

# Activity Appraisal Document ODA

## € 1.000.000 or more

### I REQUESTED DECISION CONCERNS

Explanation of the policy data can be found in the [ODA Policy Data Guide](#).

For the **highlighted** subjects in table below the de [ODA Policy Data Guide](#) gives further explanation .

<b>Application number</b>	4000003256
<b>Short name application</b>	Iraq Horticulture Development Program
<b>Long name application</b>	Iraq Horticulture Development Program
<b>Description application</b>	The aim of Iraq Horticulture Development Program is to improve the resilience of the horticulture sector in Iraq, support food security, and strengthen the resilience of food systems
<b>Budget holder</b>	IGG
<b>Number business partner</b>	30029334
<b>Implementing organisation(s)</b>	Eco Consult
<b><a href="#">Legal relationship</a></b>	Grant
<b><a href="#">Commitment</a> in foreign currency (if applicable)</b>	
<b>Corporate rate</b>	
<b><a href="#">Commitment</a> in euros</b>	EUR 8.556.267,- (EUR 8.356.267 program and Euro 200.000,- reservation for evaluation)
<b>Funds centre</b>	1702U0104003
<b>Activity start date</b>	01.12.2019
<b>Activity end date</b>	30.11.2023
<b>Contract start date</b>	01.12.2019
<b>Contract end date</b>	30.11.2023
<b>Has an evaluation been planned?</b>	Yes, mandatory (see decisiontree in 5.3.6.)
<b><a href="#">Aid modality</a></b>	Other aid

<a href="#">Donor role</a>	Single donor		
<a href="#">Technical assistance</a>	25<TA<50 Between 25% and 50% of the activity budget		
<a href="#">Beneficiary's country/region</a>	Iraq		
<b>Countries within the region (if applicable)</b>			
<b>Allocation country information</b>	100% Iraq		
<b>Location within the country (be as specific as possible)</b>	Choose an item.	<b>Name location(s)</b>	
<a href="#">CRS Code</a>	31120		
<a href="#">Policy marker weight is 'principal'</a> (no minimum or maximum amount)	MrktOnt		
<a href="#">Policy marker weight is 'significant'</a> (no minimum or maximum amount)	VdsZek KImAdp		
<a href="#">Special pledges made by the Minister or State Secretary / and/ or special marks regarding sensitive information</a>	n.a.		

## **II. ACTIVITY APPRAISAL**

### **2.1 Contribution made by the activity to BZ policy objectives (policy relevance)**

#### **2.1.1 Description policy relevance**

##### **Context**

Iraq's development and economic growth is challenged on multiple fronts, caused by amongst others a) successive internal and external political turmoil; b) terrorism and c) poor governance structures. This has resulted in large numbers of displaced people, deteriorating infrastructure as a result of conflicts and wars, and economic transformation (transition from oil towards a viable agricultural sector)

The social consequences of weak economic performance and growth coupled with instability and conflicts are devastating. Poverty, unemployment, lack of access to basic services and weak social fabric are exacerbated while institutions remain weak and underperform in creating job opportunities to improve the living standards of citizens. In acknowledging these challenges and setbacks, the government's national plans aim at achieving economic growth. As Iraq remains an agricultural country, the sector is pivotal in contributing to growth rates to achieve national development goals. Iraq's National Development Plan (2018-2022), for example, aims at developing the agricultural sector to reach a growth rate of 8% by 2022 despite the fact that the sector's contribution to GDP has dropped from 4.2% in 2010 to 2.0% in 2015.

Restoring and enhancing the agriculture sector is important for the country at a time where there is heavy dependence on food imports, low domestic food production, and weak food and market chains. Key interventions required for improving the performance of the agricultural sector include rehabilitation of and new investments in water management systems to improve water efficiency; improvement of on-farm management practices, and; the introduction of management and innovation technologies across the agriculture sector, in particular value chains. These interventions will strengthen the sector to play a significant role in economic recovery, reviving peoples' livelihoods, and employment generation in particular for women and youth in rural Iraq.



##### ***Alignment with BZ policy***

In recent years, the Netherlands development cooperation policy for countries in the Middle East has in general prioritized immediate response through humanitarian assistance over development programming. From the offset of the Syria crisis, the Netherlands supported countries in the region to cope with influx of refugees. Humanitarian assistance catered to immediate needs with more recently increased focus on medium to long term development plans. The Investing in Global Prospects policy document aims at creating stability in focus countries, work on poverty alleviation, counter forced migration and promote climate adaptation mechanisms.

The Minister for Foreign Trade and Development Cooperation indicated in her letters to Parliament (13 November 2018) that the objectives of Dutch development policy in Iraq are strengthening stability and economic resilience, with a special focus on the return of displaced people. Additionally, Dutch government wants to particularly focus on innovation to create prospects for young people and women.

The proposed intervention focuses on rehabilitation and improvement of on-farm management practices to enhance efficiency introducing innovative technologies in the agriculture sector and off-farm value chains. The intervention also builds on and contributes to the creation of an enabling environment for the development of market systems and structures that motivate farmers to participate and invest in agricultural sector development and growth. The proposed intervention will be strategic in that it will demonstrate the potential of the sector to contribute to economic recovery, by reviving livelihoods and contributing to employment generation for women and youth in rural Iraq.

