

Ministry of Agriculture

Agricultural Initiative

Advancing Sustainable Agriculture in Palestine

"Seeds for Change"

Ramallah
October, 2024

Agricultural Initiative	
Title	"Seeds for Change": Advancing Sustainable Agriculture in Palestine
Project Duration	2025 – 2026 (Two years)
Executing Agency	Ministry of Agriculture
Total Fund	57,700,000

1: Executive Summary:

Agriculture remains a vital sector in Palestine and serve as a backbone for almost all economic sectors, providing livelihoods, enhancing food security, and maintaining social stability for the population.

However, the sector faces numerous challenges especially under the current economic and political situation imposed on the Palestinian and the region because of the Israeli occupation represented in land confiscation, denied accessibility for resources, movement restrictions, settlers violence and the destructive war on Gaza.

The Ministry of Agriculture, directed by its mandated responsibilities to sustainably develop the national agriculture sector, enhance the national food security and to sustain the resilience and steadfastness of the Palestinian farmers and herders, had developed a national agricultural initiative **"Seeds for Change"** to counter the concurrent challenges facing the sector and to advance the sustainable agricultural development.

Seeds for Change represent the basis for transformation and sustainable growth. In MoA's context of the initiative, it represents the effort to address key challenges in the agricultural sector, such as food insecurity, irrigation water scarcity, and environmental degradation, by laying the foundation for long-term resilience. The initiative targets empowering Palestinian farmers and rural communities, promoting sustainable practices, and fostering local production for self-sufficiency. Just as seeds grow into forest, the initiative aims to pave the road for more prosperous and resilient agricultural sector that can support the Palestinian economy and livelihoods to counter challenges.

Key Components:

four components have been adopted by the government as a road map to guide the development directions in the agricultural sector and to pave the integration between emergency and development interventions toward a viable agricultural sector in Palestine that will enhance the livelihood for the rural communities.

- Enhancing Food Security through boosting local production of strategic agricultural commodities: The Food Security aim to boost local food production by promoting sustainable

agricultural practices in fodder and field crops and in the production of red meat and milk through different interventions and activities that will lead to increase the production and productivity in a sustainable way and supporting smallholder farmers.

- Promotion of Sustainable Irrigation Schemes Development: Irrigation water is one of the most important inputs for agricultural development, where irrigation water scarcity is a critical challenge for Palestinian agriculture caused by restrictions on water access and the degradation of irrigation water infrastructure. The component addresses these challenges by promoting efficient irrigation water management practices through demand supply management to improve availability from both conventional and non-conventional resources and to improve the efficiency (both financial and technical) for agricultural uses.

- Agro-Ecological Transformation (Restoration): The Agro-Ecological restoration aims to combat desertification and land degradation that threats the environment and biodiversity and to protect the national ownership for Palestinians land through a dedicated intervention for large scale forestation and rangeland restoration, as well as land rehabilitation and agricultural road construction.

- Urgent Response to safeguard resilient agriculture: Palestinian farmers in West Bank are vulnerable to crises such as natural disasters, climate shocks, and mainly to the Israeli practices represented in settlers aggressions and destructions for assets under the protection of Israeli military forces. The Urgent Response component is designed to provide urgent and immediate support for damaged farmers and vulnerable communities to ensure the continuity of agricultural activities and preventing further deterioration of food security.

The agricultural initiative is the MoAs' comprehensive policy to address the intertwined challenges of Israeli Occupation measures, food insecurity, irrigation water scarcity, and environmental degradation in Palestine through focused interventions of sustainable agricultural practices, efficient irrigation water use, environmental restoration, and rapid response which will restore and rebuild resilient agricultural capable of supporting the Palestinian economy and steadfast in the long term.

2: Country Context:

Palestine faces significant challenges in the Agricultural Development as a result of the complex economic and political conditions and restrictions imposed on the utilization and the accessibility to natural resources due to the occupation and its practices on the ground. Israeli occupation is deliberately practicing destruction for the Palestinian social and economic capacities to thrive through spatial fragmentation, separation, land confiscation and denying accessibility and controlling boarders and lately the destructive war on Gaza that completely destroyed the Palestinian capability to live.

Agriculture had always been a cornerstone for the Palestinians social and economic life, providing job opportunity, contributing to food security and backup trade, export and food industry. But due to the loss of agricultural land to settlements and confiscation, denied access to irrigation water resources, intended destruction for agricultural assets by the Israeli army and settlers, blockade and restrictions on free movement for population and goods nationally and through boarders, as well as the climate change and the international inflation, all these factors caused the agricultural sector to straggle in development.

