

Environmental Strategy Document

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Environmental Strategy Document

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Section I: Introduction

1.1 Purpose

1- The purpose of the UNDP Environemntal Strategy Concept Note is to update intended strategic actions and activities in light of the new realities on the ground, dominant trends in resources use, and new emerging issues nationally and global.

1.2 Background

2- This Strategy Concept Note document provides strategic direction and guidance for UNDP Yemen CO programmes in the period 2011-2015. It builds on the experiences and lessons learned at UNDP earlier environmental interventions in Yemen. Also, it brings together the various elements of environmental sustainability, and synergies into a coherent and more integrated framework to enable strengthening resilience and reducing livelihoods vulnerability from increasingly growing climate change impacts and environmental degradation while ensuring equality, and poverty reduction building on promising policy appraches. Furthermore, the Strategy Document provides a comprehensive review of environmental status, trends of available information in light of new emerging issues, relations and changing realities on the ground, from national and global contexts. It also reviews progress made in the implementation of measures and actions in Yemen aimed at enhancing the environmental sustainability work in Yemen given that national strategic goals and priorities. The strategy has also reflected on challenges and constrains related to implementation performance of the set out measures and actions. UNDP earlier interventions were outlined, and promising policy approaches, and priority actions have been highlighted.

Section II: Situation Analysis

1.3 Setting a broader national context

- 3- As a Leased Developed Country (LDC), Yemen is facing numerous socio-economic and environmental challenges. Economically, Yemen is a low-income country and depends mostly on declining oil resources which accounts for about 25 percent of Gross Domestic Product (GDP), and roughly 70 percent of government revenues. The latest estimated GDP - per capita (PPP) is about US\$ 2,700 (World Bank 2010). The average growth rate for non-oil GDP reached 5.3 percent. Poor economic growth and continued imbalances characterized the structure of the GDP and reduced the potential for job creation and poverty reduction. Hence, unemployment rose from 12 percent in 2000 to 16.8 percent in 2005. The oil sector's contribution to real GDP declined to 12.4 percent in 2005 compared to 17 percent in 2000 due to a 2.7 percent average decline in annual crude oil production (Yemen DPPR 2011-2015).
- 4- Although oil contributes substantially to GDP, it does not provide much employment. Agriculture, on the other hand, employs 54 percent of the population, and is the mainstay of 74 percent of the rural population, while only accounting for at best 15 percent of GDP. This cane largely explains the much higher incidence of rural poverty since oil investments have not significantly contributed to the improvement of rural livelihoods and economy (GoY 2007). Private industry has failed to take advantage of the opportunities offered by greater availability of foreign exchange due to an unfavorable investment climate, largely related to weak governance and absence of a culture of rule of law. In 2006, Yemen began an economic reform programme designed to boost non-oil sectors of the economy through enhancing diversification in promising sectors including agriculture, trade, industry, fishery, and ecotourism.
- 5- The Human Development Report (HDR 2011) ranks Yemen 154th among 177 countries on its Human Development Index (HDI). Yemen has is classified as the poorest country in the Middle East and reportedly seems that meeting the Millennium Development Goals (MDGs) by 2015 will be unlikely (Yemen MDGR 2010). High population growth,

slow economic growth, declining oil production, high unemployment, environmental degradation, climate change, high inequalities between rural-urban, and gender disparities, lack of adequate access to basic service including education (high illiteracy rate, and low enrollment and school drop-out), health (high child malnutrition, maternal mortality), and electricity, gender disparities, and widespread poverty, political and security concerns, and continuing weak governance including absence the culture of the rule of law, and non-conducive and inefficient delivery mechanism remain as the key obstacles for achieving substantial progress on the way towards sustainable development compared to those outlined since the last national report prepared for Rio+15.

- 6- Climate change will also further impede the national capacity to achieve sustainable development but even worse in the sense that reversing development progressed in the past. In addition, it worth-mentioning that, the recent political unrest in the country which begun since early 2011 is expected to further slow down progress towards sustainable development. The current economic stagnation coupled with business retrenchment, and declining access to basic services including health, education, electricity, and security has likely lead to job loss, and poverty expansion and declining well-being in the country. Nevertheless, the recent call for transformation has ended up fostering basis for peaceful power transition through which a more conducive political context will be growing and supportive for necessary national dialogue and developmental decision-making process reform, and eventually effective and efficient use of resources in the country.
- 7- Obtaining necessary support from partners to build on available opportunities, and address socio-economic and environmental challenges from a broader analytical framework will be essential for genuine progress towards sustainable development in the country. Following this understanding, since environmental degradation is a key multi-dimensional developmental challenge facing the country; that is associated with several factors including economic growth, poverty, and population growth, inadequate access to clean energy sources, and weak governance, the livelihoods approach will remain the insightful framework for continuing UNDP engagement to support environmental sustainability in Yemen. As far as environmental sustainability concerns, the next sections will follow to elaborate in more details UNDP CO strategy to help Yemen continue addressing their environmental challenges, reflecting on the emerging issues, new realities on the ground, national priorities, available opportunities and existing obstacles, threats, and lessons learnt.

1.4 Geography and climate

8- Yemen is located on the southern coast of the Arabian Peninsula. Its land boundaries are with Saudi Arabia in the north and Oman in the east. The coastline more than 2500 km. Yemen is a generally mountainous country. The altitudinal range extends from sea level up to 3760 meters at Jebel Al-Nabi Shauib, the highest point in the Arabian Peninsula. Such altitudinal variation results in a great diversity in climates and landscapes. Yemen covers a total land area of about 527,970 square kilometers. About 3 percent of the land can be used for agriculture. Range lands together with forest and woodlands comprise almost 40 percent of the land area. Other land, mostly desert with limited use potential, constitutes almost 60 percent of the total land area. Yemen is an arid and characterized by five major climatic zones: (1) a hot and humid coastal Tihama plain, 30-60 km wide, along the Red Sea and the Gulf of Aden, (2) the Yemen Highlands, a volcanic region with elevations between 1,000 and 3,600 m. parallel to the Red Sea coast, and with temperate climate and monsoon rains, (3) the dissected region of the Yemen High Plateaus and the Hadramawt - Mahra Uplands, with altitudes up to 1,000 m, (4) the Al-Rub Al-Khali desert interior, with a hot and dry climate, and (5) the islands, including Socotra in the Arabian Sea and more than 112 islands in the Red Sea.

