

## UNITED NATIONS DEVELOPMENT PROGRAMME

**PROJECT DOCUMENT****Project Title:** Renewable Energy improve access to health services and livelihood opportunities (HEAL)**Project Number:****Implementing Partner:** UNDP Yemen**Start Date:** September 2021**End Date:** December 2022**LPAC Meeting date:****Brief Description**

Yemen continues to remain the world's worst humanitarian and development crisis. Since the eruption of the crisis, basic services have suffered severe setback with lack of access to energy as one of the major challenges to provide key services. The inflation and commodity prices are at an all time high and with the contrast of regional disparities in USD and YER, Yemen faces a difficult situation in managing liquidity related challenges.

The ongoing conflict has severely affected the country's health-care system: barely half of public health facilities are fully functional; salaries for health-care workers went unpaid irregularly since August 2016; and essential medications and equipment are in short supply or absent. Due to price rise and scarcity of fuel, health systems have experienced the worst. The declining oil, gas, agricultural and fishery exports - used to be a major source of GDP – caused the national economy to shrink. In 2020, the real GDP recorded cumulative contraction of about 50.5% compared to 2014. This means that more people, including children, would be pushed below the poverty line, while the humanitarian crisis will exacerbate, pushing living standards further down. As a result of the economic downturn, the average per capita GNP and its lost value in dollar terms in 2020 compared to 2014, this means that women have been exposed to greater economic pressures, as they have to strive to support their families, though they often have limited or no experience regarding income-generating activities. Therefore, rehabilitative and developmental skills around income-generating activities targeting women and girls remains an urgent need that must be addressed. Data indicate that an estimated 40% of households have lost their main source of income (since the onset of the crisis).

The project intends to address the lack of access to energy in health facilities as well as the lack of income opportunities for women and youth. In addition, the project interventions will provide support to improving the access to health services and livelihoods overall. The overall objective of the project is to contribute to reduced energy poverty and strengthened resilience capacity of conflict affected communities through improved health services and sustainable livelihoods. The project would be implemented in **Aden, Lahj, Abyan, Sana'a and Hajjah governorates**, and is expected to reach approximately 205,000 individuals (106,600 men and 98,400 women).

**Contributing Outcome (CPD):**

**Outcome 1:** By 2023, all people in Yemen, especially the most vulnerable and marginalised, benefit from green economic transformation, improved food security and more sustainable livelihoods.

**Indicative Output(s) with gender marker:**

Output 1.2: Enhanced resilience and livelihoods of vulnerable people and communities.GEN2

<b>Total resources required:</b>	2,500,000	
<b>Total resources allocated:</b>	<b>UNDP TRAC:</b>	
	<b>Donor:</b>	2,500,000
	<b>Government:</b>	
	<b>In-Kind:</b>	
<b>Unfunded:</b>		

Agreed by (signatures):

UNDP

Auke Lootsma  
Resident Representative  
Date:

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## I. DEVELOPMENT CHALLENGE

Yemen is facing an unprecedented political, humanitarian, and development crisis. Long the poorest country in the Arab region, over half its population was living below the poverty line before the current conflict worsened. That number has risen steeply, with over 21.5 million people needing humanitarian assistance now close to 80 per cent of the country's 28 million people<sup>1</sup>. Yemen is considered the worst humanitarian crisis in the world and one of the most disproportional and devastating development crises<sup>2</sup>. As per the UNDP's recent report— Assessing the Impact of War on Development in Yemen – at the end of 2019, Yemen's war had thrust development back by more than two decades. Should the war continue through 2030, this will become nearly 40 years of development lost.<sup>3</sup> Poor and average Yemenis find extreme hardship to support their families as expenditure on food, electricity, health, transportation, and water increases while sustaining an income has remained the biggest bottleneck in Yemen. Continuing, lack of on-grid infrastructure and access to energy has made health support expensive and out of reach to many women, men, boys and girls. Sporadic availability of fossil fuel and high price makes it very difficult for hospitals to run in full capacity.

Public health services in Yemen have worsened significantly due to the conflict, which has been ongoing for more than six years. According to the UN, about half of the country's health facilities are non-functional or only partially functioning. One of the main reasons is long-lasting power outages that have become all too regular since the start of the war. Over the past six difficult years, and due to outages in remote and rural communities, in particular, Yemenis have been unable to access vital healthcare services to acceptable standards. Some health professionals reported that they sometimes have to work with candlelight. And economic hardship and lack of transport options caused by fuel shortages have prevented people from reaching the few functional clinics remaining to seek health services. Before the conflict, only around two-thirds of Yemenis had access to the public electricity grid (with approximately 12% who had access to private electricity networks), which was already one of the lowest access rates across the MENA region. In 2017, two years after the onset of the war, this number had dropped to below 10%<sup>4</sup>. Most health facilities have maximized their dependence on the national grid by installing diesel generators with the government or international organizations' fuel. However, health facilities relied on diesel-based power generators, which are expensive and vulnerable to shortages of energy.

Yemen is now one of the world's most energy insecure and poor countries, with most of the country lacking sustainable energy access. Even before the conflict, rural areas holding 75% of the national population had only 23% energy access rates. The ongoing conflict has dramatically worsened; it is estimated that access to electricity had dropped to below 10 per cent due to extensive damage to the national grid and fuel shortage across the country. In general, Yemen's energy supply for many years has been minimal due to weak generation capacity, restricted access, high electricity losses from the grid, and increasing demand. Energy access in Yemen has been heavily dependent on local diesel generators to meet social services' needs. The collapse of electricity combined with price and the severe shortage of fuel needed to operate social services, businesses and household generators (for those who can afford them) has restricted most people access to essential social services such as healthcare, water supply, education, as well as lighting and the ability to power home electric appliances. The cholera outbreak in 2016 and 2017 was due to lack of access to energy in the health facilities and collapse of water systems due to the unavailability of fuel supply and high price. The solar microgrid business model is now a tested initiative and is capable of handling the above

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<sup>1</sup> <https://www.undp.org/content/undp/en/home/blog/2016/10/24/New-UNDP-World-Bank-partnership-makes-a-difference-in-war-torn-Yemen.html>

<sup>2</sup> UNDP Yemen's Impact of War reports: first report (April 2019) entitled Assessing the Impact of War on Development in Yemen; and, the second study (September 2019), Assessing the Impact of War on Yemen in Achieving the Sustainable Development Goals.

<sup>3</sup> <https://www.ye.undp.org/content/yemen/en/home/library/impact-of-war-in-yemen.html>

<sup>4</sup> Ibid

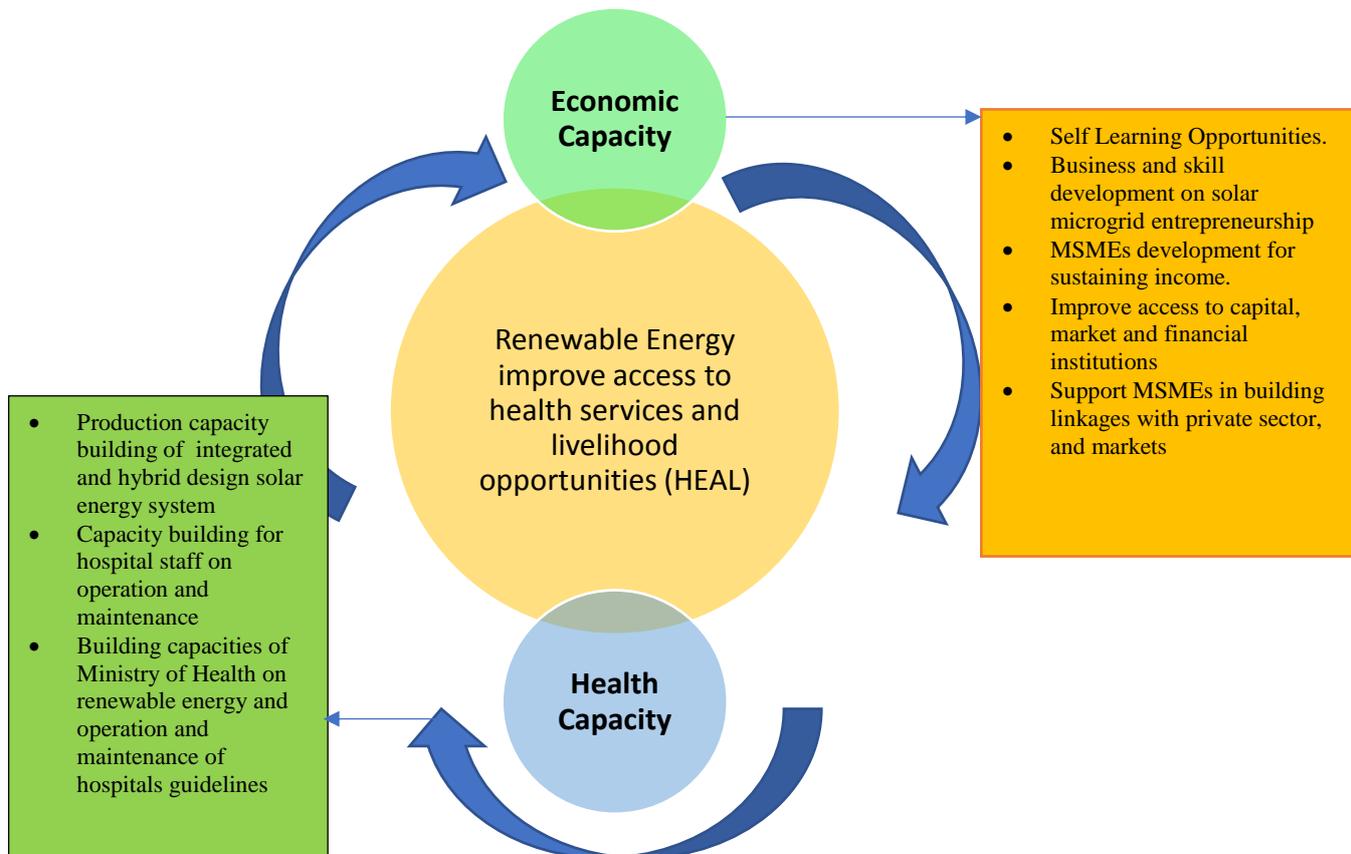
<sup>4</sup> <https://www.worldbank.org/en/news/feature/2020/02/12/solar-energy-helps-yemeni-hospitals-save-lives>

bottlenecks. The solar micro-grid model in Yemen was the first initiative implemented by women and youth groups to tackle access to energy challenges. With funding support from the European Union (EU), United Nations Development Programme (UNDP) and its partners implemented the micro-grid business model, initiated in 2018. Until now, the micro-grid stations despite the COVID-19 challenges, have continued to function well, earning an average of \$600/month and supporting their communities to access radically cheaper energy compared to fossil fuel. The pilot initiative has received global recognition from [Ashden](#) Award 2020 under the Humanitarian Energy Category. The initiative also has received acknowledgement where the representative of the solar microgrid has been featured in the [BBC100 Women 2020](#).

