



Republic of Yemen
Food Systems Pathways:
Towards Sustainable Food Systems
August 2022



Acknowledgement

The pathways of Yemen's food systems are the culmination of the government's commitment to the 2021 United Nations Food Systems Summit. They are also the result of a combination of research and policy review, as well as national technical dialogues in Yemen, which took place during the period from November 2021 and July 2022. The dialogues were organized and their outcomes produced by Scaling Up Nutrition (SUN-Yemen) Secretariat - Ministry of Planning and International Cooperation (MoPIC), with the support of partners from the UN agencies (UNICEF, WHO, FAO, and WFP), and the guidance of the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA).

This process would not have been possible without the expertise and commitment of all those who have participated in the dialogues from all the public sectors, UN partners and Civil Society Organizations (CSOs), as well as the private sector.

Executive Summary

The pathways of Yemen's food systems are the culmination of the government's commitment to the 2021 United Nations Food Systems Summit. They are also the result of a combination of research and policy review, as well as national technical dialogues in Yemen, which took place during the period from November 2021 and July 2022. These dialogues focus on the most vital sectors of agriculture, fisheries, industry, education, social protection, water, environment and health.

The fisheries sector is one of the promising sectors that can be relied upon, in order to contribute to stimulating the national economy, enhancing food security and scaling up nutrition in Yemen. The government seeks to implement a set of priorities incorporated into the framework of a strategic plan that accommodates all phases. Such a plan starts with the resilience and recovery phase, aiming to increase employment and livelihood opportunities for all fishermen to help them reach sustainable livelihoods, which will in turn enable them to recover. Consequently, the fishermen will provide the requirements for promoting advancement towards the implementation of other strategic phases that aim to restore infrastructure and revitalize the economic cycle. Moreover, the government seeks to create livelihoods for the local people in the coastal areas to make them less vulnerable and more resilient to economic shocks.

In the agricultural field, the government seeks to increase the agricultural growth rates to achieve food and nutrition security, combat poverty through the production of food commodities for consumption and marketing, improve and diversify sources of nutrition, increase reliance on food resources, as well as enhance income and access to food, and improve the relationship between consumers and sources of food.

In the education and social protection sector, the government attempts to respond to urgent and emerging needs in the economic and social field through a set of policies and procedures that ensure the provision of appropriate solutions and interventions. The government adopts policies for integrating a range of nutrition-sensitive programs, including "promoting the awareness and educational aspects, and developing curricula to include messages that raise awareness of the importance of nutrition, as well as providing nutrition incentives." The Education Ministry seeks to scale up nutrition at schools by increasing the provision of school meals, in addition to distributing biscuits to students and providing nutritional supplements for young girls. It also seeks to

rehabilitate sanitary facilities in schools, provide safe water and a healthy environment and reduce the spread of diseases.

Aiming to scale up WASH interventions, the government works in coordination with international and voluntary organizations operating in this field to provide the necessary support to the water and sanitation corporations so that these public services can address their current situation to resume the operation and maintenance of the water and sanitation system and deliver safe water to the subscribers.

With regard to public health, the technical experts stress on the need to scale up nutrition interventions in the health sector to include all vulnerable groups. This can be achieved by strengthening nutrition interventions in hospitals by providing nutrition specialists and monitoring kitchens in such facilities, as well as providing therapeutic and tube feeding/nutrition and nutritional supplements to patients, and building the capacity of the health staff to link nutrition with therapeutic protocols. Meanwhile, the Health Ministry is move towards strengthening food safety interventions, monitoring children's food and promoting environmental health interventions.

During the period from November 2021 and July 2022, the SUN-Yemen Secretariat has organized a number of workshops and expanded meetings on the national food systems dialogues, with support from WHO, FAO and WFP. Those events discussed the following pathways of food systems: First Pathway: "Access to nutritious and healthy food for all"; Second Pathway: "Transition towards healthy and sustainable consumption patterns"; and Fifth Pathway: "Building resilience to vulnerabilities, shocks and stresses".

The team organizing the dialogues has provided support to the participants during the meetings to find practical solutions that are aligned with the requirements of the current situation in Yemen, while taking into account the current and future opportunities to support the resilience of food systems in the country. The dialogues, in their entirety, focused on the following themes: Building national systems, by strengthening infrastructure, information, communication, coordination and learning; eradicating hunger in Yemen; promoting access to nutritious and healthy food, particularly for the most vulnerable groups such as women (mothers and adolescent girls), children and the elderly; promoting food safety, along the value chains of food systems (from seed to table); supporting national public policies and strategies to strengthen food control and interventions (from production to consumption); promoting effective integration and coordination across strategic partnerships between government, community and international partners to build sustainable food systems; and raising the demand for healthy and nutritious food, and changing behavior and practices that promote healthy nutrition.

While the outcomes of the food systems dialogues in Yemen draw the features of the near future in the country, they also establish strategic interventions that will improve the level of food security and nutrition, as well as ensure Food Self-Sufficiency (FSS), which represents an important step towards enhancing security, stability and prosperity in the country.

These outcomes take the form of national task-forces, which are clustered into national purposeful groups each of which assumes the task of making a change towards the provision of healthy and sustainable food systems. These national groups also represent the nucleus of global and regional communication and partnerships with similar and related pathways. In addition, these national groups are the result of an urgent need at the national level, which focus on targeting the following core areas: (1) Agricultural and fishery investments: "Focusing on improving access and abundance and reducing food insecurity"; (2) Economic development: "Focusing on increasing investment and productivity while benefiting from diversified financing sources"; (3) Empowering the most vulnerable groups (women and children): "Demonstrating the long-term impact of improving women's

and children’s health, education and participation in the economy and society”; (4) Strategic Development Partnerships: “Effective inter-sectoral partnerships, including the public and the private, as well as society and international partners, in the field of infrastructure development”; (5) Human capacities: “Addressing human development, particularly population health and education”; and (6) Quality: “Food safety - from seed to table”.

These dialogues also identified a number of thematic priorities that, when acted upon, will constitute a transformative pathway towards a sustainable, resilient and equitable food system.

The following is a brief description of the thematic priorities that emerged from the national dialogues on food systems in Yemen. Such themes took the form of national task-forces on which the participants in the national dialogues agreed to establish as mechanisms for advocacy, monitoring and implementation.

Thematic Priority 1: Scaling up social protection

- 1.1 National Task-Force on Social Protection Mechanisms and Zero Hunger**
- 1.2 National Task-Force on Compound Subsidized Bread**
- 1.3 National Task-Force on Domestic Food Industries**
- 1.4 National Task-Force on Home Economics**

Thematic Priority 2: Expanding the scale and quality of agricultural and fishery products

- 2.1 National Task-Force to Achieve Food Self-sufficiency**
- 2.2 - National Task-Force to Increase Domestic Agricultural Production**
- 2.3 National Task-Force to Support the Agricultural and Fisheries Investment Environment**
- 2.4 National Task-Force on Government Support to Fishermen**
- 2.5 National Task-Force to Support Integrated Domestic Agriculture**
- 2.6 National Task-Force on the Protection from Qat’s Effects**
- 2.7 National Task-Force on Water and Environment**
- 2.8 National Task-Force on Innovation for Food**

Thematic Priority 3: Providing lifelong nutrition, health education and awareness raising

- 3.1 National School Meals Task-Force**
- 3.2 National Task-Force on Hospitals and Health Facilities Nutrition**
- 3.3 National Committee on Awareness of Healthy Diet**
- 3.4 National Task-Force on Healthy Diet for Children**

Thematic Priority 4: Ensuring food safety from a multi-sectoral perspective

- 4.1 National Food Safety Task-Force (Food Safety)**
- 4.2 National Task-Force on Community Management on Control and Use of Agricultural Pesticides and Fertilizers**
- 4.3 National Task-Force to Reduce Food Loss and Waste**

Thematic Priority 5: Providing sustainable funding and enhancing efficiency and effectiveness

- 5.1 Task-Force to Strengthen Funding for Contribution Towards Comprehensive Development**

Thematic Priority 6: Scaling up the National Readiness for Positive Transformations and Responding to Emergencies and Shocks

- 6.1 Task-Force on Building National Capacity to Respond to Emergencies and Shocks**

Thematic Priority 7: Building strategic collaboration and partnerships across sectors and multiple stakeholders

- 7.1 Food Policies Dialogue Forums (Food Security Secretariat)**

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Overview

Yemen is located at the southern tip of the Arabian Peninsula. It consists of five main areas: The coastal plain, the western highlands, the central mountains, the eastern highlands, the eastern region, and the northeastern desert regions. This demographic diversity in Yemen can be reflected in the diversity of opportunities and areas of economic, social and cultural development - across all its multiple themes.

However, the social and economic situation is characterized by widespread poverty, high population growth rate and inadequate public services amid war, which contributed to increasing food and nutrition insecurity, and caused a series of humanitarian and development crises.

Currently, an estimated 20.7 million people depend on humanitarian assistance. Thus, Yemen is considered the largest humanitarian crisis in the world. The country ranked 178 out of 188 countries, according to the Human Development Index (HDI).

Levels of food insecurity in Yemen remain high, with more than half of the country's population (54%) suffering from severe food insecurity. Families in rural areas, displaced people, small or female-headed households, and families with illiterate heads are among the most affected groups. Food insecurity is attributed to high food prices, unemployment and disruption of livelihoods, which have been exacerbated by the economic crisis.

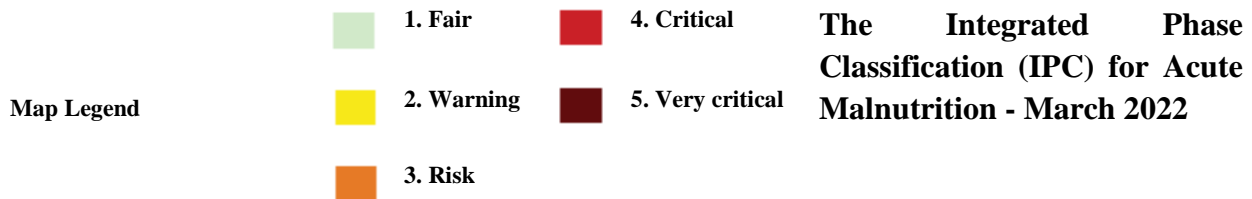
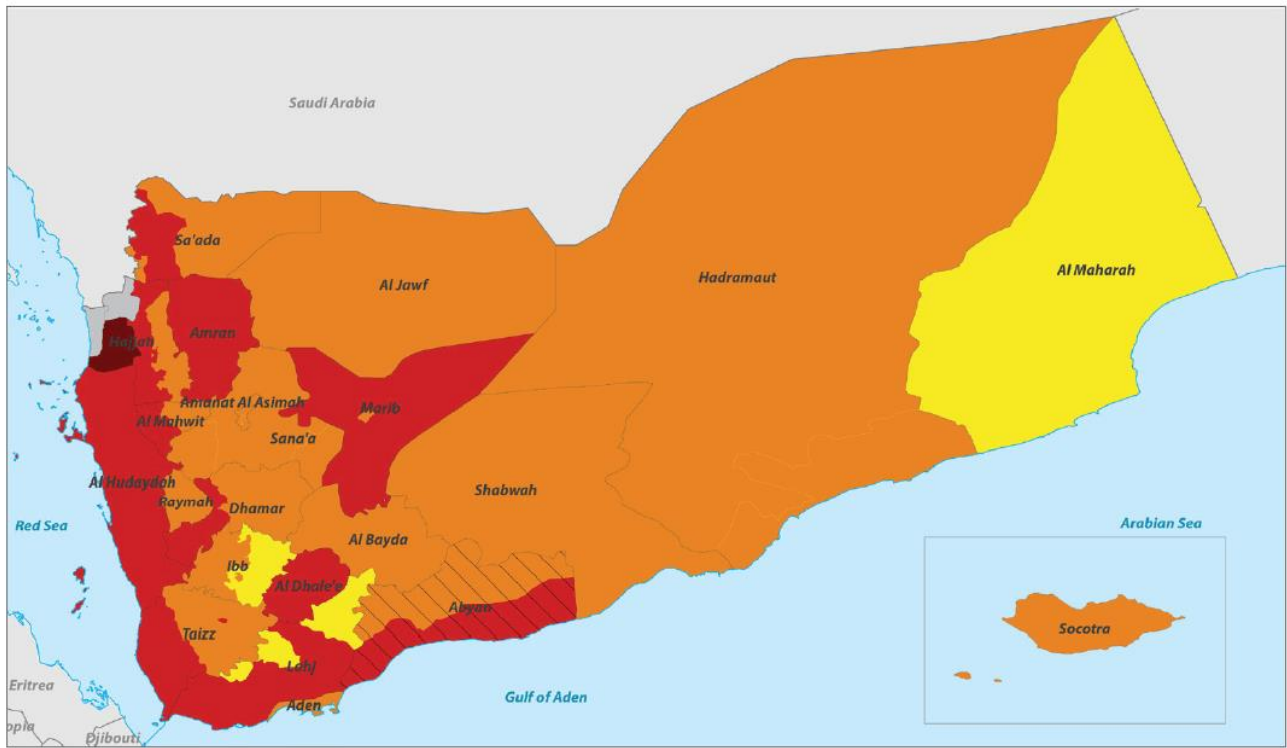
Domestic farming, livestock and fish production can contribute to the improvement of the situation, as Yemen's real gross domestic product (GDP) covers nearly 25% - 30% of its actual food needs. In addition, there is high dependence on imports where, for instance, 90% of the wheat consumed is imported. Women's social and economic empowerment also has a strong impact on the well-being of families and children.

On the other hand, national strategies - along with a number of sectoral policies and plans targeting food security, agriculture, fisheries, water and sanitation and public health - do exist to address the underlying causes of food insecurity. International partners contribute to limiting the deterioration of the nutritional situation through mechanisms of the humanitarian groups. However, there is an urgent need for a coherent approach (multi-system, multi-sectoral, multi-level, multi-stakeholder), in addition to a two-tier approach linking emergency response to sustainable development, in order to ensure local and national ownership of such an approach.

The severe deterioration of the situation is observed by comparing the Yemen situation reports. The United Nations Development Program (UNDP) report indicates that a Yemeni child under the age of five died every nine minutes during 2021, compared to every 12 minutes in the previous report of 2019, "Assessing the Impact of War on Development in Yemen¹." The report also anticipated that about 2.2 million children under the age of five in Yemen will suffer from severe malnutrition this year, indicating that 538,000 children among them would die if they have not received urgent treatment. These figures point to a surge in the severe acute malnutrition cases in Yemen since the war began .

¹ <https://reliefweb.int/sites/reliefweb.int/files/resources/Assessing%20the%20impact%20of%20war%20in%20Yemen%20-%20Pathways%20for%20recovery.pdf>

Projected Acute Malnutrition Situation June – December 2022



Food Systems in Yemen



Current Context

The fisheries sector is one of the promising sectors to rely on for contribution towards stimulating the national economy, enhancing food security and raising the level of nutrition in Yemen. The country has a coastal strip extending approximately 2,500 km in length, overlooking 10 coastal governorates, including 3 governorates on the coasts of the Red Sea, “Hajja, Hudaydah and Taiz,” while the rest are located in the coasts of the Gulf of Aden and the Arabian Sea, “Lahj, Aden, Abyan, Shabwah, Hadhramout, Mahra and the Socotra Archipelago.” Yemen also has more than 150 islands, most of which are located in the Red Sea. Hence, there is environmental and livelihood diversity of the Yemeni fisheries, both pelagic and demersal/bottom fish, as well as marine biotas along the coastal strip and the shores of the islands. Findings of fishery studies and research indicate that there are 350-400 species of fish and other biotas, of which only 60 species have been exploited, accounting for 15-17% of the total types of fish found in the Yemeni waters. Such studies also confirm that the production capacity of these coasts amounts to approximately 350,000-400,000 tons annually, while the actual exploitation does not exceed 200,000 tons annually. Therefore, there are still many investment opportunities, whether in the field of fishing, marketing and exporting, or in the forward and backward industries of investment in the field of storage, refrigeration, packaging, as well as the manufacturing of ships, boats and fishing nets.

Within the framework of the multi-sectoral nutrition plan for scaling up nutrition in Yemen, which is adopted by the SUN Yemen Secretariat, the Ministry of Fish Wealth has sought to develop an integrated concept aimed at enhancing the nutrition aspect through a set of meticulous interventions and activities whose preparation was overseen by local and international experts in the field of nutrition. Such interventions and activities aim at:

1. Raising awareness of the importance of consuming fish as food that contributes towards the reduction of malnutrition;
2. Expanding the marketing of fish and fish products, and covering areas that fish products do not reach;
3. Ensuring the quality of fish by strengthening the capacities at all phases: “production, preparation, and marketing”;

4. Strengthening livelihoods in coastal communities and supporting coastal women through a set of micro-enterprises that contribute to increasing incomes and improving families' livelihoods;
5. Strengthening the role of fisheries research with the aim of preserving and sustaining fish stocks;
6. Increasing fish production by adopting fish farming projects and encouraging expansion in this field;
7. Providing nutrition programs for small-scale fishermen producers with the aim of raising the level of nutritional awareness in coastal communities;
8. Encouraging the business sector, particularly small and medium enterprises, to invest in the fishery field.

During the past years, the fisheries sector has had a lot of material resources and investments, which were reflected in the noticeable increase in production. Measures have also been taken to identify and develop coastal services with all their components being the mainstay of developing production processes in the traditional and commercial forms.

The percentage of exploitation of the fish stocks available to catch increased from 19% to 57.5% in 2006, thanks to the remarkable development in fish production. Per capita consumption rates are affected by three basic elements (production, exports and population growth). Yemen saw a development in production and exports and a decrease in the population growth rate from 3.7% to 3.1%.

All the applicable laws in Yemen regarding hygiene rules during the handling and preparation of fish and fresh fish products, as well as frozen, canned, dried, salted and smoked fish are based on the FAO regulations and the WHO rules. However, there is a failure in terms of compliance to the specifications and standards, and a lack of control over the enforcement of those laws.

With the progress of the activity of Yemeni fish exports, it has become necessary to keep pace with such a progress in terms of meeting the requirements of the export target countries, particularly the European group. The Yemeni specifications and standards are the same as those of the European, not to mention that all the procedures are currently applied, which were approved by the European Commission that oversaw the training and qualification of the Yemeni government personnel on the implementation of these requirements. The commission provided support for conducting several courses to train the Ministry's personnel, as well as technical specialists from corporations, factories and laboratories of the private sector in everything related to the health and control conditions relating to the production and marketing of fish products.

Food produced in the aquatic environment plays a special role in nutrition as a source of the omega-3 long-chain fatty acids, eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), which are important for the optimal development of the brain and nervous system of children. Thus, fish consumption is particularly important during the pregnancy period and the first two years of life (the 1,000-day phase) while many vegetable oils provide an alternative source of the omega-3 fatty acids.

There is a focus of interest in fish products as a source of micronutrients, such as vitamins and minerals. This is particularly true as regards smaller aquatic species that are eaten whole with their head and bones, which could be an excellent source of many essential minerals such as iodine, selenium, zinc, iron, calcium, phosphorous, and potassium, as well as vitamins A and D, and several vitamins from Group B.

Therefore, fish production serves as a foundation for bridging the nutritional gap in the production of animal protein. Focus on the diversity of fish production sources has become an urgent and imperative necessity, as it is one of the renewable sources if it is well-utilized and maintained, in order to ensure its contribution to providing food security and economic and social development for the population in Yemen.

Fish Farming in Yemen

The focus of interest in establishing fish farms comes as another source to enhance production from natural resources, reduce overfishing and preserve fish stocks. It has already been proven that a unit area of fish farms produces more than 10 times the capture fisheries, which encourages a serious trend towards this type of investment in the fish sector.

Yemen is one of the countries that rely heavily on fisheries as an important source of national income, after oil. Therefore, the government is keen to preserve the fish stock. This can be achieved by rationalizing the fishing operations; developing the fish farming aspect to increase production; maintaining the ecological balance of such wealth; developing the sector in a way that enhances sustainable development; supplementing the national economy; enhancing nutrition; creating job opportunities; and reducing the level of poverty and unemployment. For the sustainability of fisheries, fish farming must be included as an essential component in the sustainable development of fish resources.

Yemen has immense sites along the coastal strip that are suitable for fish farming. While investment in establishing fish farming projects in Yemen is limited, it stands as a successful experience and has clear economic feasibility.

The government seeks to improve fish farming by developing an institutional framework to manage, organize and expand the establishment of farming projects because of its significant role in increasing fish production, as well as enhancing and raising the level of nutrition.

Fishery Associations and Cooperatives

In Yemen, the cooperative work involves an urgent need for those working in the field of fishing, due to the nature of the risks of such a profession. Moreover, the fishery cooperatives represent institutional frameworks that contribute towards the development of artisanal fishing and infrastructure management, in addition to serving fishermen, increasing and marketing fish production, and contributing towards the development of the coastal local communities. Such fishery cooperatives, indeed, provide facilities, such as the provision of fishing tools and equipment, as well as maintenance services and fish marketing. They play an important role in the field of maritime control and inspection through the formation of marine committees with fishermen as members to find out issues related to preserving the environment and protecting wealth and resources from damage and violations. In addition, fishermen follow customary laws and regulations, a step which can lead to a positive position towards accountability. The fishery cooperative work saw a remarkable growth, as the number of cooperatives along the Yemeni coastal strip and islands has increased from (15) in 1990 to (135) cooperatives in 2017, so has the number of the member fishermen that amounted to (76,000).

