the region, AMDC has recorded some major region-wide accomplishments during the reporting period. The Centers’ repertoire of and rapport with a plethora of partners resulted in convening several major region-wide events, conferences and knowledge platforms. AMDC’s convening power created a platform for decision makers and multi-stakeholders from the region to share experiences and solutions and deliberate on integrated and coherent frameworks for the mineral development. Of particular note, AMDC’s request to obtain an observer status in the International Seabed Authority has been granted. This status will not only enable the Center to contribute to the larger agenda of the Authority in advancing sustainable development but also increase the Center’s leverage to enhance the development of country-level fiscal, legal and environmental regulations. In addition, the Center has facilitated the hosting and establishment of the first ever African Mining Vision Civil Society Forum that will enable new partnerships and dialogues to be forged and sustained in support of mainstreaming the AMV. For example, the Forum will enable the identification of regional and national champions to advance the AMV agenda, in accordance with the Center’s business model.

42. Similarly, the AMDC forged a South-South cooperation between Chile and the mining countries in Africa. This cooperation is premised on transferring the best practices from the Chilean mining development to the region, as applicable. This cooperation will provide valuable lessons for African countries in enhancing their supply chain development and the engagement of their artisanal and small scale mining in competitive global markets. These examples, among others, demonstrate AMDC’s growing strategic position and convening power to facilitate and broker participatory, multi-dimensional and multi-stakeholder partnerships in support of Africa’s broad based development hinged on mineral sector.
VI. Challenges and Lessons Learnt

43. African countries have stepped up efforts in embracing new technologies and innovation, promoting green economy pathway, establishing enabling environment and capacity for mining sector development and ensure that their transformation agenda is climate resilient. Member States are keen to get ECA’s support through policy research and capacity building/knowledge sharing on the adoption and harmonisation of policies at regional level. In this regard 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 policy process. However, a number of challenges and lessons faced during the period are as follow:

44. Under green economy, one should note that the sector is a relatively new area and the challenges involved are related to the novelty of the area and the need for member States to understand opportunities that can be harnessed through resource efficiency and to embrace green economy in all its operational dimensions. Further, data paucity hampers efforts to provide member States robust research evidence on inclusive green economy; widely available good practices and lessons learnt. To that end, a phased approach was adopted to assess how Africa’s key natural resources and related sectors could be harnessed to promote inclusive green growth. This is with a view to generating relevant data while informing the transition to an inclusive green economy for realizing transformational objectives and sustainable development. Human resource requirements has also hampered the Section from fully implementing its growth potential. As highlighted above, the development of new partnerships and the involvement of adequate expertise has helped to achieved the above outputs.

45. In the area of technologies and innovations, the main lesson is that member States are critical for the success of programmes. This has been especially important for the success of SED. Another lesson is that advisory services succeed when member States are very engaged. A third lesson is that international and continental initiatives (such as the AU’s STISA-2024 and Agenda 2063) can be powerful drivers of policy innovation at the national level. The main challenges during the period under review was the increased demand from member states and the limited resources to satisfy such requests. Further, the decision by the African Union to discontinue the African Ministerial Conference on Science and Technology (AMCOST) as well as the decision of ECA to discontinue “Science with Africa” closed two very powerful pathways through which knowledge on STI, based on rigorous analysis and that has credibility and relevance could be injected into policy discussion at the highest levels of countries on the continent. In addition, there are capacity related challenges and inadequate skills sets to cover new research frontiers and all the main areas of the Section’s work.

46. Furthermore, in the area of supporting member States efforts in building climate resilient economies, the importance of knowledge from local institutions to lead policy studies cannot be overstated as they bring credibility that is essential for creating the necessary space for policy dialogue at the national level. In addition, the uptake of climate information and services is critical to effective climate risk management. Science-informed policy, planning, and practice will ensure that development is more resilient and less vulnerable to negative impacts of climate, thus fostering sustainable development. However, the benefits of climate information services are still relatively vague to the policy maker beyond aviation. Hence, there is need to plug the development deficit to enable a coalition approach that will bring meteorological services, development practitioners and users within the same circle, through more research, capacity building and awareness raising.