The agricultural sector in Palestine has seen a decline in its contribution to GDP, from 13.3% in 1994 to 6% in 2022. This reduction has been accompanied by job losses and increased dependency on food imports, primarily from Israel. The sector's challenges include imbalances in supply and demand, high costs of production, particularly for animal feed, and significant losses across the supply chain.

Food Security:

Food insecurity in Palestine has been steadily worsening. As of 2023, approximately 32% of Palestinian households are severely or moderately food insecure. This figure rises to nearly 62% in the Gaza Strip, where the blockade has severely limited accessibility and sustainability of food, where about 70% of Gaza's population depends on food assistance due to the economic blockade and repeated military conflicts. and the latest war on Gaza strip in October in 2023 had caused almost all population in Gaza to lose their source of income and to get into famine crises, where almost all population in Gaza (2.2 million inhabitant) are marked under crisis or worse levels of acute food insecurity according to Integrated Food Security Phase Classification (IPC).

Vulnerable groups are the most affected in Food insecurity. This includes refugees, women-headed households and population living in rural area, especially those living in Area C and Bedouin communities. Refugees are particularly vulnerable due to their reliance on external aid and limited access to employment opportunities. Women-headed households also face higher rates of food insecurity due to gender disparities in income and access to resources.

The demand for fodder and grains greatly exceeds local production capacity. This shortfall is mitigated through substantial imports from international sources, including Israel. These imports

incur high costs due to customs duties, taxes, transportation, and other related expenses, making them significantly more expensive than locally produced alternatives.

Irrigation water Situation:

Water sources are diverse in Palestine Between surface sources and underground sources. The average annual rainfall ranges between 150- 550 mm. Groundwater represents the primary source of water in Palestine, as the Palestinians exploit about 15% of these resources, while Israeli occupation extracts about 85% of the available quantities, where 75% of available water comes from groundwater. The amount of water pumped from the wells of the western groundwater basins in 2021 amounted to about 105.3 million m3 for drinking and agricultural purposes. An estimated 5-6 million cubic meters are also purchased for agriculture from the Israeli company Mekorot in the northern Jordan Valley for agricultural purposes.

The number of seasonal and non-seasonal springs in Palestine is estimated at 714, of which only about 350 are used. Settlers control a large number of them, and their Palestinian owners are prevented from accessing them. The flow volume of these springs is estimated at about 37 million cubic meters, a small portion of which is used for agricultural irrigation purposes. The irrigated area constitutes about 14% of the agricultural land area in the West Bank.

The quantities of wastewater in Palestine are estimated at more than 193 million cubic meters annually, according to data from the Water Authority, including 103 million cubic meters in the West Bank, where approximately 10% of that quantity is treated at 10 million cubic meters annually, while in the Gaza Strip, the estimated quantity of wastewater is 90 million cubic meters. Approximately 66% (60 million cubic meters annually before October 7, 2023) were treated. Only 2 million cubic meters of treated wastewater (20%) are currently being used to irrigate 3,000 dunums in various governorates of the West Bank due to the lack of any storage facilities for the treated wastewater on the one hand, and the lack of infrastructure for transportation systems to carry.

Water uses for agricultural purposes are estimated at about 150 million cubic meters annually (60 million cubic meters in the West Bank and 90 million cubic meters in the Gaza Strip). Enhancing the Supply-Demand management for Irrigation water resources is the basic foundation for the continuity of agricultural development and effective contribution overall national development.

Agro-Ecology:

Palestine is endowed with important natural resources such as soil and water, yet these resources are under increasing pressure due to urban expansion, climate change, human activities, as well as occupation practices and settlement encroachment.

The estimated area of pastures in Palestinian territories is 2.2 million dunums, with only about 700,000 dunums available to Palestinian citizens, most of which are located in areas classified as Area C. Additionally, Palestine is one of the countries with limited vegetation cover, less than 4%

compared to the 10% threshold. The estimated area of forests in Palestine is 240,000 dunums, of which approximately 140,000 dunums can be accessed through protection and management. Moreover, the National Network of Nature Reserves has been declared, with an estimated area of 620,000 dunums, most of which are classified as recreational areas aimed at preserving ecological systems and ensuring the sustainability of natural resources.

Farmers Resilience on their land:

Given the importance of Agriculture in reinforcing Palestinian identity and enhancing the resilience of Palestinian farmers on their land, the Israeli occupation persistently engages in multiple daily violations that lead to the depletion of natural resources. These actions are part of a broader strategy aimed at gradually dismantling the agricultural sector through land seizures, the establishment of settlements, the construction of the separation wall, and the proliferation of Israeli factories.