### 2.1.2 Appraisal

No.	Criteria 2.1 Policy relevance	Indicators ( score 0, 1, 2)	Score	EXPLANATION/ REFERENCES
2.1.1	The proposed intervention ties in with the operational objectives in the Explanatory Memorandum and the related policy memorandum (policy theory and <a href="#">intervention logic</a> ).	 <p>The proposed intervention ties in with both the main objective and the secondary objectives .</p>	2	This activity is in line with both the main objective of the result framework and the associated sub objective. The intervention will contribute to sustainable and climate sensitive farming practices through the developing and disseminating knowledge on new systems and technologies in the face of a changing climate (more irregular rainfall, recurrent droughts).
2.1.2	The proposed intervention ties in with the ODA <a href="#">priorities</a>	 <p>The proposed intervention ties in with more than one of the result areas of the BH&amp;OS priorities.</p>	2	The proposal is fully aligned with the Dutch Government Policy Targets and it ties in with Food and Nutrition Security Result Framework. The intervention will play an important role in rural job creation and income generation contributing to political and economic

				stability.
2.1.3	The proposed intervention ties in with the annual plan and the result chain of the <a href="#">MIB/MASP</a>	<input type="checkbox"/> <p>The intervention is specifically mentioned in the result chain of the MIB/MASP.</p>	2	Food Security is one of the priority areas within the sustainable development portfolio of the Dutch government in Iraq, and as such integrated in the MLS and annual plan. The Intervention ties further in with the IGG annual plan.
2.1.4	The relevance of the proposed intervention to the crosscutting themes of women's rights and gender equality / climate / PSD / coherence and strengthening of civil society organisations	<input type="checkbox"/> <p>The proposed intervention is relevant to more than one of the crosscutting themes.</p>	2	Attention to women and youth is integrated throughout program activities (intervention design, implementation and evaluation). The approach gives attention to empowerment at household and community levels. Inclusion plans shall also provide with opportunities for women and youth to foster their roles in counterpart institutions and create programs to encourage young women to

				participate in innovative agricultural value chains
Total score (maximum 8 out of 8 points)			8	

## **2.2 Problem analysis and lessons learned**

### **2.2.1 Description**

The Iraqi agriculture sector is challenged by multiple issues to reverse relapse and increase contribution to the economy. The horticulture sector in particular has a great potential to reduce fresh food imports from regional and international markets and meet the growing local demand. In general, the Iraqi fruits and vegetables sector cannot compete with imported products coming from Turkey and Iran.

The main elements that have contributed to reducing competitiveness of Iraqi agriculture products and value chains are: poor market conditions which deter farmers from expanding product base and invest in technology improvements (loss of farmer confidence in the agricultural market system) insufficient deployment of technologies, insufficient public incentives and financing for improvements of postharvest chains (in particular appropriate storage and lack of cold chains that help farmers to maintain quality of produce) and poor sorting and packaging to serve promising market outlets.

There are significant opportunities to improve cultivation practices, increase sector efficiencies, and improve the farming value chains. A multi-faceted intervention is required that invests in key elements of the horticultural sector to facilitate its potential growth. The specific sector challenges to be tackled by the activity are:

- *Weak adoption of innovative technologies at the farm level*  
Farmers continue to follow conventional practices in agriculture at a time when climate change is playing a major role in impeding production rates and quality; desertification, drought, reduced rainfall, decreased water storage, soil degradation and increased environmental pollution. Those elements are now possible to control by available modern technology, for example; moving away from cultivation in open fields and into protected farming under appropriate greenhouse technologies.
- *Inefficient management practices in cultivation and value chains*  
Many standard management practices are less efficient including selection of crop and seeds varieties, application of nutrients and fertilizers, pest management and control, and use of water efficiency practices and systems.
- *Insufficient knowledge and capacities within the public and private sectors*  
Acquiring and disseminating knowledge by various actors is critical to the development of the sector and improvement farming practices. Ministry of Agriculture, Extension Services, academics, researchers or private sector experts can play an active role in this process.
- *Lack of demonstration sites for sharing knowledge and conducting joint activities.*  
These demonstration sites offer possibilities to demonstrate, experiment and learn to stimulate behaviour change. Those locations are imperative to create a platform for practitioners to share experiences and reveal the utility of the innovation/practice to potential adopters and provide supporting evidence.

Deployment of efficient technologies, introducing new varieties, improving irrigation efficiency, and using protected farming under greenhouses are urgent needs. The immediate benefits will be signifi-

cant: improving farmers and community resilience, enhancing local food security and in time with innovations being scaled-up a reduction in horticulture imports.

A multi-faceted intervention is required that invests in key elements of the horticulture sector to facilitate its potential growth. A cluster of interventions is essential to demonstrate improved and efficient horti-systems and technologies, a joined-up approach by connecting counterpart organisations (build awareness, invest in knowledge and enhance their capacities), organize and build more efficient value chains of major horticulture products from cultivation to post-harvest management and development of market outlets through postharvest, and increase consumer awareness on the importance of fresh and healthy products produced locally in a sustainable way.

The Iraq Horticulture Development Program focuses on enhancing the opportunities in the horticulture sector through adopting Climate Smart Agriculture (CSA) technologies that improve product quality, productivity and water efficiency. Improving the value chain and introducing innovative concepts for post-harvest management is also part of the intervention. Another important component in the programme is institutional capacity building. This will directly contribute to enhancing the competitive ability of the Iraqi farmer, increasing resilience of market systems and value chains, and enhancing the knowledge base among partner organizations on sustainable agriculture practices.