In summary, there is a huge need to support access to energy to hospitals so that the critical facilities can continue to function, and vulnerable communities can benefit. On the other hand, the decentralized energy solution would let the communities have sustained income opportunities to support their health, medicine, and care expenditure. Most of the emissions that account for global warming come from the electricity sector, where the use of fossil fuels is quite rampant. We all know that burning fossil fuels let loose carbon dioxide and greenhouse gases, which contribute to the degeneration of air quality. On the other hand, sustainable energy sources release little or no greenhouse gases, thereby helping in rolling back global warming and keeping our environment unsullied and dirt-free and would HEAL communities and countries affected by the crisis.

## II. STRATEGY

The project would adopt two prong strategies to tackle health and economic capacities of target beneficiaries through an integrated approach of confidence building through livelihoods. The project encompasses and rests on capacity building in two key areas; Economic and health.



The health aspect would focus on providing solar hybrid solutions to hospitals and building the capacities of health staff and Ministry of Health on renewable energy. Whereas, the economic part

would emphasize on; MSMEs creation, business skill building and support in building linkages with private sector and market. **through two prong strategies:**

- (Re)build and strengthen the capacities of Ministry of Health and hospitals on renewable energy
- Restoring livelihoods opportunities, and building capacities to improve socio-economic conditions of vulnerable communities;

The project will focus on reducing vulnerabilities and will contribute to improved levels of access to health services and livelihood opportunities. The approach would complement, but is distinct from humanitarian support by focusing on:

- Supporting health systems in resuming critical functions and services to the most needy people in the target areas
- Community livelihoods, and capacities improved and strengthened in the area of renewable energy;

The project will focus on the link between humanitarian and development initiatives in the targeted areas. Where possible, the project will be implemented in areas that receive limited humanitarian and development assistance. Considering the fluid nature of the conflict, COVID-19, coordination with providers of humanitarian assistance will be ensured through the Food Security and Agriculture Cluster (FSAC) and Health Cluster coordination system.

The Theory of Change (ToC) assumes that (i) improving capacities of local communities and systems, (ii) enabling conditions to improve the access to health services for affected people and to livelihoods means, and (iii), addressing cross-cutting issues will enable local communities to manage risks and shocks with increased economic self-reliance and enhanced health.

### **Complimentarity with UNDP’s Supporting Resilience Livelihoods and Food Security in Yemen (ERRY) Project**

UNDP Yemen has proven experience in providing renewable and affordable energy solutions to frontline communities of the conflict in Yemen, which has resulted in reduced need for humanitarian assistance, saving lives and (re)establishing livelihoods.

This has been achieved through UNDP Yemen’s *Enhanced Rural Resilience in Yemen (ERRY)* project currently in its second phase (ending 2021) and preparing for its third phase (starting March 2022). ERRY II comprises of three outputs with the second focusing on vulnerable communities benefitting from solar energy for sustainable livelihoods opportunities and enhanced social service delivery, to which HEAL will directly contribute. In its anticipated third phase, ERRY comprises of three workstreams, each consisting of two pathways. HEAL will form part and contribute directly to workstream B on *Sustainable Environment – Clean Energy and Climate Resilience* and to its pathway on *Access to Affordable, Clean Energy*, and secondly to workstream C on *Sustainable Circular Economies – Agriculture, Employment, and Economic Resilience* and to its pathway on *Supporting Sustainable Livelihoods and Economic Development*.

HEAL will build on the groundwork done by ERRY to ensure amplification and sustainability of the progress achieved, especially through two activities: (i) scale up of solar hybrid systems to which ERRY already provided a key requisite by installing a remote sensing application to monitor the systems’ performance, and (ii) enhancing income opportunities for women and youth through solar microgrids.

As such, HEAL and ERRY will be driven by strong linkages, with ERRY providing the umbrella under which the projects’ effective complementarity will help to reach better development outcomes, as well as (cost) efficiency.

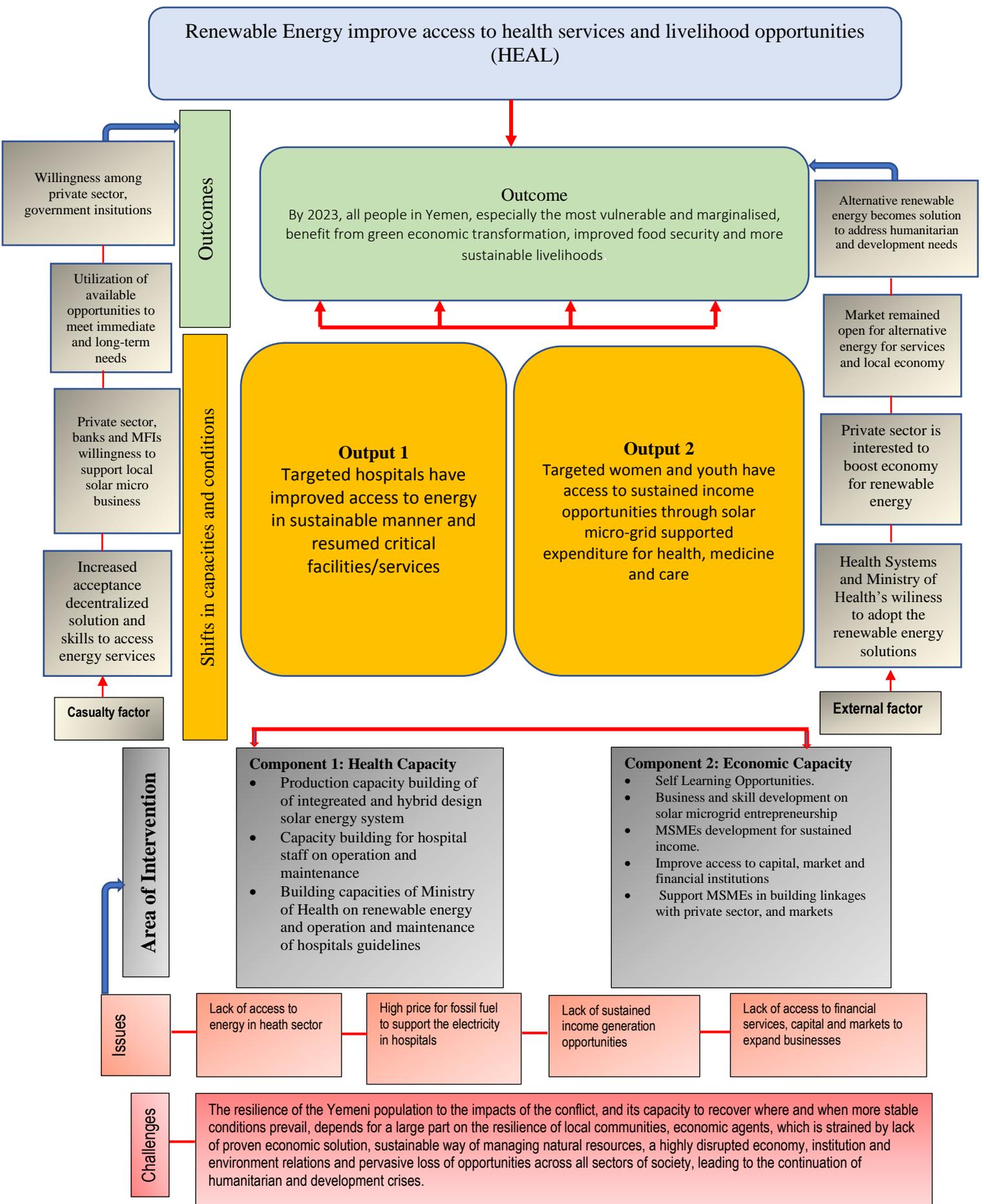
The theory of change that underlies the project rests on a number of interconnected assumptions, principles, and lessons learned on fragile and conflict-affected settings and from the ongoing work in Yemen, as detailed below:

### **Conflict sensitive approach**

The project would adopt the conflict sensitive approach in the implementation of the initiatives. The lessons learnt from the success solar micro-grid pilot initiatives suggests that, the scan of the local level conflicts is a pre-requisite to implement the community level initiatives. This is also important to engage the powerholder and those who do not have in the initiative. Otherwise, chances are high that the initiative could hit the roadblock. Secondly, the pilot initiative would engage both displaced and host population to build the social cohesion among the communities. Due to protracted crisis, Yemen is also experiencing the overstretch of natural resources and conflict between IDPs and host. Therefore, the proposed project would take the above into project design and ensure that DO NO HARM principle is applied to it.

### **Gender mainstreaming**

Yemen sits at the bottom of gender index globally and crises has been broken the gender division of labor for women and men. Women are now allowed to participate in economic activities. The project would focus on women and youth to build up the economic and empowerment model through the solar micro-grid. The current station in the north in Abs (one of the districts) is run by group of women which has received considerable community acceptance. This is also the fact that, the solar micro-grid provided the decent job with dignity and women were able to overcome various challenges and barriers at the initial phase of the community. Lessons from the group of women would be applied to the proposed scale up initiative.