Damage caused to the fish sector as a result of the ongoing war and conflict in Yemen

The fisheries sector is one of the economic sectors that have been greatly affected by the war and conflict in Yemen. Almost the entire infrastructure of this sector was targeted, including ports and landing and export centers, along the western coastal strip of the Red Sea. Fish landing sites were destroyed by direct targeting, and laboratories and fishery centers were disrupted. Fishermen were also prevented from going into the sea; others were besieged and their boats were targeted, not to mention the closure of the export outlets. This has caused great losses to the fishermen, due to the high costs of fishing trips and the low prices of catch. Moreover, some 37,000 fishermen lost their jobs, while many residents were displaced from their coastal villages and prevented from going into the sea, on top of confiscating their tools, which threatened the livelihoods in their areas. Consequently, the coastal residents became either displaced or unemployed. Still, local funding for the fishery sector activities has been cut off. This has caused great losses to the national economy, as the fisheries sector is the second mainstay of the economy after the oil sector, in addition to the natural disasters that most of the capture fisheries in the eastern governorates and the Socotra Archipelago were exposed to, as a result of climate change, which resulted in the recurrence of storms and cyclones in recent periods.

Government Efforts to Enhance Livelihoods in Coastal Areas

Risk in coastal areas has risen to an emergency level. The government seeks to implement a set of priorities incorporated into the framework of a strategic plan that accommodates all phases. Such a plan starts with the resilience and recovery phase, aiming to increase employment and livelihood opportunities for all fishermen to help them reach sustainable livelihoods, which will in turn enable them to recover. Consequently, the fishermen will provide the requirements for promoting advancement towards the implementation of other strategic phases that aim to restore infrastructure and revitalize the economic cycle. Moreover, the government seeks to create livelihoods for the local people in the coastal areas to make them less vulnerable and more resilient to economic shocks. The interventions may include:

- Compensating and supporting the affected fishermen by owning fishing gear such as nets and boats, and repairing the damaged ones;
- Assisting the most affected families on the coast, including coastal women;
- Supporting income-related livelihoods and food production;
- Increasing support for public works programs to employ young people in infrastructure and develop their skills in the use of modern equipment, as well as preservation, refrigeration, transport and marketing;
- Cooperating with international organizations to overcome the funding crisis, which still requires an increased level of coordination, cooperation and partnership. The multi-sectoral nutrition plan is one of the most important mechanisms adopted by the government to mobilize funding and build the capacity of the fisheries sector.



The countries involved in the SUN Movement adopt food systems as a new concept to enhance nutrition and diversify its sources. Through the agricultural sector, these countries aim an increasing their contributions towards nutrition to the maximum extent possible; mobilizing the underlying sectors to operationalize them in increasing the production of crops and agricultural commodities in a way that enhances nutrition and health to support the livelihoods of the population in all areas, particularly the rural ones; and disseminating nutritional awareness among farmers and poor families in a way that improves the nutrition of their members, including the most vulnerable groups such as women and children.

In Yemen, the decline in agricultural production, with a growth rate of only 1.9%², amid an estimated population growth of 2.8%³, poses a threat to the economic stability in the country, which indicates the existence of a gap between population and agricultural growth. The decline in this sector's growth rate is an indicator of the economic risks and the spread of poverty and famine among the population.

In this regard, the government seeks to increase the agricultural growth rates to achieve food and nutrition security, combat poverty through the production of food commodities for consumption and marketing, improve and diversify sources of nutrition, increase reliance on food resources, as well as improve income and access to food, and improve the relationship between consumers and sources of food.

The National Strategy for the Agricultural Sector 2012-2016 identifies the main problems facing the agricultural sector in Yemen as follows: Low productivity; shrinking public investment; and poor empowerment of rural women, who bear the burden of most of the requirements of household management, health and nutrition. The strategy indicates that these three factors cause an increase in poverty rates, food insecurity and malnutrition in rural areas at the local level, as well as dependence on food imports, and consequent exposure to price shocks in

² Central Statistical Organization (2020)

³ Yemen Population Status 2021, National Population Council

foreign markets and fluctuations in supply at the general level.

It requires sustainable development of the agricultural sector, by raising the level of investment and legislative and legal support, to achieve rates that are consistent with the population growth to cover the mounting needs, reduce food imports, and achieve better levels of food and nutrition security and sustainable agricultural growth.

It also calls for enhancing the resilience of farmers in rural areas and harnessing their resources to grow a variety of crops and commodities including grain, fruits, vegetables and animal husbandry, rather than focusing exclusively on growing cash crops to sell in the market.

Moreover, the strategy calls for supporting and improving livelihoods and access to sufficient and steady food, which improves the economic situation of families and communities alike, considering agriculture as the main source of income for many families, particularly in rural areas, to enable them to meet their needs with unproductive food resources, in addition to the ability to access health care, education and clean, safe water.

The importance of the agricultural sector in the national economy:

Agriculture in Yemen is not only an economic sector, but a way of life that has economic, social and environmental functions. It is the most important productive sector among the various economic sectors now and in the long term. This can be seen in its contribution to nearly 17.6% of the GDP as the largest sector of the national economy. Together with the contributions of other economic sectors related to agricultural activities, such as (transportation, trade, manufacturing, etc.), the importance of the agricultural sector will increase through the following:

- Some 73.5%⁴ of the population are associated with the agricultural sector because their livelihood is linked to the rural areas, whether they directly work in the field of agriculture or work in services, crafts and industries that serve both rural and urban residents;
- Employing more than half of the labor force in the country, i.e., some 52%⁵, as this sector is the most accommodating and provides job opportunities to a large number of the labor force;
- Providing a large part of the population's food needs, and in light of the population growth rate of 2.8% annually³ which requires the government to develop this sector at rates greater than the population growth rates to cover the increasing needs of the population and reduce the currently imported food;
- The agricultural sector contributes to nearly 17.6%⁴ of the GDP; the arable area is 1.452 million hectares, and the total area is about 1.609 million hectares;
- The agricultural sector is responsible for preserving the environment and ecological balance by increasing and protecting the green space, and exploiting and maintaining natural resources that have deteriorated and increased the area of drought, desertification and the loss of fertility elements in the soil;
- The agricultural sector is a relative stabilizing factor for the population and a limiting factor for internal migration, as well as a factor in reducing the rates of social and economic problems (crime and delinquency) and utilizing innovative capabilities and potentials;
- It accounts for a significant portion of non-oil exports.

⁴ National Strategy for the Agricultural Sector 2012-2016

Agricultural growth has positive effects on poverty reduction and food security through:

- Providing adequate and varied food, and achieving higher income.
- Reducing poverty, famine and malnutrition,
- Creating job opportunities for a large segment of the labor force,
- Preserving biodiversity.
- Contributing to meeting human needs and basic requirements for rural resilience and enhancing livelihoods, which can be reflected in improving the living and nutritional standard of families and in alleviating poverty.
- Increasing the contribution towards the GDP.
- Providing raw materials from local agricultural products in a way that promotes the development of food industries, as well as reducing the imported processed-food items and promoting the use of local products.

The role of the agricultural sector in the multi-sectoral nutrition plan 2021/2023 is to increase the level of productivity of the main crops (cereals, vegetables, fruits), enhance sources of income for productive agricultural families, and improve the quality and quantity of food for consumption. This will be useful for small farmers in the various governorates across Yemen. The plan contained six direct objectives, each of which involves a set of different activities to achieve such objectives.

Rural women and their impact on malnutrition

Rural women receive special national attention, stemming from the fact that they bear most of the burdens of work at home. They also have an important role in agricultural work, both farming and livestock, as they carry out wide-ranging activities that include food production, food processing and marketing. They are more affected by the consequences of undernutrition or food insecurity. Surveys indicate that there are key challenges facing rural women in the field of agriculture, including:

- Lack of adequate drinking water, and the difficulty in obtaining irrigation water.
- Failure to provide rural women with agricultural extension and other services at the required level, on top of limited training.
- Limited government funds and activities for rural women development programs.
- It is difficult for women to obtain soft loans from those who have formal titles to plots of land.
- Prevailing social customs that limit women's participation in development projects, associations and cooperatives.
- Limited studies, research and data on the role of rural women in agriculture.

Therefore, there is a need to empower rural women in a way that qualifies them to participate more effectively in issues that affect their lives, particularly in the nutritional aspects. There is also a need to raise awareness about the role of gender in the processes of effective community participation in order to achieve household and community-nutrition sufficiency at various levels.

Advantages of investing in the agricultural sector:

- Provides an arable agricultural area, estimated at 1.5 million hectares 6.
- An improvement in annual precipitation rates in light of climatic changes, which provides additional quantities of irrigation water, encouraging investment in this important sector.
- There is climatic diversity that provides suitable opportunities for the diversification of agricultural projects (farming and livestock).
- The availability of raw materials in large quantities for agricultural projects.
- The availability of trained and qualified agricultural technical staff to make the agricultural projects successful.
- Several Yemeni agricultural products enjoy comparative advantage.
- Highly-skilled, competitive and cheap workforce is available in Yemen.
- Continuous improvement in agricultural extension services, in addition to prevention and animal health.
- There is a great interest that the government attaches to the agricultural sector, whether in terms of its orientation to the reclamation of agricultural land or the credit and marketing facilities provided to farmers and investors in this sector.
- The government's serious approach to raising self-sufficiency rates in some important products. To achieve this, the government established several projects and institutional services to increase agricultural investments in the production of such crops.
- Competition in the agricultural sector is relatively low.

The multi-sectoral nutrition plan contained six objectives with a set of different activities, as follows:

1. Enhancing the capacities of the agricultural staff who provide nutrition-sensitive agricultural services;
2. Increasing productivity and improving the quality and diversity of the agricultural crops;
3. Increasing productivity and improving the health and quality of livestock;
4. Increasing the efficiency of sustainable irrigation and water management at the farm level;
5. Supporting and upgrading small-scale food production, processing and retailing;
6. Increasing the level of understanding and awareness about good nutrition practices, food safety and hygiene.

The health and social impacts of khat on the most vulnerable groups, particularly “women and children”

Khat affects health in many ways, as it causes high blood pressure and would contribute to lowering the weight of newborns and infants if consumed by pregnant women. It is one of the causes of cancer, due to the excessive use of multiple pesticides. The use of insecticides and fungicides is very common in the production of khat, not to mention that such pesticides are not being used for agricultural production as per the international standards. Moreover, khat drains the family budget and wastes the time.

The area planted with khat has increased more than 13 times 6 during the past three decades, which has led to a decrease in the areas cultivated with food and export commodities such as coffee, fruits, vegetables and sorghum. In 2019, the area planted with khat reached about 167,000 hectares 6, accounting for 15% of the total cropped area 6 and 28% of the irrigated area 6. Khat consumes huge amounts of the limited water, which reduces the quantities available for strategic crops and high-value commodities that contribute to providing

foreign currency and improving food security conditions in the country. It also consumes 23% of the total water consumption⁵ and 25% of the water consumption in agriculture⁷. The increasing consumption of khat contributes significantly to worsening the problem of poverty and nutrition and food insecurity, and is considered one of the main causes of the spread of malnutrition among the Yemenis.

The prevalence of khat consumption is a dangerous phenomenon, particularly at the level of food-insecure families. Reducing the demand for khat is the most difficult challenge facing Yemen, as it is closely related to social dimensions. Promoting crops as alternatives to khat requires great efforts to improve the profitability and competitiveness of such alternative crops. To address these challenges, it is necessary to establish an institutional system to deal comprehensively with all the intricate issues of khat in the short and long term.

The most major problems and obstacles facing the agricultural sector:

The National Strategy for the Agricultural Sector 2012-2016 identified the major problems facing the agricultural sector in Yemen as follows:

- Low productivity "despite recent improvements in water-use efficiency".
- Decline in public investment, "including in agricultural services, research and extension".
- Strengthening the role of rural women, "as they take on three quarters of the agricultural work and all the requirements of family management, health and nutrition."

The strategy indicates that these three factors cause an increase in poverty rates, food insecurity and malnutrition in rural areas at the local level, as well as dependence on food imports, and consequently, exposure to price shocks in foreign markets and fluctuations in supply at the general level. Other problems and obstacles include:

- The inadequacy of budgets approved for the agricultural sector.
- The scarcity of natural resources such as water and the lack of arable land for several reasons, such as desert encroachment and drought.
- Climatic changes have greatly affected agricultural production directly during the recent past.
- The fragmentation of agricultural holdings, which is a problem the agricultural sector suffers from in most developing countries.
- The increase in the area cultivated with khat at the expense of other food crops.
- Poor training and qualification for the agricultural technical staff.

Addressing these development challenges that are related to the agricultural sector and food production in Yemen entails a real political approach and the concerted efforts of official, international organizations and the private sector in Yemen to support and protect this sector and everything associated with it, in order to reach better levels of food and nutrition security and sustainable agricultural growth .

⁵ Previous studies.

Education Sector and Social Protection

Education Services

The Yemeni government has given a high priority to increasing enrollment in education, particularly the enrollment of girls in schools in rural areas. The 2021/2022 estimates indicate that more than 6.5 million students have enrolled in education throughout Yemen. The number of students enrolled in basic education amounted to 5,689,000 male and female students, including 3,116,000 males and 2,574,000 females, while the number of students enrolled in secondary education amounted to more than 882,000 students, including 508,000 males and 373,000 females.

The students are distributed among 17,487 schools throughout the Republic, where the total number of basic education (primary) schools is 12,814 schools, including 802 schools for males, 647 schools for females, and 11365 mixed schools (males and females), while the number of secondary schools is 4300 schools, including 438 schools for males and 560 schools. There are 3302 mixed schools (males and females), while the number of private secondary schools has reached 373 schools, including 151 schools for males, 62 schools for females, and 160 mixed schools (males and females).

The government seeks to respond to urgent and emerging needs in the economic and social field through a set of policies and procedures to provide appropriate solutions and interventions. It pursues policies that aim at integrating a range of nutrition-sensitive programs, including: Strengthening the awareness and educational aspect, developing curricula to include messages that raise the level of nutrition, as well as providing nutritional incentives.

In light of its policies, strategies, and five-year and annual plans, the government aims to provide incentives through the implementation of many activities to create opportunities for enrollment in education in general, and to support girls' education in particular, while encouraging them to enroll and continue in education. Among these activities is the Nutrition Project for Supporting Girls' Education in Rural and Poor Areas.

It is one of the projects to support girls' education in rural and poor areas in the Yemeni governorates, to bridge the gender gap in education (males and females), reduce dropouts by distributing foodstuffs to female students as a way of encouraging families to push girls to learn, as well as to contribute towards poverty alleviation, in general, and food security, in particular. The Education Ministry seeks to scale up nutrition in schools by increasing the provision of school meals, in addition to distributing biscuits to students and providing nutritional supplements for young girls. It also seeks to rehabilitate sanitary facilities in schools, provide safe water and a healthy environment and reduce the spread of diseases. The multi-sectoral nutrition plan includes the following interventions:

- **Scaling up social protection interventions:** Social protection is one of the most important pillars of the interventions of the multi-sectoral plan, and of the plan for combating child wasting. It includes conditional cash transfers, conditional cash incentives for the families of female students, an integrated model for social and economic assistance and empowerment, and family cash vouchers for 1,000 days (a mother's period of pregnancy and breastfeeding). It also includes provision and scaling up of a comprehensive supplementary feeding program; provision of general food assistance (food baskets) for the most vulnerable groups; cash voucher project intended specifically for improving the consumption of fruits and vegetables as food at the

household level; conditional cash transfers for nutrition (CCT); and Yemen Emergency Crisis Response (YECRP) to prevent famine - (financial grants and technical assistance).

- **Scaling up nutrition interventions in schools:** This includes creating healthy kitchens for school meals; the rehabilitation of sanitary facilities in schools; the provision of water and hygiene supplies; the provision of safe drinking water; and interventions aiming at improving girls' nutrition and changing positive behavior towards healthy nutrition by targeting the parents' councils and the school communities. The plan's targeted activities can be summarized as follows:
 - Providing students with micronutrient supplements, including iron and folate;
 - Deworming students, and providing medicines to treat schistosomiasis/bilharzia;
 - Providing the daily amount of biscuits to students;
 - Providing the daily school meal to students and school staff;
 - Providing hygiene kits to students (boys and girls);
 - Rehabilitating and increasing the quantity and quality of sanitation facilities in schools and providing water tanks;
 - Providing clean drinking water to the targeted schools through chlorination and provision of drinking water tanks;
 - Developing, printing out and distributing educational materials on health and nutrition to improve the capacity of school health workers and volunteers;
 - Training the health supervisors in the field of coaching and mentoring in order to develop the capacities of school health workers in terms of improving the nutritional and health situation of mothers and children;
 - Conducting community outreach activities to improve the nutritional and health situation of mothers and children through the community outreach teams across schools at the governorate and district levels;
 - Training the community outreach teams and school representatives at the central, governorate and district levels on raising the community awareness about nutrition and health;
 - Preparing and implementing outreach programs at schools in areas affected by infectious diseases such as cholera, malaria and dengue fever;
 - Developing, printing out and disseminating food health education/community outreach materials;
 - Establishing parents' councils to increase community participation on a larger scale and outreach services, in order to provide educational, psychological and social support to students;
 - Providing technical and financial support to girls' education and increasing enrollment;
 - Providing conditional cash incentives to the families of female students;
 - Recruiting and training rural female teachers in priority areas.

Scaling Up WASH Interventions

The government works in coordination with international and voluntary organizations operating in this field to provide the necessary support to the public water and sanitation corporations to help them address the shortfall they are facing due to poor revenues, particularly when the subscribers are unable to pay the amounts overdue in light of the deterioration of their economic conditions. This stems from the non-payment of their salaries, and the high prices of everyday consumer goods, as well as the State's inability to provide financial support for the operation and maintenance of the water and sanitation system to ensure the delivery of water to the subscribers. Owing to the disruption of the public power stations over the past period, the process of pumping water to the houses was hampered, which left the subscribers with no water and sanitation services, as pumping water depends entirely on the national electricity grid system.

The multi-sectoral nutrition plan includes the following interventions:

- Improving the capacity of the WASH sector for multi-sectoral coordination and emergency response;
- Increasing the availability of safe drinking water with priority given to people vulnerable to malnutrition;
- Ensuring that water testing is carried out on a regular basis;
- Improving health awareness and practices among the communities, with focus on women;
- Supporting the continuous operation of the Water Resources Management Information System;
- Providing safe drinking water to 3 million Internally Displaced Persons (IDPs);
- Rehabilitating the water supply networks that was partially damaged due to the war;
- Increasing access to safe sanitation services for IDPs;
- Increasing access to improved sanitation and safe and healthy environments, including improved waste management, as well as coastal and marine environments;
- Monitoring the quality of the wastewater treatment plant by testing the yields of sewage plants and assessing the suitability of their use or disposal safely;
- Establishing wastewater treatment units for hospitals and health facilities in an environmentally-sound and scientific manner before discharging wastewater into the sewage network;
- Conducting regular quality tests of the drinking water provided by active actors from the public and private sectors, and linking the testing process with the relevant mechanisms (depending on other activities) to address water quality concerns;
- Training the field teams, with focus on women, on chlorination, environmental sanitation and community outreach, focusing on those rural areas that are most deprived of water and sanitation services.

Food Systems Dialogues in Yemen



Food Systems Dialogues in Yemen

During the period from November 2021 and July 2022, the SUN-Yemen Secretariat has organized a number of workshops and expanded meetings on the national food systems dialogues, which included the first, second and fifth pathways of the food Systems: "Access to nutritious and healthy food for all"; "Transition towards healthy and sustainable consumption patterns"; and "Building resilience to vulnerabilities, shocks and stresses". The team organizing the dialogues has provided support to the participants during the meetings to find practical solutions that are aligned with the requirements of the current context in Yemen, while taking into account the current and future opportunities to support the resilience of food systems in the country. The proposed solutions focused on:

- Strengthening coordination and partnership in order to improve the food systems and alleviate the current food crisis in the country;
- Addressing inequalities in access to food, use of resources, knowledge, assets, technology, and markets/value chains;
- Strengthening the capacities and resources of farmers, fishers, women and youth, as well as micro, small and medium enterprises, to participate effectively in the food system chain – from production to consumption, while providing them with the necessary tools, techniques and advisory support, and enhancing their engagement in the private sector;
- Maintaining risk management at all levels – at the individual, community, government and system levels;
- Coordinating policies, programs and investments (including aid) among all stakeholders, led by governments;
- Exploring blended finance and Public-Private Partnerships (PPP) to mobilize funding for under-resourced initiatives in order to make positive change in food systems;
- Changing unhealthy behavior and practices along the value chains, from production to consumption;

- Identifying harmful agricultural practices such as excessive use of fertilizers and pesticides and excessive irrigation that contribute to the degradation, alkalinity and erosion of soil, as well as to threats to sustainable food systems.

