Questionnaire in relation to Human Rights Council resolution 50/9

on human rights and climate change

First:

Climate Change is considered to be one of the obstacles that significantly impact the absence of food security and lack of nutrition as to its direct adverse effect on natural resources in Oman and the rest of the world. In that sense, here are the challenges faced by the food security sector;

1- **Water Resources Challenges:**

The Sultanate of Oman, like the rest of the world, is facing several challenges in its Water Resources Management. All of which are a result of population growth, rainfall scarcity, lifestyle and consumerism pattern change, persistent demand of food, high increase of water usage in other developmental sectors; like the industrial, tourism and governmental sectors and in terms of the predicted effects of the international climate change which create a huge obstacle hindering water resources product output.

Additionally, Oman is considered to be one of the countries with limited water resources considering its geographical position on dry/ semi-dry regions, which is a natural/ environmental challenge where there is a dependency on scarce annual rainfall to replenish underground water resources. In that sense, the annual rainfall in Oman is less than 25mm on desert lands, 50mm on flatlands and 200mm on mountain areas.

Furthermore, economic and population growth resulted an increase of water demand. In the same vein, food demand lead to a wide spread on agricultural activities that increases water demand as a result; that same demand constitutes 83% of the overall National Water Consumption (Ministry of Regional Municipal and Water Resources, 2012), which creates a demand to achieve water and food security equilibrium. Finally, water consumption rate increased as well for industrial, commercial, national and tourism functions with more than 4 folds between 1998-2010; which reached 339 million cubic meters in (2010) opposed to 86 million cubic meters in (1998) (Ministry of Regional Municipal and Water Resources, 2012).

Finally, water pollution caused by surface activities threatens its sustainability to benefit future development in the sense that usable water resources decrease alongside its immediate and direct usability. Similarly, there are several causes of underground water pollution in Oman; salinity problems, underground water quality deterioration on coastal areas -Al Batinah and Salalah coasts-, liquid and solid municipal waste, disposal of high salinity water by-product from Desalinization Plants, and underground water pollution as a result of agricultural activities; e.g. abuse of fertilizers and pesticides.

2- Agricultural Lands Challenges:

Agricultural lands in Oman face several challenges; most significant of which are soil salinity, urbanization, agricultural land fragmentation and productivity decrease, erosion and desertification. In terms of soil salinity, it is considered one significant challenge of agricultural production as a result of the use of high-salinity water; fresh underground water mixed with seawater, for irrigation causing some of the main agricultural lands, especially in Al Batinah North and South Governorates, to lose a significant number of land plots over the last decade. On the same hand, urbanization is also a challenge in the face of agricultural lands in Oman where the ratio of agro-lands urban is disproportionate and purpose change of agricultural lands to other purposes. In the same vein, agro-lands suffer from low-crop production due to soil deteriorated fertility and high salinity, in addition to the location of those lands on Wadi banks facing problems of soil erosion/ drift. There are steps to be taken to preserve agro-lands from soil erosion caused by nature or human activity.

3- Pastoral Resources Challenges:

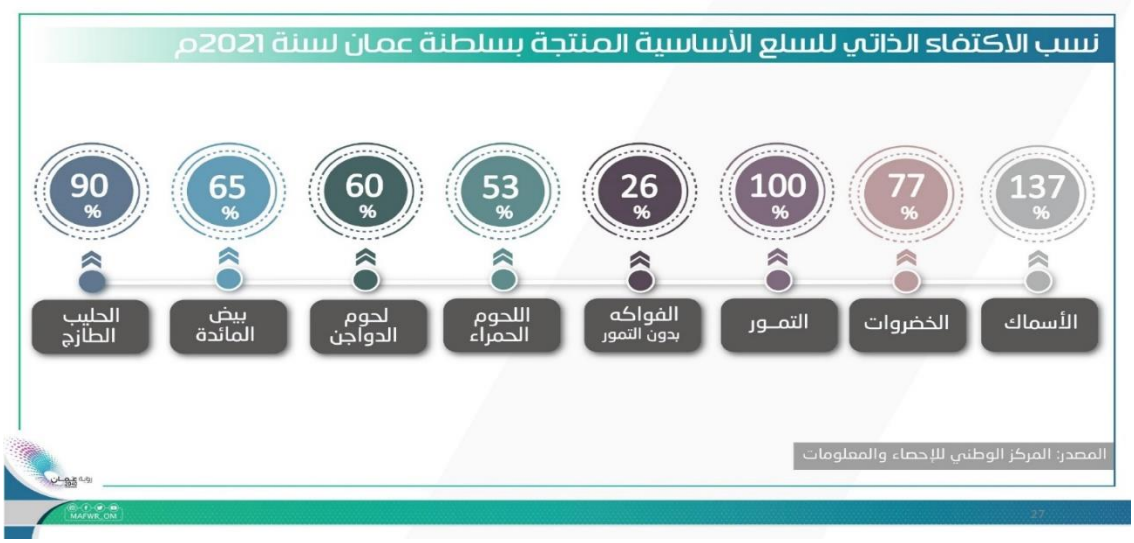
The most significant challenges facing pastoral lands; human and natural. The natural challenges are exemplified in rainfall scarcity and high temperatures while human challenges are exemplified in urbanization, urban development which result in the increase of desertification surface area. Finally, pastoral lands are also challenged with excessive grazing which in turn cause the deterioration of plant biodiversity.