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### III. RESULTS AND PARTNERSHIPS

#### *Expected Results*

**Project Outcome:** By 2023, all people in Yemen, especially the most vulnerable and marginalised, benefit from green economic transformation, improved food security and more sustainable livelihoods.

**The objective of the project is** The overall objective of the project is to contribute to reduced energy poverty and strengthened resilience capacity of conflict affected communities through health services and sustainable livelihoods improvement.

#### *Outputs, activities and actions*

**Output 1:** Targeted hospitals have improved access to energy in sustainable manner and resumed critical facilities and services

**Activity Result 1:** Targeted hospitals have improved access to energy and resumed critical facilities and services

The project will reach hospitals, focusing on quick and high impact initiatives that will create sustainable access to energy for affected hospitals. As identified one of the key bottlenecks is lack of access to energy, the selected hospitals would be provided solar hybrid systems. These systems would be defined by conducting the energy gap assessment in consultation with relevant UN agencies such as UNOPS<sup>5</sup> and others. Concurrently the provision of capacity building of health staff and Ministry of Health on operation and maintenance will be valuable for hospitals.

**Activity 1.1 Production of Integrated and Hybrid energy design for targeted hospitals:** It consists of a modular simulation of energy consumption, the electrical system's status, layout and loads. The project would hire two consultants through the direct contract modality to produce hybrid design composed of fuel supply, grid provision, and solar energy requirement. It would be advisable if local consultants from the targeted governorates are hired to ensure the accessibility to site with less transportation and mobility.

**Activity 1.2: Capacity building for staff of hospitals and representative from Ministry of Health on operation and maintenance of hybrid energy solution;** The activity would focus on training the hospital staff in operation and maintenance. The training would provide understanding of the installation and regular maintenance, replacing spare parts, checking the electrolyte in batteries, corrosion cleaning, inspecting and replacing protection fuses and short circuit problems. Cleaning the panels, supervision of the hybrid systems and how to manage the GPS tool for the grievance and redressal mechanism during the breakdown would also be part of the capacity building. The solar installation suppliers would be responsible for providing the capacity building training to targeted beneficiaries.

**Activity 1.3 Installation of hybrid energy design using long term agreement (LTA) for a hospital:** UNDP has existing LTA for solar systems under the ERRY<sup>6</sup> project. The project team would discuss with the procurement unit to access the LTA to install a hybrid energy system. The hired consultant under activity one would provide the specification, bill of quantity and support in developing the RFQ to launch.

**Activity 1.4 Activation of Remote Sensing Application to monitor the system performance as Grievance Redressal Mechanism and scaling up of solar inventar systems:** The solar hybrid system would have the remote sensing application inbuilt to monitor it on a real-time basis. UNDP under ERRY project has experienced and installed the remote sensor, and real-time information can

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<sup>5</sup> United Nations Office for Project Services (UNPOS)

<sup>6</sup> Supporting Resilience Livelihoods and Food Security in Yemen (ERRY)

be gathered. The remote sensor relays messages to the delegated mobile numbers in case of system break down. The solar supplier would train the hospital staff to manage the real-time transmission and handle the system breakdown or any unforeseen events. UNDP has developed the solar inventar platforms ([www.solarinventar.info](http://www.solarinventar.info)) to support the renewable energy initiative in Yemen through developing the list of all solar programming by agencies. The inventar includes the health sector along with others such as agriculture, water and sanitation, education, shelter and jobs and employment. The above activity would support in scaling up the inventar while engaging the partners across clusters (FSAC and Health) and update the platform with solar/renewable energy projects.

**Output 2:** Targeted women and youth have access to sustained income opportunities through solar micro-grid supported expenditure for health, medicine and care.

**Activity Result 2:** Targeted women and youth have improved income opportunities options through solar microgrid. The result will focus to develop solar microgrid models based on the earlier success of it under the ERRY project. The solar microgrid provides clean energy as well as livelihoods to the targeted communities in a sustainable manner. The result will also focus on leveraging the engagement of the private sector to scale up the solar microgrids. The solar microgrid model would be developed with the support of microbusinesses who would provide the clear energy to commercial and residential needs as well as earn income from it.

**Activity 2.1: Access to energy analysis, consumption and gap assessment at the community level:** At the initial stage, with the support of implementing partners and solar engineers, energy analysis based on consumption and gap would be assessed in all the targeted locations. The energy gap analysis would provide estimation of energy and capacity model that would be required to be built to facilitate the solar microgrid establishment. The assessment would also provide the cost estimation that each solar microgrid model needs and support to micro enterprises.

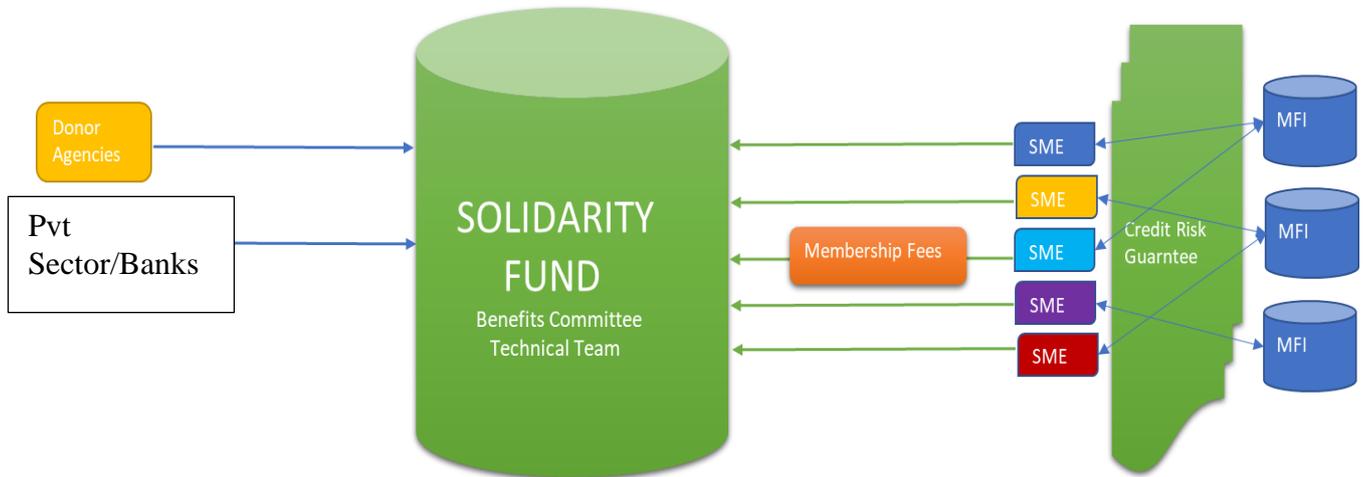
**Activity 2.2: Identification of targeted micro-small-medium enterprises (MSMEs) to establish solar micro-grid businesses:** with the energy gap analysis, existing or new micro enterprises would be established in the targeted areas. These MSMEs would be receiving basic and advance capacity building and training on business and life skills, and solar energy microgrid models. The group members from the existing solar microgrid stations would be invited to share the hands-on experience in running the plants and how challenges and bottlenecks with regards to businesses can be addressed. In the business training, the participants would learn how to set up the microgrid plants, business management, including accounting, cash flow, link with banking and MFIs. The microgrids in Hajjah and Lahj would be considered as a model and their group members would be invited to newly established microgrids.

**Activity 2.3: Provision of seed grants to MSMEs to procure the micro-grid station equipment; solar panels, battery, inverter from the private sector:** Once the MSMEs are established, UNDP with the support of implementing partners would establish the solidarity fund<sup>7</sup> with the involvement of Banks, MFIs, UNDP and Microbusinesses. UNDP would contribute to the solidarity fund as well as provide the microbusiness grant to MSMEs where they would contribute from the grant to the

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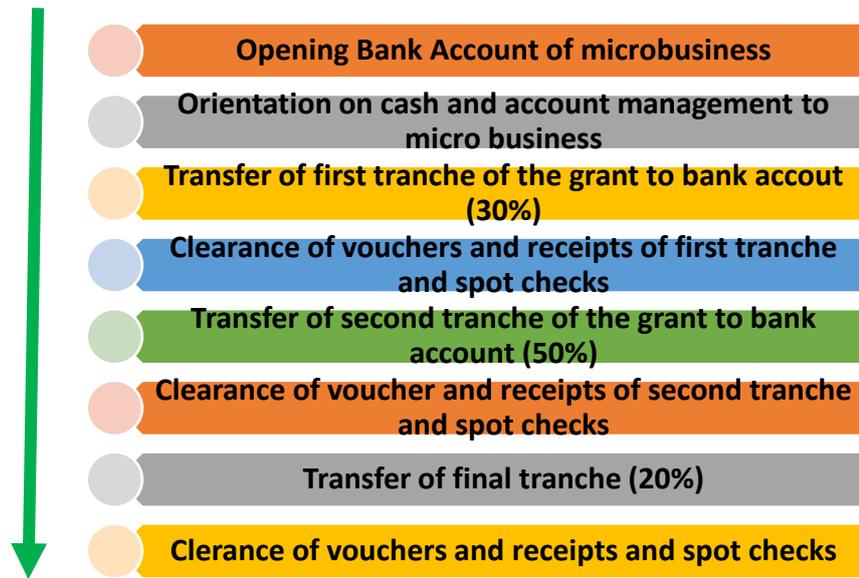
<sup>7</sup> **Solidarity Fund:** A vibrant lending practice needs a guarantee system and given the conflicts within Yemen; this has been a challenge. The Joint Liability Group (JLG) model gave microfinance in Bangladesh and elsewhere the assurance that it needed, to be repaid. A Solidarity Fund (SF) that organizes the SME's as members and assures their credit risk may be a solution that works in lieu of a small JLG model. The Solidarity fund will require to be contributed to by every SME on a monthly (periodic?) basis. This solidarity fund can be setup through a seed investment over three- five years by donor agencies to which the member SME's regularly contribute. Zakaat funds could also be directed towards this SF that could strengthen the risk underwriting capacity of the fund.

fund on a monthly basis. The solidarity fund would work as a collateral fund for MSMEs to access loans to expand their businesses in the future. The solidarity fund would also mitigate the financial risks of MSMEs, specially related to insolvency issues and help build their businesses. It is expected to establish 50 solar microgrid models in the targeted areas. Each solar microgrid group would be composed of 10 members and each group would receive USD12,000 and UNDP would contribute USD2000 as solidarity fund per group which would be deposited in the bank where MSMEs would also need to contribute on a monthly basis in order to access the fund. The grant from UNDP would support the MSMEs in purchasing solar panels, battery and inverter in establishing the station. Please see below schematic diagram of solidarity fund.