The dialogues in all focused on the following themes:

1. **Building national food systems**, by strengthening infrastructure, information, communication, coordination and learning;
2. **Ending hunger in Yemen**, by reducing food insecurity levels and raising incomes;
3. **Access to nutritious and healthy food**, particularly for the most vulnerable groups such as women (mothers and adolescent girls), children and the elderly;
4. **Food safety**, along the value chains of food systems (from seed to table);
5. **Public policies and national strategies** to strengthen food control and interventions (from production to consumption);
6. **Effective integration and coordination across strategic partnerships** between government, community and international partners to build sustainable food systems;
7. Raising the demand for healthy and nutritious food, and changing behavior and practices towards healthy nutrition.



A future vision for sustainable food systems in Yemen by 2030

While they draw features for the near future in Yemen, the outcomes of food systems dialogues also establish strategic interventions that will improve the level of food security and nutrition, as well as ensure Food Self-Sufficiency (FSS), which stands as an important step towards enhancing security, stability and prosperity in Yemen.

These outcomes take the form of national task-forces, which are clustered into national purposeful groups each of which assumes the task of making a change towards the provision of healthy and sustainable food systems.

These national groups also represent the nucleus of global and regional communication and partnerships with similar and related pathways. These national groups are the result of an urgent need at the national level.

The national task-forces are characterized as follows:

1. They aim to identify gaps and difficulties in order to find pathways of appropriate, efficient and effective solutions;
2. They constitute a center for the reduction of fragmented and unintegrated interventions and policies;
3. They serve as platforms for national systems dialogues in the relevant thematic areas;
4. They serve as a platform for all partners and stakeholders from government, civil society, the private sector and international partners;
5. Such platforms contribute to overcoming coordination problems related to the country's current situation that caused political division and multiplicity of authorities. Those task-forces represent national technical platforms intended for serving people in all parts of the country;
6. Coordinating international, national, and local recovery efforts. Recovery requires enormous resources and coordination in order to achieve maximum efficiency and effectiveness.
7. They promote investments in human health and education for long-term sustainable development; a focus on building human capacity can start off with offsetting such a loss the country has suffered during the previous decade, and can also lead to significant improvements in the future;
8. They expand the scope of investment in empowering women in nutrition and poverty alleviation programs, as well as the family economy through comprehensive recovery;
9. They expand the scope of investment in empowering young people to unleash their potentials, as well as encourage them and respond to their aspirations and ambitions, together with their urgent needs;
10. They focus on food security taking into account the agricultural restrictions in Yemen, with a growing population and several geographical challenges, since the country is highly dependent on food imports;
11. They expand access to the private sector to secure growth, employment and financing; and given the limited government resources, the private sector and civil society will be particularly central in terms of supporting post-conflict recovery;
12. They adopt an integrated approach to post-conflict recovery, focusing on developing systems with an integrated approach to make a sustainable change happen.

On the other hand, the task-forces focus on targeting the following core areas:

1. **Agricultural and Fishery Investments:** Focusing on improving access and availability, and reducing food insecurity;
2. **Economic Development:** Focusing on increasing investment and productivity, while benefiting from diverse sources of funding;
3. **Empowering the most vulnerable groups (women and children):** Demonstrating the long-term impact of improving women's and children's health, education and participation in the economy and society;
4. **Strategic Development Partnerships:** Transparent policies, government effectiveness and effective partnerships between multiple sectors - "public, private, community and international partners with regard to infrastructure development".
5. **Human Capacities:** Developing policies and treatments that can have impact on human development, particularly population health and education;
6. **Quality:** Food safety, from seed to table - "food value chains".

Priority Themic Areas

The National Food System Dialogues focused mostly on “blue foods, green foods, nutrition, health and food safety, and resilience in crisis situations.” These dialogues also identified a number of thematic priorities that, when acted upon, would constitute a transformative path towards a sustainable, resilient and equitable food system. The following is a brief description of the thematic priorities that emerged from the national dialogues on food systems in Yemen; such themes took the form of national task-forces on which the participants in the national dialogues agreed to establish as mechanisms for advocacy, monitoring and implementation.

The task-forces have been proposed by the participants during the Food System Dialogues. The SUN Yemen secretariat aimed at preparing toolkits for the task-forces to help the technical teams work collectively and effectively. The toolkits set the general framework for the outputs, by encouraging the participants to define the goals, objectives and general policies of the task-forces, in addition to developing a brief vision of the current context, the logical framework, and the expected outputs of the national task-forces. The following are the outputs of the participants' task-forces with regard to their perceptions of the national task-forces.



Thematic Priority

1

**Scaling up social
protection**

Thematic Priority 1: Scaling up social protection

1.1 National Task-Force on Social Protection Mechanisms and Zero Hunger

National Context:

The war have led to deterioration in the economic situation; a surge in the poverty and unemployment rate; an increase in the rate of female-headed households; a spike in the number of war-wounded and disabled people; and a significant increase in the number of persons with disabilities. This has occurred amid lack of investment in various fields, particularly in agricultural and fish production, in addition to climate changes in most of the Yemeni governorates and the impact of such changes on farming and fishing.

The absence of social justice and lack of commitment to the principles of social protection (access to food resources) has worsened the situation of the most vulnerable and marginalized groups, on top of persons with special needs and with disabilities. This has also been compounded by the poor services, including “non-payment of salaries”, which meet the people’s needs at a minimum level, not to mention that promoting of small income-generating professions and crafts is lacking, despite the fact that investment projects to support the poor are also lacking.

Rationales:

- Most of the projects are currently emergency in nature, non-developmental and unsustainable;
- The depreciation of the local currency and its impact on the standard of living of the vulnerable groups;
- Poor investment in local resources, which stems from poor access to food resources.
- Low wages and low level of per capita income;
- Lack of funds provided to people with special needs to cover their needs;
- Low level of education outputs;
- Lack of coordination to create an effective and adequate partnership between stakeholders (government agencies, the private sector and international organizations)

Proposed Solutions:

Social protection at the political and legislative level

- Reviewing the wages of employees in the public and mixed sectors;
- Striving for peace, stopping the war.

Nutrition-sensitive social protection

- Creating interventions with adequate budgets, which are supported by public policies that enhance people’s ability to access healthy food, and are implemented through various systems and mechanisms.

Social protection at the educational and cultural level

- Building the capacities of departments, offices and teaching staff and raising awareness of the importance of integrating the food component into the curricula;
- Aiming to promote the efficiency and rehabilitation of education outputs;
- Operationalizing the role of the steering teams in the education sector with regard to food-specific social protection interventions;
- Providing and facilitating access to social services so they can be accessible to all.

Social protection at the economic level

- Providing vouchers to target families to purchase baskets of various vegetables and fruits at a subsidized price to achieve dietary diversity in their meals;
- Stabilizing the local currency and reducing its depreciation;
- Channeling and facilitating investments towards supporting productive families;
- Promoting and supporting partnerships between the private sector and the rest of the sectors to create investment projects;
- Addressing the problems of marketing agricultural products (washing and packaging);
- Improving the efficiency of social protection cash transfers to support food-insecure groups and reviewing the existing support;
- Creating new job opportunities and targeted development to support food, particularly in promising sectors;
- Implementing livelihood programs;
- Operationalizing the role of fishery and agricultural cooperatives, and opening new markets;
- Increasing funding for social protection programs (access to food and anti-hunger programs) through local sources;

Social protection at the health level

- Promoting the health insurance coverage for all social groups by exploring opportunities in partnership with the private sector and the society;
- Focusing on meeting the requirements and needs of persons with disabilities and those with special needs;

Social protection at the agricultural and fishery level

- Improving the quality of domestic production;
- Preserving fishery resources;
- Preserving local seeds, limiting the import of enhanced seeds and harmful chemical fertilizers, and controlling overfishing;
- Creating opportunities and providing assistance with regard to agriculture and fisheries, as well as rehabilitating farmers and fishermen for the development and improvement of production;
- Carrying out customs control, and providing facilities and customs exemptions to farmers and fishermen;
- Regularizing random well-digging, using modern irrigation systems, preventing wastage of water, and preserving groundwater resources;
- Preserving agricultural areas and holdings, and refraining from turning them into housing schemes or others;

Social protection at the control level

- Monitoring and evaluating the performance of the organizations, and following up on the implementation of the projects' phases and facilities that are related to access to food;
- Strengthening the relevant information systems at all levels;

Reconsidering the poverty line and social safety nets to support the affordability of healthy diets by paying attention to the following strategic areas:

- Increasing funding for social protection (food access and anti-poverty programs);
- Increasing investments in food access systems along the value chains;
- Establishing more adaptive systems.

Overall Purpose

Effective national mechanisms for the social protection system in Yemen.

Detailed Goals

1. Increasing the readiness of the social protection sector for all sectors in Yemen;
2. Strengthening the capacities, policies and plans for the principles of social protection in all sectors: "Safe-access-to-food and anti-poverty programs"
3. Focusing more on building the capacity of the vulnerable groups;
4. Promoting community awareness of the importance of food security and safety.
5. Increasing awareness of the principles of social justice, with regard to livelihoods, in addition to food access and security and anti-poverty.

Operational Procedures

1. **Developing the national strategy on social protection for ending hunger;**
2. Supporting development projects and strengthening infrastructure for all relevant sectors;
3. Calling on the parties to the decision to implement the principle of justice in terms of access to food within the legal frameworks and commitment to applying international laws, such as the Human Rights Law, as well as applying social justice;
4. Implementing income-generating projects within the anti-poverty programs and activities, and facilitating access to food;
5. Reopening the sales points, as well as outlets for the public sector, such as (Yemen Economic Corporation) and consumer cooperatives;
6. Empowering the vulnerable and marginalized families and supporting them with small projects that are sustainable in nature;
7. Strengthening coordination among the national mechanisms for social protection;
8. Operationalizing the national strategy to regulate food safety;
9. Directing private sector investments to establish high nutritional food factories according to the requirements of the consumer and the local market;
10. Operationalizing and empowering the supervisory role of the Standards, Metrology and Quality Control Authority
11. Establishing limited joint stock companies to invest in aspects related to food security and nutrition;
12. Granting the necessary facilities to the private sector to invest along the food value chains.
13. Updating the database of the Social Welfare Fund (SWF);
14. Creating small income-generating projects for poor families;
15. Establishing institutions that accommodate young people and women to benefit from the education outputs.
16. Encouraging the community to play a role and enhancing social protection related to access to food and family self-sufficiency.

Coordination Mechanisms

1. Establishing a Social Protection Task-Force, which focuses on enhancing coordination and communication mechanisms through:

- Creating a common space for the stakeholders (government, local authority, private sector, civil society, and people) regarding the implementation of the principles and values of the anti-poverty-related social protection, in addition to securing and providing food and empowering everyone to have access to it.
- Transferring and localizing successful experiences.

Stakeholders (implementation, coordination, funding)

Government (Ministry of Trade and Industry Fish Resources, Social Affairs and Labor, Ministry of Health, Ministry of Education, the General Organization for Standardization, Metrology and Quality, National Committee for Women, Supreme Council for Motherhood and Childhood, Disabled Care Fund, Social Welfare Fund, Social Fund for Development, National Food Safety Committee).

(Central Government Coordination Bodies), and the private sector (the General Federation of Chambers of Commerce and Industry).

Civil Society and the Yemen Association for Consumer Protection, the Agricultural Cooperative Union and other national federations in concern.

Expected Results

1. Policies that do justice to the vulnerable groups;
2. Well-coordinated and formulated public and social policies;
3. Defined roles and responsibilities for the authorities involved in organizing food security and safety;
4. Having effective formalized and social control;
5. Reduction of poverty and hunger among the vulnerable groups;
6. Having more effective awareness among the various groups of society.

1.2 National Task-Force on Compound/Brown Subsidized Bread

National Context:

National bread/loaf or composite flour is defined as a mixture of local grains that contain (50% wheat, 20% corn, 10% barley, 5% maize, and from the rest of the legumes/beans with 50%). These proportions may vary according to the needs of consumers, taking into account the findings of recent studies and research.

The loaf of bread is considered one of the priority programs in the Yemeni scene; it must top the list of the country's sovereign programs, of which the decision makers in Yemen must adopt, in order to achieve self-sufficiency and food security – particularly amid the ongoing war facing the country.

It is worth noting that there are a number of individual or collective attempts by some institutions /civil society organizations (economic empowerment programs) regarding the necessity of consuming national grains or incorporating them within the basic composition of bread (composite flour). However, all of these attempts have unfortunately met with poor awareness of the importance of the composite flour, on which our fathers and grandparents had been dependent since ancient times. History confirms that Yemen was a source of wheat for the world, so do the Yemeni centenarians who have never had refined white flour which nutritionists described as

“white poison”, being extracted from wheat with chemical additions that are dangerous to the human body and result in a number of diseases Yemenis never knew about before.

Therefore, the consumer should depend on the composite flour that should reach every home in Yemen and to those who want to maintain their health.

It should be noted that the composite flour can be included in the recipes of all kinds of home-made pastries and sweets, not to mention that it adds up to their nutritional value and quality.

If it depends on the composite flour, Yemen will save on the import bill of three million tons of wheat, which is worth \$2 billion, paid annually out of public money to American, Australian, and Canadian, Russian or other farms/farmers. This amount will be for the Yemeni farmer, and will be the key factor for promoting more cultivation and production of local grain crops and employing a greater number of the national labor. Specialists also confirm that the bread industry comes from the importance of bread made of composite flour, being the topmost item of the daily meals in Yemen. They say the composite flour is the main source of energy for a consumer; they also indicate that it can have economic return, as it helps the country to save on the import bill of wheat. Composite bread contains iron, phosphorus, potassium and zinc.

It is also necessary to take advantage of the experiences of those countries, including the Arab Republic of Egypt, Iraq, Mexico, which have already utilized technology in making loafs of bread out of composite flour, in order to meet the need for bread, particularly in times of crisis and disasters.

Overall Purpose

Safe and nourishing bread for all.

Detailed Goals

1. Supporting the establishment of bakeries and large ovens that use composite flour, in order to achieve safe and nutritious bread for all;
2. Raising the community’s awareness through various media outlets and social media platforms regarding the importance and benefits of composite flour;
3. Ensuring compliance with the technical and health requirements for the production of healthy, nutritional and subsidized bread;
4. Supporting the local production of cereals by utilizing foreign grants and aid, and making the local production of cereals a top priority.

Operational Procedures

1. Rehabilitating bakeries and ovens in order to shift to the use of composite flour;
2. Supporting the establishment of typical bakeries for the production of composite bread;
3. Re-operationalizing the role of the Yemen Economic Corporation (YEC) in terms of producing subsidized composite bread and restoring the YEC’s role in providing bread production service;
4. Preparing awareness programs, brochures and educational courses, and incorporating awareness about the preparation and importance of composite flour in school curricula;
5. Promoting intensive awareness programs through various media outlets and social media, in addition to involving volunteers and influencers in the society;

6. Supporting the manufacture and production of all kinds of composite flour;
7. Operationalizing the production/product control bodies and adopting the approved Yemeni specifications that include the technical and health requirements for subsidized composite bread;
8. Directing donors to support producers and manufacturers of composite flour;
9. Shedding light on the health problems resulting from the use of refined white flour in the manufacture of bread, attracting the necessary funds, and sounding the alarm among the community members about the effects of the consumption of refined white flour;
10. Supporting local grain producers with all production requirements, such as plows, environmental-friendly energy systems, and enhanced seeds, among others;
11. Transferring and localizing successful experiences in the field of composite flour production and manufacture;
12. Applying the approved standard specifications, including the technical and health requirements for the preparation of composite bread;
13. Issuing laws that require people shift to safe food systems, particularly, composite flour;

Coordination Mechanisms

1. Organizing introductory workshops in the field of manufacturing and using composite flour, in which all stakeholders will participate;
2. Developing and adopting monitoring and control mechanisms to ensure the transition to safe food systems;
3. Adopting sustainable mechanisms to ensure the shift towards a culture of using and consuming composite flour;
4. Building strategic partnerships between the government, the United Nations, the local civil society organizations and the private sector, with regard to transition to safe food systems.
5. Defining the joint accountability framework, roles, responsibilities and work mechanisms, which are distributed from the central level to the governorate and district levels, strengthening the role of the local civil society organizations (in the districts) and encouraging the private sector at the local level.

Stakeholders (implementation, coordination, funding)

Ministry of Trade and Industry - Local Authority - Ministry of Agriculture - Higher Agricultural and Fisheries Committee - (Central Government Coordination Bodies) - Yemen Association for Consumer Protection - International organizations concerned - civil society organizations - Oil Company - Ministry of Health - the General Organization for Standardization, Metrology and Quality - Community Partnerships - Private sector - Food Bank - the Yemen SUN Secretariat - and relevant authorities. - Ministry of Education.

Expected Results

1. Providing safe and nourishing bread for all.⁴
2. Increasing demand and diversified consumption of composite flour.

1.3 National Task-Force on Domestic Food Industries

National Context:

Current Situation

The industrial sector in Yemen, generally, is facing a number of challenges due to the economic, political and security conditions that the country has gone through. This sector has not received enough attention during the previous period, although it contributes 5% of the GDP. The food industry sector accounts for the largest part of the total production of manufacturing industries. Despite the availability of a large number of food products, there is no self-sufficiency in such products, in addition to the fact that most of them do not meet the required health specifications.

The food industry sector enjoys a great deal more than other industries that work to achieve added value; It contributes significantly and effectively to food security, and to a greater extent with regard to self-sufficiency in food products. It also contributes to achieving food security and covering a large part of the needs of the local market with a large number of products. The development of the food industry sector is related to the development of other productive sectors, the most important of which are agriculture and fisheries being two promising and important sectors that serve as the main stream of primary resources associated with the production of most food industries. The following proposal includes a number of objectives that aim at developing local food production and promoting the provision of competitive food products that contribute to raising the level of nutrition in Yemen and changing consumption patterns. This can be achieved by learning from other experiences that aimed at developing initiatives and innovations for various food industries, which played a prominent role in enhancing maternal and child nutrition and reducing malnutrition risks. For instance, industries related to marine products such as fishmeal and fish wafers that are prepared from small fish, particularly when fishery statistics indicate that Yemen has a large stock of small fish, the most important of which is sardine, whose annual production quantity is approximately 60,000 tons. Such fish have not been utilized by food industry programs as food products that contribute to raising the level of nutrition in Yemen; instead, they are currently being caught, dried and exported to neighboring countries as food for camels.

Rationales

- Inadequate processing of local agricultural and fish food;
- Dependence on importing foodstuffs from abroad;
- Imported foodstuffs are low in quality and nutritional value and are more susceptible to contamination;
- Higher rates of malnutrition;
- Failure to make optimal use of abundant agricultural production;
- Higher prices of imported foodstuffs;

Opportunities:

- Having investment laws;
- Abundance of agricultural crops during the growing seasons;

Overall Purpose

Towards self-sufficiency in local food industries (healthy and safe);

Detailed Goals

1. Promoting investment in local food industries;
2. Promoting the establishment of new food industries;
3. Contributing towards the achievement of self-sufficiency in local food products;
4. Supporting local food production by adding micronutrients;
5. Developing and supporting small and medium enterprises for the food industry;
6. Reducing foodborne risks;
7. Developing the food industry supply chains, from producer to consumer.

Operational Procedures

1. Assessing the current situation of the local food industries and exploring opportunities;
2. Establishing national joint stock companies in field of local food industries;
3. Organizing introductory seminars and workshops on the importance and feasibility of investing in the field of food production;
4. Transferring the international experiences and expertise in various fields of the food industry;
5. Building technical capacities of the entrepreneurs of small, medium and micro enterprises of both sexes in the field of food industries;
6. Building the capacities of productive families in the field of home food processing;
7. Implementing and updating food safety-related legislation.

Coordination Mechanisms

1. Strengthening coordination between the government, the civil society organizations and the private sector in order to support the role of investment in the food industry;
2. Supporting the local agricultural and fish food processing in coordination with Ministry of Industry and Trade, Ministry of Agriculture and the General Organization for Standardization, Metrology and Quality, and laying down health regulations and requirements regarding food industries;
3. Preparing proposals for local industry projects, which can be supported and financed by donors, and submitting them to the Concerned parties to search for funding;
4. Promoting awareness of the importance of developing and improving local food products;
5. Preparing and submitting proposals to the Concerned parties for the Management and Coordination of Humanitarian Affairs and International Cooperation for coordinating with international organizations working in the field of nutrition to transfer the pioneering experiences and expertise that are related to food industries;
6. Supporting the efforts of the Government Concerned parties, in terms of coordinating with international financial institutions, by facilitating and simplifying financing and credit procedures;
7. Strengthening advocacy efforts through relevant civil society organizations and international organizations in coordination with government coordination bodies, to produce healthy and safe local food industries, (Central Government Coordination Bodies)
8. Establishing groups of advocates for the products, the consumer protection and the relevant government

agencies.