While considering the different local contexts (agro-ecology, markets, people groups), the program shall launch activities in three different locations of the country: Basra in the south; Salah El-Din and Baghdad in central Iraq, and; Erbil, Kurdistan to the north. In each location two lead farmers are identified to act as 'change agents' by adopting protected farming practices and technology. Lead farmers are reputed in their communities and amongst their peers as pioneers and change agents in the sector. The lead farmers possess higher technical and financial capacity (in comparison to the local context) to take risks. As 'change agents' they are also capable of stimulating fellow farmers in adopting progressive technologies even if at a lower level of sophistication. With usually long-standing relations with small farmers throughout the value chain, lead farmers' role is instrumental in showcasing enhanced quality and volume production following the adoption of efficient farming technologies.

The Iraq Horticulture Development Program focuses on enhancing the opportunities in the horticulture sector through adopting climate smart agriculture (CSA) technologies that improves product quality, productivity and water efficiency. Improving the value chain and introducing innovative concepts for the postharvest is also part of the intervention. Other important component in the programme are institutional capacity building. This will directly contribute to enhancing competitive ability of the Iraqi farmer, increasing resilience of market systems and value chains, and enhancing the knowledge base among partner organizations on sustainable agriculture practices.

### **2.2.2 Appraisal**

<b>No.</b>	<b>Criteria 2.2</b> <b>Contextual analysis</b>	<b>Indicators (score 0,1,2)</b>	<b>Score</b>	<b>EXPLANATION/ REFERENCES</b>
2.2.1	The proposal is based on a careful and thorough contextual analysis, from which a logical problem definition and objective are generated.	<input type="checkbox"/> <p>The proposal is based on a careful and thorough analysis and results in a logical problem definition and objective.</p>	2	Proposed intervention builds on the experience of the present Eco consult project in Jordan and connects with the Jordan Program to exchange knowledge. In

				addition, extensive stakeholder consultations and local context analysis is performed during the inception period.
2.2.2	Based on the problem formulated, the proposal explains in a logical manner why the intervention is aimed at the specified geographical location.	<input type="checkbox"/> <p>The proposal gives a realistic explanation of why the intervention is aimed at the specified geographical location and substantiates this with examples.</p>	2	Intervention takes into account the different geo-graphic land-scapes and accessibility. The pro-gram will launch activities in three different locations of the country; Basra in the south, Salah El-Din and Baghdad in central Iraq and Duhok, KAR to the north.
2.2.3	The proposal justifies the choice of <a href="#">target group</a> .	<input type="checkbox"/> <p>The proposal clearly justifies the choice of target group.</p>	2	In first instance, new technologies will be tested / validated and demonstrated with more resourceful and advanced growers, with the aim of scaling up technology adoption among favorable farmers. Indirect beneficiaries will also be taken into account in terms of raising awareness activities such as open and public demon-



				stration days to the public and other constituencies.
2.2.4	The proposal sets out which relevant actors were involved in formulating the proposal and what influence they had on the content of the proposal.	<input type="checkbox"/> <p>The proposal sets out the involvement of actors, both in formulating the proposal and in the proposed intervention (including its management).</p>	2	<a href="#">Delphy</a> was involved in formulating the proposal. Furthermore, the role of stakeholders is recognized and will be part of the inception phase of the program. During this period potential target farmer groups will be consulted and their feedback / suggestions taken into account in programme design.
2.2.5	A <a href="#">stakeholder analysis</a> (incl. women and youth) has been carried out and the results incorporated in the proposal.	<input type="checkbox"/> <p>The proposal sets out who has a stake in the programme/project but their relative interests are not set out in detail.</p>	1	Initial stakeholder mapping has been done, however stakeholder in-depth analysis is part of the inception phase of the program. Reference is made to subsection 2.3 of the intervention proposal
2.2.6	The proposal describes how the results of evaluations and/or studies feed into formulation of the proposal.	<input type="checkbox"/> <p>The proposal clearly sets out how results from evaluations and/or studies contributed to formulation of the proposal.</p>	2	The proposal is designed to achieve timely tangible results which the horticulture stakeholders need to immediately

				experience. Furthermore the proposed intervention is fully in line with the objectives for food security and nutrition, as set out in the FNS Results and Indicator Framework 2019.
Total score (maximum <sup>12</sup> out of 12 points)				11

## **2.3 Objectives (outcomes), results (outputs), activities and resources, based on the SMART principle**

### **2.3.1 Description**

The initiative is in line with the Netherlands' Food and Nutrition Security Policy which contributes to the objectives of SDG 2: eliminating malnutrition, doubling the productivity and income of small-scale farmers, and making food production systems more sustainable. The Dutch government has formulated its contribution to SDG 2 by 2030 into three long-term goals: lifting 32 million people out of under-nourishment; doubling the productivity and income of 8 million family farms, and; converting 7.5 million hectares of existing agricultural land to more sustainable use.

The Iraq Horticulture Development Program focuses on expanding the opportunities in the vegetable sector through adopting Climate Smart Agriculture (CSA) in making a unique contribution to the Dutch government's Food and Nutrition Security targets as outlined in the government's FNS's Results and Indicator Framework 2019.

