

### Climate Vulnerability Context



Water insecurity: decrease in water quantity and increase water salinity, decrease in the precipitation level by 30% in Iraq

Land degradation: 40% of the country's surface is estimated to have been affected by desertification, with an additional 54% under threat. Iraq loses around 100 square kilometers annually from its arable lands as a consequence of desertification

Iraq

Biodiversity loss: sharp decline of species of animals and plants, and wildlife, particularly in Marshes

Sand and dust storms: one of the most affected countries in the Middle East concerning the occurrences of sand and dust storms

Waste: world's highest per capita waste generation - about 1 kg per person of waste generation per day (about 30% higher than the world average)

Energy: Nearly all of Iraq's electricity generation is from oil and natural gas. The transmission losses in Iraq are among the highest in the world, reaching 62.5% of generated electricity. Less than 1% of the total electricity generation comes from solar in Iraq

## Climate Change as a key driver of negative changes



- ✓ The temperature in Iraq is increasing 2 to 7 times faster than global temperature rise.
- ✓ Iraqi population's continued growth will result in an increasing requirement for water and agricultural output.
- ✓ Severity and frequency of droughts will increase along with dust and sand storms.

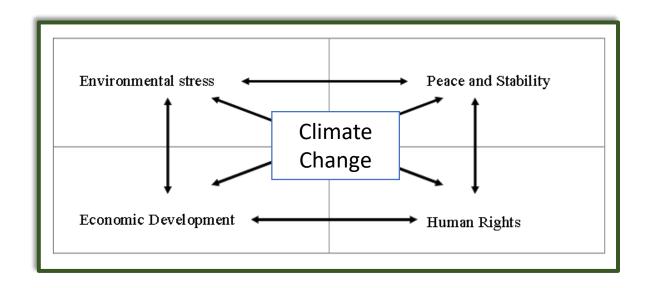


Iraq is the fifth most vulnerable country to the climate change impacts (GEO-6 Report, UNEP)

## Climate Change: A crisis multiplier in complex context



In Iraq, climate change is expected to further affect food and water security, equality, exacerbate environmental degradation, existing sociopolitical and economic vulnerabilities, undermine livelihoods, inflate the risk of conflict.







# SDG 13 – integrator role: Accelerating achievement of SDGs through SDG 13

## Mainstreaming Environment and Climate for Sustainable Development

(climate change must be systematically considered in social and economic policies, crisis recovery and reconstruction plans, rehabilitation, development projects )

Mainstreaming is achieved by putting climate/ environment issues at the heart of government by mainstreaming them into economic decision-making processes and national recovery efforts, particularly the national and subnational planning and budgeting processes led by ministries of finance, planning and local government, and supported by ministries of environment.

## Climate change and Environment policies, strategies, projects

(implementing SDG 13 accelerates the co-benefits generation across multiple SDGs)

#### Iraq National Frameworks



- Iraq Vision 2030 integrates with the environmental goal to create a clean, safe and sustainable environment for the current and future generations.
- Iraq ratified the Paris agreement on January 14, 2021.
- Iraq submitted its NDC (Nov 2021) to define Iraq's strategic objectives and commitments towards climate change adaptation and mitigation.

Iraq aims to achieve reduction between 1% and 2% of its total emissions from 2021 to 2030 through national efforts and 15% subject to the international financial and technical support.

National Priorities based on NDC



Iraq aims to invest in renewable energies of up to 12 GW by 2030 based on the Cabinet's economic decisions for 2021.



Reduce vulnerability to the negative impacts of climate change, especially in rural communities



#### **UNDP Support in Iraq**



Focuses on integrated solutions for climate action that brings benefits across SDGs and for crisis prevention/ recovery goals

#### 1. UNDP Project:

#### Climate action for human security in Iraq's Al Hawizeh marshlands



#### **KEY CHALLENGES:**

Al Hawizeh marshes and its communities are facing political, socio-economic and security challenges that could adversely impact efforts to promote sustainable development. The following challenges, coupled with the adverse impact of climate change, hinder the return of the Internally Displaced People (IDPs) from other governorates:



Severe environmental degradation and a near total absence of the infrastructure required to support everyday life of communities.



Lack of power supply.



Lack of sewage treatment facilities, schools, clinics, and other public facilities.



Lack of access to clean water supply or wastewater treatment or disposal.



Lack of livelihood opportunities.

#### PROPOSED SOLUTION:

The project supports crisis-affected communities with a special focus on women's empowerment through:

- Deployment of innovative clean drinking water supply and wastewater treatment systems.
- Support livelihoods diversification and ecotourism activities consistently in coordination with government's natural resources management plans.

Thus the project will address the following interlinked development challenges:





Social cohesion Gender equality





#### 2. UNDP Project:

# Sustainable Solutions of Compost Production from Organic Waste in Iraq - Karbala Governorate



- To create a standardized value chain for the waste management in Karbala innovation and technology transfer were be the core action in combination with introduction of financial mechanisms and incentives for communities, SMEs and individual participants involved.
- ➤ To ensure sustainability the programme supported the private sector in playing a major role and to be involved in the waste management sector.
- Specifically, the programme supported the construction of a pilot composting facility in Karbala to determine best approaches for producing commercial quantities of compost which will in turn replace chemical fertilizers progressively.
- ➤ Based on the lessons learned from the pilotin Karbala Governorate, a national strategy will be developed for upscaling the best practice in other parts of Iraq.

#### **Karbala Composing Pilot**





Results contributed to SDGs 1, 3, 9,11,12 and community economic resilience.

#### 3. UNDP Project: Promoting Carbon Reduction Through Energy Efficiency Techniques in Iraq



- ➤ to promote low carbon development in Iraq through supporting the design of a regulatory framework for enhancing Energy Efficiency in buildings and the creation of an enabling environment for its operationalization.
- reduced electricity consumption has a five-fold benefit: reduced cost to the user; reduced operational cost to the public utility because of reduced demand; reduced capital costs to the utility because the reduced growth in loads requires less infrastructure development; reduced pollution as a result of power generation; and reduced environmental impact due to extended product lifetime.



#### 4. UNDP Project: Improving the healthy nexus between ecosystems and indigenous people of the Mesopotamian Marshes in the face of climate change



To preserve biodiversity and ecosystems in a gender sensitive manner in the face of climate change

The proposed activities aim at contributing to building resilience of local communities to climate change impacts, tackling root causes of biodiversity degradation, and restoring the wildlife population, through and for women empowerment, while bringing co-benefits across poverty reduction, social cohesion, and climate mitigation



Results contributed to SDGs 1, 5, 6, 13, 14, 15