Stakeholders (implementation, coordination, funding)

External Funding Coordination: (Central Government Coordination Bodies)

Stakeholders: Ministry of Industry and Trade, General Investment Authority, Ministry of Agriculture and Irrigation, Ministry of Fish Wealth, Tax and Customs Authority, General Organization for Standardization, Metrology and Quality, Chamber of Commerce, Ministry of Legal Affairs, Ministry of Education, Ministry of Information, international organizations, Social Fund for Development (Small and Micro Enterprise Development Fund), and Yemen Association for Consumer Protection, as well as relevant civil society organizations.

Expected Results

1. Achieving self-sufficiency in the food industries;
2. Supply the local market with healthy and safe food products;
3. Utilizing the abundance of local products during the production seasons to find local nutritional industrial products;
4. Changing the food consumption pattern of the society;
5. Raising the level of nutrition in the country;
6. Self-reliance (independence) in food production and processing;
7. Contributing towards the realization of food security;
8. Supporting the national economy.

1.4 National Task-Force on Home Economics

Overall Purpose

An economic productive society rationalizing its consumption

Detailed Goals

1. Strengthening the capacities of community members in terms of food measures (production - preservation - recycling);
2. Creating job opportunities for the local community to improve income and achieve self-sufficiency;
3. Encouraging the establishment of home gardens and promoting the agricultural awareness;
4. Training and building the capacities regarding the recycling and utilization of household waste;
5. Stimulating and encouraging marketing outlets to absorb products of the home economics;

Operational Procedures

1. Introducing texts related to the promotion of home economics awareness;
2. Incorporating home economics programs into the textbooks of schools and literacy centers, as well as the local community;
3. Preparing a simplified training manual for the practical aspect of home economics;
4. Promoting social media by raising the health, nutritional and occupational awareness among the families;

5. Promoting awareness on the importance of replacing ornamental trees with food cultivation by awarding prizes on world days (afforestation, food);
6. Learning from successful experiences in the field of home economics;
7. Promoting the utilization of the agricultural abundance in the production seasons;

Coordination Mechanisms

1. Transferring and localizing successful experiences in the field of home economics;
2. Establishing a Task-Force to prepare a manual (book) on home economics in partnership with the concerned ministries and relevant authorities;

Stakeholders (implementation, coordination, funding)

External Coordination: (Central Government Coordination Bodies)

Stakeholders: Ministry of Education, Ministry of Public Health and Population, Ministry of Agriculture and Irrigation, Ministry of Fish Wealth, Ministry of Industry, Ministry of Water, Ministry of Planning (the Nutrition Secretariat), and Social Fund for Development, Ministry of Local Administration, as well as international and local organizations.

Expected Results

1. Realizing family self-sufficiency;
2. Finding cost-effective, safe and healthy alternatives.

Thematic

Priority

2

**Expanding the scale and
quality of agricultural
and fishery products**

Thematic Priority 2: Expanding the scale and quality of agricultural and fishery products

2.1 National Task-Force on Food Self-sufficiency

National Context:

Yemen is exposed to a number of crises, natural disasters, and challenges, the most prominent of which is the big gap between local production of food commodities and imports. Official figures confirm that Yemen imports 3.5 million tons of grain annually at a cost of more than \$2 billion. Wheat accounts for 40% of the imported products and 37% of food industries, and legumes/beans account for 10%, while the imported items amounted to 896, accounting for 90% of the agricultural needs, the food insecurity, the security situation, the high level of poverty, the increase in the population growth rate and the limited resources. These challenges can be addressed through the reduction of poverty and the improvement of food security, by increasing local production of food and strengthening efforts to contribute to combating poverty in rural communities, ensuring the sustainability of natural resources, preserving the environment, improving marketing efficiency, reducing post-harvest losses and strengthening export capacities in the field of fruits and vegetables. However, there is a problem that stems from the scarcity and limitation of water resources and the degradation and desertification of agricultural lands, along with the challenges to the management of watersheds, the improvement of the vegetation cover and the replenishment of groundwater, which would preserve agricultural lands.

Consequently, we present these rationales for increasing and reclaiming the agricultural lands; managing water use with modern irrigation technology; expanding water fisheries; making use of treated sewage water for agriculture; developing seeds that are resistant to drought and plant pests; setting priorities and identifying priority food commodities to attract local and foreign capital to invest in the production of such commodities and in the processing of vegetable, livestock and fish food with the aim of contributing towards food security to achieve self-sufficiency and reduce the cost of the import bill of grain and fodder; enhancing livestock, developing their resources and production and paying attention to health livestock; and supporting the role of women and families in the agricultural sector, as they carry out wide-ranging agricultural activities that include food production, food processing and processing for marketing; as well as improving physical and economic opportunities for all people to have access, at all times, to nutritionally adequate and effective food.

Overall Purpose

Towards the realization of food self-sufficiency

Detailed Goals

1. Setting priorities for food commodities that are important and whose production can be expanded, taking into account climate, water, land and environment;
2. Preparing/updating a national self-sufficiency strategy;
3. Encouraging the private sector to invest in agricultural production (both plant and livestock);
4. Providing the necessary facilities to promote agricultural and fish production in a manner that contributes to achieving self-sufficiency;
5. Improving water management and use;
6. Producing food of high quality and at a lower cost in order to enable the general consumers to obtain it;

7. Involving the local community in contributing towards self-sufficiency;
8. Increasing the efficiency of agricultural production by adopting modern methods of irrigation and agricultural inputs;
9. Advocating the allocation of sufficient budgets to support self-sufficiency projects;
10. Operationalizing the legal and supervisory role to promote agriculture, manufacturing and storage;
11. Adopting a policy oriented towards supporting self-sufficiency projects, access to food, and mobilizing national and foreign resources;
12. Disseminating a culture of self-sufficiency at the national, community and family levels;
13. Preparing programs/projects/manuals to help families to achieve self-sufficiency through home gardening, manufacturing, and drying;
14. Incorporating a culture of self-sufficiency in school curricula at all educational levels;
15. Adopting and preparing capacity-building programs in the field of food processing and making them accessible to all.

Operational Procedures

1. Updating and developing laws and legislations to ensure the protection and encouragement of national and foreign capital by investing in agricultural production, both plant and livestock, in order to contribute to achieving self-sufficiency;
2. The Ministry of Agriculture, the General Authority for Investment and the relevant authorities should draw up an agricultural list or map that includes priority commodities, their cultivation areas and cultivable lands, as well as the investment advantages and opportunities;
3. Establishing public joint stock institutions in which all government sectors, the private sector, small farmers and productive cooperatives participates; such institutions are directed to the fields of agricultural production, both plant and livestock;
4. Providing the necessary financing through facilities and soft loans to producers and breeders to contribute to achieving plant and livestock self-sufficiency;
5. Making continuous efforts to utilize the findings of research and studies to develop seeds in a manner that leads to the production of plant strains that are resistant to drought and diseases;
6. Leveraging artificial intelligence technology to combat plant pests and diseases;
7. The use of modern irrigation methods in agriculture to rationalize the use of water;
8. Making use of treated wastewater in the field of agriculture;
9. Providing grants and opportunities from the government and partners to small farmers and fishermen to increase production in a manner that contributes towards the realization of agricultural and fishery self-sufficiency;
10. Disseminating the best, effective scientific and technical practices related to increasing agricultural and fish production;
11. Staging mobilization and advocacy campaigns targeting donors and relevant authorities to adopt the financing of projects aimed at achieving food self-sufficiency;
12. Organizing workshops and training and awareness programs for farmers at the district level;
13. Adopting and supporting small and medium enterprises for productive families to ensure their contribution to achieving food self-sufficiency;
14. Ensuring the marketing of local farmers' products by developing balanced policies that preserve the product's continuity and the ability of the consumer to purchase;
15. Implementing continuous awareness campaigns that are oriented to all sectors, policy makers, executive

bodies, the private sector, the local community, unions and associations, in addition to mobilizing all efforts to contribute towards the realization of food self-sufficiency;

16. Promoting livelihood activities to realize food self-sufficiency;
 17. Operationalizing funds to promote and support agricultural and fishery production;
 18. Implementing the law that regulates and protects the animal wealth.
1. Raising awareness of the hazards of irrigating vegetables and fruits with wastewater and its effects on the consumer and the environment

Coordination Mechanisms

1. Establishing coordinating committees at the level of ministries, public and private sectors, civil society organizations and relevant institutions in the capital, governorates, districts and villages, with the aim of achieving goals, mechanisms and advocacy, as well as monitoring and evaluation;
2. Establishing community-based committees on self-sufficiency through the Agriculture Ministry's offices to provide technical and advisory support, at the level of villages, sub-districts and districts, to coordinate projects / orientations towards food self-sufficiency, awareness-raising, advocacy, monitoring and evaluation;
3. Preparing periodic reports on the level of implementation, along with the challenges, problems and obstacles, to be submitted to the competent authorities to find the means, treatments and ways to solve them and reach the goals;
4. Organizing conferences, seminars and workshops to set priorities and evaluate the level of implementation of the projects and programs for food self-sufficiency;

Stakeholders (implementation, coordination, funding)

1. Implementation:

- Concerned parties (Government)
- Ministry of Agriculture - Ministry of Fish Wealth - Ministry of Water - Ministry of Education - Ministry of Social Affairs and Labor - Ministry of Industry and Trade - Ministry of Information - General Investment Authority - General Federation of Chambers of Commerce and Industry - Agricultural Cooperative Union - Agricultural and Fisheries Production Promotion Fund - Yemen Association for Consumer Protection;

2. Coordination:

- (Central Government Coordination Bodies) - the Food Security Executive Secretariat - the SUN Yemen Secretariat.

3. Funding:

- The government as represented by the Ministry of Finance and relevant ministries - the private sector - donor countries - local, Arab and international organizations and funds - various donor organizations.

Expected Results

1. Reducing the gap between production and consumption of food commodities;
2. Increasing the cultivation area and establishing vast agricultural fields;
3. Consumers have access to affordable food;
4. Involving families and the local community in moving towards agriculture to contribute to the realization of self-sufficiency;
5. Creating job opportunities for young people to improve income and reduce unemployment.

2.2 National Task-Force to Increase Domestic Agricultural Production

National Context:

The agricultural sector contributes more than 17.5% of the GDP and is linked to livelihoods of some 73.5% of the population in rural areas, where either they work directly in the field of agriculture or in services, professions and industries that serve both rural and urban residents. This sector also absorbs more than 54% of the workforce in the country, as it is the most accommodating sector, in addition to providing job opportunities and covering a large part of the population's needs for food.

Yemen is considered one of the most food-insecure countries in the world. According to UN estimates, the percentage of Yemenis who do not have adequate food amounts to 49%, which is nearly half of the country's total population. Moreover, more than 60% of Yemeni children suffer from stunting. The phenomenon of stunting is associated with rural areas, where two out of three children suffer from stunting. Severe (life-threatening) stunting also affects one third of Yemen's children.

At the macroeconomic level, Yemen is highly dependent on food imports, which represent about 93% of the total wheat consumption. The country is also affected by external shocks that lead to a sharp increase in food prices and pressures on the balance of payments. The recent events have exacerbated the already deteriorating food problem, which has led to a decrease in the economy by 11%. The agricultural sector has dealt a severe blow, with more than 16% decline, owing to the lack of inputs and the disruption of markets.

While Yemen does face challenges, as revealed by the National Strategy for the Agricultural Sector 2012-2016, the country has the power of climate diversity that enables it to produce many agricultural products, in addition to having a long history of farming/agriculture in tough environments and infrastructure. All of these factors contribute to the agricultural sector and the rural economy, in general. It is worth noting that successes can be achieved in increasing productivity, even if the resources-related obstacles come as limitations to such successes. With the availability of additional investments in this sector, those successes cannot only be achieved at the level of economy, but also at the social level; sustainable use of the already scarce resources in the country can also be achieved. Moreover, to achieve those successes, there has to be a new and strong partnership between the farmers, the private sector, the government and the development partners.

Overall Purpose

Crops of high quality and quantity

Detailed Goals

1. Providing infrastructure;
2. Increasing the agricultural production quantitatively and qualitatively;
3. Providing different types of enhanced seeds, improving local varieties and promoting the use of the local enhanced seeds;
4. Building the capacity of farmers; rehabilitating and developing human expertise in related fields;
5. Establishing agricultural community partnerships;

Operational Procedures

1. Increasing the cultivated land by 5% of the total arable land per annum;
2. Providing agricultural inputs (agricultural technology - enhanced seeds - fertilizers -);

3. Increasing crop productivity per unit area (ha);
4. Improving flood irrigation and expanding the use of modern irrigation methods;
5. Promoting the optimal use of safe fertilizers and pesticides;
6. Supporting value chains by (opening markets - rural roads -);
7. Producing and providing high quality, disease-free local enhanced seeds of cereals, potato seeds and seedlings which are suitable for different ecological areas;
8. The Agriculture Research and Extension Authority (AREA) will continue to implement applied research for solving the problems facing Yemeni farmers and referring them to the agricultural extension, in addition to improving local varieties, and introducing and circulating new varieties;
9. Keeping agricultural extension, training and information service going, raising its efficiency to communicate modern agricultural methods to the farmers and referring the problems facing the farmers to the AREA;
10. Encouraging agricultural marketing, as well as the marketing companies and associations targeting either the domestic or foreign market;
11. Qualifying and training farmers and agricultural technical specialists;
12. Establishing specialized training centers;
13. Forming community-based agricultural associations;
14. Utilizing external support and directing the international organizations' activities towards sustainable development.
15. Rehabilitating the infrastructure of the agricultural sector;
16. Supporting the agricultural credit.

Coordination Mechanisms

1. Agreements concluded between the Ministry of Agriculture and Irrigation, the Higher Agricultural and Fisheries Committee and the relevant authorities;
2. Involvement of the government side, as represented by the Ministry of Agriculture, Irrigation and Fisheries, in identifying the interventions of development projects required;
3. Providing the necessary support (government - private sector - donors and supporters);
4. Implementation of agricultural development projects and activities;
5. Community participation and agricultural cooperative action;

Stakeholders (implementation, coordination, funding)

1. Implementing agency: Ministry of Agriculture and Irrigation - Higher Agricultural and Fisheries Committee - Agricultural Cooperative Union -
2. (Central Government Coordination Bodies) – Ministry of Water and Environment - Ministry of Fish Wealth - Ministry of Local Administration.
3. Funding agency: Ministry of Finance - Donors and Supporters - The Private Sector - Community Contribution - Local Councils.

Expected Results

1. Having appropriate infrastructure;
2. Safe access to self-sufficiency;
3. Use of high-quality local enhanced seeds;
4. Qualified and trained farmers;
5. Community participation in agricultural production.

2.3 National Task-Force to Support the Agricultural and Fisheries Investment Environment

National Context:

The Republic of Yemen enjoys a promising economic environment to attract many investments in the agricultural and fisheries sectors, which are both considered one of the main pillars of economic diversification. The Ministry of Agriculture, the Ministry of Fish Wealth and the Higher Agricultural Committee are working to promote investments in the agricultural and fisheries sectors, due to the importance of such sectors in contributing towards the national income, employing national workforce and deploying modern technology applications. Yemen also adopted new pathways to enhance agricultural and fisheries investments by paying attention to small and medium enterprises, in addition to supervising the operationalization of the relationship between the public and private sectors regarding the development of big investment projects that can be relied upon to increase local food production, raise self-sufficiency rates and enhance the food security system.

The two ministries and the Higher Agricultural and Fisheries Committee seek to promote the agricultural and fisheries sectors as a promising and important investment option, in addition to providing technical and material support, and providing the necessary incentives and facilities that help attract investors. The most important investment programs, which are led by the two ministries side by side with the private sector, are as follows:

- 1- The agro-food industries complex
- 2- Fisheries Industries Complex Fishing ports in Hudaydah and Al-Khouba
- 3- Investment in the services provided in the fishing ports
- 4- Investment in the field of marketing, as well as fish and agricultural markets and related activities
- 5- Investment in fish farming

The potentials for investment in the fisheries sector are many and varied: There is biodiversity along 2500 km of coastline, a world-class infrastructure, a globally competitive fisheries sector, a high-quality fish processing sector, a strategic location close to major export markets, and an investor-friendly environment with an attractive set of incentives.

The agricultural and fisheries sector accounts for two major, rather, core elements on which countries rely in terms of their efforts to achieve food security. From this point of view, the leaders in Yemen have expressed interest in these two sectors, stressing on the need to promote both of them according to a long-term strategy.

Fish wealth accounts for one of the renewable natural resources in the country, as it is characterized by the ability to renew itself year after year through the process of reproduction naturally. The resources of such wealth also serve as a main food for a large number of the people, and fisheries represent one of the bedrocks of food security enhancement at the country level. Yemen has a coastal strip of nearly 2,500 km long, rich in fish and marine life, which starts from the borders of Oman on the Arabian Sea up to the end of the Yemeni-Saudi borders on the Red Sea. Yemen also owns more than 182 islands. Given this privilege, which may not be found in any other country, fisheries are the most important renewable natural resource and an important source of national income. The fisheries sector contributes (1-2%) of the GDP with, and represents the second largest source of export revenues

after oil. The Yemeni coast is rich, having 400 species of fish and other variety of marine life. Nearly half a million people are working in the fisheries sector, supporting some 1.7 million people. Estimates indicate that Yemen's annual production of fish and marine species amounted to some 200,000 tons prior to the war, with 30% - 50% of this production being exported, generating revenues estimated at nearly \$300 million. Despite the importance of fisheries, which are considered a lasting and inexhaustible wealth at a low cost, and a major source of dietary protein for local consumption, this vital wealth has not been properly utilized during the past decades. It was subject to looting and destruction by a group of influential people in the State, who turned a blind eye to the behavior and practices of foreign fishing vessels that carry out indiscriminate and over-fishing in the Yemeni territorial waters amid lack of oversight or accountability.

To realize the State's vision, both the Ministry of Agriculture and Irrigation and the Ministry of Fish Wealth seek to put forward various initiatives that would be of assistance to the prosperity and development of these two sectors, and to maximize their contribution towards food security.

At the level of the agricultural and fisheries sectors, both ministries have put forward a number of initiatives with the aim of developing these two sectors, including:

1. Developing agricultural and fishery laboratories (intended for improving the quality of agricultural and fishery products).
2. Providing support to farmers and fishermen.
3. Providing extension services and promoting agricultural and fish investment.
4. Providing typical markets for marketing agricultural and aquatic products.
5. Protecting the marine environment from pollution

In the agricultural and fisheries sectors, the two ministries work with the Higher Agricultural and Fisheries Committee to enable the private sector to invest in fish farming projects, as well as establishing fish processing plants and processing factories (such as tuna production factories, pharmaceutical industries from fish products, and waste recycling factories (feed). The ministries also aim to promote community initiatives (associations, coastal women), pointing out that these current efforts, and the future efforts, will go along with the aim of realizing the aspirations of the leaderships of both ministries to enhance the contribution of agriculture and fisheries towards comprehensive sustainable development.

Overall Purpose

Conducive investment environment for investors, farmers and fishermen.

Detailed Goals

1. Advancing the national economy in the fields of agriculture and fisheries;
2. Directing local and foreign investments in the agricultural, fisheries and food industries;
3. Implementing and updating legislation and regulations related to the agricultural and fisheries investments;
4. Establishing a database of investment opportunities.

Operational Procedures

1. Providing all facilities and incentives (legal, legislative and administrative) in order to create a safe investment environment.
2. Promoting agricultural and fisheries investment;

3. Implementing sustainable investment projects;
4. Implementing the legislation and simplifying the procedures;
5. Collecting data and indicators on investment opportunities in the agricultural and fisheries fields;
6. Issuing guides that contribute to attracting investment;
7. Limiting the transactions to the single window portal;
8. Rehabilitating the agricultural and fisheries research centers;
9. Rehabilitating the agricultural and fisheries training centers and developing education curricula;
10. Developing the cultivation of wheat and other local cereals (millet, barley, maize, sorghum, etc.) through the use of local enhanced seeds;
11. Producing a digital map of the agricultural and fisheries investment areas;

Coordination Mechanisms

1. Convening a national conference to prioritize agricultural and fisheries investment needs;
2. Establishing investment partnerships with the local and external sectors;
3. Conducting ad hoc meetings and workshops;
4. Learning from the experiences and expertise of others (Arab countries).

Stakeholders (implementation, coordination, funding)

1. Implementing agency:

Ministry of Agriculture and Irrigation - Ministry of Fish Wealth - Higher Agricultural and Fisheries Committee - General Investment Authority - Agricultural Cooperatives Union - Ministry of Industry and Trade - the private sector....

2. Implementing agency:

(Central Government Coordination Bodies) – Ministry of Local Administration....

3. Funding agency:

Investors - the private sector - community contribution

Expected Results

1. A conducive environment for investment;
2. Safe access to agricultural and fisheries self-sufficiency;
3. Creation of job opportunities and reduction in the unemployment rate;
4. A diversified economy (establishing factories and processing plants- pharmaceutical industries - recycling agricultural and fish waste - creating typical agricultural and fish markets);
5. Economic sustainability and increase in the agricultural and fisheries exports.