#### **I. Intervention Impact (Overall objective)**

The **Iraq Horticulture Development Program** aims to create a resilient horticulture sector in Iraq that supports food security by adopting a sustainable climate sensitive approach.

The Intervention will:

- Introduce and showcase innovative farming technology that are best suited for Iraqi (changing) climatic conditions. Those technologies will demonstrate efficient farming techniques that can support farmers in achieving high quality, high yield while overcoming challenges associated with high temperatures and water scarcity conditions.
- Create market linkages and optimize value chains of the horticulture sector.
- Enhance the knowledge base among counterparts and partner organizations in efficient and sustainable agriculture management.

#### **II. Intervention outcome (Goal)**

"Competitive and sustainable agricultural sector that enhances food security and rural incomes, generate rural employment, diversify economic growth and protect the natural environment"

#### **Outcome performance indicators**

The theory of change presented in the project proposal will be validated during the inception phase with more precise outcome indicators being defined, discussion and examination of the existing horticulture context in Iraq. Meanwhile, a concrete work plan is developed during the inception phase and is expected to determine tangible output indicators. However, output thematic areas are projected in line with anticipated activities.

By the end of the pilot project the following targets are achieved:

#### **Outcomes – Indicators and targets:**

- 1.500 farmer adopt technologies and new knowledge on their farms - protected greenhouses, open cultivation and postharvest chains (1.200)
- 5.000 hectares of farmlands implement efficient and eco-friendly systems
- 5.500 farmer are knowledgeable of new cultivation practices
- 10 investments implemented in postharvest value chain for high priority crops
- 400 postharvest companies & farmers apply postharvest knowledge in their business
- 6 knowledge and research institutions streamline farming and postharvest technologies and new practices in their programs
- 50 researchers, advisors, and experts applying new innovation & knowledge in their work place
- 10 knowledge documents and manuals on cultivation & postharvest practices are applied by Institutions

## Outputs – indicators and targets

- Six to eight demonstration sites are established in Kurdistan, Middle and South Iraq with 2 to 3 farmers in each region
- 150,000 square meters (m<sup>2</sup>) of farmland supported to grow under protected greenhouses and improved technologies
- 1000 ha (10.0 million square meters (m<sup>2</sup>)) farmland is irrigated through water efficient techniques.
- 800 farmers are supported with knowledge and technical expertise to adopt innovative technology and efficient farming techniques
- 200 farmers using open field products supported with technical knowledge to grow potatoes and onions efficiently
- 6,000 farmers attend horticulture field and knowledge days in protected/greenhouse farming, irrigation efficiency, and open field cultivation techniques
- 45 farmers, researcher, and practitioner participant in exchange visit programs in Jordan and the Netherlands
- 4-6 Dutch and international companies demonstrate technologies in three identified regions at demonstration sites
- 3 market system models developed (for each region) and shared with farmers and vendors as each market system is tested to suit each locality.
- 3 Post-harvest business models designed, prepared for implementation and presented to horticulture community.
- 8 new crop varieties are selected and tested under protected farming and open field systems

Eco consult, at the end of the inception phase, will set relevant output indicators from the FNS Results and Indicator Framework 2019:

- **Outcome 2 - performance of small scale food producers increased:**  
relevant indicators include
  - B.1.a. Number of small scale food producers that progressively realize a living income.
  - B.1.b. Number of small scale producers that progressively reach optimum production levels in line with adopt technology and improved management.
- **Outcome 3 - ecological sustainability of farm land use strengthened:**  
relevant indicators include
  - C.1. Number of hectares of farmland Benefitting from 2 or more conservation practices
  - C.2. Number of hectares of farmland that agro-ecologically became more resilient to shocks
- **Outcome 4 - enablers for FNS :**  
An important element of the FNS Result Framework 2019 is also its attention for the 4 FNS enablers: Knowledge and innovation; Private Sector Development; Land rights, and; Regulatory Framework. The intervention is designed to take all of these into account and Eco consult is requested to report on them in line with the FNS Result Framework 2019.  
Relevant FNS enabling indicators for the intervention to adopt are:
  - 1. Knowledge & Innovation Systems**
    - 1.1 Number of farmers that adopted new knowledge and/or technologies
  - 2. Private Sector Development**
    - 2.1 Number of companies engaged in inclusive agribusiness.
  - 4. Regulatory Framework**
    - 4.1 Number of reforms / improvements in major 20 (inter)national FNS policies regulations

