

Project Final Evaluation

Strengthening Livestock Holders'  
Livelihoods in Area C (Rawasi)

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## Project Summary

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Country/Region	Palestine		

### Author Notes

This final evaluation was conducted by Human Resource Development (HRD) between December 2015 and March 2016 to evaluate the "Strengthening Livestock Holders' Livelihoods in Area C Project" (Rawasi). The evaluation team was comprised of Ali Khatib (Team Leader), Amal Abusrour (Senior Evaluation Specialist) and Asia Qawasmi (Field Researcher). The evaluation team would like to express gratitude to CARE International Ramallah, PARC, ICARDA, and Ministry of Agriculture for assistance provided during the final evaluation.

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## Executive Summary

This report documents the achievements in the livestock sector in Palestine as a result of the intervention called 'Strengthening Livestock Holders' Livelihoods in Area C' (Rawasi Project). Rawasi was funded by the European Commission and by the Austrian Development Cooperation under the EU's Livestock Based Livelihood Program. This two-year project was launched in October 2013 and aimed at strengthening the resilience and increase in income of sheep and goat holders in 30 locations (mostly located in Area C of the West Bank), with a specific focus on women and Bedouins. The contracting partner was CARE Austria while implementation was led by CARE WBG and partners PARC and ICARDA. In total the project worked with 2,000 smallholders of sheep and goats, 17 Community Based Organizations (CBO's) serving 12,000 people and 3 SME's (production groups and cooperatives) and other private sector actors, among them 10 women groups

Rawasi has aimed to improve the livelihood and food security of vulnerable Palestinians via implementing sustainable and market-oriented economic empowerment opportunities and to bring about the highest and the most meaningful impact for sustainable livelihoods of livestock holders . The project was implemented through an integrated market oriented approach that linked farmers, including women, with CBOs, and linked targeted communities with different stakeholders, including cooperatives, governmental actors and businesses. Rawasi also worked to strengthen the role of CBOs through capacity building that meets their organizational needs and followed a market-orientated approach. Rawasi's specific Expected Results (ER) were as follows; 1) Male and female livestock holders and community based organizations (CBOs) have improved access to and management of water, grazing land, and fodder, 2) Male and female livestock holders have enhanced health, quality and productivity of their livestock and improved links to extension services, 3) Male and female livestock holders have better returns from increasing the value-added of their products.

This evaluation report is developed by the research team from Human Resource Development and explores the relevance, efficiency, effectiveness, impact and sustainability of the Rawasi project. The evaluation adopted a mixture of evaluation methods to capture both qualitative and quantitative results. Primary data was collected from field via focus groups discussions (FGD) and via interviews with different project beneficiaries and stakeholders. Secondary data was also used through reviewing different documents produced by Rawasi project team and CARE. The overall goals of the evaluation were to: 1) to assess the project's achievements and performance against the before mentioned criteria for standard evaluations and 2) to identify lessons learned and recommendations to improve future programming as well as opportunities for scale-up or replication.

The project was found very **relevant** to the needs and priorities of target farmers, while it also complies with the National Agriculture Sector Strategy “Resilience and Development” 2014-2016 making Rawasi very much in line with the Ministry’s strategic plan. The evaluation team found that in depth research had been done at the start of the project through a value chain analysis, as well as at later stages, giving the team a deep understanding of the local challenges and needs. At the same time, project communities and other relevant stakeholders (MoA, private sector, CBOs) have been involved in project design and in project choices, contributing greatly to both the project’s relevance as well as sustainability through the local ownership created.

The evaluation established that the project was implemented in an **efficient** manner where the available resources were transformed in the intended results with targets being exceeded at several occasions. For example, interventions were found very efficient in terms of increasing the capacity of farmers to use existing resources to improve productivity and reduce costs by innovative approaches such as demonstration sites and field schools as well as training and coaching. The application of peer to peer training was especially successful among both women and men alike. Regarding the crucial input of water, in the project the construction of water cisterns, water harvesting and pools decreased the need for purchased water, increased availability of water and decreased the cost from 50 to 10 NIS per cubic meter for several project communities. Overall the project was able to implement all its activities in the proposed timeframe and all targets were amply reached.