A related Task-Force

Strengthening marketing mechanisms for agricultural and fish products

2.4 National Task-Force on Government Support to Fishermen

National Context:

The Current Situation

The number of fishermen in the Republic of Yemen is approximately 130,000. The fishermen stand out as one of the poorest segments, and the poverty rate among them has increased as a result of the war. The losses incurred amounted to more than YR6.2 million, including losses of fishing boats and gear (250 boats were completely destroyed). Over time, 271 fishermen have lost their lives because they were caught in crossfire or were victims of mines or air strikes. Having lost their source of income, 40,000 fishermen were displaced, and had to seek safety elsewhere along with their families. Moreover, a total of 11 fish landing centers were completely destroyed, including the ports of Midi and Al-Haymah, which led to the suspension of more than 5,000 boats¹.

The lack or increase in the prices of oil derivatives in recent times has posed another difficulty, which has led to the disruption of the fishing process, not to mention the hurricanes that would sometimes lead to the destruction of fishing gear and boats.

Movement from one governorate to another is considered one of the obstacles to transporting fish in a safe and high-quality manner.

Rationales

1. Hurricanes, air raids, and sea mines that destroyed fishing boats and gear;
2. High prices of inputs for fish production;
3. There are landing centers and fish yards that need rehabilitation and maintenance;
4. The use of old fishing boats of small sizes that do not accommodate fish freezers, which consequently results in poor preservation of fish and makes it impossible to sail to distant places;
5. Difficulty in transporting fish products due to the lack of oil derivatives or increase in their prices, which leads to a decrease in purchasing power;
6. Difficulty in coordination with the relevant authorities, which has led to the curtailment of support and the disinclination of most donors to provide projects to support fishermen.

Opportunities:

1. Promoting fish food industries;
2. Improving livelihoods to increase fishermen's income;
3. Rehabilitating the landing centers and fish yards;
4. Deploying networks to connect the landing centers;

Solutions

1. Reviewing the fisheries stock and conducting fishery research.
2. Implementing the legislation and regulations for the improvement of performance and protection of fish wealth.
3. Promoting the activity of typical landing centers and fish yards, including ice block plants, storehouses,

gas stations, quality labs ... etc.

4. Reducing fish losses by providing adequate transportation and storage means.
5. Supporting the fishermen with improved fishing boats.
6. Providing subsidized oil derivatives used for fishing boats.
7. Building the capacities of the fishermen and the coastal women

References

Current Situation Report, 2020

Overall Purpose

Sustainable livelihoods for the fishermen.

Detailed Goals

1. Enhancing the livelihoods of the fishermen;
2. Promoting coordination between the Ministry, the Fish Cooperatives Union and the fish associations.
3. Promoting fish marketing services.
4. Promoting quality fish products at the landing centers and markets (safe trading of fish products);
5. Operationalizing the role of marine control;
6. Improving and modernizing the fishing gear.
7. Protecting the marine environment and maintaining sustainable stocks;
8. Developing and updating fish-related legislation and fish sector's regulations;
9. Protecting the fishermen from attacks, assaults and violations;
10. Supporting the coastal women by identifying and supporting their potentials (training and qualification, awareness-raising. funding).

Operational Procedures

1. Communicating with the relevant parties to support the fishermen (fishing gear, engines, and production equipment: nets, boats, fuels, ice-block containers, life vest);
2. Finding local or external funding sources, in coordination with the (Central Government Coordination Bodies)
3. Building the capacities of the associations and fishermen to support the cooperative work in the coastal communities.
4. Conducting studies and research in the fishery sector (fish stocks, marine habitat);
5. Establishing joint operations rooms with the relevant parties to resolve the fishermen's issues ((Central Government Coordination Bodies), the Ministry of Water and Environment, the General Authority for Marine Affairs, the Higher Agricultural and Fisheries Committee);
6. Establishing plants for the manufacturing and maintenance of fishing boats and gear;
7. Promoting the role of the quality labs and research centers.
8. Introducing the fish farming technology (fishermen - fish associations);
9. Implementing fish-related legislation and fish sector's regulations;
10. Promoting the role of the community-based initiatives in the coastal communities;
11. Promoting the role of the coastal women in the fish production process, as well as in the small and micro enterprises; Identifying and supporting their potentials (training and qualification, awareness-raising. funding).
12. Activating networks to connect the landing centers;
13. Expanding geographical scope of the markets to include non-coastal areas;

14. Introducing the remote-sensing technology and encouraging and training the fishermen to use them, in order to easily access fish settlements.
15. Strengthening the coordination mechanism in order to implement projects oriented to supporting the fishermen's livelihoods.

Coordination Mechanisms

1. Setting up a team of specialists to finalize and sustain the government support to the fishermen;
2. Incorporating the government support to the fishermen into the sectoral plan.
3. Implementing the legislation and regulations governing the fishing operations.

Stakeholders (implementation, coordination, funding)

1. Implementation:

Ministry of Fish Wealth, Coast Guards, Local Authority in the Governorate, Fish Cooperatives Union, Cooperatives, Ministry of Local Administration (General Administration of Islands), Ministry of Transport, Ministry of Education, Ministry of Water and Environment, Ministry of Electricity.

2. Coordination:

(Central Government Coordination Bodies), General Authority of Marine Affairs, Higher Agricultural and Fisheries Committee, Ministry of Information, SUN-Yemen Secretariat, Ministry of Industry and Trade, Ministry of Oil, and the private sector.

3. Funding:

Ministry of Finance, CAC Bank, Agricultural and Fisheries Production Promotion Fund, General Authority of Zakat, donors and supporters, the private sector, and the local communities.

Expected Results

1. Sustainable support to enhance the fishermen's livelihoods;
2. Abundance of high-quality fish products;

2.5 National Task-Force to Support Integrated Domestic Agriculture

National Context:

Yemen has ranked among the world's 10 countries with the highest rates of food insecurity, and is currently facing an unprecedented food crisis.

Today, war and civil insecurity are the main drivers of food insecurity, with devastating effects on livelihoods and the food situation. The Integrated Food Security Phase Classification reports, issued in March 2017, points to a general deterioration in the state of food security and nutrition, with an increase in the total number of food insecure people in Yemen from 14 to 17 million people between June and December of 2016.⁶ This figure makes up 60% of the population, compared to 41% prior to the outbreak of the war. Moreover, some 7 million Yemenis are currently in IPC phase 4 (emergency) while 10.2 million others in phase 3 (crisis). Malnutrition has long been a serious problem in Yemen, while acute malnutrition is a major consequence of severe food

insecurity, reaching alarming levels. The food situation in more than 11 governorates is either serious or critical, on top of the global acute malnutrition rate.

Agriculture is a major source of income in Yemen. Prior to the war, the agricultural sector provided job opportunities for more than half of the Yemen's workforce (54%), and was the main source of income for 73% of the population, either directly or indirectly through services and industries related to the agricultural economy. In addition, the agricultural sector had good potentials and opportunities: Unlike other countries in most parts of the world, in Yemen, the economic dependence on agriculture is witnessing a remarkable increase, due to the stagnation of employment opportunities in the industrial sector and the service sector since 2000. The main agricultural systems are concentrated in the highlands that depend on rainwater, and which are characterized by agricultural terraces known for the cultivation of coffee, fruits and grains, and *khat*,⁷ abundant livestock production, as well as the plains where irrigated horticulture and field crops spread. The poor farming areas in the highlands also pose a challenge, as two-thirds of the food-insecure Yemenis live in the highlands that depend on rainwater irrigation. In addition, 75% of agricultural production comes from those highlands, which are home to 60% of Yemen's population.

Yemen is almost completely dependent on imports to meet domestic demand for basic commodities. Some 80 percent of the food consumed is imported, while local agricultural production represents only 20% of the total food available. The imported food consists of basic foodstuffs such as wheat, rice, oil, sugar and milk. Food imports totaled 4.1 million metric tons in 2016 with a total value of \$3.7 billion. Yemen is self-sufficient in terms of some types of grains (sorghum, millet, barley and wheat) while it imports 85% of wheat. The cultivation of grains, *khat* and fodder represents 80% of the total arable land use, while wheat represents only 16% of the area cultivated for grains. Domestic production also consists of meat, fruits, and vegetables.

The war has greatly disrupted the agricultural production, markets, transportation and distribution. Although productivity was always low, the situation has been made worse by the conflict. In 2016, the total supply of locally grown food amounted to 62% of pre-crisis levels, mainly due to a decrease in the cultivated area, which led to a reduction in food availability and household food stocks. Prior to the war, the sector represented the main source of livelihood for two thirds of the population in Yemen. The crisis has greatly reduced field activities and severely disrupted livelihoods in the agricultural sector. As the main sector in Yemen in terms of the employment opportunities, the agriculture sector is the most affected by the crisis as it has lost nearly 50% of the sector's workforce. This sharp drop in employment is likely to have a long-term negative impact on the agricultural workforce.

References:

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Report No. PIDISDSA21351 Pre-assessment Phase/ date of preparation / date of update: 29 June 2017

Overall Purpose

Integrated farming that contributes to achieving dietary diversity.

Detailed Goals

1. Increasing the diversity of vegetable and fish food;
2. Reducing malnutrition in the targeted areas;
3. Facilitating the access of fish products to areas far from the fish marketing centers;
4. Improving the productivity of vegetable crops;

5. Promoting awareness of the importance of the integrated dietary diversity;
6. Rationalizing the use of chemical fertilizers and pesticides.

Operational Procedures

1. Awareness of products that are suitable for use in fish ponds and home gardens:

- 1.1 Disseminating the concepts of integrated aquaculture (Aqua), which is based on raising fish in aquariums/ponds and using their waste for fertilizing, as well as improving home garden products and rooftop farming.
- 1.2 Providing fish and eggs from river/freshwater fish for breeding in ponds, which are suitable for nutritional use, and capable of breeding and adapting to the local environment.
- 1.3 Training the target audience on the method of preparing agricultural soil suitable for home gardens and making appropriate pots for rooftop farming, with these ratios: (1/3 sand -1/3 clay -1/3 sawdust and “peat moss” fertilizer), as well as raising awareness on how to maintain and protect such soil.
- 1.4 Choosing varieties of suitable various seeds for home farming, and introducing their nutritional and health benefits, such as (cilantro/coriander - parsley - lettuce - tomatoes - watercress - fenugreek, and fruits in the case of having suitable spaces ... etc.)
- 1.5 Providing suitable seeds and seedlings for home farming, particularly those generated at research centers and seed and seedling production associations.
- 1.6 Training the target audience on and guiding them with the means and methods of home gardening and rooftop farming, and providing manuals explaining the methods and timing of irrigation and plant protection.
- 1.7 Conducting training on how to clean ponds and purify and replace water within 1-3 months to avoid algae growth, and reduce the natural vision of breeding fish, which is done using natural filtering, or by scavenger fish that feed on residues and impurities, as well as introducing the target audience to the use of fish waste in fertilizing and improving home farming.
- 1.8 Educating the community to prepare compost from leaf waste, food scraps and house dust.
- 1.9 Recycling food scraps for domestic animal and poultry farming, by cutting, drying and grinding them.
- 1.10 Encouraging the community to establish productive cooperatives and associations, between 5 and 31 or more, according to the law and in light of the capability of the community action, facilitating the exchange of experiences, marketing products and improving livelihoods.
- 1.11 Educating the community about the importance of dietary diversity in the table and introducing healthy foods as a way of life such as (lemon, figs, sesame, honey, milk and its derivatives, vegetables of all kinds, fruits, jams, pickles, and fish, particularly those of high nutritional value and affordable prices, including salmon, mackerel, and *Lakham* - dried salted fish).

2. Reducing malnutrition in the targeted areas:

- 2.1 Providing housewives with home-made food ideas and experiences, such as making jams, pickles and cheeses, as well as methods of drying, preserving and storing, and diversifying the methods of preparing healthy food.
- 2.2 Linking projects aimed at reducing malnutrition by encouraging food-processing activities, such as tomatoes, zucchini, and pumpkin and improving the quality of products.
- 2.3 Educating the community about the types of healthy and safe food, and reducing the use of hydrogenated oils, cheeses, artificial butter, external canned goods, processed and canned meat, and sausages, except in cases of extreme necessity.
- 2.4 Preparing studies to change the dietary pattern based on nutritious local products, and setting ratios for the introduction of different ingredients in food (so that they contain a homogeneous mixture of wheat

and corn "white/yellow/red maize" and Sidr tree fruits.)

2.5 Awareness of the dangers of unhealthy eating habits such as excessive consumption of artificial sugar and salt, fast food .. etc.

3. Facilitating the access of fish products to areas far from the fish marketing centers;

3.1 Teaching the target audience how to dry and preserve fish at home.

3.2 Encouraging people to have tools for preserving, cooling and transporting fish between the fishing and consumption areas (cooler boxes).

3.3 Educating marketers about the proper methods and means for preserving, cooling and transporting fish using crushed ice and cooler boxes.

4. Improving the productivity of vegetable crops:

4.1 Developing local suitable and enhanced seeds in coordination with the Research and Extension Authority, research and studies centers, and experienced farmers.

4.2 Introducing new, good and nutritious food varieties and providing suitable seeds and seedlings accordingly, such as (Moringa - Cassava).

4.3 Educating the community on the importance of natural selection of seeds of different products from different environments.

4.4 Awareness of the methods and timing of seeding and irrigation.

5. Promoting awareness of the importance of the integrated dietary diversity:

5.1 Establishing field schools to educate people about the importance of integrated dietary diversity based on the seasons and climate variables.

5.2 Awareness of the types of food that are suitable for various ecological areas.

5.3 Disseminating the local traditions of preparing plant, animal and fish foods, and the uses of natural oils in home kitchens such as sesame oil and olive oil.

5.4 Promoting the establishment of top models of home gardens and rooftop farming for food production in rural and urban communities

5.5 Promoting the process of harvesting water from the rooftops of houses and facilities and reusing it for drinking and irrigation purposes.

6. Rationalizing the use of chemical fertilizers and pesticides:

6.1 Adopting rational management approach for the use of pesticides and chemical fertilizers, in terms of providing licensed, environmentally sound and safe products, and raising awareness of the methods and standards for their use.

6.2 Maintaining cooperation between the society and the official authorities to combat the smuggling of adulterated fertilizers and pesticides that are not licensed and in violation of the standard specifications approved in our country.

6.3 Promoting the use of insecticides available in the local environment, such as neem (nimtree) and castor oil, and training the target audience on the methods of extracting and using such insecticides.

6.4 Promoting the use and deployment of natural enemies, such as Abul Eid (ladybug), to combat harmful insects, including the black aphid, which is widespread in citrus, grapevines and some almond trees.

Coordination Mechanisms

1. Preparing brochures and pamphlets about the integrated agriculture and disseminating them in the targeted communities.

2. Collecting information and harnessing expertise acquired in the field of agriculture and food, and facilitating their circulation among rural and urban households.

3. Circulating and disseminating modern knowledge related to the field of the integrated agriculture in developed

countries.

4. Organizing training courses and workshops, as well as field schools, to promote modern applications of fish farming (aquariums/ponds) and home farming.

Stakeholders (implementation, coordination, funding)

Implementation:

- Rural and urban households, with low and middle income, as well as the affluent who are interested in the field of integrated agriculture and its nutritional and health benefits.
- Cooperatives and associations

Coordination:

- (Central Government Coordination Bodies)
- Ministry of Agriculture and Irrigation, Ministry of Fish Wealth, Agricultural Cooperative Union, Fish Cooperatives Union, the SUN-Yemen Secretariat, the Local Authority, FAO, and WFP.

Funding:

- Agricultural and Fisheries Production Promotion Fund, Social Fund for Development, and CAC Bank.
- Local and foreign financing institutions that are interested and associated with food and community development, and charitable donations and contributions.

Expected Results

1. Spread of the integrated agriculture among the targeted communities.
2. Improving the standard of living of the low-income households.
3. Making safe, healthy food available for rural and urban households.
4. Improving people's abilities to provide food through fish farming, home gardening and rooftop farming.

2.6 National Task-Force on the Protection from Khat's Effects

National Context:

The continuous increase in the production of khat represents one of the biggest challenges facing Yemen today, as it causes many social and economic problems, the most important of which are as follows:

- It causes many health and social problems.
- Increases withdrawal of groundwater at levels that exceed recharge rates.
- Does not promote the production of major food and export goods

To address these challenges, the government has implemented, since 1999, a set of policies and measures in the short and long terms to control the production and consumption of khat. Although some success has been achieved, the general trends of khat consumption and production continued to persist.

The area under khat cultivation is estimated at approximately 170,000 hectares, which accounts for some 14% of the total cultivated area in Yemen. Between 1970 and 2021, the area under khat cultivation has increased from 8,000 hectares to about 170,000 hectares, respectively. Khat production has increased due to the profitable nature of this plant compared to other crops.

Khat consumption also contributes greatly to the emergence of a state of food insecurity among families, leading to poverty and malnutrition. The habit of chewing khat on a daily basis takes away the family's limited resources, thereby cutting off the portion allocated for food. This phenomenon calls for much attention at the present time

due to the increasing number of family members who consume khat, including women, youth and children.

Moreover, khat occupies an important part of the rural economy, but at the same time it negatively has an impact on food security and contributes to increasing poverty. It also represents a huge burden on the scarce water resources in the country.

Water is considered a very scarce resource. In 1995, the annual water resources of renewable water were estimated at 2.5 billion cubic meters, of which one billion cubic meters were surface water and 1.5 billion cubic meters were groundwater. Water consumption is nearly 3.5 billion cubic meters, which means there is a water deficit estimated at about 1 billion cubic meters. The problem is exacerbated by the expansion of khat production as it heavily depends on groundwater, which represents 80% of production. Estimates indicate that khat production consumes 22.5% of the total water use, and nearly 25% of the total water use of the agricultural sector. Perhaps one of the critical dimensions of the expansion of khat production and consumption is the increasing withdrawal of groundwater, which stems from the excessive pumping of water to meet the growing expansion of khat areas. The unsafe use of pesticides in khat cultivation has caused negative health effects, leading to a high incidence of cancer diseases among khat consumers and those involved in its cultivation.

Addressing the problems of khat and stopping its increasing trends in production and consumption represents a great challenge. While efforts have been made to control it, khat production and consumption continued to rise. This is due to the immense profitability that khat cultivation generates for the producers, not to mention that khat cultivation has an effective marketing system characterized by short marketing channels and a rewarding return for all parties to the commodity chain; such a return is higher than that of all competing crops.

Overall Purpose

Yemen Without Khat

Detailed Goals

1. Reducing khat cultivation and consumption;
2. Reducing diseases resulting from khat consumption;
3. Enhancing the production of other crops to promote self-sufficiency;
4. Reducing the depletion of water used in the cultivation of khat.

Operational Procedures

1. Motivating and encouraging khat farmers to grow alternative crops with high economic returns;
2. Implementing and updating laws related to the reduction of khat cultivation;
3. Utilizing the outcomes of khat-related conferences, as well as previous studies related to the reduction of khat cultivation;
4. Utilizing studies related to the cultivation and consumption of khat;
5. Preparing and disseminating extensive awareness-raising programs on the harmful effects of khat on health and community, and broadcasting them through the media outlets and mosque preachers;
6. Including topics on the harmful effects of khat in the school curricula;
7. Raising taxes on khat;
8. Removing khat markets from the major cities;
9. Banning the reclamation of new lands for khat cultivation;
10. Providing suitable alternatives, such as sports clubs and parks, and banning the consumption of khat in such

facilities;

11. Supporting and promoting the use of modern irrigation techniques;
12. Supporting the Khat Center of the Ministry of Agriculture and Irrigation to carry out its functions.

Coordination Mechanisms

1. Government stakeholders
2. Using social media to facilitate and implement the executive procedures.

Stakeholders (implementation, coordination, funding)

- Ministry of Agriculture and Irrigation, Ministry of Public Health and Population, Ministry of Information, Ministry of Interior, Ministry of Finance, Ministry of Legal Affairs, Ministry of Awqaf, Ministry of Education, Ministry of Water and Environment, and civil society organizations.
- (Central Government Coordination Bodies)

Expected Results

1. A healthy khat-free society;
2. A decline in the agricultural area under khat cultivation;
3. A decline in the percentage of khat consumers;
4. An increase in water savings.

2.7 National Water and Environment Task-Force

National Context:

Preserving the environment must stem from an individual's moral scruple that needs to be strengthened through societal and global awareness of the importance of preserving the environment from pollution (water pollution, soil pollution, and air pollution). It causes water pollution and the extinction of creatures and aquatic organisms or their infection with strange diseases transmitted to humans as a result of the discharge of sewage water (sewage), industrial facilities, oil derivatives, waste dumps and liquid waste from water treatment plants, leaking sewage or petrol filling stations. Warfare in the modern era is also considered one of the major causes of pollution.

Pollution affects the soil and its suitability for agriculture. Polluted water harms the soil, as well as air that contains harmful or toxic fumes and gases. Moreover, allowing the expansion of buildings and factories at the expense of arable lands results in a great loss of such soil. There is a major cause of soil pollution that cannot be disregarded, which is the use of pesticides, chemical fertilizers and hormones, particularly those that are not subject to supervision or evaluation by agricultural or chemical specialists. Undoubtedly, the negative impact of these substances is reflected on the health of the creatures that feed on these plants, the most important of which are human beings, livestock and herbivore pets. This explains the increasing number of people infected with diseases and epidemics, for instance, cancer and its various types.