Iraqi Horticulture Improvement Project - Results and Indicators Framework			
Ultimate Goal	Technology Innovations & Improved Management Practices in Iraq Horti Sector are Adopted leading to Increased Productivity		
Project Outcomes	Cultivation Technologies are Utilized & Management Practices are Improved	Postharvest Value Chains Practices & Systems are Improved and Utilized	Researchers and Practitioners with Increased Knowledge of Technologies and Practices in Cultivation and Postharvest
Intermediate/Sub Outcome	Farmers knowledge of efficient farming systems increased	Knowledge of postharvest value chain is accessible and applied by farmers and companies	Training curricula (for education, farming advisory, and applied research) utilized
	Access to technologies and systems increased	Technical & financial studies on horticulture postharvest value chains are utilized for investment	Extension officers, engineers, and research teams apply new knowledge and skills in workplace
	Demonstration sites are used for Joint applications between farmers and practitioners to promote new systems and technologies	Services in technology providers of postharvest systems increased	Research, education, and advisory institutions integrate new technology application and improved farming approaches into their services
	Application of efficient practices and technologies on farmlands expanded		Services by research and advisory institutions are improved and expanded
	Climate smart agriculture practices and systems are available & used		
	Mechanization/automation innovations are applied		
Outcome Indicators & Targets	# Farmers with increased awareness & knowledge of new cultivation practices (4.500)	# Realized investments in postharvest value chain of high priority crops (10)	# Knowledge documents and manuals on cultivation & postharvest practices which are applied by institutes (10)
	# Farms apply new technologies and systems to increase productivity (800)	# Suppliers and advisory companies providing support in postharvest design and investments (10)	# Researchers, advisors, and experts applying new innovation & knowledge in their work place (50)
	# Hectares of farmlands using efficient and eco-friendly systems (5.000 ha)	# Postharvest companies & farmers apply postharvest knowledge in their business (400)	# of Participating institutions that incorporate new systems and innovations and improvement of value chain into their mainstream (5)
	# of Farmers that adopt technologies and new knowledge on their farms - protected greenhouses, open cultivation and postharvest chains (1.200)	# of Horti Value Chains with Improved performance (6)	# of Joint (Iraqi and international) research programs between researchers and university staff (10)
Project Outputs	Participating farmers are aware of technologies and & practices to increase productivity	Knowledge and practices of postharvest systems are available and accessible to companies and farmers	Skills and knowledge exchange programs with Jordan and the Netherlands developed
	Private sector companies (Iraqi & international) provide services in technology applications & farmers support	partners companies and farmers are knowledgeable of postharvest efficiency measures	Researchers, experts, engineers, and farmers are equipped with knowledge and skills on new farming and postharvest systems
	New & relevant technologies in protected agriculture and greenhouse systems are demonstrated	Postharvest value chain plans for high priority crops are developed	knowledge and training materials are developed and available
Output Indicators (Targets)	# of Protected agriculture greenhouse demonstration sites (8)	# Market systems developed (3 - 1 per region)	# Farmers attend field days on protected agriculture (960)
	# farmers supported with efficient irrigation technologies (30)	# Postharvest business models designed (3)	# Experts participating in exchange programs (45)
	# of Open field farms directly supported with technical knowledge to implement irrigation efficiency systems (100)	# New crop varieties tested (8)	# Effective agriculture manuals developed (10)
	# of farmland hectares supported to install irrigation efficiency (150 ha = 30 farms*5 ha per farmer)	# Available studies, technical guidance, analysis reports on postharvest systems (8)	
	# of farmland hectares installed irrigation efficiency with technical support and advisory from the project (1000 ha)		
	Companies exhibited innovative technologies (6)		
	Participating farmers adopting innovative technologies (600)		
# of farmers using open field products supported with technical knowledge to grow potatoes and onions efficiently (200)			

### 2.3.2 Appraisal

No.	Criteria 2.3  Outcomes, outputs, activities and resources based on the SMART principle	Explanation of score (1 point per indicator)	Score
2.3.1	The objectives at outcome level are clearly formulated, fall within the proposal's span of influence and are realistic. The outcomes follow logically from the problem formulated.	<input checked="" type="checkbox"/> The outcomes are specifically formulated.  <input checked="" type="checkbox"/> The objectives follow logically from the problem formulated.  The objectives fall within the proposal's span of influence and are realistic (taking account of its duration and local circumstances).  <input checked="" type="checkbox"/> The objectives are acceptable to the target group and other stakeholders.  The objectives formulated are realistic bearing in mind the scope of the activities and the capacity of the (local) organisation(s).	5
<p><b>EXPLANATION/ REFERENCES</b></p> <p>Targets at outcome level aims to reach three objectives:</p> <ul style="list-style-type: none"> <li>- Iraq farmers adopt innovative climate sensitive technologies</li> <li>- Knowledge core platform created</li> <li>- Horticulture value chain optimized</li> </ul> <p>The planned baseline during inception phase will produce a more tangible overview. The project approach is designed to ensure gender-sensitivity (and will report on this accordingly by the end of the inception phase). The approach ensures inclusion of different social groups in different project segments and where possible participation in decision making, dialogue and develop future plans of the Iraq horticulture sector. In that sense, a participatory approach during inception phase shall ensure that all segments of society are reached including: women organizations, youth centers, refugees, and internally displaced persons.</p>			
2.3.2	Progress in achieving the outcomes can be determined objectively on the		3