1.5 Biodiversity

9- Yemen is a country with rich natural habitats, species and genetic diversity, including many endemic species resulted from the variant altitudinal topography, climate, and geographical landscapes. The unique geographical position of Yemen with the variant climatic and topographical features is favorable for existence of diverse ecosystems, natural habitats, and great marine, coastal, and terrestrial biodiversity. The flora of Yemen is very rich and heterogeneous. According to the Gap Analysis of Natural Plant Biodiversity of Yemen (2011), about 2,810 plant species were recorded in Yemen in which endemic and near endemic plants were estimated about 604, among which 455 are endemic (307 in Soqotra), constituting of about 16% of the flora which does not occur elsewhere (National Biodiversity Strategy and Action Plan, NBSAP 2005).

1.6 Natural resources

10- Also, the country is endowed with a rich bird life of more than 363 species, and providing sanctuaries for numerous southwest Arabia endemic species (Yemen 4th NR). On the other hand, Yemen has very limited natural resources including for instance arable land, water, fishery, and green cover which evidently experience constant degradation. The arable lands do not exceed 3% of the total natural area which is dominated by desert and mountains. The arable lands experience continuous deterioration by about 1.8% annually during the period 1999-2006 as a result of the water erosion, desertification, salinization, and urbanization. The total lands covered by forests are estimated about 1.5% until 2005. Desertification is accounting for over 50 percent of total land of the country. Desertification of

Box 1: Successful models in livelihoods sustainability from Yemen experience

There are a number of success stories in relation to establishing and development of community-based natural resources management across a number of protected areas such as Al-Hiswa, Jabal Bura'a which has not only contributed towards environmental conservation but reducing poverty, generating jobs, empowerment, and enhanced equity. In addition, Rosh community in Socotra has also win the Equator prize of 2010 as a result of a model presented in conserving environment and improving livelihoods sustainability. For instance, The total revenue generated across two protected areas (Al-hiswa and Jabal Bura'a) excluding Socotra is estimated about YR 87,544,900 since 2008 trough 2011.

agricultural land ranges from 3-5 percent annually, whereas the area of deteriorated land due to soil erosion and salinity is estimated to be 12 million hectares and another 3.8 million hectares, respectively. The situation is further worsened as a result of encroachment of sand dunes (NSES 2005-2015). The potential for greater desertification is high considering a number of factors including changes in socio-economic patterns and farming practices and increasing demand for fuel,

abandonment of terraces, overgrazing and depletion of tree cover and water erosion problems.

1.7 Green cover

11- As for the green cover, there is a solid evident pointing out that vegetation is degrading in Yemen due to several factors including weak enforcement law, lack of environmental awareness, weak of institutional, monitoring and oversight. According to the Environmental Status Report (2005), for instance about 46% of pasture land across Wadies of Moore and Zabid have been lost following the introduction of an agricultural development project; desertification has reduced the available land of rain-fed agriculture and pastoralism at Tihama plains by 16 percent due to coastal, and internal sand dune expansion; decline in wetland area by 1 percent; spread of invasive species on the expense of those indigenous; and the rapid deterioration of significant species and rare trees such as Juniper plant in Saada, Taiz, and Sana'a, in addition to the Draseana plant (blood brothers) in Socotra and Shura plant in the coastal area of Yemen. Deforestation continues to take place in several areas in Yemen for many reasons including wooding for fuel, shelter, and farming and cultivation. According to SNC (2011), access to clean energy such as LPG stoves for cooking is limited in rural areas. About 70 percent of the rural households use wood stoves for cooking as

of 2000. Wooding is still the biggest source of energy for most of rural and for a few urban areas of Yemen which has the most serious environmental impact.

1.8 Protected areas

12- So far only around 1.5 of the Yemen total land is protected areas. The resources gap to achieve the MDGs with regarding to halt deforestation through protected areas is slowly progressing and it is unlikely to reach the target of 10 percent if the current trend persists. However, It worth-noting that there is a potential for accelerating progress on this regard through capitalizing on success stories presented across a number of local initiatives in protected area management in Aden, and Al-Hodeida (see Box 1).

1.9 Fisheries

13- The fishery resources are also experiencing continuing decline. According to the Fishery Sector Development Strategy (2011), fish production peaked in 2004 with production of 256,000 metric tons, but has since dropped to 127,000 metric tons in 2008 mainly due to uncontrolled resources exploitation. The Environmental Protection Law of 2000, and its regulatory by-laws provides a legislative framework for environmental protection in Yemen, but its enforcement remains a major challenge.

1.10 Water resources

14- As an arid country, with no permanent rivers, Yemen is one of the most water-scarce countries in the world. Water depletion, pollution and inadequate supply are the main issues in Yemen (NWSSIP 2009-2015). The long term average amount of water available is less than 200 m³ per capita per year and predicted to decline to below 150 meter cubic per capita per year (EPA 2009). Yemen's water scarcity is due to limited renewable resources available for use including low rainfall rate (i.e. 800 mm annually in western highlands, 250 in lowlands and 50 mm in coastal plaints), and nearly most of which is rapidly lost to evapotranspiration (ET). Conventional water including underground is the main source for household consumption, agriculture, and other services including industry use. The current State's policy to secure water for different users including households, and agricultures is through taping into underground recourses. Due to heavy reliance on limited amounts of underground water, and low rainfall rate, high ET, the water-basins in Yemen have been over-extracted, and resulted in increasing salt-water intrusion in costal aquifers. The sustainable rate of water use in Yemen is estimated about 2,500 million m³/year. However, water is extracted at a rate of about 3,400 million m³/year; this demand exceeds the renewable levels leaving an annual deficit of around 900 m³ (NWRA 2005). Although there is already a cute water deficit in Yemen, only about 35 percent of the population has yet access to safe drinking water in 2008; around 43 percent of urban population, and 35 percent in rural areas have access to safe drinking water in 2008.

1.11 Saniation and soild wastes

15- The percentage of people without access to proper sanitation services is estimated about 77 percent of the population in 2008; around 32 percent of urban population, and 22 percent in rural areas have access to improved sanitation in 2008. There also no adequate measures for solid waste management which leads to deterioration of underground water quality. Under groundwater is being pumped to household without making adequate examinations and proper treatments. Underground water is contaminated with high contents of nitrate, heavy metals, soluble salts, chemicals, and bacteria. Water quality has declined for many reasons including improper management of hazardous materials and solid waste management particularly of hospitals, laboratories, agricultural practices (i.e. pesticides and fertilizers) and manufacturing industries leaching downwards to underground. Also, waste and sewage in Yemen have been accounting for major underground water contamination.