Environmental pollution is a disaster that must be stopped by raising awareness of the importance of stopping such a disaster, as it particularly caused several problems, including changing the earth's temperature (global warming), decreasing the vegetation cover, the extinction of some creatures, and the pollution of water reserves. Awareness should change people's daily practice, lifestyle and consumption. It is necessary to strengthen control over factories and cars, in addition to reducing air pollution by developing means of waste disposal, including sorting

and recycling. It is also necessary to promote farming, utilize arable lands, reduce logging, and control urban sprawl.

Yemen is one of the Arab countries, which suffers the most from a stifling water crisis, as fresh water resources are dwindling due to excessive pumping of groundwater. The demand for water is increasing due to high per capita consumption, excessive use and mismanagement of water resources, as well as rapid population growth that is expected to double to 48 million by 2037. In 2011, surveys estimated that 4.5 million children live in homes without an improved water source, more than 5.5 million children do not have adequate sanitation services, and nearly half of children under five suffer from chronic malnutrition. Among the reasons behind the water crisis in Yemen are the annual population growth rate of 3% , which is considered one of the highest rates in the world, in addition to water overdrafting, low irrigation efficiency, misuse, mismanagement, non-application of laws, and the impact of climate change. The amount of water currently used in the agricultural sector reaches 90%, of which 40% to 60% is wasted for irrigating khat, followed by domestic use by 7% to 9%, and industrial use by 2%. Moreover, the amount of recharge and withdrawal varies from one basin to another and from one tank to another. Yemen has an arid to semi-arid climate, and suffers from a scarcity of surface water. It is also characterized by a scarcity of rain.

Yemen's annual share of water is considered the lowest in the world; the per capita share of water is estimated at 120 cubic meters per annum. This is equivalent to approximately 2% of the global average of 7,500 cubic meters, and 14 percent compared to the Middle East and North Africa average of 850 meters, noting that the minimum amount of water necessary for food and drinking is 1,600 cubic meters annually. In light of the current situation, it is expected that the per capita share will decrease to 55 cubic meters per person per year. Estimates indicate that the amount of renewable water in Yemen is 2.5 billion cubic meters annually, while the groundwater withdrawal rate is 3.4 billion cubic meters, which means an annual depletion rate of the groundwater reserves of 900 million cubic meters.

Owing to the critical water situation in the country, the government has taken and aimed to implement measures including strategies, legislation, policies and regulations for the environment and water sectors. This included Law No. (26) of 1995 regarding the protection of the environment, to be amended in 2022; The Water Law promulgated on August 31, 2002, and amended by Parliament in December 2006. Work is underway by the Public Authority for Water Resources and the relevant authorities to introduce amendments to suit the changes in 2022. The government also implemented the provisions of these laws, legislation and regulations, including the regulation of random digging and others, in order to work on water conservation, the introduction of water purification, the reuse of rainwater and wastewater, irrigation efficiency and maintenance techniques in Yemen – particularly in the agricultural sector, as well as building dams, water harvesting facilities and flood water collection.

Overall Purpose

Safe water and a clean, sustainable environment.

Detailed Goals

1. Providing safe water and sanitation (urban and rural);
2. Developing water resources;
3. Reducing water depletion and contamination;
4. Protecting the marine environment from pollution.

Operational Procedures

1. Promoting community awareness of the importance of preserving water and protecting the environment;
2. Implementing the relevant laws and legislation (water law - environmental law - regulations to limit random digging);
3. Coordinating with the Central Government Coordination Bodies, in order to support the provision of funds for the implementation of water and environmental projects;
4. Expanding and maintaining the water and sewage networks;
5. Promoting and supporting community initiatives;
6. Promoting investment in the field of water and environment;
7. Assessing the current situation;
8. Recharging the groundwater (dams - caravans - water barrages-);
9. Promoting water harvesting;
10. Reducing the use of groundwater for irrigating khat;
11. Applying penalties for violations of water use mechanisms in general;
12. Using modern methods of water conservation (agriculture);
13. Strengthening the control over drinking water resources (wells - water factories - water purification stations);
14. Monitoring and creating mechanisms to reduce water wastage caused by the use of inexpensive solar energy;
15. Treating and reusing wastewater (treatment plants);
16. Carrying out monitoring to protect the environment from pollution;
17. Coordinating with various media outlets to raise awareness of water and environmental issues;
18. Promoting the role of the environmental advocates;
19. Incorporating water and environmental awareness into the school curricula.

Coordination Mechanisms

1. Stakeholders (Ministry of Water and Energy):
2. Operationalizing the water user committees;
3. Learning from the experience of others.

Stakeholders (implementation, coordination, funding)

External Funding Coordination: (Central Government Coordination Bodies) ; Coordinating with the relevant local authorities;

1. Implementation: Ministry of Water and Environment (its affiliates).
2. In coordination with: (Ministry of Fish Wealth - Ministry of Agriculture and Irrigation - Ministry of Interior - Ministry of Local Administration -)

Local Funding: Coordinating with the Ministry of Finance, the private and investment sectors - community contributions

Expected Results

1. Optimum use of water;
2. Reduced water and environmental pollution;
3. Increased awareness of the importance of water and environment;

2.8 National Water and Environment Task-Force

National Context

Current Situation:

The critical situation of food security and malnutrition in Yemen has further deteriorated in 2022, with 17.4 million people in IPC Phase III and above in need of urgent assistance. The number will rise to 19.0 million starting from June up till the end of the year. The biggest concern is that 31,000 people are now facing levels of extreme hunger, and this number will increase to 161,000 by June. In addition, there are nearly 2.2 million children under the age of five, of whom 538,000 suffer from severe acute malnutrition. It is expected that nearly 1.3 million pregnant and lactating women will suffer from acute malnutrition during 2022. The severity of the risk increases significantly in the forecast period for both food security and acute malnutrition, as 86 districts have went up to higher IPC phases.

Rationales:

- High food prices in light of the decline in income sources and job opportunities, which in turn has contributed towards the deterioration of the food system in terms of quantity and quality.
- As the economic crisis exacerbated, some families resorted to coping mechanisms, in light of their dwindling livelihoods, and following crisis strategies, (heavily) depending on aid.

Difficulties:

- The conflict and The war and its consequences, including the restrictions imposed on the clearance of goods at the ports, has led to a severe shortage of fuel, and consequently a further increase in food prices.
- The displacement as an effect of the conflict and The war (the number of displaced people is nearly 4.3 million), in addition to other effects such as the escalation of civil unrest with its attendant risks of economic deterioration and inadequate and lack of public services.
- The economic shocks - the source of depletion of foreign reserves, and the highly volatile exchange rate, both of which would consequentially cause the purchasing power to decline, due to the depreciation of the Yemeni riyal. The conflict between Russia and Ukraine may also affect Yemen's imports, specifically the import of grain from these two countries, which is estimated at nearly 40%.
- Shortage of funding for humanitarian aid.
- Reduced access to basic services (limited access)
- Natural hazards (a mix of droughts, floods and cyclones is expected this year)

Opportunities:

- WFP supports 3.3 million children and mothers with nutritional supplements to prevent malnutrition. It also provides school snacks to 1.55 million children – to boost their nutrition and encourage them to stay in school.
- Yemen Commitments at the Nutrition for Growth Summit 2021 (Mainstreaming Nutrition in the Essential Health and Nutrition Package for Universal Health Coverage).
- Supporting game changers to improve food systems.

Solutions:

- Promoting economic stability.
- Providing life-saving humanitarian assistance.
- Providing livelihoods support and diversifying interventions.
- Improving cross-sectoral programming (food security, nutrition, health, sanitation).
- Strengthening surveillance and early-warning systems (monitoring risk factors and major drivers of food insecurity).

Overall Purpose

More productive, safer and more sustainable food systems.

Detailed Goals

1. Stimulating creative thinking to produce healthy food;
2. Promoting creative contributions of social responsibility;
3. Supporting creative ideas and raising the social awareness towards food systems.

Operational Procedures

1. Promoting scientific competitions and marketing them through social media, local media outlets, and educational media;
2. Having such a competition sponsored by supportive stakeholders and adopting the winning innovations for production before distributing them to the beneficiaries;
3. Monitoring the products’ effectiveness and impacts on the target environment.

Coordination Mechanisms

1. Creating a website and official accounts on social media networking platforms, in order to run scientific and youth competitions;
2. Receiving creative ideas on the Task-Force’s activities;
3. Obtaining feedback from the target groups.

Stakeholders (implementation, coordination, funding)

General Authority for Science and Innovation Ministry of Planning and Development; Ministry of Education; Ministry of Industry and Trade; Ministry of Agriculture and Irrigation; Ministry of Fish Wealth;

Expected Results

Encouraging the creators and innovators and shifting those ideas towards food systems.

Models for the Task-Force

- Model (1) Small Farm Simulator “Self-Sufficiency”
- Model (2) Innovation for Food (Loss and Waste)

Thematic

Priority

3

**Providing lifelong nutrition,
health education and
awareness raising**

Thematic Priority Providing lifelong nutrition, health education and awareness raising

3.1 National School Meals Task-Force

Related Context :

When children reach the age of five, their bodies begin to grow rapidly and often become more active and mobile; therefore, they need a diet that provides an adequate amount of energy and all the nutrients necessary for healthy development. However, sometimes the appetite of children may not too be much when attending schools. Therefore, these children should have a diet full of important nutrients to ensure that the requirements of the body are met at this age. In addition, healthy nutrition for school students can help prevent some diseases such as obesity and malnutrition that can cause learning difficulty, poor development and fatigue, dizziness, weakness, low body weight. Moreover, healthy nutrition can provide the necessary calories of proteins and carbohydrates, which are the main source of energy for school students, particularly at this important age, which work to nourish the brain and supply it with sufficient quantities of glucose, as well as the body with fats. These substances are very important for the cognitive development of children, particularly omega 3, in addition to vitamins and minerals, which contain calcium and iron.

School students between (6-12 years) need to eat healthy foods and nutritional snacks to meet the needs of their bodies and ensure the stability of the growth rate. It should be noted that breakfast is importance for children to increase their concentration and comprehension during the study. Healthy school student's nutrition should include: essential needed nutrients, vitamins, minerals and important children nutrients, including calcium and calcium- and iron-fortified drinks.

School meal is an essential safety net that helps to ensure students' access to education, health care and nutrition. Studies have also shown that investing one dollar in school meal programs has an economic returns ranging between (3-10) dollars due to improved health, education and productivity.

School meals help families to support their children's education and protect their food security at the same time. They also help to break the cycles of generational hunger and poverty from which poorer areas suffer by helping children to become healthy and productive adults. School meal programs can target children with special needs, orphans and children with disabilities. School meals promote education by removing barriers that prevent children access to classrooms and learning. Daily school meals allow children to focus on their studies instead of their empty stomachs; contribute to increasing the enrollment rate of schoolchildren and retaining them at schools; increase graduation rate; and develop children cognitive abilities. School meals also help retain children in school during emergencies or protracted crises, restore their sense of stability and ensure that they are not deprived of education.

Rationales:

1. Higher rates of school students and children malnutrition;
2. Higher food prices in view of the low income sources and job opportunities, which contributed to the deterioration of food system;
3. Scaling back of humanitarian assistance provided by international organizations;
4. Constant deterioration of the economic situation;
5. Many families lost their sources of income.

Opportunities:

1. WFP provides daily school meals to school students;
2. Having national and international supporting organizations;
3. Having national investment opportunities for supporting school nutrition;
4. Community initiatives are available to support school nutrition;
5. Government's commitment to the Nutrition for Growth Summit.

Solutions:

1. war
2. Providing life-saving humanitarian assistance;
3. Promoting and encouraging the role of the private sector for investment in school nutrition;
4. Increasing the number of schools and students, taking advantages of the school meals provided by the WFP;
5. Supporting male and female students from remote and poor rural areas by providing dry food items to alleviate poverty;
6. Encouraging and promoting local community initiatives for providing healthy meals to school students;
7. Scaling up nutrition and health in Yemen.

Overall Objective**Promoting nutritional and health situation of school students and staff.****Detailed Goals**

1. Integrating the school nutrition within the implementing regulations of Ministry of Education and adopting the methodology of child friendly school;
2. Establishing typical healthy school kitchens at schools;
3. Strengthening the direction of donors' support towards school nutrition;
4. Promoting the expansion and operationalization of the role of the private sector, civil society organizations and relevant parties;
5. Promoting the role of health supervisors and student councils at schools;
6. Raising awareness of the importance of good healthy diet for schoolchildren;
7. Establishing warehouses for food storage in accordance with health standards;
8. Establishing typical school canteens in accordance with school health criteria and standards in coordination with relevant parties;
9. Supporting and promoting joint initiatives of different sectors to work within the field of school nutrition;
10. Directing donor support in education to strengthen the child friendly school methodology through coordination and consultation with the General Administration of School Nutrition, as well as the integration of the project within the next humanitarian response plan;
11. Supporting sustainable school nutrition mechanisms;
12. Reducing obesity and malnutrition, which lead to learning difficulty and poor development;
13. Providing a good health environment at schools (water, hygiene and sanitation).

Operational Procedures

1. Providing nutritious meals to students and teaching staff at school;
2. Promoting the role of school health at schools (health supervisor, health student councils);
3. Raising awareness of the importance of good healthy diet for school students through various media, health supervisors and parents' councils at schools;
4. Preparing a manual on nutrition and school health (through the adoption and resettlement of the methodology and manuals of children friendly schools);
5. Preparing the nutrition and health education manual;
6. Preparing the health supervisor's manual;
7. Applying and implementing the health student file program in coordination with Ministry of Health;
8. Equipping outreach centers for raising health and nutrition awareness among students at schools;
9. Training health supervisors on school health in order to improve the nutritional and health status of school students;
10. Training the parents' councils and school communities on nutrition and health awareness;
11. Promoting community-based initiatives to supply schools with healthy and nutritious meals;
12. Promoting the role of the private sector and community contribution for supporting and financing healthy and nutritious meals at schools;
13. Integrating the concepts of nutrition and good health into the curriculum;
14. Integrating consumer protection concepts and principles into the curriculum;
15. Providing nutritional supplements to malnourished students;
16. Supporting national food production for providing healthy meals by contracting specialized national manufacturing companies that will undertake to deliver them to schools;
17. Rehabilitating school canteens to provide healthy meals;
18. Supporting health supervisors at schools with monitoring and evaluation tools to assess the canteens' performance level in terms of providing healthy meals;
19. Implementing the regulations of school canteens;
20. Providing water and sanitation facilities to schools;
21. Providing green spaces and planting trees at schools in coordination with the Ministry of Agriculture;
22. Promoting the roles of follow-up, monitoring and evaluation

Coordination Mechanisms

1. Networking and coordinating with relevant parties;
2. Coordinating with civil society organizations and international organizations, together with the (Central Government Coordination Bodies)
3. Involving relevant parties in activities to facilitate the implementation of activities;
4. Establishing a joint coordinating committee with members from the relevant parties.

Stakeholders (implementation, coordination, funding)

Ministry of Education, in cooperation and coordination with government sectors and other relevant parties, (Central Government Coordination Bodies), international organizations, donors, civil society organizations and the private sector.

Expected Results

1. Sustainable school nutrition and a sustainable health system for school students;
2. Availability of healthy meals for school students;
3. Adequate awareness of the importance of healthy diet among students;
4. The higher role of community participation at schools;
5. Community-based initiatives have promoted and contributed towards the provision of good healthy diet for school students;
6. An active role of health supervisors at schools;
7. Effective control over school canteens;
8. Low morbidity rate among school students.

3.2 National Task-Force on Hospitals and Health Facilities Nutrition

Related Context:

Nutrition plays a fundamental role in human health at different stages of life. Doctors or nutritionists who monitor patients' health continuously observe that patients' health improves as a result of changing their diet and eating healthy foods. Food is like medicine; it does not only fight the disease but also strengthen the immune system and reduce chances of contracting common diseases of our time, such as heart disease, cancers, and diabetes.

The provision of integrated nutritional and health care, through balanced diets that are based on health criteria, ensures that patients and staff meet their needs, and that all kinds of food intended for preparation are served and nutritional education and counseling is delivered to all patients.

Nutrition in all hospitals involves requirements and standards for healthy diet services. Moreover, food is a preventive and therapeutic factor; it is a component of the hospital health services for improving the patient's health and providing essential nutrients needed for the safety and health of the patient's body. Applying health standards is required to maintain the safety and quality of hospital foods and to provide food based on the patient's health condition. In fact, food and nutrition are provided based on the condition of each patient; food provided to diabetic patients is different from that provided to those with heart diseases — for example, sugar and starch-rich foods must be less provided to diabetic patients.

Overall Objective

Adequate health nutrition for patients and staff in all public and private hospitals according to protocols and standards adopted.

Detailed Goals

1. Providing and implementing binding regulations and manuals for all public and private hospitals for applying national nutritional manuals utilizing international protocols by the end of 1444H / 2023;
2. Promoting the role of supervision and control over hospitals and health facilities in accordance with nutritional protocols;
3. Promoting nutritional awareness within hospitals and health facilities;
4. Increasing the institutional capacities of hospitals and health facilities to provide safe and healthy nutrition by 1445H / 2025.

Operational Procedures

1. **Providing and implementing binding laws, regulations and manuals to all public and private hospitals for applying nutritional protocols by the end of 1444H / 2023:**
 - Establishing a specialized team for preparing the regulations and protocols and their various classifications;
 - Strengthening the role of the Nutrition Administration in the Ministry of Health by supporting the oversight role, direct supervision and continuous follow-up on hospital nutrition;
 - Applying nutrition protocols in hospitals and health facilities;
 - Collecting data on the status of nutritional hospitals;
 - Analyzing the current situation of hospitals;
 - Preparing the first draft of the hospitals current situation;
 - Presenting the first draft to the relevant officials for approval and adoption;
 - Preparing the final draft, along with the workshops that will be organized in cooperation with the relevant parties and specialists, for approval;
 - Following up with the relevant parties to obtain approval;
2. **Promoting the role of supervision and oversight of hospitals and health facilities for applying nutritional protocols:**
 - Recruiting specialists to supervise and oversee the nutritional status of patients according to medical guidelines and the type of disease;
 - Visiting the field to assess and oversee nutritional status within hospitals;
 - Preparing and presenting daily oversight reports to those concerned;
 - Taking the necessary action based on the reports;
 - Visiting hospitals to supervise, oversee and follow up on the status of nutrition;
 - Following up on the recommendations of hospitals' reports and of field visit reports and to measure to which extent they were implemented;
3. **Promoting nutritional awareness within hospitals and health facilities:**
 - Strengthening the role of the National Centre for Health Information and Health Education of the Ministry of Health to implement educational activities on nutrition and immunity, and to fully promote their role.
 - Preparing and implementing visual, audio and print awareness media programs;
 - Distributing instruction and awareness-raising posters in hospitals for patients and caretakers;
 - Providing awareness-raising monitors in waiting rooms in public hospitals;
 - Utilizing community participation to raise awareness among different community groups;
 - Conducting nutritional awareness-raising sessions in hospitals for caretakers and patients;
 - Obligating medical staff to provide brief nutritional advice when providing medical care to patients and caretakers;
4. **Increasing the institutional capacities of hospitals and health facilities for providing safe and healthy nutrition by 1445H / 2025:**
 - Issuing a circular on the rehabilitation of kitchens according to health standards and requirements;
 - Implementing such a circular by providing a therapeutic nutritionist;
 - Establishing of a therapeutic nutrition department in hospitals;
 - Training and qualifying the hospital and health facilities staff on national therapeutic nutrition

protocols and manuals;

- Absorbing graduates from universities specialized in the field of nutrition and therapeutic nutrition in hospitals and health facilities;
- Creating a nutrition information system in hospitals and health facilities, including databases, manuals, tools and means of electronic data processing, in accordance with the approved protocols;
- Improving the operational budget of nutrition in public hospitals and health facilities;
- Launching programs to teach therapeutic nutrition in public universities;

Coordination Mechanisms.

Coordination mechanism between relevant parties for the provision of nutrition services in hospitals and health facilities through meetings and memos (Ministry of Agriculture - Ministry of Fish Wealth - Ministry of Legal Affairs).

Stakeholders (implementation, coordination, funding)

1. Implementation

Ministry of Health

2. Coordination

(Central Government Coordination Bodies), and relevant local authorities.

3. Financing:

Ministry of Finance – donors and funders – the private sector.

Expected Results

1. Contributing towards the reduction in the consumption of medicines and medical supplies in hospitals and health facilities;
2. Contributing towards a reduction in the rate of hospital-bed occupancy;
3. Reducing mothers and newborns morbidity and mortality rates in hospitals and health facilities;
4. Providing nutrition-related manuals and regulations to public and private hospitals;
5. Establishing Nutrition Administrations in reference/referral hospitals;
6. providing a t therapeutic nutritionist in reference hospitals;

3.3 National Task-Force on Awareness of Healthy Diet

Related Context :

Healthy nutrition relies on a variety of foods containing nutrients that the body needs to maintain health, feel comfortable and access energy, including: proteins, carbohydrates, fat, water, vitamins and minerals. Raising awareness of the importance of nutrition is essential for all groups of the community. Healthy food is important to maintain a person's strength and mental and physical health, in conjunction with adequate physical activity, and to maintain healthy weight. A healthy diet also helps to reduce the risk of malnutrition in all its forms, reduce the risk of a range of non-communicable diseases. Moreover, it should be noted that a diverse, balanced

and healthy diet varies from one person to another, depending on the individual characteristics, such as age, sex, and lifestyle, level of physical activity, cultural level, dietary levels, and dietary habits. However, in general, the basic principles of dietary system are the same.