	<p>basis of measurable performance indicators.</p>	<p>Relevant performance indicators have been formulated for each outcome.</p> <p>A baseline measurement and a measurable target (quantitative and/or qualitative) have been formulated for each performance indicator.</p> <p>The verification method (the means by which data is collected and the sources of that data) is realistic and feasible.</p>		
<p><b>EXPLANATION/ REFERENCES</b></p> <p>The initial outcome indicators are identified in the proposal and are related to productivity of farmers, market accessibility, and resilience, and improved farmland sustainability and practices. To monitor the outcome indicators objectively, Eco consult will:</p> <ol style="list-style-type: none"> <li>Dedicate a neutral and focused M&amp;E team that is focused on developing and tracking performance indicators and conducting qualitative and quantitative analysis</li> <li>Develop a baseline tracking farmers' participation in demonstration days, field days, knowledge platforms, and track their progress in Year 3 and Year 4 of the project</li> <li>Have all the tools and the M&amp;E team gender balanced and gender sensitive</li> <li>Work with knowledge and research institutions to participate in outcome monitoring and reporting including productivity of farms and applying efficient and new farming systems</li> </ol> <p>At the end of the inception phase, key performance indicators (KPI) will be confirmed and elaborated for each outcome. KPIs shall consider those targets that are attainable, relevant and time-based. Gender disaggregated data will be gathered to illustrate qualitative and quantitative results are reached.</p>				
<p>2.3.3</p>	<p>The outputs formulated are concrete and fall within the proposal's span of control. The outputs follow logically from the outcomes formulated.</p>	<p>The project proposal is divided into clear phases, each having concretely formulated outputs.</p> <p>The outputs are specific.</p>	<p>5</p>	

		<p>There is a clear link between the outputs and the out-comes, i.e.</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> the outputs can be expected to contribute to achievement of the outcomes.</li> </ul> <p>The outputs are</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> acceptable to the target group and other</li> </ul> <p>The outputs formulated are</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> realistic bearing in mind the scope of the activities and the capacity of the (local) organisation(s) .</li> </ul>		
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**EXPLANATION/  
REFERENCES**

Project activities are designed and elaborated upon in annual work plans. The description of the project activities to achieving the respective outcomes will be described in an integrated manner. The order of the activities will be described in line with realizing the project's outcomes. For example, activities associated with building the capacity of the horticulture community are invested in before launching the knowledge platform. Another example, academic/knowledge institutions will base their curriculum development on practical and field-tested innovations that have potential to improve the horticulture sector.

2.3.4	Progress in achieving the outputs can be determined objectively on the basis of measurable performance indicators.	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Relevant performance indicators have been formulated for each output.</li> <li><input checked="" type="checkbox"/> A baseline and a measurable target (quantitative and/or qualitative) have been formulated for each performance indicator.</li> <li><input checked="" type="checkbox"/> The verification method (the means by which data is collected and the sources of that data) is realistic and feasible.</li> </ul>	3	
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**EXPLANATION/  
REFERENCES**

During the inception phase concrete / tangible targets on quantitatively and qualitatively basis will be determined. A MEAL plan is to specifically address gender-disaggregated data of men, women, youth, IDP and refugees' participation.



2.3.5	There is a logical link between the proposed activities and the outputs formulated.	<input checked="" type="checkbox"/> The proposal sets out the nature of the activities and explains how the activities formulated will contribute to achieving the outputs.	1	
<p><b>EXPLANATION/ REFERENCES</b></p> <p>Activities are designed to vigilantly achieve output targets, which will ultimately feed into securing outcomes. In that sense, emerging challenges will be addressed through timely resulting activities to ensure that targets are achieved thus contributing to project outcomes.</p>				
2.3.6	There is a logical link between the activities and the project budget (efficiency).	<input checked="" type="checkbox"/> The budget is supported by figures on price and quantity (p x q).  <input checked="" type="checkbox"/> The budget is broken down by output and/or outcome.	2	
<p><b>EXPLANATION/ REFERENCES</b></p> <p>The budget is broken down by the three thematic output areas:</p> <ol style="list-style-type: none"> <li>1. Iraq farmers adopt innovative climate sensitive technologies (%).</li> <li>2. Knowledge core platform created (%).</li> <li>3. Horticulture value chains optimized (%).</li> </ol>				
2.3.7	When the activity ends, its envisaged outputs will have a lasting effect for the ultimate target group.	<input checked="" type="checkbox"/> The proposal contains a clear vision (with objectives) as to how the activities will be continued when the intervention comes to an end.  <input checked="" type="checkbox"/> To achieve these objectives, specific measures will be taken during implementation of the activities to ensure that the target group will help continue the activities.	4	

		<input checked="" type="checkbox"/> The proposal contains suitable criteria against which progress in continuing the activities can be		
		<input checked="" type="checkbox"/> The proposal includes a transition plan or exit strategy, identifying the various actors.		

**EXPLANATION/  
REFERENCES**

Sustainability is key to the success of the proposed project. Realizing quantitative and qualitative identified targets will support intervention's assessment and whether the anticipated results are achieved.

Farmers adopting innovative technology on their farms and will benefit from improved production over time and at the same time ensure that their farms serve as demonstration sites accessible to future stakeholders encouraging scaling of improved practice. Equally, launching a knowledge platform is expected to provide information and know-how to different stakeholders contributing to long-term impact.

2.3.8	At the end of the activity, the envisaged outputs will have a lasting effect on the local partners.	<input checked="" type="checkbox"/> The proposal contains a clear vision (with objectives) as to how the quality of the activities and/or financial independence of the local partner will be	4	
		<input checked="" type="checkbox"/> To achieve these objectives, specific measures will be taken during implementation of the activity.		
		<input checked="" type="checkbox"/> The proposal devotes attention to the capacity of the local partner to generate income from various sources.		