Water-borne diseases are among the the main causes for infant mortality. Also air pollution including smog, carbon monoxides, and dust across major cities as a results of emissions from transportation, energy production (i.e. power generation stations or household generators), and mining and manufacturing industry has serious environmental and health impacts. A number of studies warn that the continuing decline in water tables (i.e. about 3-6 meters a year in some water basins) will turn the underground basin of major towns especially in Sana'a (i.e. in 15-25 years) and other such as Taiz, Abyan and Hadhramout dry. The resources gap to achieve the MDGs with regarding to water & sanitation is wide for which enormous investments to reach the target by 2015 will be necessarily required. The Water Law of 2002 provides a legislative framework for controlling extractions, but enforcement remains a major challenge.

1.12 Depletion, pollution of scarce natural resources

16- Yemen's natural resources including minerals and oil, water, land, diverse ecosystems, and biodiversity are the basis of the national economy. Water depletion and pollution, land degradation, waste, air pollution, coastal erosion, habitat and biodiversity deterioration are among the major environmental challenges in Yemen leading to further environemntal depriviation (i.e. declining access to water and energy). The depletion or degradation of these resources represents not only a loss of the country's national capital but undermines the sustainability of its economy. Agriculture forms an important sector in the nation's economy and much of the economic activities depend on exploitation of fresh water resources, marine resources, and its soil and oil wealth. However the natural resource base is facing serious challenges. The rapidly growing population at the rate of 3% annually accelerates pressure on scarce natural resources. Demand increases on water resources, foodstuff and other products of natural resources. Unplanned expansion of urban centers exceeds, in some places, the carrying capacities of available resources to meet new demand. It also causes sanitation and waste management problems and puts pressure on social services, in addition to loss of biodiversity and agricultural land.

1.13 Main environemtal challenges, climate change and livelihoods

- 17- National policy documents including 4th National Report 2008, the 4th DDPR 2011-2015, NEAP 2005-2015, NSES 2007-2015 have identifed priority environmental issues in Yemen namly: water resources (Water depletion, pollution and supply), land resources (land degerdation, desertificion), Habitat degradation (natural heritage, loss of biodiversity both terresterial and marine, marine and coastal zone management, and sea level rise), waste management (soild sanitation, hazardouse materials). In addition, the indicated documents have also highlighted that fact that natural resources are degrading in Yemen which represents not only a loss of the country's national capital but also undermines the sustainability of its economy. For instance, the high levels of poverty in rural areas have often coupled with using soils, forests, and other resources including water at rates that exceed sustainable limits for renewal leading to environmental degradation. About 75 percent of population in Yemen lives in rural areas, and mainly relies on access to natural resources for constructing their livelihoods through engaging in activities such as farming, grazing, wooding, and fishing while –as mentioned earlier- lacking access to basic services such as electricity, safe water and sanitation, health and education.
- 18- As such, environmental degradation including soil erosion, over-wooding, and water depletion will jeopardize rural economy capital asset base, and undermines the livelihoods sustainability of the poor particularly across rural areas in Yemen where the majority of population live. However, as climate change has been identified as one of the emerging issues in Yemen (DPPR 2011-2015), its underlying impacts will be muti-demntional to include numerous sectors and themtic areas such as food security, water, agriculture, environmental sustainability, fisheries, ecotourism, gender and public health. Poverty is expected to increase due to disease spread, declining access to water and decreasing agriculture productivity, or even asset destruction. Furthermore, natural resources based are

vulnerable to impacts of climate change including water, agriculture, coastal zones, and many resources. The country has witnessed increasing intensity and frequency of extreme events such as floods, and drought causing impact on the livelihoods posing pressure leading deterioration of livelihood conditions, and humanitarian diseases. The capacity of Yemen to achieve development and poverty reduction goals will be further restricted under climate change.

1.14 Environement, and human well-being

19- Notably, the aformentioned types of environmetal degredation in Yemen have always been coupled with serious developmental problems. There are limited natural resources in the country (scarcity of open sources), growing poulation (increasing human needs of the poor), and in between an economic patterns (use of limited economic production factors to meet the gowing human needs of the poor). The issue in environemntal degerdation is not a matter of use but rahther how the limited open-resources are exploied to meet unlimited human needs of the poor in a way that is not sustsianble nor efficient. Open-source resources with no clear property rights, and legislations that regulates the way in which resources are used has been by far inefficeent paradim, and even nor conducive for sustainability. When limited resources are used by economic activities (human-made), to meet a growing human needs in a away that exceeds the ecological capcity for renewal, and hence degredation starts. When degredation ecceds certain limits, the loss becomes irreversibale, and haramful socio-economic, and environemntal impacts increasingly gorws for which specific adaptation will be essential for sustainability. For instance, degredation of forests will not only be representing biodivesity loss, but also losing of thier tremandous values and services which includes for instance reducing environmentally-related natural disaster vulnerability such as floods control, soil protection, temperature regulation, and water and air purification.

1.15 Environement, climate change and natural disasters

- 20- Natural disasters in Yemen includes hazards such as flash floods, dust and sandy storms, tropical cyclones and earthquakes. Most importantky, the vulnerable communities and groups are the most affected by natural environemntal hazards which could cause substantial loss of asets, and lives. In October 2008, Hadhramout and Al-Mahara governorates suffered substantial damage between as a result of tropical storm 03B, that is attributed to climate change. The storm caused heavy rainfall & devastating floods in several locations (16 districts) in both governorates, making them the two most heavily affected areas. The flash floods and surging water resulted in one of the largest natural disasters to hit Yemen in the last decade. Following the storm, the two governorates were declared disaster areas to enable emergency aid and subsequent reconstruction assistance. Additionally, it worthmentioning that environemntal degradation itensified under changing climate will not only leads to endangered livelihoods, and increasing vulnerability to natural disasters but also to conflicts and social strifes.
- 21- With regards to climate change mitigation, anthropogenic CO₂ emission which has exceeded that atmpospheric assimulation capacity, it became irreversibale, and haramful impacts has been increasingly growing for which approritae adaptation measures are critical. Following this understanding, management for environmental sustsinability has been recoginzed as indispensable. Management for sustsinability ensures that a conducive environemnt for sustainable use of resources is fostered through which the limited resources are used for meeting growing human needs without undermining the ecolgical capacity for renewal. Towards that end, certain environmental management instruments have been used, which include: Institutional; legislative; Policy and strategies; information; awareness and community participation for environmental development in Yemen; that was basically intiated in the late eightees and early ninetees.

