

Concept note for the expert group meeting

"Transition to renewable resources for energy and food security in North and West Africa"

Accra, Wednesday, 1 November 2023

I. Context

Africa is responsible for just 4 per cent of global greenhouse gas emissions, but it is one of the most vulnerable regions of the world, accounting for 17 of the 20 countries that were most at risk from climate change in 2020. According to the latest report by the Intergovernmental Panel on Climate Change, North and West Africa are particularly vulnerable, with a rise in temperature of between 1.5°C and over 3°C envisaged in various scenarios.²

Africa spends between 2 and 9 per cent of its budget on managing extreme weather events, which is a heavy burden on public finances and deprives the continent of part of its resources for financing development.³ Climate change thus threatens development gains and the achievement of the Sustainable Development Goals.

Adapting to climate change and adopting a model for sustainable growth are becoming priorities. The major challenge in combating climate change is reducing resource use, on the one hand, and reducing the pollution generated by the extraction and use of resources, on the other. It is particularly challenging for high-income countries, which are responsible for climate impacts 10 times greater than those of low-income and lower-middle-income countries. Even if African countries demand the option to be able to increase their greenhouse emissions to meet their development needs, in particular for infrastructure, it would be to their benefit to build a development model that is both resilient to climate change and able to improve the well-being of populations while limiting the impact of climate change. Accordingly, the energy transition and the adoption of sustainable agricultural strategies are essential for energy and food security

³ Vera Songwe and Jean-Paul Adam, "Delivering Africa's great green transformation", in *Keys to Climate Action*, working paper no. 180.9, Amar Bhattacharya, Homi Kharas and John McArthur, eds. (Washington, D.C., Brookings Institution, 2023).



¹ According to the vulnerability index of the University of Notre Dame, available at https://gain.nd.edu/ourwork/country-index/.

² Elham Ali and others, "Cross-chapter paper 4: Mediterranean region", in *Climate Change 2022: Impacts, Adaptation and Vulnerability – Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, Hans-Otto Pörtner and others, eds. (Cambridge, United Kingdom of Great Britain and Northern Ireland, and New York, Cambridge University Press, 2022).

in North and West Africa, and, more generally, for the sustainable economic and social development of those subregions.

Since 1961, global warming has reduced agricultural productivity in Africa by 34 per cent.⁴ Sustainable agriculture requires soil and water management that is adapted to the climate. Access to electricity and clean fuel remains a challenge in Africa, affecting 53 per cent of the continent's population. Renewable energy could be a solution, given that Africa is endowed with abundant renewable resources, including year-round sun and wind. Targeted investment could ensure near-universal access to electricity by 2050. That goal, however, requires a significant increase in funding – a doubling of investment to over \$190 billion annually by 2030.

II. Objectives

The expert group meeting, which will be held on 1 November 2023, will be focused on the following overall theme: "Transition to renewable resources for energy and food security in North and West Africa".

The main aim of the meeting is to formulate specific recommendations and propose relevant priority measures for the agricultural and energy transition.

The specific objectives of the meeting are, first, to discuss the challenges associated with the transition needed to build energy and food systems that are based on renewable resources, and, second, identify innovative public policies.

In that context, the discussions of the expert group will be focused on the following three topics:

- (a) Better understanding of the impact of climate change on the development strategies of the continent;
 - (b) Rethinking energy security in the context of climate change;
- (c) Approaching intra-African trade as a facilitator and accelerator of the agricultural transition and a driver of food security.

III. Participants

The expert group meeting will bring together policy researchers, experts from member States and representatives of international institutions working in the fields of energy, sustainable agriculture, sustainable finance, environmental economics and climate change.

IV. Structure

The expert group meeting will consider three topics:

(a) The first topic concerns understanding the challenges associated with climate change in North and West Africa, with the aim of examining the far-reaching consequences of climate change, in particular for development strategies that are simultaneously low-carbon and

⁴ World Meteorological Organization, "State of Climate in Africa highlights water stress and hazards", 8 September 2022.

more aligned with the planet's limits. Faced with the harmful consequences of exponential growth and widening inequality, ever more people are challenging the pursuit of perpetual growth of gross domestic product and are calling for an alternative to be considered. Such consideration includes a particular emphasis on developed countries, given that their industrial development model has major adverse effects on climate change. But what about North and West Africa? Although poverty is still a major issue in both subregions, where policies must be implemented to address it and improve standards of living, in particular in terms of access to basic goods and services, it is no less necessary for the subregions to reconcile such vital action with environmental protection and the sustainable preservation of their resources. The goal of inclusive and sustainable development is incompatible with growth that is based solely on economic output.