4- Fishery Resources Challenges:

Fisheries preservation and sustainability is considered to be one of the most significant challenges faced by fishery resources due to excessive fishing over certain types of fisheries, depletion of certain commercial types stocks and climate change challenges through natural crisis affecting the coral reefs. In that sense, preserving the quality of fisheries is also a challenge during the processing of fisheries, fast perishable foods, unless handled well through fishing, preservation, preparation stages. In addition, the rise of temperature leads to increase of chemical and biological reactions which leads to product decay. Accordingly, food safety and quality measures are to be implemented to ensure the provision of high quality and safe product healthy to consumers. On the same hand, another challenge is ensuring the provision of fishery products to individuals, companies, institutions and water live-stock transportation and promotion while balancing the supply of the same between local and international markets; ensuring products provision in local markets for prices affordable by everyone. Finally, another challenge comes from natural phenomenal occurrences such as; red tide phenomena and noxious planktonic algae, which could cause the death of many fish and sea creatures and in rare cases cause the culmination of biological toxin in fish and shellfish gill endangering humans upon consumption of the same creatures.

Second:

- The Sultanate of Oman received first place over the GCC and fourth over Arab countries for achieving sustainable development goals according to Sustainable Development Report 2022 issued by the UN.
- Local production in agricultural and fisheries sectors increased in value to consumption ready food value to (66%) in 2021.
- Oman is classified to be 35th internationally and 3rd over Arab countries according to the International Food Security Indicator 2022.



Third:

In order to reassure Oman care for environmental problems, climate affairs and continued support to such efforts, Oman efforts were shown in the establishment of the National Committee of Climate Change and Ozone Layer Protection in January 31st 2021 led by the head of the Aviation Authority and 31 members concerned with dampening and adapting with the negative effects of climate change, and its duties are;

- Contributing by proposals and execution of national policies and work plans to decrease greenhouse gases, adapt to negative effects of climate change and protection of the Ozone layer according to Oman Vision 2040.
- Determine Oman stand on cases presented on member countries meetings and negotiations of agreements concerning climate change and Ozone layer protection.
- Follow-up with the execution of resolutions and recommendations of the mentioned agreements of member countries and ensure Oman obligation fulfillment of said agreements.
- Contributing in drafting and executing national climate change and ozone layer protection strategies.
- Contributing in drafting and reviewing national studies, reports and active reports according to the mentioned agreements.
- Contributing in spreading awareness about climate change and its effect on different sectors.
- Recommending methods of qualifying national human resources and build up competencies for climate change and ozone layer protection.
- Continuous review of work progress and recommending the necessary to establish and support the coordination between all concerned parties and resolve execution obstacles.

Fourth:

The mission of issuing environmental laws according to environmental needs or upon royal decrees concerned with the same. The General Directorates of the Environment Authority take the task of drafting environmental bylaws and follow up according to specialty. In addition to full scale coordination through the National Early Warning Center from Multiple Hazards and the National Committee of Climate Change and Ozone Layer Protection. Finally, there is a clear plan on how to deal with crisis and disasters in the framework of the joint-work system approved by the National Committee of Emergencies Management.

Fifth:

- Implementation of some projects aimed at increasing the efficiency of the use of available water resources through the introduction of modern irrigation systems and upgarde of some traditional agricultural systems in Aflaj villages, and the use of triple treated wastewater for irrigation of certain agricultural crops.
- Preparing a salinity strategy that includes the proposal to implement some projects to address the challenges facing this aspect.
- Work on the implementation of some projects dealing with the development of natural pastoral lands and thus contribute to addressing some of the challenges of desertification.
- Introduction of modern technologies in agriculture such as protected agriculture, introduction of new varieties, thereby increasing productivity, reducing costs and raising the added value of the agricultural sector.
- Use of good practices in agriculture, reduce the use of pesticides and enhance the quality of agricultural products.
- Review of laws and regulations in terms of use and maintenance of agricultural land, continuously.

Sixth:

The following are some environmental projects, programmes and studies:

- Green Initiative.
- Artificial Rainmaking.
- Crimean Tree Farming Project.
- The Falco Concolor (Falcon) Survey Project.
- Develop a methodologies manual and publish sustainable development indicators.
- Update of the National Plan to Combat Oil Pollution.
- Project to review plans for Water Supply Well Field Protection Zones and establish new protection zones.
- Draft enabling activities for the development of a national implementation plan for the Stockholm Agreement on Persistent Organic Pollutants.
- Radiation Monitoring Early Warning System Project.
- The National Program for Monitoring Pollutants in Marine Environments.

- Project of the Implementation of the Master Plan for the Protection of Groundwater from Pollution

- Expansion of national air pollution monitoring network stations.

Seventh:

The Sultanate of Oman is making constructive efforts to reduce the phenomenon of climate change;

- Update the Climate Governance Regulation and draft a climate change law.

- Preparation of The National Strategy for Mitigation and Adaptation to Climate Change.

- Development of a database to track the achievement of nationally determined contributions and inventory all climate change adaptation projects in the Sultanate of Oman.

- Work on a database to account greenhouse gas emissions from key sectors.

- Form an Omani technical delegation under the scope (Ministerial Committee on Climate Change and Ozone Layer Protection). It oversees the functioning of the technical teams established under its scope, namely:

- Climate mitigation team.

- Climate Change Adaptation Team.

- Finance, Technology and Competencies Building Team.

- Media and Events Team.

- Ozone Layer Protection Team.

- Technical Negotiating Team.

- The Sultanate of Oman has confirmed its commitment to managing projected emissions in 2030 by reducing projected emissions by 7%.

- The Sultanate of Oman is keen to participate in international conferences and events related to climate change.

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