In the absence of accountability for these violations and the international community's disregard for the aggressions against Palestinian lands, the land has become vulnerable to Israeli exploitation. This has resulted in the displacement of the population and continuous catastrophes for the Palestinian people, most recently exemplified by the October war on the Gaza Strip.

The occupation's aggression is not limited to land control; it also involves attacks on the agricultural sector. Daily violations and aggressions on Palestinian land include, land confiscation, the destruction of forests for settlement construction, the uprooting of trees, and the setting fire in agricultural fields. Additionally.

There has been a notable expansion in the establishment of settlements and settlement outposts in Palestinian territories, posing a significant threat to Palestinian lands. The following table illustrates the settlement expansion in the West Bank:

In 2022, the occupation authorities approved 83 plans, resulting in the seizure of approximately 26,000 dunams under the pretext of closing nature reserves and designating them as state lands. By 2023, the number of settlements in the West Bank, including Jerusalem, had reached 176 settlements and 186 settlement outposts. In 2023, particular emphasis was placed on pastoral settlement, where settlers, accompanied by flocks of sheep and cattle, took control of vast areas, further threatening the existence of Palestinians.

In light of these challenges, the Ministry of Agriculture has prioritized strategic goals aimed at strengthening the resilience of Palestinian farmers and reinforcing their connection to the land. The ministry also provides support and assistance to those affected by Israeli violations.

3. Strategic Objectives and Results

3.1 Project Objectives

The overall goal for the Agricultural initiative is to "***To build a resilient, sustainable, and capable of enhancing food security, conserving natural resources, supporting rural livelihoods, and mitigating the impacts of aggressions and external pressures***".

The initiative will facilitate the achievement of the following objectives through the implementation of the initiative components:

- Enhancing Food Security through boosting local production of strategic agricultural commodities.
- Promotion of Sustainable Irrigation Schemes Development.
- Enhancing Agro-Ecological Transformation (Restoration).
- Supporting the resilience of farming communities.

3.2 Alignment with the Government Strategies

The initiative is a direct representation for the national Agricultural Sector Strategy (NASS 2021-2024) and directly aligned with the future vision that belief in the positive potentials of the Palestinian Agricultural sector when modernized for both national and international markets.

Driven by NASS 2021 – 2024, the initiative is directly linked with the following strategic objectives:

- S.O.1: "*The resilience of female and male farmers on their lands is enhanced*", where the initiative will focus on providing immediate and long-term interventions. It will offer rapid response mechanisms to address damage caused by natural disasters, climate shocks, and Israeli settler aggressions to ensure the continuity of agricultural activities and preventing further deterioration in food security. Additionally, the initiative will empower smallholder with access to sustainable farming techniques and improved irrigation schemes. Trough restoring degraded lands, enhancing infrastructure, and providing direct support to those most affected, the initiative ensures that vulnerable farmers and communities can recover and build resilience against prospective shocks.
- S.O.2: "*Food self-sufficiency and disengagement from the Israeli domination over trade and markets are enhanced*", where the enhancement of food security is an essential component for national security and self-reliance and a direct response to government priorities to sustain the resilience of population, while disengaging from the Israeli economic domination.
- S.O.3: "*Sustainable management of agricultural natural resources adapted to climate change*", where the enhancement of irrigation water security is an essential component to promote agricultural production and productivity in a sustainable manner. furthermore, the enhancement of forestry, range land and the Palestinian arable land is an essential component to protect the environment as and secure national land.
- S.O.4: "The production, productivity, and competitiveness of the Palestinian agricultural sector are enhanced", where utilizing the comparative advantage for the Palestinian agriculture with

the diversification of the agricultural production throughout the different production chains and to focus on the production of the commodities that are mostly imported through introducing new technologies will increases the production and reduce the cost of production, and hence improve the profitability of the sector especially in the livestock. furthermore, if managed correctly, this will encourage the expansion of exports and the balance of trade, create jobs for the youth, and increase agricultural contribution to GDP.