- The second topic concerns the energy transition in the context of climate change. (b) Few countries have succeeded in eradicating energy poverty. Ghana is one of the small number of African countries that have reduced energy poverty and it is on track to achieve energy coverage for 100 per cent of the population by 2030. Energy security, and its affordability and sustainability, remain challenges in Africa, however. Studies have shown that renewable energy can respond to the energy needs of Africa. In West Africa, for example, solar photovoltaics are expected to be the main source of electricity, meeting 81-85 per cent of demand by 2050. A 100-per-cent renewable electricity system appears to be the best option in terms of cost, emissions and jobs.⁵ North Africa is a diverse subregion with regard to energy security issues, in terms of both energy resource endowments (oil and gas, in particular), and levels of development, and, therefore, capacity to finance the energy transition. In relation to renewable energy, many countries have committed themselves to increasing their capacity. Morocco has set itself the target of reaching 52 per cent of renewable energy by 2030, which would put it in the lead for total renewable energy production capacity (excluding hydroelectricity), thanks to its extensive solar programme. Elsewhere, Egypt leads the way in wind power. One of the major challenges of the energy transition is energy storage, which requires technological innovation and adequate capacity.
- (c) The third topic concerns the need for cooperation among African countries to achieve food security. The energy and agricultural transition cannot be conceived outside a cooperative framework among African countries in order, first, to pool risks and increase resilience; second, to coordinate efforts and benefit from the comparative advantages of and variety in the major endowments of each country, and, third, to develop regional value chains, as, for example, in the green energy sectors. In that context, the Agreement Establishing the African Continental Free Trade Area should help to facilitate trade among countries, boost food security and promote the creation of subregional agricultural value chains.

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⁵ Ayobami Solomon Oyewo and others, "Transition towards decarbonised power systems and its socioeconomic impacts in West Africa", *Renewable Energy*, vol. 154.

Session 1: Climate change challenges and opportunities for economic and social development strategies in North and West Africa

In the first session, the main features of climate change in the two subregions will be analysed and the implications for possible development models will be examined. Although climate change is a threat to economic development, it offers countries in both subregions an opportunity to build an alternative development model, more concerned with the well-being of populations and more in harmony with the planet.

- Main features of climate change in North Africa and West Africa (Technology, Climate Change and Natural Resources Management Division, Economic Commission for Africa).
- Green growth or an alternative prosperity model: what are the choices for Africa? (United Nations Environment Programme International Resource Panel on the 2024 Global Resources Outlook report).

Session 2: Rethinking energy security to meet the challenges of climate change

The session will focus on challenges associated with the dual objective of achieving an energy and agricultural transition while ensuring security in both areas. The session will include the sharing of experience among countries in the two subregions.

- What is the model for the energy transition in Africa? The case of two countries (Ghana and Morocco).
- Trends in energy intensity and carbon performance in North and West Africa (Louis Mofor; Samia Hamudah, Subregional Office for North Africa).
- Technological challenges of the energy transition: the case of renewable energy storage (Zuzana Schwidrowski, Subregional Office for North Africa).

Session 3: How can intra-African trade facilitate and accelerate the energy and agricultural transition?

During the session, the agricultural transition will be considered in the context of collaboration among African countries, including in trade, and, more specifically, the creation of regional value chains in the green energy sector.

- The fertilizer value chain in Africa (Aziz Jaid, Subregional Office for North Africa).
- Priority value chains in West Africa (Subregional Office for West Africa).

V. Expected outcomes

The expected outcomes of the expert group meeting are:

- Greater awareness and knowledge on the part of key stakeholders regarding:
 - O Challenges of climate change for the development of countries in North and West Africa, in particular in terms of food and energy security;

- o Role of trade in facilitating and accelerating the green transition in Africa;
- Key public policies for implementing sustainable food and energy systems and initiatives to finance the transition.
- A report of the meeting, including conclusions and recommendations
- Guidance notes in support of the strategic guidance arising from the expert group meeting

VI. Documents and working languages

The issues paper and agenda will be sent to participants in due course. The working languages will be Arabic, English and French, and simultaneous interpretation will be provided.

VII. Meeting dates and venue

The meeting will be held in Accra on 1 November 2023.

VIII. Contact details

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