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A Future Vision for Sustainable Food Systems in Yemen

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Introduction

Unhealthy diets have become a major source of poor health and environmental deterioration. From this standpoint, the food systems paths focused on vital and promising sectors, as the fisheries sector represents one of the national pillars whose contribution to the development of the national economy and the enhancement of food security is relied upon, in addition to the agricultural sector, which seeks with institutional efforts and national directions to increase growth rates, secure food and combat poverty, the education and social protection sector contributes to integrating a set of nutrition-sensitive programmes, by spreading community awareness and education on the importance of dietary diversity according to the availability of plant and animal sources, in addition to strengthening school curricula with targeted nutrition messages. It contributes to raising the level of family nutrition, developing and disseminating the experience of providing the school meal. The water and environment sector seeks to promote public health and reduce the burden of malnutrition, by increasing water, hygiene and sanitation interventions to obtain safe, clean water and a healthy environment.

In order to complement the national efforts, the food systems dialogues contribute, within a participatory dialogue approach, to presenting a new approach and work paths that help in developing practical solutions that are compatible with the requirements of the current context in the country, taking into account the current and future opportunities to support the resilience of food systems in Yemen, focused in their entirety on building national food systems in all its aspects, including public policies and national strategies to strengthen interventions and control over food (from production to consumption) and along value chains.



Achieving self-sufficiency in the food industries



Safe access to self-sufficiency



Sustainable school nutrition and a sustainable health system for school students



Having the community aware of dietary patterns



Spread of the integrated agriculture among the targeted communities



Healthy, nutritious and safe food for healthy children



Food Systems in Yemen (Current Context)



Blue Foods

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.

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.

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;
- ◆ 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;
- ◆ Assisting the most affected families on the coast, including coastal women;
- ◆ 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.
- ◆ Supporting income-related livelihoods and food production;

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.



Food systems, through the agricultural sector, aim to maximize its contributions to nutrition to the maximum extent possible; and 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.

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%¹ 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%² 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%², 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%⁵ annually 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%¹ of the GDP; the arable area is 1.452 million hectares, and the total area is about 1.609³ 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 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.

¹ Central Statistical Organization (2020)

² National Strategy for the Agricultural Sector 2012-2016

³ Agricultural Statistical 2019

Rural Women and Malnutrition Impact

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:

Yemen embraces a large agricultural area, with an arable area estimated at 1.5 million hectares³, and the improvement in annual precipitation rates in light of climatic changes, which provides additional quantities of irrigation water, encouraging investment in this important sector.

In addition to many advantages, the most important of which are:

- 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.



khat and other crops

The area planted with khat has increased more than 13 times³ 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 hectares³, accounting for 15% of the total cropped area³ and 28% of the irrigated area³. 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 consumption⁴ and 25% of the water consumption in agriculture⁴. 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.

⁴ Previous studies.

⁵ Yemen Population Status 2021, National Population Council

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 .

Promote community awareness

The Yemeni government has given a high priority to increasing enrollment in education, particularly the enrollment of girls in schools in rural areas. Where education is considered the first starting point for increasing societal awareness leading to a positive change towards the correct nutritional behavior.

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.

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.

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:

Action Track 1: Ensuring access to safe and nutritious food for all



Action Track 2: Shift to Healthy and Sustainable Consumption Patterns



Action Track 5: Build Resilience to Vulnerabilities, Shocks and Stresses



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.

What are the national dialogues on food systems?

They are open meetings and discussions with many stakeholders from different sectors.

What is the purpose of the national dialogues?

The various national dialogues aim to:

- Understanding of current and existing food systems and policies;
- Identifying nutritional gaps and finding alternatives;
- Develop solutions to make food systems more resilient and resistant to shocks;
- Formation of working groups or tracks for sustainable national food systems in line with national plans and priorities.