		<p>The proposal sets out suitable criteria against which progress in regard to institutional sustainability can be measured.</p> <p><input checked="" type="checkbox"/></p>			
<p><b>EXPLANATION/ REFERENCES</b></p> <p>During the programme inception phase, a detailed sustainability plan and exit strategy will be developed to sustain the benefits from the programme after the project intervention. In addition to support and catalyse capacity development, the programme proposes a dedicated output on knowledge transfer through knowledge platforms. This complements and synergizes the efforts from the other outputs. It will ensure that (new) knowledge is widely shared, skills properly utilized and capacity development activities implemented as efficient and sustainable as possible.</p> <p>The proposed programme will furthermore support Governments' policies and strategies, acting on existing government policy by setting practical examples to improve on horticulture sector performance and to inform current / future policies and resulting programmes and will be integrated into the ongoing development actions to ensure the sustainability of the process beyond the program duration.</p>					
<p>Total score (maximum score 27 points)</p>				<p>2</p>	

**2.4 Cooperation, harmonisation and added value**

In the intervention, Eco Consult teams up with Delphy as lead knowledge partner. Delphy will be a key partner to Eco Consult in the design and management of the programme, and will be responsible for the implementation of outcome thematic area II building knowledge platforms.

For the inception phase Eco Consult and Delphy will develop and implement a structured approach and plan of action. This will include, in essence, a context analysis and a multi-actor co-design of the intervention strategy.

The project is well positioned to taking a context specific approach in Iraq by building on lessons learned and good practice from a likewise programme in Jordan. The intervention shall therefore leverage on the success of the hydroponic farming project in Jordan. The Hydroponics Agriculture and Employment Development Project implemented in Jordan brings two years of experience in settings not that different from Iraq. The Jordan program is comparable to Iraq in terms of poorly functioning market systems due to regional political instability, limitations in accessing domestic markets, a semi-arid (changing) climate, scarce water resources and lack of knowledge and expertise in the application of innovative technology fitting such contexts.

**2.5 Channel and aid modality (including alignment)**

The intervention falls in the aid modality category "Program Aid" and responds to gaps identified in the Iraq National Development Plan (2018-2022). Eco consult is most suitable to implement the program.

Eco consult is a leading development company specialized in innovative sustainable solutions. This intervention shall leverage on the success of a pilot hydroponic farming project that is implemented by Eco consult in Jordan, which managed in engaging local communities, provide income generation and improving their productivity.

Through established strong linkages, the intervention introduces the Dutch expertise, knowledge and methodology to local growers and production institutions, making use of best practices in the sector. Lastly, Dutch experts on value chain and market analysis are also ensured through Eco consult which will identify opportunities and overcome challenges posed by regional political developments.

## **V. IMPLEMENTATION**

### **5.1 Budget**

#### **5.1.1 Breakdown of costs**

**- Categorized Budget summary per year**

Description	Year 1	Year 2	Year 3	Year 4	Total	[%]
Salary Professionals	332,500	369,152	377,097	341,313	1,420,062	17%
General Service Staff						
Consultants	95,500	98,365	84,342	52,451	330,657	4%
Locally recruited labor	167,300	242,874	250,160	257,665	917,999	11%
Contracts	260,000	225,000	197,500	145,000	827,500	10%
Travel	119,025	119,025	119,025	119,025	476,100	6%
Training	164,000	164,000	150,500	27,000	505,500	6%
Expendable Procurement	22,500	45,000	45,000	45,000	157,500	2%
Non-expendable Procurement	1,070,000	975,000	200,000	-	2,245,000	27%
Technical Support Services	25,000	-	25,000	-	50,000	1%
General Operating Costs	84,000	84,000	84,000	84,000	336,000	4%
GOE Common Services						
<b>Subtotal</b>	<b>2,339,825</b>	<b>2,322,416</b>	<b>1,532,624</b>	<b>1,071,454</b>	<b>7,266,319</b>	
Support Costs	350,974	348,362	229,894	160,718	1,089,948	
<b>GRAND TOTAL</b>	<b>2,690,799</b>	<b>2,670,778</b>	<b>1,762,517</b>	<b>1,232,172</b>	<b>8,356,267</b>	
<b>[%]</b>	<b>32%</b>	<b>32%</b>	<b>21%</b>	<b>15%</b>	<b>100%</b>	

**- Yearly Breakdown by Outcome**

	Year 1	Year 2	Year 3	Year 4	Total	Percentage
<b>Outcome 1</b>	1,829,679	1,892,672	993,982	713,326	5,429,658	65%
<b>Outcome 2</b>	285,769	251,014	244,376	212,167	993,326	12%
<b>Outcome 3</b>	575,351	527,093	524,160	306,680	1,933,283	23%
	1,829,679	1,892,672	993,982	713,326	5,429,658	
<b>GRAND TOTAL</b>	<b>2,690,799</b>	<b>2,670,778</b>	<b>1,762,517</b>	<b>1,232,172</b>	<b>8,356,267</b>	