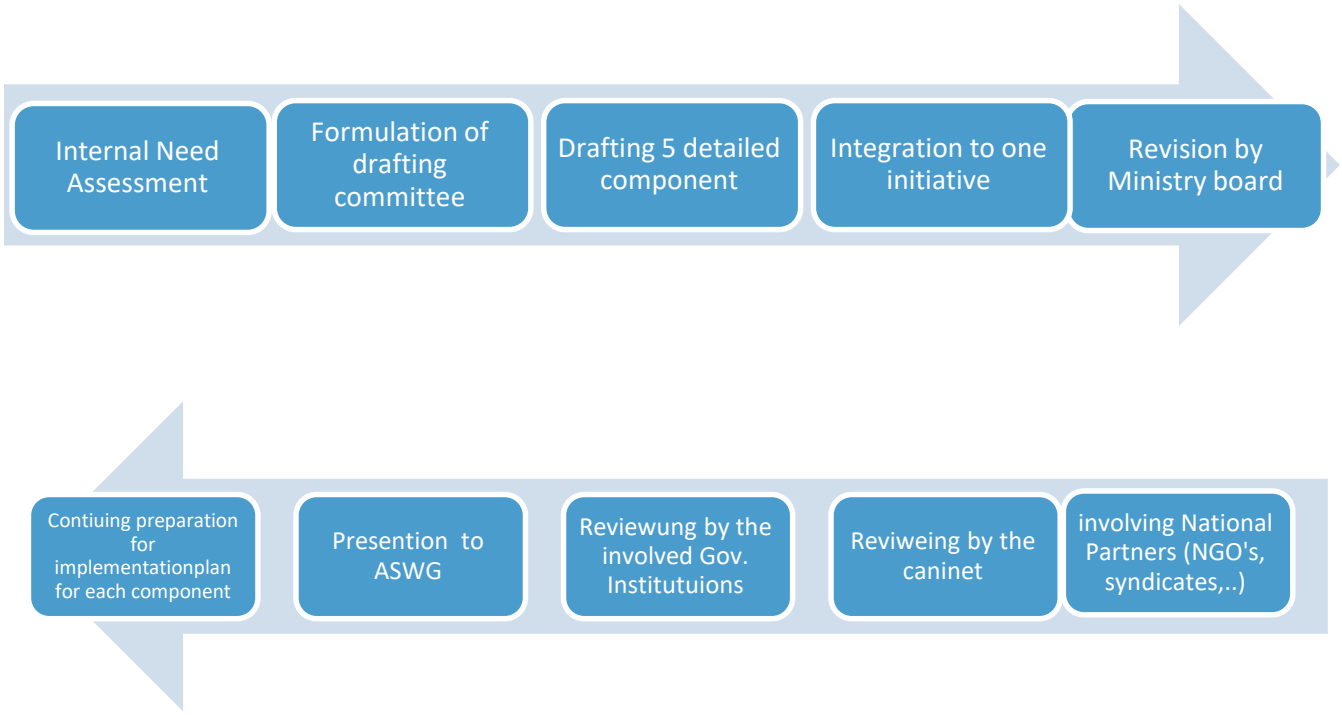
The Palestinian cabinet of Ministers had adopted lately a new approach to enhance the resilience of the population and encourage the economic development through focused initiatives in the social and economic sectors. The Agricultural sector is one of the main sectors that have potentials for both social and economic development, where the government had adopted the agricultural initiative with a main focus on the natural resources development (including land, water and forestry), food security (through enhancing thr production of strategic commodities), urgent response (to support local farmers to counter occupation and settlers attacks). The project will be linked with almost all initiatives while focusing on the food security through the enhanced production of field and forage crops and red meat.

3.3 Adaptation methodology

Directed by the cabinet, the Ministry of Agriculture followed the participatory approach to which involves several key steps as follows:

- Conducting an internal need assessment for the priorities which involves the superior officers in the ministry including the Minister, Deputy Minister and the heads of the different sectors and programs in the ministry. This assessment defined the challenges and opportunities that the initiative will target.
- Formulation of internal drafting committee headed by the planning department with the and relevant technical departments in the ministry including agricultural water, agricultural land, veterinary services, extension services and farmers services. The committee drafted the initiative according to the directions of the need assessment and in consultation with relevant stakeholders. Where clear theory of change including objectives, outcomes, interventions and activities were proposed and drafted consisting of 5 main components, where each component had a detailed implementation proposal.
- One initiative was drafted by integrating the five detailed components for advancing agricultural development.
- The initiative was reviewed by the ministry board internally and a modification had been adapted to the initiative.
- The initiative was shared with the national agricultural NGOs as the main stakeholder in the sector.
- The initiative was presented to the cabinet and the relevant government institutions for their engagement and partnership.
- The initiative was presented to the agricultural sector working group (ASWG), which is formed from donors in the agricultural sector to enhance the advocacy and integration of their programs in line with the initiative.

The below diagram summarize the methodology that MoA follows in the preparation process:



3.4 Key Performance Indicators (KPIs)

- Total agricultural area allocated for field and fodder targeted crops (target: 50,000 dunums by 2026).
- Area of cultivation using treated wastewater for targeted crops (target: 2,000 dunums by 2026).
- Number of sheep breeding units established (target: 5 units by 2025).
- Increase forest and rangeland Area by 5,000 dunums within 2 years.
- Increase carbon fixation from 99 million ton co2 absorption to 101 million co2 absorption.
- Increase the rangeland productivity three times from 40kg dry matter per dunum to 80 kg dry matter/dunumduring 2 years.