Expanded meetings of the national food systems dialogues in Yemen

Action Stream 1: Ensure access to safe, nutritious food for all

The aim of the meeting is to identify the problems that must be addressed; To conduct a scientific discussion based on experience and practice and come up with a number of solutions that would bring about a radical change in the pattern of food consumption, within three main axes:

1. **Zero Hunger:** About 700 million people suffer from malnutrition, and a quarter of the world's population is food insecure. This deserves urgent action. Addressing it likely includes significantly increasing agricultural productivity in sustainable ways, strengthening social protection that builds productive assets, and reducing inequality in access to food. Moreover, it is in countries experiencing war, conflict and fragility that hunger is rising the fastest, prompting special attention to be paid to humanitarian contexts and fragile and conflict-affected situations.
2. **Access to nutritious food:** A large percentage of the world's population does not eat a healthy, balanced diet - and nearly 3 billion people cannot afford even one. Improving access to and making nutritious foods the preferred choice will require addressing three major barriers to them: price (i.e. how to make nutritious foods cheaper and nutrient-poor foods relatively more expensive) and purchasing power (i.e. increasing purchasing power through social media). protection, wages, etc.), and perceived affordability (ie changing how people value nutritious foods in relation to their price)
3. **Food safety:** WHO estimated that foodborne illnesses caused a high proportion of illness and a high proportion of premature deaths in 2010. Particularly in low- and middle-income countries with the highest burdens, focus on markets where vulnerable people buy Food through appropriate and appropriate interventions can reach low-income consumers while not excluding small-scale and low-income producers and sellers. shifting from risk thinking to risk thinking, which focuses on understanding the relative risk of causing harm; Possibility of providing appropriate incentives and support to actors to adopt improved practices; and enhance consumer demand for food safety.



Action Stream Two: Shifting to healthy and sustainable consumption patterns

The meeting aimed to come up with a number of solutions that would bring about a radical change in the pattern of food consumption within the three work areas of the second work stream: 1) food environments, 2) demand for food, 3) food waste.

Solutions must be analyzed and examined based on the three main criteria to find solutions that can radically change the situation in a phased manner through:

- **Impact:** Provides long-term economic, environmental and societal value at scale, addresses the main and most pressing food production challenges, and integrates with other actions and sustainable food systems already in place.
- **Actionability:** Designed to target improvement in a specific area, defining measurable results, taking into account context, available resources, and accountability.
- **Sustainability:** the ability to continue to achieve the Sustainable Development Goals by 2030 and beyond.

Solutions should also focus on reducing unhealthy diets as follows:

- Existing diets that provide more quantity but lower quality food;
- Increased availability of cheap calories and lack of a variety of nutritious foods.
- Healthy diets cost, on average, five times more than diets that simply provide enough calories.
- Current food policies, food industry practices and changing consumer preferences are leading to increased consumption and explosive growth in the consumption of ultra-processed foods and beverages.

- Risk factors include low fiber diets, low consumption of fruits, vegetables, legumes, whole grains, nuts, seeds, milk, seafood, calcium, healthy fats that are high in unsaturated fatty acids, and increased consumption of salt/sodium or processed meats and sugar.
- Falling food cost may lead to increased food waste, now a third of food is lost or wasted between farm and plate.
- Today's long and complex food value chains, together with intensive livestock production, can increase the risk of rapid transmission of foodborne diseases and the spread of zoonotic agents (including viruses), as well as other food-related health risks such as - antimicrobial resistance.

Action Stream Five: Building resilience to vulnerabilities, shocks and stresses

The meeting aimed to develop solutions to build national capacities to withstand times of crisis and to participate in issues of building sustainable and resilient food systems in the next decade.

- Define a list of solutions with high impact in:
 - Creating a coherent approach (multi-system, multi-sector, multi-level, multi-stakeholder);
 - A dual-track approach linking emergency response to sustainable development;
 - local and national ownership; Within an approach specific to the local and national context;
 - Sustainable local food systems by encouraging transformative innovation.
- Encouraging government, private sector, civil society organizations and actors to take actions in line with the solutions;
- Propose public advocacy tools focusing on the five core competencies for food system resilience in the face of shocks:
 1. Capacity to predict.
 2. Capacity for prevention.
 3. Capacity to absorb.
 4. Capacity to adapt with risks emerging.
 5. Capacity for transition in cases when the existing food system is not sustainable.