**Activity 2.4: Establishment of energy connections to the households, commercial shops, schools, health centers and public offices:** After the establishment of solar microgrid plants through MSMEs, energy connection including tariff establishment would be done. Microgrids use different revenue models. These models consider the daily and monthly electricity consumption. For example, two micro-grids in Hajjah (north part of Yemen) are using a non-fixed load type model. In this model, the station has installed a digital kWh meter at end-user points to record the monthly consumption of electricity, and users must pay the number of units consumed. The accountant issues the consumption bill for the first ten days (three times a month) using the electronic billing form. The form gets distributed to all its users, and in return, users pay the electricity fees at the station office. All transactions (money in and money out) are recorded with an official receipt and acknowledgments. The third micro-grid station in Lahj is using a different payment model. This model is charging users per equipment rather than actually consumed electricity. The station has provided all users with a few LED lamps, ceiling fans, and mobile charging sockets based on the actual demand, and users in return must pay a specific amount based on the devices. The station accountant collects fees on a daily basis. To establish the tariff model, consultative discussions would have to take place with consumers and MSMEs to decide which model would be suitable for the stations and should be agreed upon by the targeted communities. The energy connections would include households, commercial shops, schools, health centers and public offices.

UNDP has extensive experience in managing the micro-business grant. Please see below showing in flow chart as to how the grants would be managed.



UNDP does spot checks through third party (audit firm), however there are internal controls also in place to ensure the utilization of the grant is in line with the compliance policy of UNDP.

### Grants Managing Timeframe

Activity	2022			
	Q1	Q2	Q3	Q4
	Opening Bank Account of microbusiness	1 <sup>st</sup> week of the first month		
Orientation on cash and account management to micro business	Second and third week of the second month			
Transfer of first tranche of the grant to bank account (30%)	First and second week of third months of the quarter			
Clearance of vouchers and receipts of first tranche and spot checks		Second and third week of first month		
Transfer of second tranche of the grant to bank account (50%)		Second week of second months of the quarter		
Clearance of voucher and receipts of second			First week of t third months	

tranche and spot checks				
Transfer of final tranche (20%)			Second week of third months of the quarter	
Clearance of vouchers and receipts and spot checks				First and second week of second and third month

### Resources Required to Achieve the Expected Results

The project will rely first and foremost for its implementation on human resources, grant funds and technical services.

#### *Human Resources*

- **Project staff:** The project would be implemented based on cost sharing approach. It will include one international staff and four national staff of which one is female (full staffing list is shown in Section VIII). International staff would act as Chief Technical Advisory (CTA-P5) and where as 1 national coordinator, 1 solar energy specialist, 1 procurement and finance associate, 1 monitoring and evaluation officer) would be part of the team. Given the security constraints, none of the project staff will be outposted in government offices whether national or local. Project staff will be involved with overall and day-to-day planning of project delivery, managing procurement and recruitment processes and agreements with responsible parties, coordinating with government and development partners, providing guidance to responsible parties and overseeing their performance, collating and analysing monitoring data and preparing progress reports. Project staff will also be involved in delivering policy advice and capacity-building support to local institutions relevant to project and crosscutting issues such as gender.
- **Local authorities:** project outputs will be implemented in close coordination with the local authorities, relevant departments and experts appointed by governorate and district authorities.
- **Service Providers:** all project activities will involve implementation by Service Providers selected by UNDP, given the security and operational constraints that limit the ability of UNDP for direct implementation – except for activities taking place out of the country.
- **UNDP Yemen programme staff:** the Governance & Rule of Law Pillar and the Economic Recovery & Development Pillar as well as Peace Support Facility unit in UNDP Yemen Country office will support the project for resource mobilization, quality assurance, technical guidance and policy advocacy support towards the central government and the broader development community. UNDP Yemen will support day-to-day administrative and financial management needs of the Project team for executing the project. All UNDP Yemen staff time devoted to implementing project are accounted for in the Direct Project Costs (DPC) and Common Services (CS) incorporated in the project budget calculations.

### Equipment and other resources

Various types of equipment will be procured by the Project for achieving the intended results. The range of equipment that may be procured has been listed in the result section related activities. Any procurement done through grants will be done by Responsible Parties according to their SOPs, as they have been approved through the HACT process.

### Partnerships

Different actors will be responsible for the planning, implementation and monitoring/reporting of the project activities at all levels, in close coordination with the implementation team of the project. The direct implementation of activities is designed to create the organizational foundation necessary for

the sustainability of the project. In addition to technical assistance and capacity development, the project will provide indirect support to stakeholders. Partnership arrangements will detail the delivery of services by local partners, respecting both national and international priorities.

The project intends to partner with Ministry of Health and Ministry of Water Resources and Environment and Department of Renewable Energy. Also, close partnerships with sister agencies will be maintained and expanded for the ultimate benefit of the project and consequently for higher impact on the affected population. To date, UNDP has set strong cooperation with ILO, IOM and UNWOMEN, UNHCR, UN Women, Women Entrepreneurship Association and Yemen Women Unit (local NGOs), especially will be a crucial partner in enhancing women's leadership in relation to women's economic empowerment and promotion of gender equality. The project would further explore the partnership with other projects of UNDP in country and would strengthen the cooperation closely by working together from the planning, implementation and evaluation stages.

UNDP would collaborate with local Yemeni partners) and Regional Center for Renewable Energy and Energy Efficiency (RCREEE- regional organization leading in renewable energy) based in Cairo for developing the capacity building certified curriculum for communities on solar micro-grid. RCREEE<sup>8</sup> being the regional umbrella for the renewable energy, various expertise would also be sought from the regions to support this initiative. RCREEE has sound experience in implementing renewable energy projects in fragile and conflict countries in the region (e.g., Yemen, Iraq and Sudan). For Yemen, RCREEE, during the last few years, collaborated with several international organizations (World Bank, UNDP and UNOPS) to implement several energy projects aimed to find solutions to recover the electricity services and to develop innovative business models to spread using solar photovoltaic applications in the Yemeni communities. UNDP Yemen over the past few years have increased its footprint in the area of renewable energy and currently chairs the Solar Working Group at the national level. UNDP along with RCREEE has developed the SOLARINVENTAR ([www.solarinventar.info](http://www.solarinventar.info)) to support the local and national partners in the area of renewable energy while promoting communities of practice. UNDP would also bring the regional hub (Istanbul) support to this initiative to implement the project. UNDP would also closely work with GIZ and partner in building networks with private sector.

### **Relevance to Yemen Humanitarian Response Plan (HRP)-2021**

The HRP identifies the decaying infrastructure and basic services where only half of health facilities (10,000) are currently functioning. It further highlights that 90 per cent of the population lacks access to publicly provided electricity, with shortage due to chronic under-supply, lack of plant capacity, conflict related damage, inadequate maintenance and fuel shortages. The HRP also highlights that conflict has weaponized the economy. Since 2015, the economy has shrunk by half, and more than 80 per cent of Yemenis now live below poverty line. The collapse is most visible in loss of income, depreciation of the Yemeni rial (YER), loss of Government revenue and rising commodity prices. More than 40% of Yemeni households are estimated to have lost their primary source of income<sup>9</sup>.

The proposed interventions tackle lack of electricity while solarizing the hospitals and thus help Yemenis to improve access to critical health facilities. Economic instability and limited livelihood opportunities will further reduce household purchasing power, and impost increasing economic barriers to services, creating tensions with the host community; it also increases the likelihood IDPs will need to resort to negative coping mechanisms, with consequent protection risks, especially for

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<sup>8</sup> <https://www.rcreee.org>

<sup>9</sup> Yemen Humanitarian Response Plan, 2021, pp-21

children and women<sup>10</sup>. The solar microgrid solution would support the vulnerable communities in income generation and thus mitigate the risks of negative coping mechanism.

### **Risks and Assumptions**

**Political risks:** The UN works within complex dynamics reflecting competing interests of political actors and member states, limitations of responding to the scale of needs, a society under pressure and trauma, and security and access constraints. The UN maintains its operational integrity through adherence to principles of impartiality, human rights and inclusive humanitarian/civilian assistance and engages stakeholders clearly communicating these principles. UNDP coordinates with the Office of the Special Envoy to the Secretary-General and is a member of the Humanitarian Country Team and UN Country Team to collectively address political risks.

To mitigate the political risks, UNDP will put in place a communication strategy and ensure regular Project monitoring, risk analysis and oversight. Grievances from beneficiaries and stakeholders will be channelled through mechanisms established within the project. UNDP will inform MOPIC and other relevant authorities of project progress and issues and to support implementing partners in gaining acceptance of the strategies and principles of the project and enabling a conducive operating environment.

### **Operational risks:**

Due to the ongoing pandemic, conflict and related insecurity, the project will face some operational risks in relation to potential disruption in UNDP's business processes and project management services. UNDP has developed a Business Continuity Plan for COVID-19 which ensures that the critical office functions can be performed from other locations if necessary. UNDP has staff presence in the targeted locations, through other ongoing programs in which UNDP has presence, can reach all governorates. UNDP will also rely on a contracted Third-Party Monitoring Agent to perform complementary monitoring of the project. Service Providers would be recommended to take the preventive measures of COVID-19 for their frontline staff as well as for beneficiaries to mitigate the risks of infection.