1.16 Environemntal sustainability

- 22- According to the Environmental Sustainability Index (Yale ESI 2005), Yemen was ranked globally the 137th country, with a score of 37.30 in the year of 2005 (see Appendix A). This ranking seems to be low, and can be interpreted in light of the fact that Yemen suffers from the challenges of poverty and weak governance. It also appears that poor environmental planning and limited investment in environmental protection and infrastructure which plausibly was translated into lower ranking. The score of 37.30 positioned Yemen below medium in terms of stewardship to maintain its favorable environment conditions into the future. The ESI pointed out that the environmental systems of Yemen experienced moderate stresses, as expressed in the plot by the fifty points scored on a scale whose maximum is 100. Air quality is neither inferior nor superior, however, according to figure 3.2 below; the quality of air in Yemen is lower than that of peer countries that belong to the group.
- 23- The chart also suggests that, unlike peer countries, biodiversity in Yemen is threatened as shown by the negative score recorded on the chart. However, the state of land resources and quality of water in Yemen is better than that of peer countries. As for water quantity, the score suggests that Yemen, as many countries in the Arab peninsula, faces a shortage in fresh water. As for the second set of indicators, reducing stresses, Yemeni efforts seem to be average. The score of Yemen is 42 on a scale of 100. The negative score of population stresses suggest that maintaining high rates of population growth means putting additional pressures on the natural resource base.
- 24- Yemen did not score well on the other two sets of indicators; that are reducing human vulnerability and social and institutional capacity. All score are negative on the indicators composing the two indices. Yemen is not doing well in terms of conserving the environmental health, sustaining basic human needs and reducing environmentally-related natural disaster vulnerability. Also, the capacities to sustain the development and environment of the country are extremely limited.
- 25- The scores on environmental governance, eco-efficiency, private sector responsibilities, and science and technology are all negative. It was found that ESI is highly correlated with civil and political liberties, environmental governance, government effectiveness, political institutions, and participation in international environmental agreements. Finally, the fifth and last set of indicators, global stewardship, suggests that Yemen is positioned around the average with a score of 42 out of 100. Yemen is not an advanced industrial country that contributes significantly to greenhouse gases, thus scoring well compared to peer countries on GHG emissions and reducing trans-boundary environmental pressures. Data on later ESI updates is unavailable to allow for systematic comparison. However, the next sub-section will highlight progress on environmental work in Yemen which gives insights towards progress, gaps and constrains.

1.17 Development of environemntal work in Yemen

26- The government acknowledges the inter-relationships between sustainable development, sound environmental management and poverty eradication. The fourth National Report identified climate change as an emerging issue causing challenge on development. Actions were taken for active involvement in environmental management and significant progress has been achieved in environmental work. External support played an important role. Major achievements relate to institutional development, development of policies and legislation, data collection and in environmental awareness. Environment protection and concern for sustainable use of natural resources grew gradually since late eighties, both on the part of the government and the public. The government has been undertaking active roles in environmental management and institutionalized environmental work. Growing public interest resulted in establishment of a number of non-governmental organizations and increasing involvement of media in environmental issues. The academic institutions and scientific communities also got more involved in

environmental research. Fundamental steps have been initiated to integrate environmental, social and economical factors at policy and legal levels.

- 27- The overall regulatory and policy frameworks have been developed. The national environmental other relevant legislations in Yemen have been developed including for instance: The Environmental Protection Law (26) of the year 1995; the Environment Protection By-laws (148) of the year 2000; and the Water Law (33) of the year 2002. Altogether, they acknowledge concern to global environmental issues and calls upon national contribution to global efforts undertaken towards such issues. In addition, the government reflected its commitments to global efforts by ratification of major international conventions on environmental issues of global concern (EPA 2005). These conventions1 deal with climate change, biodiversity, ozone layer protection, trans-boundary movement of hazardous waste and desertification control. Activities have been initiated to fulfill national obligations towards some of these international conventions. For instance, a survey was carried out on ozone depleting substances.
- 28- The country programme on ozone depleting substances was also prepared and submitted to the convention secretariat. National arrangements have been made to upgrade relevant system to comply with the Vienna Convention on Protection of Ozone Layer, depleting substances including CFC. To comply with Basel Convention on Trans-boundary Movement of Hazardous Waste, hazardous organic substance including POPs I&II in addition to PCBs are panned by national legislation for use or carrier transit through the country ports. Projects were developed and implemented to support introduction of ozone friendly technologies in private sector. The national capacity self assessment (NCSA), and the First National Communication (INC) has been prepared and submitted to the Conference of Parties (CoP) and process has been initiated for an adaptation programme as the National Adapation Programme of Action (NAPA 2009) prepared. National Desertification Action Plan has been prepared. The Biodiversity Strategy and Action Plan is in advance stage of preparation. The National Water Sector Stragy and Investment Programme I (2005), and te update in 2009. National Strategy for Environmental Sustainability has been prepared. Clean Development Mechanism was institutionalized and Designated National Authority (DNA) was established and rectified. The Law as well as National Strategy for Renewable Energy (2009) have been prepared.
- 29- At the institutional level, focus of environmental work and management evolved with institutional development from a stage focusing on combating environmental degradation and pollution to a stage focusing more on sustainable use of the natural resources (EPA 2005). National Water Resources Authority has been established in the year of 1994 to manage the water resources of the country on sustainable basis. Through consecutive stages of development since early nineties, the Environmental Protection Authority (EPA) was also established in 2001 to replace Environmental Protection Council (EPC) that was established in 1990. The EPA has been entrusted with a wider mandate, including the formulation of polices, strategies and action plans, drafting and implementation of pilot programmes, drafting of environment-related laws and by-laws, provision of technical feed-back and advice on regional and global environmental conventions, coordination, monitoring, and evaluation of activities of different environmental agencies, establishing of contacts with regional and global agencies dealing with environmental issues, and implementation of a public environmental awareness programme. More recently, the Government has

¹ The main environment conventions to which Yemen is party is listed below:

⁻ Basel Convention on Transboundary Movement of Hazardous Waste.

⁻ Convention on Biodiversity Convention.