The project has clearly incorporated several steps and tools to work on **sustainability** from the start of the project onwards, including local capacity building, local ownership, feasible selections and a clear exit strategy. Its impact was especially seen in the increased capacities of 17 CBOs that will provide continuous efforts to support members livestock holders in their communities, with several cooperations of them also taking up active marketing roles and being hubs of knowledge and skills for better farm management, production and marketing. Important groundwork has been done with regard to dairy production units; both male and female farmers have been trained in best practices and production processes have been made efficient meaning that loss was minimized and produced products are valuable on the market. The stage has been set for these units to become an efficient market player by using market information.

There are several examples of the **multiplying impact** of Rawasi, reaching both extra women and male farmers as well as ensuring benefits spread over to other value chain members. The new techniques and approaches promoted by Rawasi project in water harvesting and planting fodder had remarkable results and impact not only on project participants but also on other people in target communities. Overall the evaluation can state that Rawasi project had direct results on the resilience of Palestinian people who live in Area C through equipping them with the needed tools and skills required to meet their basic needs.

It was evident that the project was well-designed as stated by all project partners and several stakeholders, including the Ministry of Agriculture. The participatory approach adopted by Rawasi is a model for other project implementers to follow, as it increased the capacity of all project stakeholders while implementing. The clear communication and management structures between the consortium partners CARE, PARC and ICARDA ensured that the project could **reach its objectives** and respond well to new information (like the assessments carried out) of changes circumstances (like sudden demolition orders).

## Chapter 1: Introduction

### 1.1 Context of the Project

More than 60% of the West Bank is identified as Area C. Palestinians, however, have access to less than 30% of this land where the remaining 70% of Area C is classified by the Israeli authorities as areas allocated for settlement expansion, military firing zones or 'nature reserves'. Area C is inhabited by more than 150,000 Palestinians living in 542 communities. The area is known for its population diversity including original residents, Palestinian refugees from 1948 and Bedouin communities who are often refugees from either '48 or '67. Bedouin communities can be loosely divided into two groups: those living in tents and those living in mud brick houses. The Israeli authorities impose severe restrictions on building and development projects in these areas, including on water management systems (even wells or tankers) and people face extreme mobility restrictions and difficulties regarding access to water and access to grazing fields. This strict planning regime allows the military occupation to track all construction in these zones and any attempts at development must be requested through the administrative body: COGAT. However, of all permits requested between 2007-2010, only 7.4 percent has been approved and, of these, only 4.5 percent was actually granted. Between 2010 and 2014, 1.5% was approved with in 2014 only a singly permit was issued. Currently, there are 11,000 outstanding demolition orders - affecting an estimated 17,000 Palestinian-owned structures that were built without the required permit<sup>1</sup>. Every year, demolitions leave hundreds of people homeless. In 2014, 1,215 people were displaced, 969 of them in Area C. By the end of 2015, 544 buildings have been demolished, directly impacting 757 people, including 406 displaced children.<sup>2</sup>

As Area C is under full Israeli military and civilian control including control over service sectors such as education and health, as well as land, water and other natural resources, its residents face a very complex mix of challenges. Their livelihoods are characterized with high vulnerability due to extreme water shortages for both domestic use and livelihoods. Grazing fields have significantly deteriorated as a result of this water shortage leaving herders dependent on fodder, which is extremely expensive. Restriction of movement of people, goods and a lack of adequate transportation affects any attempts at investing in these areas and prevents development organizations from implementing projects in these areas. These factors have resulted in a lack of economic opportunity and poverty in Area C.<sup>3</sup> Reports show that Area C is “key to future Palestinian Development” as it “would benefit the economy of Palestinian residents in Area C and in the West Bank and Gaza in

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<sup>1</sup> UN OCHA, 2015, UNDER THREAT Demolition orders in Area C of the West Bank

<sup>2</sup> UN OCHA, 2016, Monthly Humanitarian Monitoring Tables

<sup>3</sup> Rafael Eguiguren & Luna Saadeh 2014: Protection in the occupied Palestinian territories

general”<sup>4</sup>. The World Bank report further clarified that freeing economic activity in Area C will have a major impact on the development of agribusiness, tourism, telecommunication and Dead Sea minerals.