In terms of asset delivery and management, the project will seek to establish specific arrangements with the local authorities, male/female community committees for delivery and premises protection in project sites. Further and to prevent violence against women during assets delivery, women will participate in the selection of location and timing. Regular assessments of the political and security situation will generate evidence to inform all project decisions and help to determine if additional security measures or adaptations to any aspect of the project are required to ensure its relevance, effectiveness and impact.

### **Financial/fiduciary risks:**

The financial and fiduciary risks are defined by several factors, including hyper-inflation, fraud, and cash advance management. UNDP's anti-fraud policy, the annual audits, regular spot-checking by UNDP staff, and above the donor internal procedures to mitigate the risk of fraud, misappropriation and diversion of funds.

### **Programmatic risks:**

The programmatic risks are associated with access and targeting due to security or conflict-related obstacles. These will be mitigated with the help of implementing partners' widespread network, as well as regular analysis of the conflict context through specific conflict-sensitivity tools. UNDP level risks are associated with UNDP's potential inability to verify results on the ground in a timely manner, potential inability to recruit staff in a timely fashion to support Project implementation, and

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<sup>10</sup> Yemen Humanitarian Response Plan, 2021, pp-60

potential inability (or significant delays) to meet delivery expectation/targets. UNDP will closely review the quarterly expenditure reports of the responsible parties to monitor financial delivery of the project.

Further, empowering women and shifting the gender roles and level of power within the targeted communities may lead to GBV. Male/female community committees established throughout the project can be utilized in the awareness creation of women human rights, GBV and PSEA and how to respond and report to such incidents. Accountability channels will be established to report these incidents in confidential matter.

### **Security risks:**

The ongoing protracted conflict continues to pose significant security risks to the implementation of the project in the form of (petty) crime, air strikes, landmines and UXO, terrorist attacks, and ground combat, arbitrary arrests and detentions. This situation compounded by the breakdown of law and order and rise of crime and general insecurity. UNDP intends to mitigate these risks through close collaboration and coordination with the UN Department for Safety and Security, including the de-confliction protocols and strict adherence to UN security procedures. Staff training on conflict-sensitive communications and risk management will continue.

### **Stakeholder Engagement**

Further to the partnership approach described under 3.2, the implementation of the project will be highly participatory and will be overseen by a project board. The direct beneficiaries will be engaged based on their willingness and commitment to contribute to the project results on a non-monetary basis. From its onset, the project will promote ownership by the targeted local authorities and communities.

While activities are designed to benefit communities at large, the project will include dedicated efforts to identify the most vulnerable groups among communities and address their specific needs. Vulnerable households/individuals will be selected through a consultative and inclusive participatory process with women and men community-based institutions using beneficiary selection criteria jointly developed by partners. An accountability channels will be established to report against any unfair exclusion or selection of beneficiaries.

Specifically, the project will target unemployed youth, women, socially excluded and other marginalized groups, including IDPs, returnees and host communities, households with highest levels of food insecurity and malnutrition, women-headed households, as well as people with disabilities and minority groups.

**Youth:** With a rapid population growth of 3 percent per annum, nearly 63 percent of Yemenis are under the age of 25. Thirty-three percent of the total population is estimated to be illiterate.<sup>11</sup> Of the youth population, 71 percent live in rural areas and 91 percent work in the informal sector. The presence of a large youth population with limited employment opportunities fuels alienation and exclusion from the state and economy, and feeds into conflict and instability. The population pressure has serious ramifications on scarce land and water resources and on the labour market, which is exacerbated even more due to the escalation of conflict.

The project will actively engage youth through social and community mobilization work, which has the potential to translate into longer-term employment opportunities. The Programme will give special attention to youth –actively including young women – as an important driver of peace,

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<sup>11</sup> UNDP, Multidimensional Livelihoods Assessment in Conflict Areas in Yemen, December 2014

providing them with income and participation opportunities through the microbusiness opportunities interventions. In this sense, the project contributes by providing opportunities for jobs, ensuring interventions enhance inclusion, and providing opportunities for collaboration around the project implementation and monitoring.

**Women:** For more than ten consecutive years, Yemen has been at the bottom of the World Economic Forum's Global Gender Gap Index for women's equality (141 out of 141 countries).<sup>12</sup> Child marriage is common. Gender-based violence is hidden, but ever present in Yemen. Women have limited freedom of movement; conservative traditions prevent their participation in the economic arena; they have little control over family resources. There are striking differences between the attainments of women and men in the labour market<sup>13</sup>, both in terms of employment status and the range of occupations open to women.

Due to the ongoing conflict, women are disproportionately affected and have become increasingly vulnerable – women-headed households in particular. The number of women-headed households are increasing due to conflict as men are often absent seeking employment, engaging in fighting, or have been killed. Experiences from the ongoing intervention shows that, women are capable of leading the entrepreneurship and therefore the livelihood and income generation would target them to support the most vulnerable.

In rural areas, where strong tradition restricts women's participation, community consultation and discussions with women will be part of the priority outreach approach in order to explore suitable cash for work and other livelihood activities, including small businesses, that women can participate in. Throughout existed local women community committees, women will be included in the project design, implementation, monitoring and evaluation to assure that they have access to benefits that they value and that they are able to manage the resource base in a sustainable manner.

The solar microgrid model has demonstrated that targeting with community engagement would help women to prosper in becoming the role model through the economic empowerment approach. The experience of successful solar microgrid would be applied in targeting women under the above initiative.

**Marginalized groups:** The *Muhamasheen*, of African descent, are one of the most marginalized and socially excluded groups in Yemen. This is exacerbated by numerous and complex factors, such as discrimination and inequality, which limit their access to quality education; and racism in the wider community, which limits their employment opportunities. Often the only work options for them are low-wage and precarious such as street cleaning or smuggling; this has only been exacerbated by the conflict. Competency-based skill development trainings could significantly improve their livelihood-generating options. To improve integration, livelihoods opportunities and reduce vulnerabilities, the Muhamasheen will be involved in community level consultation processes.

**Internally displaced people and returnees:** IDPs are another priority target group for the project. Livelihoods opportunities and access to food are among the top two priority needs for IDPs and returnees; the project will address this by providing skill development opportunities and provision of grants for the establishment of MSMEs related income opportunities.

**Relevant government agencies and insitutions:** The project is intended to work closely with the insitutions and cooperatatives to strengthen the institutional capacity in the sector. In order to build

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<sup>12</sup> World Economic Forum, The Global Gender Gap Report 2017

the capacities of the solar microgrids, the project would collaborate with Technical and Vocational Education Institute (TVET).

Solarization of hospitals (4) would provide the outreach of approximately 100,000 direct beneficiaries who would benefit from the resumption of critical facilities. The micro-grid stations have a capability to reach more than 100-200 households (approx. 1400 individuals) and connecting the schools, hospitals and public offices could reach around 300 households (approx. 2100 individuals). With 50 micro-grid stations, the project would reach directly 15,000 households and approximately 105,000 individuals. In total the project would reach 205,000 direct beneficiaries.

### **South-South and Triangular Cooperation (SSC/TrC)**

**Bilateral cooperation:** organizing inclusive learning events gathering for SMEs, MFIs and private sector actors and policy makers and community representative. The learning event will be comprised of the targeted districts of the project as well as non target districts would be invited to exchange learning and their experiences from the project. The project will ensure the equal representation of men and women and will encourage women to share their experience, present their achievements, discuss the challenges and document women and men success stories and lessons learnt.

### **Knowledge**

The Project will develop and disseminate two types of knowledge products:

→ for use by the Project's beneficiaries (individuals households, women, men and youth, private sector organizations, microfinance institutions' and MSMEs, public and commercial banks): publications issued by the Project (including UNDP, service providers) such as guidelines to access banks, MFIs, human interest stories, project brochures, leaflets etc.

→ for use by the wider international community and governments of other developing countries presenting a similar context to that of Yemen and seeking to address the resilience including lesson learnt documents, case studies, research papers on innovative approaches successfully piloted by the Project, as well as a final report presenting the Project's approach and results.

Knowledge products will fall within the thematic areas covered by the Project (capacities for service delivery, renewable energy, livelihoods, peer networking, improving public services, resilient businesses) as well as on cross-cutting aspects (gender equality, social inclusion, conflict sensitivity).

### **Communications**

The project will undertake a series of communications activities. All the project communications will portray women and girls, men and boys equitably and fairly. The project will use inclusive language throughout all written communications as well as visual and audio materials.

**Online communication and visibility:** Information about the Kuwait Fund will be disseminated through web platforms and social media. The Government of Kuwait emblem and acknowledgement of its support will also be included, as will links to the relevant websites and social media accounts.

**Electronic newsletters, online articles and blogs:** The intervention will disseminate inclusive and gender sensitive electronic newsletters, online articles and blog posts to inform the stakeholder's audiences about the Government of Kuwait-financed project. These publications will also be shared in social media channels of UNDP in Yemen, regional and globally into their webpages. They will also be shared in the implementing partner website. Arabic versions of these publications will be produced whenever possible.

**Inclusive Information campaigns, events, visits, stakeholder meetings:** These will be conducted according to Government of Kuwait Communication and Visibility criteria. These events will link overall objectives, achievements and impacts of project with Government of Kuwait general

partnerships with UN agencies working in Yemen. Public events (such as workshops, learning, training courses, and exhibitions) will be conducted to highlight the objectives and achievements of the Programme. The Government of Kuwait emblem will be displayed prominently on all these events to ensure that attendees are aware of the Government of Kuwait's financial support. The project will ensure equal representation of women and men in all campaigns, events and meetings.

**Press releases:** Press releases will be issued at action launches, and during events or joint field visits. The Government of Kuwait partnership with UNDP and implementing partner in Yemen and funds provided by the Government of Kuwait will be mentioned.