⁻ United Nations Framework Convention on Climate Change.

⁻ Vienna Convention on Protection of Ozone Layer.

⁻ Desertification Control Convention.

⁻ Convention on International Trade on Endangered Species.

⁻ Stockholm Convention on Persistent Organic Pollutants (POPs).

established a Ministry of Water and Environment (MoWE) in 2003 to consolidate all water and environment related functions and institutions under one ministry (NWRA 2003). EPA and NWRA report directly to the MoWE.

- 30- The EPA is also expected to meet the additional tasks mandated by the Environment Protection Law, particularly in environmental monitoring and impact assessment. Environmental management at sectoral levels including sectoral policy and legislation development is the responsibility of each relevant line ministry or agency in coordination with MoWE/EPA. The line ministries and agencies are also responsible for implementation of environmental activities to the limit of their area of concern. There are also other support government ministries and agencies. Due to weak the weak role, and delivery mechanism of the State (i.e. as a result of lack of good governance) in Yemen, the central institutions are unable to substantially speed up the environmental development work in country. Nevertheless, there is relatively reasonable public interest including several local and civil institutions to participate in supporting and facilitating realization and implementation of environmental organizations (NGO) and increasing involvement of media, and academia in environmental issues. The academic institutions and scientific communities also got more involved in environmental research: Water and Environment Center in University of Sana'a, Environmental Sciences Study Center in University of Aden, and Marine Sciences & Environmental Collage in University of Al-hudydah, and Environmental & Marine Organisms Science Collage in University of Hadramout.
- 31- Research institutions provide inputs for the development process from local research perspectives. However, such institutions lack adequate human and financial capacities to participate effectively in the national development process. The public too contributes in environmental work either in organized forms i.e. NGOs A large number of NGOs has been officially registered to contribute towards environmental work but they still lack to adequate capacities to contribute efficiently and effectively towards environmental sustainability governance and as yet no pioneer one has been identified- or through community participation at local levels g the preparation phase of regulations/mandates and by-laws. However, there are potentials for involvement of additional several actors but still there is no clarity on the roles of each actor (EPA 2005).

1.18 In sum: Progress, challenges and constrains

- 32- Altogether, although positive progress was made towards institutionalizing management for environmental sustainability in Yemen, there are still challenges that restrict the available capacity on the way forward (i.e. the sluggish delivery mechanism of the overall administrative system in Yemen). For instance, although institutional capcity has improved but it has also remained constrained by weak organizational structures, conducive delivery mechanism, and lack of effecive coordination with key relevant actors and agencies. Yemen still lack adequate, accurate and up-to-date environemntal information records for proper strategic environemntal planning, monitring & evaluation as restricted mainly by weak technical supportive capacities. In addition, although legislations have been generally enacted, but it remains constrained by lack in power for enforcement of environemntal law (i.e. significantly weak culture of rule of law in the country). Furthermore, although polices and strategies were produced, but their implementation (i.e environmental and water awareness raising programmes, biodivesity conservation, rural water and sanitaion programmes, renwable energy technologies, and programmes) have been constrained mainly by lack of sufficient finacial resources (i.e. ineffecient use of the State' resources; less than about 20% of the national budget goes for development and the remainder is almost spent as for unnecessary expendidtures), and weak environemntal and climate change fund raising capacity. Inadequate particpation of civil society and private sector in conserving the environment is restricted by lack of capacity, and awarness. Following outlines key challenges and constrains:
 - Lack of sufficient funding/inadequate financial resources;

- Weak technical and institutional capabilities; relatively new development;
- Weak coordination among relevant agencies;
- Weak environmental monitoring and assessment capacities; and
- Weak environmental awareness and information base.

Section II: Yemen's Future Strategy and Long Term Vision

National policy documents including NSES (2005-2015), and NEAP II (2006-2015) identified the following as strategic goals for achiving environemntal sustainability:

- Habitat and biodiversity conservation;
- Sustainable land management;
- Sustainable water resources management;
- Sustainable waste management;
- Sustainable climate change and energy management; and
- Institutional development / capacity building.

To strategically reflect on the preious Section, SWOT analysis will be introduced as supportive tool assisting to draw on a couple of points more fully while updating priority actions for enhanced environmental sustainability in Yemen. The strengths, weaknesses, opportunities and threats including new realities on the ground, and changes in global trends will be outlined to constitute a more relevant context and road-map for understanding Yemen's future strategy and long-term vision. Table 1 illustrates the SWOT analysis matrix of Yemen regarding environmental sustainability.

Table 1 illustrates the SWOT analysis matrix of Yemen regarding environmental sustainability

Strengths	Weaknesses
 Party to several international conventions which enables us to access funding for environmental programmes Moderate institutional capacity Adequate strategy and policy framework Good base for information Environmental considerations mainstreamed into sectoral polices strategies Reasonable progress, experience, and locally technically qualified environmental professionals Adequate legislative framework Rich biodiversity with international interest, such as Jabal Bura and Socotra and heritage sites Rich and undermined sound and sustainable traditional practices, and local knowledge 	 Inadequate institutional coordination leads to policy incoherence lack of implementation of policy and lack of infusion of environmental issues into sectoral policies Weak organizational structures Lack of national framework for infusion of environmental allocations into public financial budget Lack of law enforcement capacity Lack of financial resources, and funds mobilization capacity Key institutions are ineffective in the delivery of their mandates Lack of proper mechanism such as data collection, and analysis for strategic planning, monitoring and evaluation Inadequate system for monitoring the environment, no culture of enforcement, roles and responsibilities not well defined, oftentimes resulting in agency conflict and overlap

	 Weak media, civil society, private sector, and NGO participation Insufficient capacity for policy implementation at local level
Opportunities	Threats
 Policy and legislative framework Government Reform Decentralized local development frameworks and programmes Existence of best practices that could be adopted Suitably situated for use of alternative and new technologies Global trend towards the development of sustainable economic sectors (i.e. sustainable agriculture development) Green economy Environmental and climate finance including GEF Trust Fund, LDCF, AF The government aim at economic diversification is based natural resourcesPotential of using natural resources and biodiversity potentials for ecotourism 	 Poverty and inequality Climate change Highly population growth rate Lack of adherence to environmental, and water law by some of governed entities Lack of adequate political will and vision regarding the environment Dependence on wooding for energy in rural areas Open-access resources Macro-economic policy relating the use of resources (i.e. incentivized water pumping for expanding cash crop production)

In the light of review and analysis of avaliable information oulined earlier in Section I, and the ESI scrutiny, and SWOT analysis, the environemnt of Yemen can be classified as a system with moderate stress. In addition, it can be concluded that: First, reducing community to natural hazards, and building reileince to adapt to climate change impacts are among the highest priorities; Second, building on earlier progress, and learning from past experience are quite relevant; Third, for Yemen to be environemntal sustainable, it is also necessarly essential to continue the followig:

- Ensuring further enhancment of the current policy, institutional, legsilative frameworks;
- Replicating the application of livelihood approaches for sustainable natural resources management;
- Reducing vulenrability to environemntal hazards;
- Building local capacity to cope and adapt to climate change impacts;
- Promoting broader stakeholder participation including NGOs, private sector, and media;
- Improving access to safe drinking water and proper sanitaion and clean energy sources; and
- Reducing poverty, and scaling up partnership for achieing global commitements.