**- *Yearly Breakdown for Professional Staff Salaries***

<b>Item Description</b>	<b>Outcome</b>	<b>Yr 1 Cost</b>	<b>Yr 2 Cost</b>	<b>Yr 3 Cost</b>	<b>Yr 4 Cost</b>	<b>Budget EURO</b>
<b>Professional Staff - Salaries</b>		<b>332,500</b>	<b>369,152</b>	<b>377,097</b>	<b>341,313</b>	<b>1,420,062</b>
Director	All	27,000	27,810	28,644	29,504	112,958
Project Manager	All	92,000	113,712	117,123	100,531	423,366
Head of Operations	All	17,100	11,742	12,094	12,457	53,393
Procurement Officer	All	9,750	10,043	10,344	7,103	37,239
Admin & Finance Officer	All	11,250	11,588	11,935	9,835	44,607
Human Resources Officer	All	6,500	6,695	6,896	3,551	23,642
M&E Officer	All	11,000	11,330	14,587	12,020	48,937
Outreach & Communication Officer	All	8,500	8,755	9,018	9,288	35,561
Technical Manager	All	75,000	92,700	95,481	90,150	353,331
Construction Supervisor	Outcome 1	11,400	17,613	12,094	6,229	47,336
Post-Harvest Specialist	Outcome 2	30,000	23,175	23,870	24,586	101,632
Training Manager	Outcome 3	20,000	20,600	21,218	21,855	83,673
Events & PR officer	Outcome 3	13,000	13,390	13,792	14,205	54,387

**- *Yearly Breakdown for Locally Recruited Staff***

<b>Item Description</b>	<b>Outcome</b>	<b>Yr 1 Cost</b>	<b>Yr 2 Cost</b>	<b>Yr 3 Cost</b>	<b>Yr 4 Cost</b>	<b>Budget EURO</b>
<b>Locally Recruited Labour</b>		<b>167,300</b>	<b>242,874</b>	<b>250,160</b>	<b>257,665</b>	<b>917,999</b>
Site Engineer 1	Outcome 1	32,500	40,170	41,375	42,616	156,661
Site Engineer 2	Outcome 1	26,000	40,170	41,375	42,616	150,161
Site Engineer 3	Outcome 1	26,000	40,170	41,375	42,616	150,161
Driver (2 Drivers)	Outcome 1	46,800	48,204	49,650	51,140	195,794
Logistics & Operations Officer	All	21,000	43,260	44,558	45,895	154,712
Procurement Officer	All	15,000	30,900	31,827	32,782	110,509

**- Yearly Breakdown for Expendable and Non-expendable Procurement**

Item Description	Outcome	Yr 1 Cost	Yr 2 Cost	Yr 3 Cost	Yr 4 Cost	Budget EURO
<b>Expendable Procurement</b>		<b>22,500</b>	<b>45,000</b>	<b>45,000</b>	<b>45,000</b>	<b>157,500</b>
Inputs and tools (farm tools/equipment, seeds, storage materials)	Outcome 1	15,000	30,000	30,000.00	30,000.00	105,000
Inputs and tools (Seedlings GA, fertilizers, tools, millet, groundnuts, sesame, legumes, jute/hermetic bags, solar pumps, irrigation pipes, etc.)	Outcome 1	7,500	15,000	15,000.00	15,000.00	52,500
<b>Non-Expendable Equipment</b>		<b>1,070,000</b>	<b>975,000</b>	<b>200,000</b>	<b>-</b>	<b>2,245,000</b>
Vehicles	All	105,000	-	-	-	105,000
Furniture and Office Equipment	All	90,000	-	-	-	90,000
Procurement of Greenhouses & Cultivation Systems	Outcome 1	400,000	600,000	200,000	-	1,200,000
Procurement of Mechanization Systems	Outcome 1	175,000	175,000	-	-	350,000
Procurement of Irrigation Efficiency Systems (Drip Systems)	Outcome 1	300,000	200,000	-	-	500,000

### **5.3 Monitoring**

IATI will be basis for narrative reporting (see IATI-section - 5.3.3). Monitoring will also take place through regular field visits to the Project sites. Furthermore, an independent midterm review will take place.

#### **5.3.1 Narrative and financial reports**

Annual narrative and audited financial reports

#### **5.3.2 Audit opinion**

Outcome 8

#### **5.3.3 IATI - International Aid transparency Initiative**

Eco consult will provide for the purpose of the proposed program a narrative progress report on the activity using an IATI data set based on the BZ publication guidelines on the IATI standard.

<https://www.government.nl/documents/publications/2015/12/01/open-data-and-development-cooperation>)



### 5.3.4 Annual plans and other reports

### 5.3.5 Monitoring calendar

Report type	Any specific requirements*	Period	Submission by
<b>Annual plan</b>		2021 2022 2023	1/11/2020 1/11/2021 1/11/2022
<b>Narrative IATI *</b>	<i>updates</i>	<i>Quarterly (publication in IATI)</i>	<i>Within 3 months</i>
<b>Narrative IATI</b>	<i>Yearly (In IATI as described in the BZ/DGIS reporting guidelines)</i>	1/12/2019- 31/12/2020 2021 2022 1/1/2023 – 30/11/2023	30/4/2021 30/4/2022 30/4/2023 30/4/2024
<b>Financial/Audit</b>	<i>Audited financial report</i>	1/12/2019- 31/12/2020 2021 2022 1/1/2023 – 30/11/2023	30/4/2021 30/4/2022 30/4/2023 30/4/2024
<b>Final narrative**</b>		1/12/2019 – 30/11/2023	30/6/2024
<b>Evaluation</b>	<i>Final evaluation</i>	1/12/2019 – 30/11/2023	30/6/2024 <i>within six months of completion of the project</i>

### 5.3.6 Evaluations

An external evaluation is planned because it meets the criteria on the activity's financial value > 5 million. € 200.000,- has been reserved for evaluation and will be carried out.