**Audio-visual material, photography and other productions:** An inclusive and gender sensitive Audio-visual and photographic materials will be produced to convey project accomplishments, impact, and key messages. All materials will comply with the Government of Kuwait-financed external actions' criteria in and will consider the generally recognized standards and best practice. The Government of Kuwait's will be entitled to use or reproduce all audio-visual and photographic materials produced by UNDP or implementing partners. Audio-visual materials will also feature the Government of Kuwait emblem at the beginning and/or end of the production, accompanied by the following text: *This [film/video/...] was produced with the financial support of the Government of Kuwait.*

Photographs related to project progress, results, and impact will also be available to the Government of Kuwait, accompanied by IPTC metadata or a separate English metadata file detailing (for each image) the photographer's name, production date and location and a caption detailing the names and functions of any identifiable individuals.

Audio-visual material and photographic material will ensure that women and men are represented and should challenge any existing gender stereotypes in the targeted communities.

**An inclusive and gender sensitive newsletters, leaflets, brochures, assessments, human stories, case studies and other printed materials:** These will be disseminated in electronic form through websites, social media and email. All these materials will comply with the Communication and Visibility in Government of Kuwait-financed external actions criteria. The cover or front page of any document will clearly identify the Programme as an Government of Kuwait-financed action. The Government of Kuwait emblem will be prominently visible.

**Promotional materials:** projects promotional materials (jackets, t-shirts, calenders, mugs and notebooks) will be produced and distributed to implementing partners, stakeholders and people working in the field. These promotional materials seek to increase Government of Kuwait visibility in the field and amongst government officials and stakeholders. The Government of Kuwait emblem will be prominently visible in these materials accompanied with the sentence: *This programme is supported by the Government of Kuwait.*

**Banners and commemorative plaques:** The Government of Kuwait emblem will be prominently visible on all project special event banners. project permanent structures (such as training centres, solar systems or markets) will bear a commemorative plaque inscribed with the following sentence: *This [type of structure] was built with the Financial support of the Government of Kuwait.* These will be placed in the most visible part of the structure, such as at the front of the building or at its main entrance.

### **Sustainability and Scaling Up**

The sustainability of the proposed interventions would be handled at two major levels:

1. **Solarization of health systems:** the provision of solar hybrid systems in hospitals would result in significant savings by having less expenditure for fossil fuel. The hospitals would be able to save money due to the solar hybrid model which has very negligible operation and maintenance cost. The solar system would have at least two years of warranty period to support the operation and maintenance. In two years of time, the targeted hospitals would be

able to save substantial amounts in order to expand any future solar systems. The solar panels would last for at least twenty years whereas the battery for five years maximum. The targeted hospital can replace the battery with the amount of savings in five years time period.

2. **Solar microgrid:** as explained in earlier section, a solidarity fund would be established to support the MSMEs in expanding their capital and businesses. The solidarity fund would be the first kind in Yemen and with the engagement of Banks, MFIs and other financial institutions, it would help set up a sustainable mechanism for the MSMEs to continue to expand their businesses. Interventions will adopt the value chain approach by promoting the local producers, market actors, private sectors, and economic institutions. Building the horizontal and vertical linkages will strengthen the value chain, and thus the MSMEs could be sustained. MSMEs have a significant advantage over larger organizations regarding addressing sustainability issues- their size means they can react very quickly to changes in the business environment. They are disadvantaged, however, by lack of information on marketplace changes that make sustainability an opportunity to innovate, and to inspire others. While some SMEs could become a leader in the business environment as opportunities-seeing the tasks which require more change as an additional burden, rather than a source of potential advantage. The intervention has been designed to tackle bottlenecks as mentioned above, in terms of providing accurate and timely information about the marketplace.

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#### IV. PROJECT MANAGEMENT

##### *Cost Efficiency and Effectiveness*

HEAL project introduces the following features to enhance the effectiveness of its development and reform interventions:

**Gender inclusive Approach:** Through its stakeholder strategy, the project benefits from the involvement of women/men national actors, specialized institutions and civil society groups which ensures that interventions are effective, relevant and sustainable in the long term.

**Dynamic Programme Building on Lessons Learned:** The programme builds upon and scales up combined experiences of UNDP and the UN sister agencies of what works in the field. Through effective communication and coordination, the project will adjust to new circumstances and lessons learned to maximize impact and reduce costs.

**Harmonized and Integrated Development Approach:** Project will be implemented within a broader programmatic framework notably encompassing livelihoods, local development and conflict reduction making the stabilization interventions more strategic and effective for the people of Yemen.

**Health & Safety and Environmental Safeguards:** The project will analyse and address significant social and environmental and occupational health and safety risks and impacts via UNDP's Strategic Environmental and Social Assessment (revised SESA, 2021). Where a risk is determined to be Moderate to High, the project will undertake a comprehensive environmental and social impact assessment (ESIA), including the development of a social, environmental and occupational health and safety management plan. The plan will include steps for implementing protective and safety measures for the community members, contractors and labourers/workers. The project will also utilize a Stakeholder Response Mechanism that includes stakeholder analysis, a stakeholder engagement plan, a consultation process and a grievance and the Complaints Handling Mechanism (CHM), as referred to above.

##### *Project Management*

Effective management of the Programme will be critical, given its importance, size and complexity. To this end, the project will employ a project management methodology which emphasizes a simple

and structured yet flexible framework, with an emphasis on delivering measurable outcomes and benefits. The following guiding principles will be applied:

- **‘Do no harm’**. This approach ensures that the project’s work does not harm beneficiaries and stakeholders.
- **Foster local ownership and skills transfer**. This will be both through the Board members, and through day-to-day involvement of counterpart institutions.
- **Manage the Programme in a flexible and responsive way**. Drawing on the experience of the project’s Yemeni staff, who are able to solicit informal feedback from counterparts, make sure that the Programme is responsive to its counterparts’ changing needs.
- **Gender equality**. This approach ensures that the project will be able to apply Gender-sensitive language, the collection and analysis of gender-specific data, equal access to and utilisation of services, involve women and men in decision making.
- **Draw on local insight and expertise**. Maximise the use of Yemeni experts on the project team.
- **Build momentum and demonstrate positive impact in the early stages of the project**. This will take place under each programme component, with an emphasis on ‘quick wins’ and a robust M&E strategy.
- **Close partnerships** with Ministry of International Planning and Cooperation, Ministry of Water Resources and Environment, Ministry of Health, vocational training institutes, and relevant agencies, and associations including UN Women, Women Entrepreneurship Association and Yemen Women Unit (local NGOs).

## V. RESULTS FRAMEWORK<sup>14</sup>

**Intended Outcome as stated in the Country Programme Development: Outcome 1:** By 2023, all people in Yemen, especially the most vulnerable and marginalised, benefit from green economic transformation, improved food security and more sustainable livelihoods. **Related outcome indicators as stated in the Yemen CPD:** Output 1.2: Enhanced resilience and livelihoods of vulnerable people and communities.

EXPECTED OUTPUTS	OUTPUT INDICATORS <sup>15</sup>	DATA SOURCE	BASELINE	Implementation		DATA COLLECTION METHODS & RISKS
			Value	Year 2021	Year 2022	
<b>Output 1</b> Targeted hospitals have improved access to energy in sustainable manner and resumed critical facilities	<b>Indicator 1</b> # Number of health facilities supported <b>Baseline:</b> 1 <b>Target:</b> 4	UNDP	1	1	3	Energy gap assessment report Project Final Report
	<b>Indicator 2:</b> # Number of critical facilities have resumed and supported women, men, girls & boys. <b>Baseline:</b> TBC <b>Target:</b> TBC	UNDP	0	TBC	TBC	
<b>Output 2</b> Targeted women and youth have access to sustained income opportunities through solar micro-grid supported expenditure on health, medicine and care.	<b>Indicator 3</b> # solar microgrids stations have supported households/commercial places to access clean energy <b>Baseline:</b> 3 <b>Target:</b> 50 HHs	UNDP	3	10	40	Energy Gap Assessment Report Pre and Post Training Report Project Final Report
	<b>Indicator 4</b> # number of women and men have improved access to sustained income through solar microgrids <b>Baseline:</b> 30 <b>Target:</b> 500	UNDP	3	100	400	Energy Gap Assessment Report Pre and Post Training Report Project Final Report
<b>Output 3</b> <i>Project Managemnt</i>	Delivery rate of annual funded budget	UNDP	0	20%	80%	Project Annual Report
	Number of knowledge products on Solar Hybrid Solutions and Microgrids	UNDP	0	2	2	Longitudinal Case Studies Human Interest Stories Blogs Article

<sup>14</sup> UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.