3.5 Project Component and Results:

Component/Outcome 1: Enhanced Food Security through boosting local production of strategic agricultural commodities.

This component focuses on expanding the area under cultivation for key crops such as wheat, barley, chickpeas, lintels, vetch and alfalfa using improved, drought-resistant, high productive varieties and enhancement of livestock production including sheep, goat and cows through improved breeding practices and with highly productive breads which are adaptable to local agroclimatic conditions, better farming management, intensive programs for animal health

management practices and the establishment of infrastructure to support livestock markets and slaughterhouses.

The aim is to double self-sufficiency rates and reduce reliance on imports from fodder and field crops and red meat, as well as to provide a cheap source of locally produced fodder crops for animal feed and production and to enhance livestock production including sheep, goat and cows through improved breeding practices and with highly productive breads which are adaptable to local agroclimatic conditions, better farming management, intensive programs for animal health management practices and the establishment of infrastructure to support livestock markets and slaughterhouses.The component will also focus on establishing a central facility training and capacity building, targeting farmers, agronomists, and other stakeholders.

This component is crucial for ensuring sustainable agricultural practices and long-term food security.

Outputs/Activities:

- A national plan for food security and the supply of strategic goods and basic commodities (field and fodder crops) is prepared and approved by the government.
- Introduce breeds goats and sheep to the breeding Stations in Samou' and Beit Qad.
- Introduce improved rams of highly productive breed to local farmers.
- Introduce modern breeds improvement techniques (artificial insemination, cross breeding, embryo transfer) to local farmers for sheep and goats.
- Construction of livestock markets and slaughter house.
- Implement a selected animal health management program.
- Establish breeding program for local cattle breeds.
- Establish the training center and satellite facilities.
- Develop and deliver specialized training programs.
- Training pioneer farmers to produce their own seeds with high quality.
- Build partnerships with local and international organizations for knowledge exchange.
- Establishment of farmers field school of for local farmers in livestock.
- Developing a national program for animal health management.

Component/Outcome 2: Promoted Sustainable Irrigation Schemes.

This component focuses on Rehabilitating underground wells with modern equipment with the aim of raising the operational efficiency of these wells and increasing pumping quantities and productivity by 25%, which leads to saving.

This will also include supplying and installing of solar energy units for agricultural groundwater resources, in order to provide alternative energy sources to operate these wells instead of

electricity and diesel, with the aim of reducing the cost of operating expenses for those wells by 40%, which reflects positively on the price of a unit of irrigation water for farmers.

It will also transfer treated wastewater from waste water treatment plant station to agricultural area and develop the irrigation system in order to meet the needs of the increasing demand for agricultural water to grow strategic fodders crops and to increase the agricultural area with targeted crop.

This component will also Establish agricultural water harvesting facilities from rainwater and the surface runoff by constructing and operating earthen ponds of different sizes to increase the availability of agricultural water for supplementary irrigation, in targeted governorates as well as constructing 70 cubic meter cisterns in mountain area of West Bank.

Outputs/Activities:

- Rehabilitation of 70 agricultural groundwater wells with the necessary equipment in West Bank governorates.
- supply and installation of 100 solar energy units for agricultural groundwater wells in West Bank governorates.
- Construct two conveying system for treated wastewater.
- construction of a solar energy unit with a capacity of 350 kilowatts per hour.
- Construction and operation of 37 water harvesting pond in Hebron, Bethlehem and Ramallah governorates.
- Establish and construct 1,000 cistern in West Bank governorates.

Component/Outcome 3: Enhanced Agro-Ecological Transformation (Restoration).

This component will focus on the expansion the area of forest and rangeland through a dedicated forestation, cultivation and protection activities targeting both state owned land and private and communal land. The trees and seedlings will be provided through the Ministry nurseries. This will be implemented in a partnership with the local councils and municipalities through a public – private partnership to facilitate the establishment of recreational area to local residents that may be used also to provide job opportunity and agribusiness.

land reclamation, rehabilitation and conservation is considered as a cornerstone to develop the agricultural sector, especially with the limitation in expanding agricultural land due to occupation constrain. This component will target the development of mountain area in a climate smart intervention that will increase the productivity of the land and facilitate the accessibility to remote area and to provide production alternatives to local rural residents in agriculture.

Outputs/Activities:

- Producing 500,000 forest and forage seedlings annually at the Ministry of Agriculture's nurseries.