All the above will require continuous substantive financial support from development partners which is currently lacking.
Under the mining for development support, several valuable lessons were recorded to be reflected upon for continuous improvement.

47. First and foremost, there is an increasing momentum among African member states to domesticate the AVM and this is evidenced in the amount of requests received from the member States for technical assistance and advisory services. This increasing demand – rightfully received with excitement by staff – has revealed challenges in terms of human resources and financial capacity to handle such country requests. Staff have reported that partnership with civil society organizations with similar interests to advance the AMV agenda very instrumental in responding to the country’s emerging needs. This in return calls for more in-depth and targeted engagement with such actors, necessitating tailored communications and partnerships strategies.

48. Second, as much as the Centre’s interventions are spanning across the region, building consensus, fostering support and forging alliances to develop country mining visions prove to be time-intensive requiring dedicated resources and custom-made approaches to policymaking. Indeed, AMDC staff reported the utility of customizing the nature, including duration, dosage, intensity and engagement level, of the Centre’s interventions based on the country’s context and needs. This necessitates agility in programming and implementation with further implications for financial and human resources.

49. Last but not least, the Centre’s hence AMV’s influence is found to be closely linked to outreach and advocacy efforts, as well as policy and media campaigns whereby major stakeholders and other parties are continuously updated, informed and trained about the Centre’s knowledge products and technical assistance. Strategic coupling of these activities into programmatic aspects is critical in ensuring not only visibility but also sustainable uptake of AMDC’s work over time.

VII. Conclusion - Looking to the future: Strategic framework 2018-2019

50. Given the crosscutting nature of the various sections of the subprogramme, the Division will collaborate with other ECA subprogrammes for the implementation of its workprogram during the biennium 2018-2019. The strategic direction of the subprogramme will be guided mainly from the internationally and regional agreed development goals, including the 2030 Agenda for sustainable development, Agenda 2063: The Africa We Want, the Addis Ababa Action Agenda (AAAA) of the third International Conference on Financing for Development (FFD3); the COP21 Paris Agreement, the Small Island Developing States (SIDs) Accelerated Modalities of Actions (S.A.M.O.A) pathway, as well as the World Summit on Information Society follow-up; in particular those related to harnessing technology and innovation, harnessing mining sector for sustainable development, building climate resilient and low carbon development pathways, and the empowerment of women as part of the incorporation of the gender perspectives in the work of the subprogramme, poverty reduction and the global partnership for development.

51. The strategy will focus mainly on research, policy development and analytical work to support member States in the following areas: (a) promoting the use of social, economic and environmental innovations and technological systems; (b) developing mineral resources in the context of the Africa Mining Vision; (c) advocating policy-relevant research and analysis to inform the formulation and implementation of policies to foster a green economy in the context of sustainable transformation and development and realize optimal benefits from Africa’s natural resource endowments; and (d) support member States in addressing challenges of climate change in key sectors, and putting in place appropriate plans and mechanisms to reflect national development priorities, policies, strategies and programmes. The results will be disseminated and policy recommendations will be submitted to governments, regional bodies, and other relevant stakeholders.
52. The subprogramme will also promote policy dialogue and the exchange of experiences and best practices among stakeholders at the regional, national and local levels through Conference, meetings, seminars, and electronic forums. In addition, the creation and operation of networks will be supported to generate, update and disseminate knowledge. The strategy will also include the provision of technical cooperation services, such as specific training courses and workshops.

53. The subprogramme will continue to promote partnerships with other African and non-African research, specialized institutions and development partners to help deliver on its activity areas. These strategic partnerships supplement the internal capacity, mobilise expertise and extend the reach of the programme across the African continent.

54. Furthermore the subprogramme will ensure broad visibility of its work and major achievements through the continuous updating and development of its website and databases, wide dissemination of its main publications and findings in international events and relevant conferences, as well as participation in key forums involving relevant policymakers, academia and other stakeholders, both within and outside the region.