<sup>15</sup> It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

## VI. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans:

### Monitoring Plan

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
<b>Track results progress</b>	Progress data against the results indicators in the project will be collected, disaggregated by sex and analyzed to assess the progress of the project in achieving the agreed outputs.	Quarterly, or in the frequency required for each indicator.	Slower than expected progress will be addressed by project management.	UNDP	
<b>Monitor and Manage Risk</b>	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a gender sensitive risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks (gender sensitive) are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.	UNDP	10,000
<b>Learn</b>	Knowledge, good practices, lessons and gender impact will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project. All learning materials will include gender equality as cross cutting issues.	At least annually	Relevant gender sensitive lessons are captured by the project team and used to inform management decisions.	UNDP	20,000
<b>Annual Project Quality Assurance</b>	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decisions to improve the project. The report will indicate the project contributions to gender empowerment.	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.	UNDP	
<b>Review and Make Course Corrections</b>	Internal review of disaggregated data and evidence from all monitoring actions to inform gender and conflict sensitive decision making, as well as adaptive management.	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.	UNDP	10,000
<b>Project Report</b>	A progress report will be presented to the Project Board and key stakeholders, consisting of disaggregated progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk log with mitigation measures, and any evaluation or review reports prepared over the period. Gender issues will be reviewed in the report.	Annually, and at the end of the project (final report)		UNDP	10,000

## VII. MULTI-YEAR WORK PLAN <sup>1617</sup>

All anticipated programmatic and operational costs to support the project, including development effectiveness and implementation support arrangements, need to be identified, estimated and fully costed in the project budget under the relevant output(s). This includes activities that directly support the project, such as communication, human resources, procurement, finance, audit, policy advisory, quality assurance, reporting, management, etc. All services which are directly related to the project need to be disclosed transparently in the project document.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		RESPONSIBLE PARTY	PLANNED BUDGET		
		2021 <sup>18</sup>	2022		Funding Source	Budget Description	Amount
<p><b>Output 1:</b> Targeted hospitals have improved access to energy in sustainable manner and resumed critical facilities</p> <p><b>Activity Result 1:</b> Targeted hospitals have improved access to energy and resumed critical facilities and services</p> <p><i>Gender marker:2</i></p>	<b>Activity 1.1:</b> Production of Integrated and Hybrid energy design for targeted hospitals	\$30,000	\$0	TBC	GoK	Consulting Services for three months	\$30,000
	<b>Activity 1.2:</b> Capacity building for staff of hospitals and representative from Ministry of Health on operation and maintenance for hybrid energy solution	\$0	\$25,685	TBC	GoK	Consulting Services (Training fees lump sum) for five months	\$25,685
	<b>Activity 1.3</b> Installation of hybrid energy design using long term agreement (LTA) for a hospital	\$200,000	\$555,000	TBC	GoK	Contractual Services	\$755,000
		\$0	\$50,000	UNDP	GoK	Solar Energy Expert (12 months salary)	\$50,000
		\$0	\$50,000	UNDP	GoK	National Coordinator (12 months salary)	\$50,000
		\$0	\$50,000	UNDP	GoK	Monitoring and Evaluation Officer (12 months Salary)	\$50,000
	<b>Activity 1.4</b> Activation of Remote Sensing Application to monitor the system performance as Grievance Redressal Mechanism and scaling up of solar inventar systems	\$10,000	\$0	TBC	GoK	Consulting Services	\$10,000
		\$15,000	\$30,000	UNDP	GoK	Travel 3,000 USD × 15 visits	\$45,000
		\$10,000	\$21,000	TBC	GoK	Provision of COVID-19 Protective Gears for 1000 beneficiaries @\$30	\$31,000
		\$0	\$48,000	TBC	GoK	Procurement and Finance Associate 12 months Salary	\$48,000
		\$10,000	\$40,000	UNDP	GoK	Monitoring and Evaluation	\$50,000

<sup>16</sup> Cost definitions and classifications for programme and development effectiveness costs to be charged to the project are defined in the Executive Board decision DP/2010/32

<sup>17</sup> Changes to a project budget affecting the scope (outputs), completion date, or total estimated project costs require a formal budget revision that must be signed by the project board. In other cases, the UNDP programme manager alone may sign the revision provided the other signatories have no objection. This procedure may be applied for example when the purpose of the revision is only to re-phase activities among years.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		RESPONSIBLE PARTY	PLANNED BUDGET		
		2021 <sup>18</sup>	2022		Funding Source	Budget Description	Amount
<b>Output 2</b> Targeted women and youth have access to sustained income opportunities through solar micro-grid supported expenditure on health, medicine and care. <b>Activity Result 2:</b> Targeted women and youth have improved income opportunities through solar microgrid.  <i>Gender Marker: 2</i>	<b>Activity 2.1:</b> energy analysis, consumption and gap assessment at the community level			TBC	GoK	Consulting Services	\$10,000
	<b>Activity 2.2:</b> Identification of targeted micro-small-medium enterprises (MSMEs) to establish solar micro-grid businesses	\$5,000	\$0	TBC	GoK	Consulting Services	\$5,000
	<b>Activity 2.3:</b> Provision of seed grants to MSMEs to procure the micro-grid station equipment; solar panels, battery, inverter from the private sector	\$170,000	\$704,130	TBC	GoK	Consulting Services	\$874,130
	<b>Activity 2.4:</b> Establishment of energy connections to the households, commercial shops, schools, health centers and public offices	\$0	\$20,000	TBC	GoK	Consulting Services	\$20,000
\$20,000		\$60,000	TBC	GoK	Monitoring and Evaluation (Third Party Monitoring)	\$80,000	
<b>Output 3:</b> <b>Project Management</b>  <i>Gender marker:2</i>	Project Management			UNDP	GoK	Communication	\$25,000
	UNDP Support - This includes only Country Office staff technical and operational provide support to the project implementation			UNDP		UNDP Support	\$222,138
<b>Sub Total Project</b>							\$2,380,953
<b>GMS (5%)</b>							\$119,047
<b>Total Programme Budget</b>							<b>\$ 2,500,000</b>

## **VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS**

The project will be directly executed by UNDP in partnership with RCREEE and in compliance with existing rules and regulations. The project activities will be implemented under supervision and the guidance of the Resident Representative (RR) and Deputy Resident Representative (DRR), who will directly oversee technical implementation of the project. Other UNDP units such as Management Support Unit (MSU), Procurement, Finance, Communications, Common Services, Information and Communication Technology, Human Resources, will support efficient and effective project delivery and oversight. The project will benefit from a wealth of technical and managerial expertise from the UNDP Regional Bureau in Arab States.

### **The Project Board**

A Project Board would be established and preside over this project offering advice and guidance to overall implementation of the project. Should there be any major changes in the landscape this organ will lay the strategic guidance on how to meet such challenges and with what appropriate measures. The Project Board will consist of the Resident Representative of UNDP and representatives of GoK. The project board will be supported by UNDP Economic and Development Unit and the Chief Technical Advisor.

Based on the approved AWP, the project board may review and approve quarterly project plans and authorize any major deviation from these agreed plans. It is the authority that signs off the completion of each quarterly plan as well as authorizes the start of the next. This ensures that required resources are committed, arbitrates on any conflicts within the project, and negotiates a solution to any problems between the project and external bodies. In addition, it approves the appointment and responsibilities of the Project Manager and any delegation of its project assurance responsibilities. The project board will be convened bi-annually. Procedures for interest income and unspent balances are in line with the policies and procedures of the Kuwait-UNDP Partnership Fund.

### **The board will:**

- Review and approve the annual work plan of the project and the quarterly work plans if necessary
- Review the progress report and ensures that obstacles to smooth implementation of the project are addressed.
- Ensure gender is mainstreamed throughout the project lifecycle
- Suggest revisions/measures or reallocation of funding if the project faces obstacles in implementation under any given section.
- Facilitate audits and evaluations, and report back to the Project Board;
- Review and approve M&E plan
- Review and approve gender initiatives and side activities
- Promote synergies across the project activities and with all cross-cutting themes;
- Coordinate and compile narrative reports received from Participating UN Agencies, and report back to the Project Board for review and approval

### **The Project Implementation Team UNDP**

The project team will be responsible for implementing the present project according to specific terms of reference, under the overall direction of the project manager and the Project Board. The percentage

of female project staff and consultants will be 50%, if applicable. This will ensure gender inclusion, mainstreaming and empowerment throughout all the project phases.

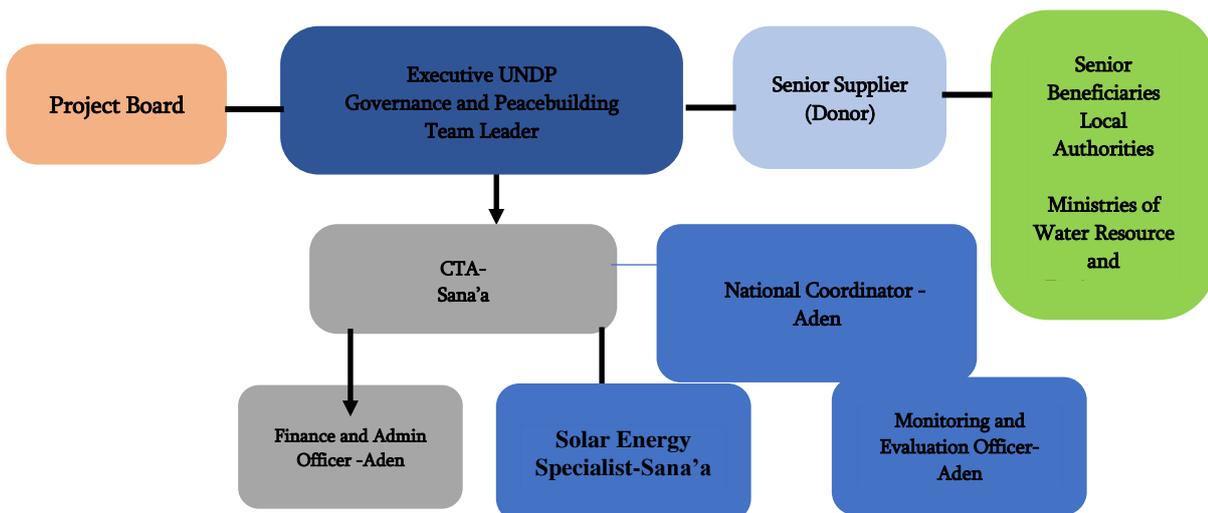
**The Chief Technical Advisor** (International) will be based in Sana'a and will be responsible for day-to-day management and decision-making for the project. CTA's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The CTA time and cost would be shared and charged from the ongoing projects.

**National Coordinator** will be based in Aden and will be responsible for strategic coordination support and support the implementation of key activities under the project. The National Coordinator would provide his/her expertise and technical assistance and advisory support to implementing partners and relevant counter partners.

**Monitoring and Evaluation Officer:** The role M&E would be to work closely with the national coordinator and support in the implementation project related activities. The officer would also be responsible to ensure the implementation of monitoring and evaluation framework and activities during the project intervention.

**Finance and Procurement Officer** to be based in Aden will be responsible for guidance in overall financial management of the project, including the release of funds, quality of financial delivery, audit process, financial reports to UNDP and the donor etc.

**Solar Energy Specialist:** the specialist would be based in Sana'a and responsible for the technical guidance and providing expert support in the implementation of output 1 and 2.