- Planting 1,000 dunums of new forests annually in governorates with land classified as government forests.
- Planting 1,000 dunums of new pastures and rangeland annually in pasture and common land areas.
- Rehabilitating 5,000 dunums of pastures and rangeland reserves by spreading natural seeds, applying fertilizers, and implementing grazing management systems.
- Establishing 2 national parks in secure forest lands.
- Establishing 10 public gardens in government forest areas.
- Rehabilitating 1,000 dunums of agricultural land annually.
- Constructing 100 kilometers of agricultural roads annually.

Component/Outcome 4: Enhanced resilience of farmers communities (urgent needs against shocks).

This component is expected to establish a supervisory committee and develop an operation manual to monitor and quick react to support farmers, herders and rural communities against assaults and aggressions caused by settlers attacks and destructions for agricultural assets. The creation of clear beneficiary selection criteria will promote fairness and equity in resource distribution, ensuring that both gender and geographical allocation are respected.

Regular reporting and evaluations, including feedback from farmers, will provide valuable insights for continuous improvement, helping to address challenges. Ultimately, these interventions will result in more resilient farmers to protect the national ownership of land and agricultural assets.

Outputs/Activities:

- provision 4 suitable and secure storage facilities with safety procedures in place.
- contract 4 nurseries to accommodate seedlings.
- Provide transportation and logistical support.
- Project management committee in collaboration with the specialized committee for the Emergency Response Fund.
- Prepare a list of needs, including agricultural equipment and supplies, seedlings, trees, seeds, irrigation tools, tents, and other items.

4. Project Implementation Arrangements

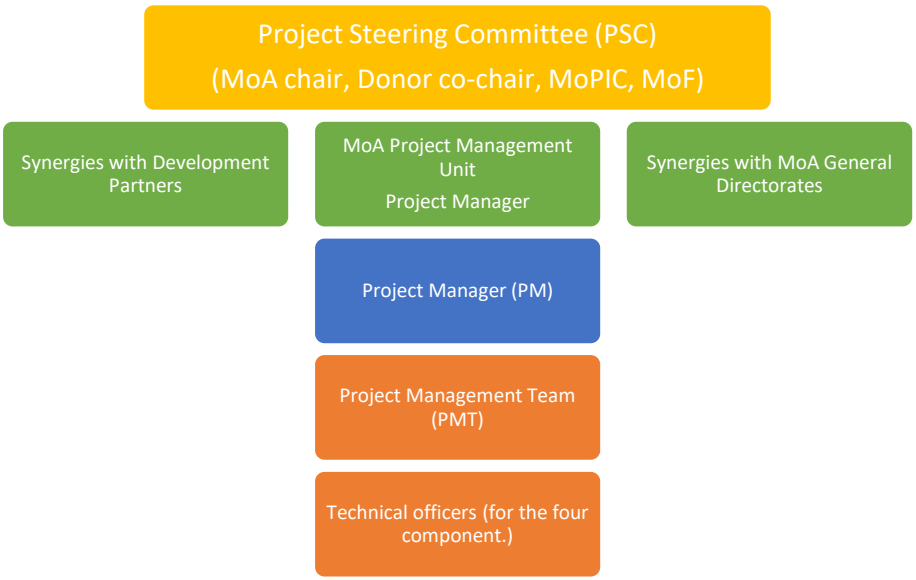
4.1 Institutional setup:

The Ministry of Agriculture and after the approval of the initiative and fund allocation or commitment will establish a steering committee (PSC) chaired by the ministry and co-chaired by the funding institute. the SC will have the responsibility to oversee the project and provide guidance and follow-up and facilitate the smooth implementation of project.

the Ministry will also establish a project management team (PMT) under the direct supervision of the project management unit in the ministry project management unit (PMU). The PMU will ensure the synergies with similar projects and activities through working closely with international development agencies, NGOs, private sector entities and local communities of similar interventions to leverage the expertise and resources.
The PMT will include (but will not be limited to) the following personnel:

- Project Manager (PM): the PM will be responsible for the whole management and implementation of the project. PM ensures the smooth implementation of the project in terms of technical, administrative and financial aspects at the Headquarters level. The PM provide the necessary coordination with other PMU whom will facilitate the coordination with other projects in the ministry, as well as with development partners.
- Technical officer/s (TO): the Ministry will deploy a dedicated officers from its staff in the field of project components (veterinary, ruminant management, fodder crops, field crops, monitoring and evaluation, training and extension, finance and tendering,….)
- Partnership with Governmental Institutions: A partnership with governmental institutions including the Ministry of Finance, Palestinian Water Authority (PWA), Ministry Local Governorates (MoLG), Environmental Authority (EQA) should involve a Steering Committee for high-level decision-making, comprising senior representatives from each ministry. Also, representatives for the aforementioned institutions will actively be involved in the project management team.