Agriculture in the Palestinian context is not merely an economic or income generating activity, but is considered as a major contributor to the protection of the land from confiscation and settlements. The agricultural sector provides currently job opportunities for 13.4% of the total labor force, contributing to 8.1% of the GDP and 15.2% of total exports.<sup>5</sup> These numbers have severely declined as compared to decades ago before the occupation started. In particular, the livestock sector in Palestine is of major importance as it contributes to 46% of the total current agricultural income. The backbone of this sector are sheep and goats, dairy cattle and poultry. There are 972,000 sheep and goats and 39,000 cows in the West Bank and Gaza Strip.<sup>6</sup> Data in the Agriculture Strategy of the MoA however demonstrates that productivity of the livestock sector is very weak due to some key constraints. For example in 2007, production inputs contained a value of approximately USD 465 million whereas the value of the production itself was about USD 404 million. This means that the production value was in the minus, demanding urgent and significant interventions to address this weak access to better inputs and higher productivity. A large number of livestock breeders, including around 31,000 small-scale farmers, are prone to suffer from poverty.<sup>7</sup> Other data shows that livestock sector’s total value added was USD 332.6 million in 2011, showing a decline compared to 2007.<sup>8</sup>

Livestock is raised as a secondary activity in many places in Palestine to provide supplementary income to rural households. Therefore, the small ruminants sector is an important source of income for many Palestinian families while they produce important products for local consumers and provide a source of self-employment. Furthermore, it is important to notice that the women from the household contribute greatly to this sector in terms of labor and skills.<sup>9</sup> About 33% of total sheep in Palestine are raised in Hebron, 18% in Jenin and 13% in Nablus. Hebron also hosts the largest number of goats at 28%, followed by Jenin at 16% and Bethlehem at 15%. The total number of livestock in the Jordan Valley decreased from 155,000 to 100,000 in 2010 due to Israeli occupation measures of blocking grazing fields, construction of settlements and lack of access to water resources.<sup>10</sup> Around

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<sup>4</sup> Rafael Eguiguren & Luna Saadeh 2014: Protection in the occupied Palestinian territories

<sup>5</sup> MoA: Agriculture Sector Strategy: A Shared Vision 2011-2013

<sup>6</sup> EC, FAO and MoA: The European Union program in support of agriculture and livestock based livelihoods in the West Bank and Gaza Strip, [http://eeas.europa.eu/delegations/westbank/documents/news/2014/20140401\\_agriculturebrochure\\_en.pdf](http://eeas.europa.eu/delegations/westbank/documents/news/2014/20140401_agriculturebrochure_en.pdf)

<sup>7</sup> MoA: Agriculture Sector Strategy: A Shared Vision 2011-2013

<sup>8</sup> EC, FAO and MoA: The European Union program in support of agriculture and livestock based livelihoods in the West Bank and Gaza Strip, [http://eeas.europa.eu/delegations/westbank/documents/news/2014/20140401\\_agriculturebrochure\\_en.pdf](http://eeas.europa.eu/delegations/westbank/documents/news/2014/20140401_agriculturebrochure_en.pdf)

<sup>9</sup> EC, FAO and MoA: The European Union program in support of agriculture and livestock based livelihoods in the West Bank and Gaza Strip, [http://eeas.europa.eu/delegations/westbank/documents/news/2014/20140401\\_agriculturebrochure\\_en.pdf](http://eeas.europa.eu/delegations/westbank/documents/news/2014/20140401_agriculturebrochure_en.pdf)