More specifically, enhancement of the ability of Yemen to follow the paths of environemntally sustainable development calls for interventions in environmental monitoring and assessment, environmental research and application of sound environmental technologies, updating, development and implementation of appropriate policy instruments, strengthening management systems and improvement of coordination mechanisms, promotion and application of appropriate management tools, awareness raising and promotion of public participation. As identified by key national poilices (NSES, and NEAP II), following are the main areas for development and improvement:

- Strengthening and enhancement of national institutional capacities to apply sound environmental management practices and to integrate social, economical and environmental issues at all levels of planning and implementation. Development of coordination mechanisms among relevant agencies;
- Careful design and implementation of capacity building actions in natural resource management that meet the needs and learning levels of the national cadres;
- Development and application of economic instruments to encourage careful use and management of natural resources;
- Investment in environmental infrastructure and technologies;
- Encourage investment in pollution control and reuse and recycling of waste generated in various forms;
- Enhancement of access to safe drinking water building on experience of non-conventional initiatives;
- Enhancement of access to proper sanitation;
- Introduction of low cost and appropriate technologies. E.g. solar and wind energy and exploitation of surface
 water. These technologies out to be identified by relevant agencies in close cooperation with the beneficiaries.
 Traditional technologies ought to be considered where ever they have proven to be effective. National scientists
 and researchers can contribute in monitoring the cost effectiveness of applied technologies;
- Building and strengthening national information databases. Improvement of the use of data and information at all stages of planning and management. Encouragement for application of analytical methods stressing interactions and synergism;
- Assessment of the potential impacts of developmental projects and programmes to facilitate the provision of alternative ways of operation and management to attain desired results and economic sustainability;
- Enhancement of essential human resources to plan and apply sound environmental management practices. Design special programmes directed to the rural areas, the urban poor, women and children. Enhancement and introduction of interdisciplinary and integrated approaches in the curricula of the schools and universities;
- Establishment of procedures and measures to facilitate and enable involvement of local groups and communities to participate in sustainable management and protection of the natural resources at the local levels;
- Encouragement of NGOs and community driven initiatives and approaches to sustainability & livelihood approach for natural resources management and green economy at the local levels; and
- Promotion of public awareness at large on the importance of considering environment and development in an integrated manner highlighting the responsibilities and potential contribution of different social groups.

Section IV: UNDP Strategy

4.1 Setting a broader frameworks and agendas

- 1- According to the HDR (2011), the poor whose livelihoods depend mainly on access to natural resources carry double burden: More vulnerable to natural resources degradation, and must cope with the direct environmental threats such as pollution, and inaccessibility to clean drinking water improved sanitation. As pointed out earlier, poverty increase pressure on natural resources and degradation pose serious and harmful threats including natural hazards and disasters. In addition, climate change, and environmental degradation will not only endanger livelihoods, increase poverty, vulnerability to natural hazards and expand inequalities, but also could cause expensive impacts such as reversing the human development progress of the past, and even conflicts, and social strife.
- 2- As an LDC, Yemen will still rely to a great extent on developmental cooperation to support environmental work and actions. Implementation of environmental protection policies parallel with that of economical growth requirements, presents serious challenges to the government. As outlined earlier, the environmental management is facing institutional and technical challenges affecting performance and progress. There is still need to improve existing policy and legal frameworks for improved and sound environmental management and to improve coordination

among relevant and environmental related agencies including public, private sectors and NGOs. As a leading agency for supporting MDGs, UNDP is mandated and closely engaged as key partner in supporting developing countries including particularly the LDCs meet their targets by the year of 2015. As indicated earlier, Yemen MDG progress is yet far from satisfactory. Additional support is needed to catalyze performance of environmental sustainability as a key pillar of broader sustainable development for which UNDP is a key partner and advocate. Expanding people' choices for promoting human development requires addressing sustainability locally, nationally, and globally; that is the core of UNDP approach.

3- Environmental degradation of scarce natural resources, and climate change threats and risks are among the key human development challenges in Yemen in that the poor's choices are increasingly dwindling. The CCA, UNDAF, CPD, and CPAP are the key programmatic frameworks, through which UNDP aligns assistance to partner countries in coherence of Corporate Strategic Plans to advance progress towards human development. In sum, the UNDP Yemen CO engagement to further catalyzing environmental sustainability in the country is consistent with corporate strategies in the area of environment and energy, national priorities, and the programmatic frameworks including CPAP 2011-2015.

4.2 Environmental vision

4- Yemen's natural resources are used in environmentally sustainable manner while supporting the livelihoods of the vulnerable poor, and reducing inequality.

4.3 Environmental mission

5- The UNDP mission in the area of environment and energy is to support scaling-up addressing environmental deprivation, and building resilience to climate change in Yemen.

4.4 Short-, medium-, and long-term actions

- 6- The UNDP will support scaling-up addressing environmental deprivation, and building resilience through providing strategic polcy advice, guidance, and actions to :
 - Strengthening resilience of local communities in climate change adaptation besides mainstreaming of biodiversity conservation into development as an expansion of community-based approaches for natural resources management;
 - Reviving non-conventional sound practices such rainwater harvesting for sustainable use of biodiversity, land and water resources;
 - Mainstreaming climate change into key sectoral development strategies, and plans, and catalyzing Nationally Appropriate Mitigation Actions (NAMAs), and Low-Emission Development Strategies (LEDS), and promoting proper national mechanisms for access climate finance such as National Climate Funds (NCF), and National Implementing Entity (NIE);
 - Promoting clean development mechanisms including access to clean energy;
 - Prompting youth, and women empowerment, and media participation for active engagement in greenbased economy and sustainable management of natural resources; and
 - Strengthening synergies between disaster risk reduction and climate change.