This collaborative framework fosters alignment of goals, resource sharing, and transparent governance for efficient project implementation.



4.2 Financial Management and Budget

A comprehensive workplan will be developed to track progress against planned interventions and activities in accordance with the Ministry internal format and following the below result chain:
The PMU will conduct regular revisions to ensure the project remains on track and to make necessary adjustments as in the below multiyear work plan.
The project planned budget is estimated by 57,700,000 US $ and detailed in the following table:

Component / Interventions	Cost US$		
	2025	2026	Total
Total Initiative	**19,935,000**	**37,765,000**	**57,700,000**
Component 1: Enhanced Food Security	**8,680,000**	**13,680,000**	**22,360,000**
Support Production of Field and Forage Crops	6,000,000	6,000,000	12,000,000
Developing and Introducing New Breeds for Ruminants	270,000	2,270,000	2,540,000
Introducing Red Meat Ruminant Breeds for Local Farmers	1,230,000	1,230,000	2,460,000
Improving Infrastructure for Ruminant Production (including Slaughterhouse and Livestock Markets)	80,000	2,080,000	2,160,000
Improving Infrastructure for Local Farms and barns	500,000	500,000	1,000,000
Capacity Budling Program for Local farmers in ruminant and Field crops	100,000	100,000	200,000
Establishing a center for training and capacity building	500,000	1,500,000	2,000,000
Component 2: Promoted Sustainable Irrigation Schemes	**9,050,000**	**17,700,000**	**26,750,000**
Rehabilitation of agricultural ground water Wells for Irrigation	875,000	875,000	1,750,000
Installation of Solar Energy Systems for Agricultural ground water Wells	2,000,000	2,000,000	4,000,000
Construction of Irrigation Scheme for Treated Waste Water In Jenin	1,025,000	0	1,025,000

Construction of Irrigation Scheme for Treated Waste Water in Wadi Fara (Western Nablus Treatment Plant)	0	7,975,000	7,975,000
construction and operating agricultural earthen ponds of different sizes	1,650,000	3,350,000	5,000,000
Construction of 1000 cisterns	3,500,000	3,500,000	7,000,000
Component 3: Enhanced Agro-Ecological Transformation (Restoration)	**1,705,000**	**4,885,000**	**6,590,000**
Forestry Cultivation and rehabilitation	320,000	440,000	760,000
Production of Forage and forestry trees	500,000	500,000	1,000,000
Construction of National Parks (300 dunums each)	145,000	145,000	290,000
Construction of Public Green Area (Community Gardens)	160,000	160,000	320,000
Range land Cultivation	280,000	140,000	420,000
Range land Rehabilitation	300,000	300,000	600,000
Agricultural land Reclamation and rehabilitation	1,000,00	1,000,000	1,000,000
Construction of Agricultural Roads	1,200,00	1,200,000	1,200,000
Mobile fire fighting vehicles/Palestinian Prototype	0	1,000,000	1,000,000
Component 4: Enhanced resilience of farmers communities (urgent needs against shocks).	**1,000,000**	**1,000,000**	**2,000,000**
Provide 4 suitable and secure storage facilities with safety procedures in place.	10,000	10,000	20,000
Establish 4 nurseries to accommodate seedlings.	30,000	30,000	60,000
Provide transportation and logistical support.	50,000	50,000	100,000

Project management committee in collaboration with the specialized committee for the Emergency Response Fund.	10,000	10,000	20,000
Prepare a list of needs, including agricultural equipment and supplies (seedlings, seeds, tools, tents, and other items)	900,000	900,000	1,800,000

Periodic progress reports will be submitted on quarterly basis through the PMU to the Steering Committee detailing the achievement against planned activities.

The project implementation will follow the government procedures in contractual work for construction or provision of assets and in line with the national rules and regulations.

5. Risk Management Plan

In the Palestinian context and the current political instability, the it is crucial to address the potential risks that may hinder the implementation of the project activities and to achieve the desired objectives.

Political Risks: Political risks are among the most important obstacles facing the implementation of the project. They are higher than average and must be accepted as part of the working conditions in Palestine, especially with the reported incidents of settlers attacks on Palestinian farmers in rural areas as well as the occupation land confiscation and intended destruction for infrastructure in Area C. the denied accessibility to and from international market that prevents the Palestinians from importing improved breeds may be an obstacle in the implementation of the project.