Overall Purpose

Optimal dietary practices for all community groups.

Detailed Goals

1. Developing and introducing relevant national laws;
2. Raising awareness of dietary practices, healthy consumption patterns and national health alternatives available;
3. Promoting the conduction of studies and research to categorize the dietary practices inherited in Yemeni society and disseminating their outputs.

Operational procedures

1. Reviewing national laws;
2. Taking advantage of similar regional and international experiences;
3. Standardizing a media policy for the adoption of government orientations;
4. A support and advocacy campaign to foster behavioral change in nutrition patterns;
5. Awareness-raising campaigns on healthy dietary consumption patterns and identifying them from such unhealthy diets;
6. Conducting awareness-raising programs targeting (mothers - girls - men and children... etc.);
7. Promoting the role of health education program (expansion of health education channels);
8. Identifying and disseminating gaps in consumption patterns and reviewing mechanisms for solving them;
9. Establishing a specialized research center for healthy and sustainable food;
10. Designing awareness-raising programs in the following areas: breastfeeding, supplementary feeding, nutritional needs of different community groups such as young women, pregnant and lactating mothers, elderly persons, patients with chronic disease (diabetes, blood pressure) cancer, celiac and so on;
11. Reducing food losses and waste at the household level;
12. Advocating issues related to the trade regulations and policies of industrial and nutritional products and breast-milk substitutes.
13. Focusing on raising awareness of concepts of breastfeeding and supplementary feeding;
14. Highlighting the main gaps in the food consumption pattern across different relevant sectors relevant for proposing alternatives;
15. Staging awareness-raising campaigns through various modern means of food standards and safety;
16. Promoting and raising awareness about traditional food and promoting national food identity (in its various patterns in all Yemeni governorates) and its associated advantages;
17. Introducing the importance of subsidized food and nutritious food;
18. Focusing on product and content quality through commercial posters and instructions;
19. Raising awareness about the nutritional needs of certain cases that require enhancement;
20. Creating a web page for community control over food.

Coordination Mechanisms.

1. Setting up a competent legal team;
2. Setting up policies and programs for developing national laws;

3. Conducting sessions, interviews and workshops for decision makers;
4. Producing various media materials (visual / audio / print / etc.);
5. Training and involving teachers and community leaders in awareness-raising activities;
6. Promoting the role of community control;
7. Using social media;
8. Focusing on product and content quality through commercial posters and instructions;
9. Encouraging and supporting university students to conduct researches related to awareness and nutrition, particularly in the master's and doctoral degrees.

Stakeholders (implementation, coordination, funding)

- Government (all relevant ministries and competent authorities) and the parliament;
- The private sector (Chamber of Commerce / Food Bank / Food Factories);
- Relevant civil society organizations, both national and international.

Expected Results

1. Modern national laws for meeting the needs and solving the gaps;
2. Having the community aware of dietary patterns;
3. A decrease in malnutrition rate.

3.4 National Task-Force on Healthy Food for Children

Related Context:

Globally, at least 1 in 3 children under the age of five suffers from malnutrition, with its most visible forms: stunting, wasting and overweight. Moreover, globally, at least 1 in 2 children under the age of five suffers from hidden hunger due to a lack of vitamins and other essential nutrients. Under-nutrition continues to take a heavy toll. In 2018, nearly 200 million children under the age of five were stunted or wasted, while at least 340 million suffered from hidden hunger. In fragile communities, children and youth bear the brunt of the effects of poverty and various forms of malnutrition, which leads to the perpetuation of poverty through generations. The main cause of the triple burden of malnutrition is the poor quality of children's nutrition patterns: 2 out of 3 children do not get the minimum recommended dietary diversity needed for healthy growth and development – only 2 out of 5 children under six months are breastfed exclusively as recommended. Breastfeeding can save the lives of 820,000 children every year globally. Poor feeding patterns in early childhood cause malnutrition: 44% of children between 6 and 23 months have no access to fruits or vegetables, and 59% do not eat eggs, dairy products, fish, or meat. Many school-going teens consume highly processed foods, with 42% have soft drinks at least once a day and 46% eat fast food at least once a week. Millions of children eat only a fraction of what they do not need, and millions of others eat more than they need. Poor nutrition is now the main risk factor in the global burden of disease.

In Yemen, wrong practices in feeding infants and nourishing young children are among the reasons for increasing levels of malnutrition, which are among the highest rates in the world. The results of the Yemeni Demographic Survey of Family Health in 2013 showed that about 39% of children under the age of five suffer from underweight and 47% from stunting and 16% from wasting, while 47% of newborns are underweight, 10.3% exclusively breastfed, and 64% of children aged between 6 and 9 months receive supplementary feeding.

* Reference: The State of the World's Children 2019 – UNICEF

Rationales:

1. Wrong practices among the community members as regards infants and young children feeding and mothers' nutrition;
2. Many children and adults do not get the good nutrition they need, impairing their ability to grow and learn;
3. Unhealthy diets are a major source of malnutrition and environmental degradation. It has side effects such as diabetes, high blood pressure, heart disease, metabolic disorders and certain forms of cancer.

Opportunities:

1. Having governmental interest, support, care and facilities.
2. Access to family support and anti-poverty programs.

Overall Objective

Healthy, nutritious and safe food for children in a sustainable and affordable way.

Detailed Goals

1. Directing the national food policy to place the nutrition of children at the center of its work because their nutritional needs are unique, and meeting their needs is critical for achieving sustainable development;
2. Raising the level of nutritional and health awareness in the community about children's healthy, safe and nutritious food and the hazards of unhealthy and non-nutritious food;
3. Promoting the best practices for supplementary feeding and nutrition of infants and young children;
4. Strengthening the role of nutritional and health control over baby food (*Al-Ja'alah*);
5. Setting up legislative systems and standards that ensure the production and import of healthy, safe and nutritious foods for children and that limit or prevent the demand for unhealthy foods;
6. Promoting the production and consumption of healthy and safe foods for children by using national natural alternatives.

Operational Procedures

1. Educating and raising awareness through school curricula, various media outlets, social media platforms, and mosque preachers;
2. Supporting and protecting breastfeeding at the health facility and community levels;
3. Providing nutritional counseling in primary health care facilities;
4. Promoting the role of control over advertising for baby food;
5. Utilizing good and sound nutritional practices from the local tradition;
6. Focusing on educating girls at all school levels about the importance and advantages of breastfeeding, as well as having healthy, safe and nutritional food for mothers and children (supplementary feeding for children between 6 months and 2 years);
7. Promoting the role of the National Food Safety Committee regarding specifications and standards for the production and import of nutritious, healthy and safe foods for children and limiting or preventing the demand for unhealthy foods;
8. Promoting national food production;
9. Fortifying food with micro-nutrients such as (fortifying vegetable oil with vitamin A, fortifying flour with iron, etc.)

10. Increasing the capacities of workers in the supervisory authorities and supporting them with inspection and conformity devices;
11. Obligating producers, manufacturers and suppliers to adopt proper and effective procedures to provide food and production requirements in a sustainable and affordable way;
12. Improving communication and exchanging information between the relevant parties and forming joint working teams for achieving effective control and helping to achieve objectives;
13. Encouraging companies, producers or suppliers of healthy and affordable baby food.

Coordination Mechanisms.

1. Holding periodic meetings between relevant parties;
2. Establishing a joint operation room involving the relevant parties.

Stakeholders (implementation, coordination, funding)

Ministry of Public Health and Population, Ministry of Fish Wealth, Federation of Chambers of Commerce and Industry, Higher Agricultural and Fisheries Committee, Ministry of Agriculture and Irrigation, Ministry of Industry and Trade, Yemen Organization for Standardization, Metrology and Quality Control, Ministry of Water, Consumer Protection Association, civil society organizations (cooperative societies), (Central Government Coordination Bodies) and donors.

- Investment Authority.

Expected Results

1. An increase in the intake of healthy foods and a decrease in the demand for unhealthy foods;
2. Healthy, nutritious and safe food for healthy children.

Thematic

Priority

4

**Ensuring food safety from
a multi-sectoral
perspective**

Thematic Priority 4: Ensuring food safety from a multi-sectoral perspective

4.1 National Food Safety Task-Force (Food Safety)

Food safety is the level of risk that food may cause to individuals' health. Therefore, the fewer risks caused by food are, the safer the food is, and this is what everyone works to achieve for ensuring consumer safety.

Food contaminated with germs, viruses, parasites or chemicals causes more than 200 existing diseases, ranging from diarrhea to various types of cancer. There are new risks emerging all the time that can threaten food safety. It has become increasingly difficult to control pathogens and pollutants as they enter our food due to changes in the way food is produced, distributed and consumed, not to mention the emergence of antibiotic-resistant bacteria, and increased travel and trade. The problem of food insecurity is by far a global one that is little known of and often overlooked. As the food chain expands around the world, the need to strengthen food safety systems within and between countries is becoming more urgent, particularly with the objective of enhancing food safety **from seed to fork/table** and throughout the food chain. Safe food production is important for the growth of the economy, as it increases trade and tourism and supports food security and sustainable development. Food safety is also important in education. Sick children skip school classes, and school is where the next generation of consumers can learn basic food safety practices. With the increasing population growth in Yemen and the increasing in poverty and hunger, there is an urgent need to exert more efforts to improve the quality and safety of food, in order for everyone in the community to have safe and sustainable food. In this sense, it is necessary to combine all efforts by the relevant parties to work on creating effective and healthy food systems.

Overall Purpose

Safe and sustainable food

Detailed Goals

1. Coordination between the different relevant parties and sectors;
2. Following up on the implementation of food safety standards;
3. Strengthening the institutional, organizational and technical capacities of the relevant parties;
4. Creating a national information system.

Operational Procedures

1. Promoting the National Committee for Food Regulation and Safety (Codex) while ensuring its impartiality;
2. Promoting and establishing communication channels between the parties relevant with food safety;
3. Setting up the technical committees emanating from the national Committee to represent all the relevant parties;
4. Presenting a proposal for a draft food law;
5. Monitoring and evaluating the commitment of relevant parties to carry out the tasks entrusted to them with regard to food safety;
6. Carrying out workshops and training courses to raise the institutional, organizational and technical capacities of the parties relevant with food safety;
7. Conducting studies and research, taking advantages of research centers, universities and educational institutions;

8. Creating and updating a database that includes all international food safety specifications and standards;
9. Integrating food safety policies into sustainable development.

Coordination Mechanisms.

1. Maintaining the regularity of the committee's periodic meetings;
2. Organizing mobilization and advocacy workshops;
3. Conducting awareness programs and workshops;
4. Establishing training programs and courses for the relevant parties;
5. Maintaining periodic food safety assessment;
6. Coordinating with all donors and funders.

Stakeholders (implementation, coordination, funding)

Ministry of Industry and Trade, Ministry of Public Health and Population, Ministry of Agriculture and Irrigation, Ministry of Fish Wealth, Ministry of Water and Environment, Yemen Organization for Standardization, Metrology and Quality Control, Federation of Chambers of Commerce and Industry, Yemeni Industrialists Association, Yemen Association for Consumer Protection, Scientific and Academic Research Centers, (Central Government Coordination Bodies)

National Committee Secretariat

Ministry of Finance, FAO, WHO and WFP

Expected Results

1. Promoting the role of the National Committee for Food Regulation and Safety (Codex).
2. Improving public health;
3. Consumers' access to safe and sustainable food;
4. Reducing consumer's treatment costs.

4.2 National Task-Force on Community Management and Use of Agricultural Pesticides and Fertilizers and their Effects

Related Context:

In recent years in Yemen, there has been an increase in the use of pesticides and plant fertilizers on agricultural crops and wrong and arbitrary practices by farmers, as a result of poor awareness, poor control, increasing number of smuggled items, and low experience of pesticide shops. This has exacerbated the health damage to the population, particularly to pregnant women and newborns, due to chronic toxicity that stems from the bioaccumulation of pesticides for many years. Therefore, during this stage, diseases and malformations appear in the fetuses.

In the early eighties, Yemen's Ministry of Agriculture began organizing the process of controlling pesticides and plant fertilizers and their use, through the establishment of the General Administration for Plant Protection.

Yemen issued a number of laws and legislation related to plant protection, including Plant Quarantine Law No. 32 of 1999, and Law No. 25 of 1999 regulating the use of plant pesticides, and Law No. 7 of 2011 amending plant quarantine.

Law No. (26) of 1995 regarding environmental protection was also issued, which stipulates in its articles that "no pesticide should be used without a prior license, and that pesticide stores and warehouses should be far

from residential neighborhoods. The use of toxic materials and hazardous waste without a license is prohibited.

This legislation aimed to protect the environment and humans from chemical and toxic substances that may harm living organisms and humans, in the geographical environment.

Yemen has ratified a number of international treaties related to pesticides, including: The Rotterdam Convention (PIC) on the Implantation of the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. And Basel Convention on regulating the transboundary movements of hazardous wastes

Yemen has also ratified the International Plant Protection Convention (IPPC) and the Stockholm Convention on Persistent Organic Pollutants (POPS). and the Montreal Protocol on Substances that Deplete the Ozone Layer..

An official report of Ministry of Agriculture indicated that the quantities of smuggled pesticides and highly dangerous substances that entered the country from March 2012 to March 2013 amounted to about 61,221 kg/liter.

A document from the General Administration of Plant Protection at Ministry of Agriculture indicated that the list of banned pesticides in Yemen amounted to about 196 until 2017. While the severely restricted pesticides amounted to about 154 cm.

In view of all this, and with poor oversight, lack of law enforcement, conflict of interests, and the deterioration of the health system in Yemen, the hazards of pesticides to public health is increasing, in a country suffering from a severe food crisis, amid the exacerbation of the humanitarian crisis.

Overall Purpose

Healthy food, productive society and a safe environment.

Detailed Goals

1. Reviewing pesticides and fertilizer use policies;
2. Regulating the use of pesticides and fertilizers;
3. Promoting agricultural pesticides and fertilizers use control;
4. Raising community awareness of the hazards of arbitrary use of pesticides and chemical fertilizers;
5. Promoting investment in the national safe organic pesticides and fertilizers industry;
6. Promoting Biological pest control .

Operational Procedures

1. Implementing and updating the law on pesticides and the law on seeds and agricultural fertilizers;
2. Supplying laboratories with modern equipment;
3. Providing manuals;
4. Supporting the Agricultural Epidemiology and Pest Prevention Research Program;
5. Implementing agricultural quarantine procedures;
6. Conducting control and inspection campaigns on pesticides and fertilizer stores;
7. Conducting national campaigns to combat migratory and endemic pests;
8. Training and building the capacities of farmers in the use of agricultural pesticides and fertilizers;
9. Promoting the role of government and community parties in controlling the pesticides and fertilizers use;

10. Issuing legislation to penalize the users of smuggled pesticides and fertilizers;
11. Conducting the necessary periodic tests for agricultural crops;
12. Implementing awareness programs through various media;
13. Strengthening coordination between the relevant parties;
14. Promoting investment in the national safe organic pesticides and fertilizers industry;
15. Promoting national methods/alternatives of organic pesticide and fertilizer products;
16. Tightening control at customs ports and combating smuggling.

Coordination Mechanisms

1. Forming a joint team from the governmental side, civil society organizations and the private sector in order to strengthen the control work on agricultural pesticides and fertilizers, and to raise awareness among the community and farmers of pesticide damage through civil society organizations.
2. Establishing a joint committee from the relevant official parties to update laws, controls and requirements to regulate the use of pesticides and fertilizers;
3. Setting up mechanisms that regulate the work of the committees.

Stakeholders (implementation, coordination, funding)

Parliament, Council of Ministers, Ministry of Agriculture and Irrigation, Higher Agricultural and Fisheries Committee, Ministry of Water and Environment, Ministry of Interior, Ministry of Justice, Environment Protection Authority, Yemen Standardization Metrology and Quality Control Organization.

Expected Results

1. Food crops free from pesticides and fertilizers residual effects;
2. Safe and sustainable food;
3. High and sustainable agricultural production;
4. A decrease in disease rates (particularly malignant tumors).

4.3 National Task-Force to Reduce Food Losses and Waste

Related Context:

Food losses and waste prevails in many Arab and developing countries alike, at a time when the people of some of these countries, including Yemen, are still suffering from hunger, poverty and destitution.

FAO has published in one its latest reports that almost one-third of food produced for human consumption – approximately 1.3 billion tons per year – is either lost or wasted globally before it reaches the consumer's plate. The report added that this amount of food wasted is enough to feed the hungry around the world.

FAO attributed the losses and waste of that amount of food in the Arab and developing countries, as well as in the rich countries, to the improper storage and transportation, the mechanisms for packing and weighing, as well as some customs and traditions related to the use and consumption of food, traditional methods of preparing food, inaccurate means of preparation, and experiences based on random estimation in numbers. Accordingly, reducing food losses and waste reduces poverty and hunger and combats climate change, thereby reducing damage. It should be noted that food loss and waste are responsible for about 7% of global greenhouse gas (GHG) emissions, and that approximately 30% of the world's agricultural land is used in the

production of food that is not consumed.

All over the world, tons of edible food every day are lost or wasted. Between harvest and retail alone, around 14 % of all food produced globally is lost. Huge quantities of food are also wasted in retail or at the consumer level.

Yemen is among the Arab countries that waste food. Figures indicate that the amount of food wasted in Yemen is 3,200,000 tons. As for food losses in the agricultural and fisheries sectors, studies related to food losses assessment in these two sectors reveal that the food losses along the value chains amounted to 30%; this percentage is very high compared to the quantity of production, particularly with the deterioration of fish and agricultural production, which calls for action and qualitative interventions for the missing links of the value chains along the stages of fish and agricultural production.

Reducing food losses and waste is essential in a world where millions of people go hungry every day.

When we reduce waste, we respect the idea that food is not taken for granted for the millions of people who go hungry on every day.

We must all change our habits so that the losses and waste of food does not become a lifestyle; there must be a margin as regards waste and economic collapse, as well as everything that leads to the losses of a large quantity of food, starting from the source of its production and cultivation all the way to preparing and serving such food, and beyond. This, indeed, calls for practical and scientific intervention to control this margin through a series of solutions and steps for changing the situation.

The following are among the most important opportunities and solutions available to overcome the problem:

- Development of value chains for food products;
- Adopting a healthier and more sustainable food pattern;
- Ensuring that the necessary food are only purchased;
- Improving food storage;
- Reading the information on the food packets carefully;
- Reducing food consumption to smaller quantities;
- Making use of the leftovers.

Overall Purpose

Reducing food losses and waste along value chains.

Detailed Goals

1. Promoting the control role, together with the controls/punishments that are related to reducing food losses and waste;
2. Developing regulations and controls to reduce of food losses and waste, along value chains.
3. Adopting public policies for guiding and raising community awareness of the importance of reducing food losses and waste;
4. Bridging the gaps in the missing links along the food production value chain.

Operational Procedures

1. Highlighting the issue of food waste through media outlets, platforms, events and social media as

profligacy that is prohibited in Islam.

2. Urging government and community parties to implement the legal and legislative system related to the prevention of food losses and waste;
3. Presenting visions and constructive proposals to add the required laws and legislations related to reducing the food losses and waste;
4. Adopting a media awareness plan targeting the community members and groups (family, school, universities, mosques and forums);
5. Obligating producers and importers to create awareness messages about rationalizing consumption and reducing food losses and waste;
6. Preparing manuals and means to educate producers about the importance of conserving resources and reducing waste;
7. Conducting seminars, workshops and training programs that contribute to raising food producers' awareness on the importance of conserving food resources and reducing waste;
8. Conducting intensive awareness campaigns in various media outlets (visual, audio, and print media, social media platforms, mosques and forums);
9. Adopting and promoting community initiatives and participations in terms of conserving food and reducing food losses and waste;
10. Using modern technologies to conserve food and reduce losses and waste;
11. Taking advantages of successful experiences in other countries related to reducing food losses and waste;
12. Conducting research and evaluation studies on food losses and waste along value chains;
13. Encouraging university studies and research related to reducing food losses and waste;
14. Integrating programs to reduce food losses and waste into the school curricula at the various levels;
15. Integrating plans presented by ministries and relevant authorities of interventions, which contribute to bridging the gap along food chains;
16. Sorting and recycling the lost and wasted food for use as organic fertilizers;
17. Building the capacities through education, training and extension services for farmers and actors along the food chains.

Coordination Mechanisms

1. Establishing governmental and community-based control teams to promote programs that aim at reducing food losses and waste;
2. The need for coordination and participation of all relevant governmental and civil parties to promote programs that aim at reducing food losses and waste.