Translating solutions into collaborative actions to support resilience of food systems by:

- Promote investment in inclusive food systems that address people's food needs;
- Strengthen the capacities and resources of farmers, indigenous groups, women, youth, and micro, small and medium enterprises to participate effectively along the entire food system from production to consumption, and provide them with tools, techniques and advisory services to enhance their engagement with the private sector;
- Risk management at all levels in the food supply chain.
- Coordinating policies, programs and investments (including producer assistance) among all stakeholders, with governments;
- Explore opportunities for blended domestic financing and public-private partnerships (PPP) to mobilize funding for under-resourced initiatives to effect positive change in food systems;
- Possibility to mitigate instability, shocks and pressures leading to unavailability and sustainability of food;
- Develop monitoring and evaluation systems to monitor, measure and evaluate interventions;
- Identify harmful agricultural practices such as excessive use of fertilizers and pesticides and excessive irrigation that contribute to soil degradation, soil alkalinity and erosion and threaten the sustainability of sustainable food systems.

Outputs of food systems dialogues in Yemen

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.

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.

1: Scaling up social protection

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

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.

1.2 National Task-Force on Compound/Brown Subsidized Bread

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;

	<ol style="list-style-type: none"> 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.
1.3 National Task-Force on Domestic Food Industries	<p>Overall Purpose: Towards self-sufficiency in local food industries (healthy and safe);</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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.
1.4 National Task-Force on Home Economics	<p>Overall Purpose: An economic productive society rationalizing its consumption;</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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;
2: Expanding the scale and quality of agricultural and fishery products	
2.1 National Task-Force on Food Self-sufficiency	<p>Overall Purpose: Towards the realization of food self-sufficiency</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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. Supporting the gradual shift towards sustainable and developmental interventions. 13. Disseminating a culture of self-sufficiency at the national, community and family levels; 14. Preparing programs/projects/manuals to help families to achieve self-sufficiency through home gardening, manufacturing, and drying;

	<p>15. Incorporating a culture of self-sufficiency in school curricula at all educational levels;</p> <p>16. Adopting and preparing capacity-building programs in the field of food processing and making them accessible to all.</p>
2.2 National Task-Force to Increase Domestic Agricultural Production	<p>Overall Purpose: Crops of high quality and quantity</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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;
2.3 National Task-Force to Support the Agricultural and Fisheries Investment Environment	<p>Overall Purpose: Conducive investment environment for investors, farmers and fishermen.</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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.
2.4 National Task-Force on Government Support to Fishermen	<p>Overall Purpose: Sustainable livelihoods for the fishermen.</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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).
2.5 National Task-Force to Support Integrated Domestic Agriculture	<p>Overall Purpose: Integrated farming that contributes to achieving dietary diversity.</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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.
2.6 National Task-Force on the Protection from Khat's Effects	<p>Overall Purpose: Yemen Without Khat</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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.

2.7 National Water and Environment Task-Force	<p>Overall Purpose: Safe water and a clean, sustainable environment.</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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.
2.8 National Water and Environment Task-Force	<p>Overall Purpose: More productive, safer and more sustainable food systems.</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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.
3: Providing lifelong nutrition, health education and awareness raising	
3.1 National School Meals Task-Force	<p>Overall Purpose: Promoting nutritional and health situation of school students and staff.</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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).
3.2 National Task-Force on Hospitals and Health Facilities Nutrition	<p>Overall Purpose: Adequate health nutrition for patients and staff in all public and private hospitals according to protocols and standards adopted.</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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.

3.3 National Task-Force on Awareness of Healthy Diet	<p>Overall Purpose: Optimal dietary practices for all community groups.</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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.
3.4 National Task-Force on Healthy Food for Children	<p>Overall Purpose: Healthy, nutritious and safe food for children in a sustainable and affordable way.</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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 (<i>Al-Ja'alah</i>); 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.
<h2 style="text-align: center;">4: Ensuring food safety from a multi-sectoral perspective</h2>	
4.1 National Food Safety Task-Force (Food Safety)	<p>Overall Purpose: Safe and sustainable food</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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.
4.2 National Task-Force on Community Management and Use of Agricultural Pesticides and Fertilizers and their Effects	<p>Overall Purpose: Healthy food, productive society and a safe environment.</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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.
4.3 National Task-Force to Reduce Food Losses and Waste	<p>Overall Purpose: Reducing food losses and waste along value chains.</p> <p>Detailed Goals:</p> <ol style="list-style-type: none"> 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

5: Sustainable Funding and Enhancing Efficiency and Effectiveness

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

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.

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

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.

References:

- <https://summitdialogues.org/>
- Central Statistical Organization (2020)
- National Strategy for the Agricultural Sector 2012-2016
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SCALING UP NUTRITION SECRETARIAT

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