4.5 Policy approach

7- To ensure that UNDP CO engagement in the short, and medium-run are effective, and efficient, the following polices have been adopted:

- Win-win strategies
- The context matters
- Equity
- Participatory
- Holistic
- People-centered
- Partnership
- Communication
- Multi-level
- Knowledge sharing
- Synergies identification

4.6 UNDP earlier interventions, and impact

- 8- UNDP supported enhancement of natural resources management, biodiversity conservation, community-based protected areas management and environmental awareness. A total of six protected areas have been established. Socotra and Jabal Bura protected area have been listed as UNISCO World Heritage Sites. The Environment Protection Authority (EPA) was also supported to institutionalize Clean Development Mechanism that will facilitate government and private sector investment in projects with potential to reduce greenhouse gasses. The Gap Assessment Report of Yemen Protected Areas including institutional, biodiversity components produced. Rosh protected area won Equator Prize 2010 for best practice demonstrating a successful approach for poverty reduction through conservation and sustainable use of natural resources as well as for benefit sharing between biodiversity conservation, eco-tourism and development. EPA was also supported in data collection for elaborating different scenarios of climate change impacts leading to the development of the Second National Communication and the National Adaption Plan of Action, in addition to conducting a National Capacity Self Assessment (NCSA) for implementation of key UN environmental conventions. In addition, UNDP supported EPA in udating NEAP I, and developing the National Strategy for Biodivesity and Action Plan.
- The UNDP has supported the development and sustainability of Socotra since 1997 through consecutive phases. The 9initial project carried out intensive research on biodiversity to provide the basis for designing a comprehensive Conservation Zoning Plan (CZP) for the islands. In parallel with this initiative the project implemented an awareness and communications programme that raised the profile of the islands biodiversity and the importance of conserving it to a local, national and international audience. The project also supported the development of the Socotra Branch of the EPA, including construction of new offices. Key outputs of this project included the ratification by government of the CZP, which is endorsed by law, recognition of the Socotra as a Man and Biosphere Reserve through UNESCO and the articulation of a general development model for the islands based on sustainable fisheries and eco-tourism. The two projects following the initial project further initiated actual conservation and development work by implementing the CZP, in particular by establishing pilot protected areas and pilot eco-tourism activities. These projects also supported establishment of the Socotra Conservation Fund, viewed as the primary mechanism for promoting sustainability of project outcomes; in addition to building government capacity to coordinate investments in Socotra's development and conservation initiatives. The fourth project built on capacities built in earlier phases to further promote key areas of growth in the local economy, namely eco-tourism and sustainable fisheries, and implement the archipelago's zoning plan and community based management of protected areas; addressed pressing basic community development needs and mobilized communities' engagement in local development process; and enhanced the professional capacity of local and central government to lead sustainable development in the archipelago.

- 10- Climate change risks have been also mainstreamed into key national policy documents including National Agriculture Sector Strategy (NASS), besides outlining policy notes for National Water Sector Strategy and Investment Programme (NWSSIP), National Fishery Sector Development Strategy (NFSS). Moreover, Discussions on establishing National Climate Fund (NCF) have been initiated with concerned agencies, and a policy note assessing the potentiality of the Social Fund for Development (SFD) to host the fund was prepared and shared with key stakeholders. The National Water Resources Authority (NWRA) was supported to develop and initiate implementation of two water basin management plans covering three water basins of Hadhramout, Tuban-Abyan and Taiz. National Water Awareness Strategy was developed in full consultation and participation of stakeholders and implementation initiated contributing to raising public awareness through delivering of awareness messages. Friends of water school clubs were established and a number of which organized workshops on water conservation and management during the World Water Day. The Social Fund for Development is promoting reuse of grew water from mosques which has been piloted by UNDP project in Aden and Taiz.
- 11- Through UNDP supported intervention, 5,000 people in 17 small settlements in Ressib, Hadhramout gained access to piped water. A Decision Support System (DSS) for coordination and monitoring of sustainable development patterns on the Island of Socotra besides assisting the local authorities to improve the management of this rich protected area developed. Socotra Island Wide Authority (IWA) proposal and the legal framework for establishing Socotra Fund for Sustainable Development have been finalized. However, approval by Cabinet is pending due to the unstable political situation in the Country.

4.7 UNDP added-value

12- As an LDC, Yemen has its own pressing development challenges that determine its national priorities. Without UNDP support, Yemen may not have been able to take adequate actions to address the environmental threats, and climate change risks, and ensure sustainable use of already degrading natural resources in the country due to lack of sufficient capacity, the national institutional arrangement. With the continuing UNDP support, the environmental sustainability performance in Yemen will be further improve. In contrast, without UNDP support, environemntal performnce cause decline due to lack of funds eading to further degradation, and thus increasing poverty, vulnerability, and inequality, under which human developemnt is retracted. It worth-noting that with the UNDP earlier and ongoing support has contributed to produce sustainable impact. For example, the environmental performance in Yemen has improved, in that the number of Environmental Impact Assessment (EIA) which were carried out have significantly increased up to about 268 studies by end of 2010, a total of six protected areas have been established. Socotra and Jabal Bura protected area have been listed as UNISCO World Heritage Sites, CDM institutionalized, NCSA conducted, INC, SNC, and NAPA prepared, climate change mainstreamed into key programmatic and developmental and sectoral polices, community-based protected area management promoted, three water basin management plans finalized, and implementation initiated, environmental awareness raising enhanced, and National Water Awareness Strategy developed and implementation initiated through delivering proper messages. Altogether, the UNDP support contributed in enhancing Yemen capacity to address natural resources threats, and climate risks more effectively.

4.8 Partnership strategy

13- Strategic partnership will be forged with key national and local actors, community, private sector, civil society, NGOs, research institutions, and local authorities. Existing schemes and mechanisms for access to finance will be involved such as youth and women networks, and volunteerism to expedite process for creation enabling environment for sustainable and management of NR, climate change adaptation initiatives, and risk reduction,

capacity building, awareness raising, advocacy, and active participation of local community. South-south cooperation, sharing of experience within country, and the region will be further promoted.