Stakeholders (implementation, coordination, funding)

Ministry of Agriculture and Irrigation, Ministry of Fish Wealth, Ministry of Industry and Trade, Ministry of Interior, Ministry of Endowments and Guidance, Ministry of Water and Environment, and (Central Government Coordination Bodies), civil society organizations, Scaling Up Nutrition (SUN-Yemen) Secretariat, relevant United Nations organizations and donors, Yemen Organization for Standardization Metrology and Quality Control.

Expected Results

Reducing food losses and waste for achieving a healthy and sustainable food pattern.

Thematic

Priority

5

Sustainable Financing

and Enhancing

Efficiency and

Effectiveness

Thematic Priority 5: Sustainable Funding and Enhancing Efficiency and Effectiveness

5.1 National Task-Force to Ensure Sustainable Financing Mechanisms for Comprehensive Development

Related Context:

Rationales:

In 2022, the situation of acute food insecurity and malnutrition deteriorated further in Yemen. The latest Integrated Phase Classification (IPC) food security analysis released in March 2022 indicated that an estimated 19 million people are likely to face acute food insecurity in the second half of the year, with an estimated 161,000 expected to suffer from famine-like conditions. The risk of malnutrition is still looming, as nearly 2.2 million children under the age of five suffer from acute malnutrition, including more than half a million children suffering from severe levels.⁸ This coincided with the faltering of the implementation of government programs and activities due to the damage caused by the war and the crises that resulted from the conflict. The poor government's performance in implementing development plans, programs and projects, was caused by reasons, foremost of which is the lack of funding. Attention to the importance of giving priority to financing comes at a critical time, "as the number of people in need has increased by nearly 3 million compared to 2021,"⁹ at a time when humanitarian organizations are facing a severe funding shortages, as they have worked, even partially, on the emergency response and meeting the urgent needs of food, nutrition, health, water, sanitation and hygiene during the past years. The emergence of a national Task-Force for financing has become a very important matter. This group is not intended for attracting international financing and grants, although it will be a provisional task for this group to assume alongside its main function – the establishment of the nucleus of a Task-Force that works on regulating local finance and improving local resources management to achieve comprehensive development to reach self-sufficiency. We believe that it is not possible to achieve comprehensive development, but through a wide range of financial resources provided via a set of channels that connect the potential partners, particularly with the government having key tools that conserve the financial resources under its direction and control, using them to play a catalytic role in bridging the gaps. However, the majority of financial resources that contribute to development are not under its direct control, and this is why the financing group comes to lay the foundation for creating a nucleus concerned with ensuring the collection of sufficient resources from all channels to achieve development, without prejudice to the conservation and sustainable use of local resources and the equitable sharing of subsequent benefits. **Note that the outputs of this group are proposals that will be presented to the Central Government Coordination Bodies on assistance issues, and to strengthening the capacities of the coordination focal points to lead change in this pivotal matter.**

⁸ Report on the latest humanitarian developments issued by the United Nations Office for the Coordination of Humanitarian Affairs Issue 04 / April 2022

⁹ Ibid.

Rationales:

- The deterioration of the economic situation and its impact on many vital sectors;
- The continuous depreciation of the national currency against foreign currencies, the collapse of public fiscal balances, and the decline of public revenues;
- Suspension of development support from donors;
- The widespread of poverty and hunger that accounts for the worst humanitarian crisis in the world. According to UNICEF, Yemen faces the greatest humanitarian crisis in the world, as more than 24 million people – nearly 80% of the population – need humanitarian assistance, including 8.4 million people who are at risk of famine;
- Many families have lost their sources of income;
- Suspension of most public services such as access to drinking water and appropriate health care,

Opportunities:

- International and regional interest in supporting economic recovery in Yemen,
- International grants and funds are available,
- Diverse and abundant national resources,
- Human resources,
- Investment opportunities,

Solutions:

- Strengthening actions to match international resources with sustainable development goals through Central Government Coordination Bodies,
- Promoting national financing sources to contribute to development by 20% during the next 10 years,
- Promoting the role of the private sector in development,
- Strengthening the pursuit of new international financing sources by 10% during the next 10 years through Central Government Coordination Bodies.
- Strengthening the preparation of a national plan for international financing that will contribute to achieving comprehensive development in alignment with national priorities through (Central Government Coordination Bodies),
- Promoting the national capacity building in the diverse sectors to raise the level of financing absorption and mobilize funds through National Center for Capacity Building and Decision Making Support in coordination with (Central Government Coordination Bodies) regarding international financing,
- Promoting the role of social responsibility and community participation in the national development,
- Seeking to create a safe environment for investment in Yemen.
- Equitable access to and use of resources, knowledge, assets, technology and markets/value chains,

Strategic Goals:

- Strengthening the national capacity to provide funds for achieving comprehensive development,
- Financing gives priority to the implementation of plans and programs that achieve comprehensive development and that preserve national resources with their diversity and types, use them sustainably, and distribute them equitably.

Overall Purpose

Sustainable financing for comprehensive development

Detailed Goals

1. Promoting the alignment of international and national resources (public and private) with the Sustainable Development Goals,
2. Strengthening national financing sources to contribute to development by 20% over the next 10 years;
3. Strengthening the role of the private sector in development;
4. Supporting the efforts of Central Government Coordination Bodies in providing new international financing sources by 10% during the next 10 years;
5. Strengthening national capacities for achieving comprehensive development in line with national priorities;
6. Building national capacity for mobilizing financing;
7. Strengthening the role of social responsibility and community participation in national development;
8. Seeking to create a safe environment for investment in Yemen;
9. Equitable access to and use of resources, knowledge, assets, technology and markets/value chains.

Operational Procedures

First: Policies:

1. Setting up financing mobilization policies and programs;
2. Setting up relevant policy criteria to obtain financing for preserving national resources;
3. Identifying the general and national guidelines for financing, and setting up the policies regulating them;
4. Preparing a working paper on the situation of financial institutions during war and political crises;
5. Preparing policy papers including general guidelines for developing a national financing plan;
6. Developing and implementing national policies and mechanisms concerning national and international financing in coordination with Central Government Coordination Bodies.
7. Updating and implementing the legislative system to contribute to strengthening national orientations for financing, such as (eliminating the dual career and tasks, providing facilities to investors, reducing bureaucratic procedures (routine administrative procedures...etc);
8. Implementing the accountability mechanism for strengthening government financial systems;
9. Promoting the role of oversight authorities, (such as the Central Organization for Control and Accountability, Supreme National Authority for Combating Corruption and civil society organizations, etc.);
10. Creating an advocacy network for the strengthening national financing in coordinating with Central Government Coordination Bodies, regarding international financing for Sustainable development .
11. Reviewing previous national, regional and international experiences in financing, taking into account the peculiarities of the national environment in coordination with Central Government Coordination Bodies;
12. Exploring blended finance and public-private partnerships (PPPs) to mobilize financing for under-financed initiatives;
13. Ensuring equal and adequate access to basic services, and promoting the rule of law and equitable economic development;
14. Setting up governance frameworks for the programs, as well as the funding mechanisms and arrangements;

15. Setting up operational principles for impact management, and standardizing investments for achieving a positive, measurable social, economic or environmental impact;
16. Reviewing key resources, products, investment strategies and risks;

Second: Participatory Planning:

1. Supporting the preparation of a national financing plan in partnership with the government, the private sector and civil society organizations;
2. Providing a framework for dialogue with local communities to build confidence and support partnership orientations with the government.

Third: Capacity-building:

1. Assessing the government institutions capacity to absorb grants and financing in coordination with Central Government Coordination Bodies;
2. Analyzing needs and identifying the financing gaps in coordination with Central Government Coordination Bodies;
3. Assessing all potential financing sources in coordination with Central Government Coordination Bodies;
4. Estimating cost for achieving strategic goals and evaluating the contribution of the actors;
5. Conducting training courses for teams established at the relevant institutions and parties level in coordination with the Central Government Coordination Bodies;
6. Training the concerned government authorities to prepare studies and competition documents for partnership projects with the private sector;
7. Updating the Yemen's public sector systems and programs to shift towards an e-government;
8. Updating the financial system of government institutions in line with the changes and requirements;
9. Conducting training sessions for farmers, women, youth and micro-, small- and medium-sized enterprises to participate effectively throughout the entire food system from production to consumption;
10. Providing farmers, women, youth and micro-, small- and medium-sized enterprises with the tools, techniques and consultations services needed to promote their engagement with the private sector;
11. Integrating security sector and the judiciary reform into the financing process by allocating sufficient resources to effectively respond to any security challenges hampering any development activities or programs, and removing barriers for access to services;
12. Developing projects and programs for supporting productive groups, small enterprises and cooperatives;
13. Developing a set of initiatives for mobilizing financing from innovative sources and mechanisms;

Fourth: Coordination:

1. Coordinating policies, programs and investments among all relevant parties, mainly the government;
2. Strengthening the role of Central Government Coordination Bodies, in coordination and collaboration with funders and donors, and working closely to achieve a common understanding of priorities and needs;
3. Strengthening links between various financing sources and relevant partners through cooperation in planning and combined expenditures opportunities, in coordination with Central Government Coordination Bodies;

Fifth: Partnerships:

1. Providing programs for empowering women, youth and vulnerable groups, economically and socially, through vocational training and providing them with soft loans to set up small enterprises;
2. Setting up economic initiatives to engage women, youth and vulnerable groups in the labor force with long-term efforts to address social and economic structures and traditional cultural norms that have restricted their participation in the labor force;
3. Increasing the current and new partners support through partnership and collaborative planning,
4. Developing projects for creating investment opportunities;
5. Investing in companies through loans and equity capital investments;
6. Mobilizing capital from other lenders and investors through loans co-provision;
7. Encouraging the government to promote private investment and improve the investment climate;
8. Establishing new markets in areas where markets are lacking.

Coordination Mechanisms

1. Strengthening the role of Central Government Coordination Bodies to review current financing mechanisms and agree with donors and UN agencies on a new mechanism commensurate with the government's orientations for implementing its development agenda and multi-year programs involving government authorities, the private sector and relevant parties;
2. Taking advantages of the needs and financing gaps analysis produced by Central Government Coordination Bodies;
3. Conducting workshops and consultative meetings with representatives of government authorities, development and international partners, relevant partners, and relevant authorities for strengthening and building confidence, developing financing mechanisms, and exploring promising and innovative potential mechanisms.

(The outputs of this Task-Force represent recommendations for supporting the Central Government Coordination Bodies regarding donors financing requirements, and the role of the public executive sectors, the private sector, civil society organizations, farmers, fishermen and other actors, to obtain national financing for achieving comprehensive and sustainable development in a coordinated and effective manner).

Stakeholders (implementation, coordination, funding)**1. Implementation**

Central Government Coordination Bodies

Government (all relevant ministries and competent authorities),

Private sector,

Academic institutions, studies and research institutions, technical and vocational training institutes (public and private),

Media.

2. Coordination

Central Government Coordination Bodies,

Ministry of Finance, Ministry Planning and Ministry Local Administration

3. Funding:

Government,

Private sector,

Society,

Donors,

UN Agencies,

Expected Results

1. Promoting the alignment of international and national resources (public and private) with the Sustainable Development Goals,
2. Having diverse and sustainable national financing sources;
3. An active role of the private sector in economic development by 20% within 10 years;
4. International financing sources by 10% during 10 years of the plan's period;
5. A national financing plan and guidelines prepared and agreed upon in a participatory manner;
6. Qualified national capacities with experience to mobilize financing work for implementing the national financing plan;
7. Active role of social responsibility and community participation in national development;
8. A safe investment environment in Yemen.

Thematic Priority

6

**Scaling up the National
Readiness for Positive
Transformations and Responding
to Emergencies and Shocks**

Thematic Priority 6: Scaling up the National Readiness for Positive Transformations and Responding to Emergencies and Shocks

1-6 Task-Force on Building National Capacity to Respond to Emergencies and Shocks

Crises and emergencies cause transformations in livelihoods, practices, behavior and knowledge. These transformations may be positive or negative and can occur in a natural course without State Interference in its pathway. Here comes the importance of focusing on managing these transformations through national experts for supporting those positive and reducing those negative through evidence-based predictions and practices, before setting up policies that will direct these transformations and take advantage of crises and emergencies, considering that opportunities are part of them.

Overall Purpose

Towards national capacities for responding to emergencies and crises and promoting positive transformations

Detailed Goals

Raising national capacities in the following areas:

- 1- Capacity for transition;
- 2- Capacity to predict;
- 3- Capacity to absorb;
- 4- Capacity to adapt;
- 5- Capacity for prevention.

Capacity to predict

Mechanism

- Strengthening national capacities as regards emergencies and food security, establishing a network for all control centers in all sectors, and providing them with qualified national capacities for analyze and predict risks.
- The institutional structure (infrastructure, devices, tools and equipment required, qualifying and training teams working on monitoring and analysis in all fields)
- Developing emergency mechanisms in all food sectors , for example in the agricultural sector (the Epidemiological Surveillance Center, the desert locust center, Disasters early warning system DEWS)
- Rehabilitation of the infrastructure destroyed by the war in the monitoring and prediction centers (Seismological and Fisheries Monitoring Center)
- Utilizing the existing data and creating an up-to-date database with a timeline spanning a long period and helping in analysis and prediction
- Setting up a communication and coordination mechanism among the relevant authorities and linking them

with the main center (emergency committee) and taking advantage from the regular feedback for taking the necessary actions and measures for emergencies and crises

- The participation of the local community in the prediction and monitoring process, as well as taking advantage from the previous experiences of the community inherited regarding warning,
- Taking advantages from the experiences and expertise of other communities.

Stakeholders/ partners (implementation, coordination, funding)

Responsible Authorities:

Central Government Coordination Bodies, the security services, the agricultural sector, the fisheries sector, the education sector, the health sector, water and environment, meteorology, industry and trade sector, media and culture sector, and local communities.

Supporters:

Ministry of Finance, Federation of Chambers of Commerce and Industry, Agricultural Cooperative Union, Agricultural and Fisheries Production Promotion Fund, Cooperative and Agricultural Credit Bank, UN agencies, and national organizations,

Capacity for prevention

Mechanism

Water shortage and drought:

- Developing water harvesting projects (dams, water barriers, etc.) to recharge groundwater
- Water Consumption Rationalization (Using Modern Methods for Irrigation.....)
- Protecting groundwater from depletion and pollution (implementing legislation and regulations to reduce uncontrolled drilling and polluted water -)

Climate change

- Strengthening national capacities for responding to emergencies and disasters
- Strengthening society's capacities for climate change adaption
- Proactive awareness of disasters
- Disasters early warning system DEWS
- Setting up a rescue and rapid response team

Stakeholders/ partners (implementation, coordination, funding)

Responsible authorities:

Central Government Coordination Bodies, Ministry of Transportation (Meteorology Authority) - Ministry of Information - Ministry of Communications - Ministry of Water and Environment - Ministry of Interior - Ministry of Health - Ministry of Defense - Ministry of Local Administration -

Supporters:

Ministry of Finance - funders and donors - specialized organizations - the private sector

Capacity to absorb

Mechanism

Mechanism:

- Managing and following up on operations in a manner where all data, response mechanisms and feedback flow into accordingly.
- Strengthening the capacities of the sectors concerned and training them to respond to the crisis.

Mechanism purpose:

- Emergency response based on the standard emergency definition for preventing wasting resources and dispersal of emergency response efforts and mitigating the negative impact that may result from it.
- Prioritizing and updating the data list.
- Developing emergency response plans and emergency response mechanism manuals according to the sector, the type of emergency and the competent authorities.
- Implementing emergency response plans at different sectors level.
- Continuous updating of emergency and crisis plans for new developments at the global, regional and national levels.
- Capacity building and continuous training at the decision-making, professional and technical levels.
- Continuous awareness of the crisis and latest methods and techniques for preventing and mitigating its effects to ensure full response to the emergency
- Implementing the communication and outreach mechanism among the various emergency response teams.
- A monitoring and evaluation system for plans, interventions, and a resources use mechanism in an efficient and effective manner
- Community participation in setting up and implementing plans based on their background of some emergency crises that may be seasonal, and the equitable distribution of resources available during the crisis.
- Carrying out media campaigns through various media outlets (visual, audio, and print) and educational media for creating community awareness on methods and mechanisms that contribute to responding to the crisis.
- Taking advantages of success stories in countries that have responded to similar crises.
- Activating and maintaining broken resources and utilizing them instead of creating new ones.

Stakeholders/ partners (implementation, coordination, funding)

Responsible authorities:

Central Government Coordination Bodies

Council of Ministers

Ministry of Health

Ministry of Education

Ministry of Public Works

Ministry of Social Affairs

Ministry of Industry and Trade.

Ministry of Information.

Yemen Organization for Standardization Metrology and Quality Control

National civil society organizations

Supporters:

- UN and international organizations
- Other interested international organizations
- National civil society organizations
- Private sector
- Targeted groups

Capacity to adapt with risks emerging

Mechanism

Financial crises

- Raising awareness of the importance of community participation
- Promoting community-based initiatives
- Rationalizing and managing financial resources
- Directing national investment
- Creating a community-based mechanism for mobilization and community financing
- Allocating funds from zakat
- Raising awareness of the importance of social solidarity
- Applying the principles of governance in the State's financial and revenue institutions
- Creating a mechanism for mobilizing funds at the national level

Stakeholders/ partners (implementation, coordination, funding)

Responsible Authorities:

Central Government Coordination Bodies

Ministry of Finance - Central Bank -

General Authority of Zakat -

Supreme National Authority for Combating Corruption

Central Government Coordination Bodies

Supporters:

UN agencies, international and national organizations, the private sector, and civil society organizations

Mechanism

Sever Lack of Logistics in supply chains

- Assessment of the current supply chains situation
- Developing an emergency plan to bridge gaps along the supply chain
- Promoting the private sector and providing it with incentives for bridging gaps
- Encouraging national initiatives for bridging supply gaps
- Breaking the monopoly with regard to logistic supplies and financing

Stakeholders/ partners (implementation, coordination, funding)

Responsible Authorities:

Central Government Coordination Bodies

Ministry of Industry and Trade - Ministry of Transportation

Yemen Organization for Standardization Metrology and Quality Control

Supporters:

UN agencies, international and national organizations, the private sector, civil society organizations and the local authorities,

Mechanism

Disruption of Livelihoods

- Building the community's capacities in entrepreneurship
- Launching community initiatives for establishing small and micro enterprises
- Apprenticeship Programs
- Encouraging initiatives related to the agro-food and fisheries industries
- Training families in setting up professional and craft projects
- Providing agricultural, livestock and fish production inputs to rural families
- Organizing exhibitions and local markets for household products

Stakeholders/ partners (implementation, coordination, funding)

Responsible Authorities:

Central Government Coordination Bodies

Ministry of Agriculture and Irrigation - Ministry of Industry and Trade - Ministry of Fish Wealth

Ministry of Social Affairs and Labor

Social Fund for Development

Supporters:

UN agencies and international organizations

General Authority of Zakat

Agricultural and Fisheries Production Promotion Fund

Funds, micro-financed institutions and banks

Capacity for transition in cases when the existing food system is not sustainable

Mechanism

Description:

All kinds of disasters result in negative or positive transformations; therefore, it is not possible through a mere overview of such transformations to know the extent of their impact and conflict with the economic, social and environmental standards of food security and nutrition of existing and future generations.

Analysis:

- Failure to enforce some laws, legislation and legal measures.
- Some government agencies' tasks and terms of reference are overlapping.
- Having a community's conflicting perception that leads to negative transformations (unplanned adaptation).
- Scarcity or lack of financial resources

Mechanism:

- Creating a risk assessment mechanism.
- Creating a mechanism for monitoring and tracking problems (transformations accompanying crises)
- Creating a proactive mechanism (to analyze transformations) for reducing negative transformations resulting from crises
- Reviewing similar national, regional or international experiences and taking advantage from them without contrasting the national standards.
- Creating a mechanism to monitor and follow up on transformations in current behavior practices
- Creating a mechanism to assess transformations resulting from crises
- Creating a mechanism for communication and networking around the potential transformations.
- Raising awareness of negative transformations and advocating for positive transformations for supporting transformations and change,

Example: Low fish stocks

Analysis: The decline in fish production has affected the food system in the community

Transformation Mechanism:

- Fish farming in coastal areas, fresh water and dams
- Raising fishermen and community's awareness of the importance of protecting fish wealth, fish stocks and the marine environment
- Carrying out studies to assess fish stocks and how to protect them, and setting up pertinent legal legislation.
- Implementing the emergency mechanism.

Positive transformation:

- Protecting and developing fish stocks
- Increasing the per capita of food fish
- Creating job opportunities in coastal areas
- Expanding the distribution of fish products to landlocked areas
- A noticeable transformation in the productive families activity

Negative transformations:

- Depleting fish stocks,
- Destroying the marine environment,
- Overfishing,
- Using fishing methods that could be harmful to the marine environment in the long term,
- Environmental pollution

Stakeholders/ partners (implementation, coordination, funding)**Responsible Authorities:**

Central Government Coordination Bodies

The government, ministries and relevant authorities

Supporters:

- Humanitarian organizations working in the relief, humanitarian and development fields, such as FAO and IFAD
- Agricultural and Fisheries Production Promotion Fund
- Higher Agricultural and Fisheries Committee,
- National fish cooperatives.
- Private sector
- Supreme Economic Committee