The Ministry intend to partner international community and local civil society organization in the implantation of the activities as well as to work with private owned land and to negotiated the implementation through international accredited institutes, and it may be needed to adjust project activities in a flexible manner. The ministry will create partnership with international institutions for breeding to introduce new technologies to produce new cultivars and breeds with high efficiency and productivity.

Economic Risks: under the current political situation, the project may be hindered by a fund shortage from the internal government budget. The risk will also double due to cost of inputs and fluctuation of the market price for the products.

It is very important to advocate and partner international fund especially those related to food security and climate change adaptation and mitigation objectives. The MoA will also coordinate the marketing of the produce and create trade links between farmers and market to increase the profitability for farmers and herders.

Environmental Risks: climate change, drought, desertification, water quality deterioration, soil erosion and desertification are the environmental risks that may affect the project development. The project intends to develop climate smart interventions that would adapt to the climate change including, but not limited to the use of non-conventional water resources in the production cycle with a renewable energy source and to introduce the smart agricultural techniques.

Governance and Administration Risk: the change in government priorities as a result in the sudden change in the government may affect the implementation of the project. The Ministry had already developed a national plan in consultation with the local communities where this project had become a national interest and is a priority not only for the government, but also to the population and the international partners.

5. theory of change

Theory of change
The Integrated Initiatives for Sustainable Agriculture in Palestine seek to enhance productivity and resilience by expanding the cultivation of field and fodder crops, improving livestock breeds, and increasing irrigation water availability and efficiency These efforts, alongside biodiversity enhancement and conservation of agricultural lands, aim to revitalize production, create jobs, and engage youth in agriculture, ensuring the sector's continuity as a vital part of the Palestinian economy and strengthening food security for communities.

Impact (General Objectives)	Promoted agricultural sector in Palestine

Results (sub – objectives)	• Improved production and productivity of strategic commodities. • Promoted Irrigation water schemes. • Restored environmental and agroecological conditions. • Enhanced farmers and rural communities resilience and steadfastness,

Outcomes	• Improved yield and productivity of field and forage crops. • Enhanced production and productivity of red meat. • Enhanced local capacity in Agricultural Services and Practices. • Improved irrigation water availability and efficiency. (agricultural ground water) wells have been rehabilitated • Increase in Forest and Pasture Areas • Improving Environmental and Living Conditions for Rural Residents. • Enhancing Livelihoods and Safe Access in Land Management. • Protecting agricultural lands and agricultural assets from destruction, confiscation and settlement expansion

Activities	• A national plan for food security and the supply of strategic goods and basic commodities (field and fodder crops) is prepared and approved by the government. • Introduce breeds goats and sheep to the breeding Stations in Samou' and Beit Qad. • Introduce improved rams of highly productive breed to local farmers.

	• Introduce modern breeds improvement techniques (artificial insemination, cross breeding, embryo transfer) to local farmers for sheep and goats. • Construction of livestock markets and slaughter house. • Implement a selected animal health management program. • Establish the training center and satellite facilities. • Develop and deliver specialized training programs. • Training pioneer farmers to produce their own seeds with high quality. • Build partnerships with local and international organizations for knowledge exchange. • Establishment of farmers field school of for local farmers in livestock. • Rehabilitation of 70 agricultural groundwater wells with the necessary equipment in West Bank governorates. • supply and installation of 100 solar energy units for Agricultural wells in West Bank governorates. • Construct two conveying system for treated wastewater. • construction of a solar energy unit with a capacity of 350 kilowatts per hour. • Construction and operation of 37 rain harvesting pond in Hebron, Bethlehem and Ramallah governorates. • Establish and construct 1,000 cistern in West Bank governorates. • Producing 500,000 forest and forage seedlings annually at the Ministry of Agriculture's nurseries. • Planting 1,000 dunums of new forests annually in governorates with land classified as government forests. • Planting 1,000 dunums of new pastures annually in pasture and common land areas. • Rehabilitating 5,000 dunums of pasture reserves by spreading natural seeds, applying fertilizers, and implementing grazing management systems. • Establishing 2 national parks in secure forest lands. • Establishing 10 public gardens in government forest areas. • Rehabilitating 1,000 dunums of agricultural land annually. • Constructing 100 kilometers of agricultural roads annually. • provision 4 suitable and secure storage facilities with safety procedures in place. • contract 4 nurseries to accommodate seedlings. • Provide transportation and logistical support.

	• Project management committee in collaboration with the specialized committee for the Emergency Response Fund. • Prepare a list of needs, including agricultural equipment and supplies, seedlings, trees, seeds, irrigation tools, tents, and other items.