4.9 Communication strategy

14- With a long and solid experience in over 180 countries across the globe, the UNDP Yemen CO is capitalizing on global, regional and local knowledge, and networking to support strengthening national capacity to manage the environment in a sustainable manner while ensuring poverty reduction, and equity.

4.10 Fund-raising matrix framework

15- The fund raisin matrix framework (see appendix B) outlines potential pipeline project proposals, and funding sources for removing key barriers to facilitate scaled-up UNDP contributions towards achieving the already mentioned national strategic goals of environmental sustainability which includes: Habitat and biodiversity conservation; Sustainable land management; Sustainable water resources management; Sustainable waste management; Sustainable climate change and energy management; and Institutional development / capacity building.

Section V: Conclusion

- 1- Environmental degradation including water depletion and pollution, biodivesity degradation, and soil erosion continue to be dominant trend in Yemen posing serious threats on the livelihoods of the poor in Yemen whose survival systems mainly depends on access to natural resources. Furthermore, Accounting for climate change implication, its potential impact on development and achievements of MDGs is expected to turn the current challenges including livelihood security, environmental deprivation, disaster risk reduction, gender inequalities, social cohesion further complicated. Environmental degradation, and climate change impacts are among the key developmental challenges in Yemen, constraining available choices for the poor and hence impeding satisfactory progress towards human development, achievements of MDGs, and sustainability in Yemen.
- 2- Environmental conservation and building resilience for climate change adaptation has tremendous sustainable livelihoods, and developmental implications including enhanced progress towards MDGs achievements particularly in terms of poverty reduction, food security, combating diseases and ensuring environmental sustainability. In other words, degradation of forests for instance will not only be representing biodiversity loss, but also losing of their tremendous values and services which includes reducing environmentally-related natural disaster vulnerability (i.e. floods control, soil protection, temperature regulation, and water and air purification) will be jeopardized.
- 3- Yemen has made some progress towards achieving the national strategic environmental sustainability goals through enhanced management of natural resources. Although positive progress was made towards institutionalizing management for environmental sustainability in Yemen, there are still challenges that restrict the available capacity on the way forward including improper organizational structures, inadequate information base, and lack of fund, inappropriate delivery mechanisms, and coordination between relevant actors, and weak civil society, and private sector participation.
- 4- UNDP supported Yemen towards enhancement of natural resources management, integrated water resources management, biodiversity conservation, community-based protected areas management and environmental awareness, and institutionalizing for clean development mechanisms, and identification of climate change impacts and priority adaptation actions and frameworks for mitigation. Without UNDP support, Yemen may not have been

able to take adequate actions to address the environmental threats, and climate change risks, and ensure sustainable use of already degrading natural resources in the country due to lack of sufficient capacity, the national institutional arrangement.

5- As Yemen continues to face numerous challenges and constrains that necessarily need urgent interventions in order to advance the environmental sustainability in Yemen while reducing vulnerability, poverty, and inequalities. UNDP earlier interventions were outlined, and promising policy approaches, lessons learnt, and priority actions have been highlighted allowing for synthesizing an enhanced integrative framework for action. Thus, in order to succeed in scaling-up addressing environmental deprivation, and building resilience, and achieving impact, the various elements of environmental sustainability, and synergetic potentials have been put together into a coherent and more integrative framework; that is sustainable livelihoods to enable strengthening resilience and reducing livelihoods vulnerability from increasingly growing climate change impacts and environmental degradation while ensuring equality, and poverty reduction, and building on promising policy approaches.

Appendix (A) ESI Yemen, 2005



Source: 2005 Environmental Sustainability Index 2005

National	Proposal title	Funding	Timeframe 2012-2015			
strategic goal		sources	Yearı	Year2	Tear3	Year4
Habitat and biodiversity conservation	 Sustainable Financing of Protected Area in Yemen 	GEF Trust Fund- Biodiversity				
Sustainable land management	 Mainstreaming Sustainable Land Management in Agro- pastoral Production Systems of Yemen Enhancing Disaster Risk Reduction through Proper Land-Use Planning and Watershed Management for Wadie-located Highly Vulnerable Communities - 	GEF Trust Fund- Land				
Sustainable water resources management	 Improving Water Sector Policy and Practice Interaction through Civil Society Capacity Building Improving Irrigation Efficiency, and Rainwater Harvesting to Control Salt- Water Intrusion in Hodiedah Water Aquifer 	GEF Trust Fund- Water				
Sustainable waste management	 Demonstrating and Promoting Best Techniques and Practices for Managing Healthcare Waste and PCBs 	GEF Trust Fund- POPs				
Institutional development / capacity building	 Development of National Integrated Environmental Monitoring And Control System 					
Sustainable climate change	- Energy Efficiency Promotion	GEF Trust Fund- Climate				

Appendix (B) outlines potential pipeline project proposals, and funding sources

and energy	in Industry	Change	
management			
5	- Catalytic Investments for		
	Rural Renewable Energy		
	- Energy Efficiency Promotion in Industry, Commercial		
	bullulitys, and Households		

Note I: There are a number of generic project concept on climate change mitigation identified through CDM feasibility study, INC, and SNC in Yemen which could be used as a basis and entry point for further improvement as fund-raising opportunities

Note II: There are still a number of project profiles on priority climate change adaptation which were identified in NAPA but not yet programmed for further fund-raising GEF TF, GEF AF, GEF LDCF, and GEF GCF opportunities which include:

- Awareness Raising on Adaptation to Climate Changes. The estimated cost is US\$ 650,000.
- Water conservation through reuse of treated waste water and grey water from mosques, and irrigation saving techniques. The estimated cost is US\$ 3.2 million.
- Establishment and Maintaining of Climate Change Database. The estimated cost is US\$ 350,000
- Planting and re-planting of mangroves and palms for adaptation to sea level rise. The estimated cost is US\$ 2.45 million
- Develop and implement programs to improve Yemen's preparedness to cope with extreme weather events. The estimated cost is US\$ 5 million
- Rehabilitation and maintenance of mountainous terraces4. The estimated cost is US\$ 78 million
- Promotion of research on drought, heat and salinity tolerant varieties. The estimated cost is US\$ 3.15 million
- Sustainable land management to combat desertification and land degradation. The estimated cost is US\$ 2.33 million

Note III: There are limited annual allocations for each country under the various funds with some barrier for access through one of GEF agencies including UNDP. However, national direct access is increasingly becoming a favorable modality for which UNDP CO could engage to catalyze in Yemen.