### Composition and organization

This group contains three roles:

- **Executive** (UNDP): is responsible for the project, supported by the Senior Beneficiary and Senior Supplier. The executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher-level outcomes; ensures that the project gives value for money, uses a cost-conscious approach to the project and balances the demands of beneficiary and supplier.
- **Senior Supplier** (Donors/UNDP): primary function within the project board is to provide guidance regarding the technical feasibility of the project. The senior supplier represents the interests of the parties which provide funding and/or technical expertise to the project (designing, developing, facilitating, procuring, implementing) and has the authority to commit or acquire required supplier resources.
- **Senior Beneficiary** (MOPIC): represents the interests of those who will ultimately benefit from the project or those for whom the deliverables resulting from activities will achieve

specific output targets. The senior beneficiary's primary function within the project board is to ensure the realization of project results from the perspective of project beneficiaries. They validate the needs and monitor so that the solution will meet the needs of the project. The senior beneficiary also monitors progress against targets and quality criteria.

- **Ministry of Water Resources and Environment:** represent the interest of those who would be able to take the initiative forward and replicate. The engagement would also ensure that, the intervention is in line with the agreed stranded and institutional arrangements.

**Other project roles within UNDP are as follows:**

- **Project Assurance:** project assurance is the responsibility of each project board member. The project assurance role supports the project board by carrying out the objectives and independent project oversight and monitoring functions. This role ensures appropriate project-management milestones are managed and completed.
- **Project Support:** the project support role provides project administration, management and technical support to the CTA, as required by the needs of the individual project. The provision of any project support on a formal basis is optional. It is necessary to keep project support and project assurance roles separate in order to maintain the independence of project assurance.

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## IX. LEGAL CONTEXT

[NOTE: Please choose **one** of the following options, as applicable. Delete all other options from the document]

### **Option a. Where the country has signed the [Standard Basic Assistance Agreement \(SBAA\)](#)**

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Yemen and UNDP, signed on 1 April 1977. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”

This project will be implemented by UNDP in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

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## X. RISK MANAGEMENT

*The Project would be a direct implementation modality (DIM) as option b.*

### **Option b. UNDP (DIM)**

1. UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.)
2. UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the [project funds]<sup>19</sup> [UNDP funds received pursuant to the Project Document]<sup>20</sup> are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via [http://www.un.org/sc/committees/1267/aq\\_sanctions\\_list.shtml](http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml). This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
3. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).
4. UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
5. In the implementation of the activities under this Project Document, UNDP as the Implementing Partner will handle any sexual exploitation and abuse (“SEA”) and sexual harassment (“SH”) allegations in accordance with its regulations, rules, policies and procedures.
6. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

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<sup>19</sup> To be used where UNDP is the Implementing Partner

<sup>20</sup> To be used where the UN, a UN fund/programme or a specialized agency is the Implementing Partner

7. UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party, subcontractor and sub-recipient:
- a. Consistent with the Article III of the SBAA [*or the Supplemental Provisions to the Project Document*], the responsibility for the safety and security of each responsible party, subcontractor and sub-recipient and its personnel and property, and of UNDP's property in such responsible party's, subcontractor's and sub-recipient's custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:
    - i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
    - ii. assume all risks and liabilities related to such responsible party's, subcontractor's and sub-recipient's security, and the full implementation of the security plan.
  - b. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's and sub-recipient's obligations under this Project Document.
  - c. In the performance of the activities under this Project, UNDP as the Implementing Partner shall ensure, with respect to the activities of any of its responsible parties, sub-recipients and other entities engaged under the Project, either as contractors or subcontractors, their personnel and any individuals performing services for them, that those entities have in place adequate and proper procedures, processes and policies to prevent and/or address SEA and SH.
  - d. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, subcontractors and sub-recipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.
  - e. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at [www.undp.org](http://www.undp.org).
  - f. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.
  - g. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.
  - h. Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and sub-recipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.
  - i. *Choose one of the three following options:*

*Option 1:* UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of this Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail any responsible party's, subcontractor's or sub-recipient's obligations under this Project Document.

*Option 2:* Each responsible party, subcontractor or sub-recipient agrees that, where applicable, donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities which are the subject of the Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

*Option 3:* UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement.

Where such funds have not been refunded to UNDP, the responsible party, subcontractor or sub-recipient agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

*Note:* The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

- j. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.
- k. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
- l. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled "Risk Management Standard Clauses" are adequately reflected, *mutatis mutandis*, in all its sub-contracts or sub-agreements entered into further to this Project Document.

## XI. ANNEXES

1. Risk Analysis
2. Schedule of the implementation of activities

### Annex 1: Risk and Mitigation Measures

<i>RISK</i>	<i>LIKELIHOOD</i>	<i>POTENTIAL IMPACT</i>	<i>MITIGATION MEASURES</i>
<b>GENERAL CIVIL INSECURITY</b>			
Violence, incidents at distribution points involving the implementing partner staff and beneficiaries	Medium	High [fatalities, Injuries and asset damages]  to Medium  [violent behaviour, abuse, exclusion, fear, reduced acceptance]	<ul style="list-style-type: none"> <li>• Awareness and sensitization on the distribution process among beneficiaries and communities;</li> <li>• Coordination with Local Authorities;</li> <li>• Activation of the Feedback and Complaint system before and during the distribution days to capture dissatisfactions and address them preventatively;</li> <li>• Use of beneficiary volunteers to facilitate communications for crowd control and general services;</li> <li>• Timely suspension of activities in case of high violence risk;</li> </ul>
Strong interference by conflicting parties in the program implementation putting at risk independence, neutrality and fairness.	Medium	High [reduced acceptance by one of the parties, subsequent insecurity, reduced access, activity suspension]	<ul style="list-style-type: none"> <li>• Coordination with Local Authorities and parties;</li> <li>• Development of Key messaging on proposed intervention</li> <li>• Programme and intervention logic and clear local level communication strategy in place;</li> <li>• Local awareness on Independence, impartiality of the work carried out;</li> <li>• Suspension of activities in case of unbearable political pressure;</li> </ul>
<b>RISK LINKED TO BENEFICIARY TARGETING</b>			
Exclusion/inclusion errors - Influence of Local leaders/ authorities on the selection Of beneficiaries.	Medium	Medium	<ul style="list-style-type: none"> <li>• Establishing of community-based selection committees drawn from all segments of the society; develop vulnerability-based targeting criteria</li> </ul>
<b>OPERATIONAL RISKS</b>			
Local authority tightens the coordination procedures for IPs leading to delay in implementation	Medium	Medium	<ul style="list-style-type: none"> <li>• Support service providers to have better coordination and communication with the local authorities and power holders</li> <li>• governorate and district level coordination meeting to share the progress and achievements of the project</li> <li>• Engage positively the local authorities in the implementation of the proposed project activities</li> </ul>
<b>COVID Risks</b>			
Lack of protective gears and social distancing measures in the targeted communities leading to potential threat of spread	High	High	<ul style="list-style-type: none"> <li>• Awareness and orientation to targeted communities in COVID-19.</li> <li>• Provision of Protective Gears to fishers</li> <li>• Crowd management for asset distribution, self learning, business skill training and cash grant for microbusiness</li> </ul>
<b>Social and Environmental Risks</b>			
Discrimination against women and persons with disabilities when selecting beneficiaries	Low	High	<ul style="list-style-type: none"> <li>• Ensure equal participation and stakeholder engagement</li> <li>• Awareness raising and community consultation on inclusion and full participation</li> <li>• Proper stakeholder analysis and assessment to identify the most vulnerable groups</li> <li>• Mainstream gender into all project activities</li> </ul>
Sexual harassment, abuse, gender-based	Low	High	<ul style="list-style-type: none"> <li>• Awareness and training session to the project target groups and labours.</li> </ul>

violence and discrimination			<ul style="list-style-type: none"> <li>• Sensitization and awareness on SRP and Complaint Handling Mechanism and referral pathway with respect to confidentiality.</li> <li>• Apply all GBV and SH preventive and responsive measures.</li> </ul>
Pollution and damage to environment and natural habitat	Low	<u>Medium</u>	<ul style="list-style-type: none"> <li>• Apply Environmental screening, assessment, and management plan.</li> <li>• Develop Environmental and Social Management Plan (ESMP) with specific environmental mitigation plan according to type of risks and project's sectors and nature</li> <li>• Minimise. mitigate any further risks may occur during the implementation and keep updating project SES during project management process.</li> </ul>
Failure to comply and implement occupational health and safety safeguard measures.	Low	<u>High</u>	<ul style="list-style-type: none"> <li>• Use of Personal Protective Equipment (PPE)</li> <li>• Awareness training on culture of safety and mitigation measures.</li> <li>• Apply labour management plan and SOPs</li> <li>• Awareness and sensitization to the community members and project's workers on COVID19 protection measures, GRM and CHM.</li> </ul>
			<ul style="list-style-type: none"> <li>•</li> </ul>

**Annex: 2. Schedule of the implementation of activities**

Activity	2021				2022											
	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
<b>Activity 1.1:</b> Production of Integrated and Hybrid energy design for targeted hospitals																
<b>Activity 1.2:</b> Capacity building for staff of hospitals on operation and maintenance for hybrid energy solution																
<b>Activity 1.3</b> Installation of hybrid energy design using long term agreement (LTA) for a hospital																
<b>Activity 1.4</b> Activation of Remote Sensing Application to monitor the system performance as Grievance Redressal Mechanism and scaling up of solar inventar systems																

<b>Activity 2.1:</b> Access to energy analysis, consumption and gap assessment at the community level															
<b>Activity 2.2:</b> Identification of targeted micro-small-medium enterprises (MSMEs) to establish solar micro-grid businesses															
<b>Activity 2.3:</b> Provision of seed grants to MSMEs to procure the micro-grid station equipment; solar panels, battery, inverter from the private sector															
<b>Activity 2.4:</b> Establishment of energy connections to the households, commercial shops, schools, health centers and public offices															
<b>Project Management</b>															