<sup>10</sup> <http://www.maan-ctr.org/old/pdfs/FSReport/JVEn.pdf>

90% of the goats are of local breed, and 3% are Shami goats. Sheep and goat production is practiced by 20,000 households in Palestine. Livestock of small herders account for some 80-85% of total animal numbers. Data shows that around 15% of goat holdings are with less than 5 goats and 26% of sheep holdings are with less than 10 sheep.<sup>11</sup>

The livelihoods of the small livestock farmers in Area C are highly vulnerable and obstructed by both economic and political forces. Access to inputs is unstable. Farmers face high prices of fodder, and great dependency on Israeli market for fodder and medicines where prices constantly rise. Climate change, drought and restrictions placed by the Israeli occupation limits farmers access to grazing land. Water is a crucial input but sometimes hard to access for isolated communities due to a strict water policy applied by the occupying forces. Besides this, farmers see obstacles both in their production process and health and productivity of their flock. Because of the isolated nature of Area C (both physically and at the level of policies) there is limited reach of important extension services and veterinary services to these areas. There are some extension and veterinary services provided by both the Ministry of Agriculture and private service providers, but they tend to go to medium and larger (more than 99 livestock) farmers, and while they are believed to be reasonably effective, they have uneven quality. Small farmers benefit little from these service providers. They receive some advice from suppliers and dealers, but its quality is mixed.

The farmers also practice simple processing and marketing techniques in which they ignore an important potential. Farmers currently process the raw milk mainly into yogurt or cheese, and sell to other households, to cooperatives, or to middlemen, who then sell to retailers. The return they get from this is low. Women shoulder much of the work burden related to livestock rearing and dairy production. While their husbands own the animals, women are often responsible for milking, farm sanitation, and milk processing. Despite this, women have very little access to better marketing channels, especially in urban areas, where prices are higher and return could be higher but instead sell their products at a lower price closer to their households.<sup>12</sup>

## 1.2 The Intervention

Recognizing this reality of complex challenges, the Strengthening Livestock Holders' Livelihoods in Area C (Rawasi) project aimed to contribute to long-term food security of livestock holders (goat and sheep holders including herders and Bedouin communities) in 30 locations in northern and central West Bank Area C. Rawasi aimed to achieve sustainable and resilient livelihoods through innovative approaches transitioning vulnerable livestock holders' households and communities from relief to development. The 24+4 months project commenced in 2013 led by CARE Österreich (CARE Austria) and CARE West Bank and Gaza

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<sup>11</sup> TechnoServe Inc., and Oxfam, with support from the Portland Trust 2011: A Roadmap for Agribusiness Development in the Occupied Palestinian Territories An analysis of the Vegetables & Herbs, Dairy, and Sheep & Goats subsectors

<sup>12</sup> TechnoServe Inc., and Oxfam, with support from the Portland Trust 2011: A Roadmap for Agribusiness Development in the Occupied Palestinian Territories An analysis of the Vegetables & Herbs, Dairy, and Sheep & Goats subsectors

(CARE WBG) in partnership with Palestinian Agriculture Relief Committee (PARC) and International Centre for Agricultural Research in the Dry Areas (ICARDA).

The program has aimed to improve the livelihood and food security of vulnerable Palestinians via implementing sustainable and market-oriented economic empowerment opportunities to bring about the highest and the most meaningful impact for vulnerable Palestinians. Rawasi has introduced replicable, innovative solutions to mitigate different challenges and constrains that Palestinian livestock holders are facing. The project was implemented through an integrated market oriented approach that linked farmers, including women, with CBOs, and linked targeted communities with different stakeholders, including cooperatives, governmental actors and businesses. Rawasi also worked to strengthen the role of CBOs through capacity building that meets their organizational needs and following a market-orientated approach.

### 1.2.1 Project Activities and Expected Results

During the 24 months of the project a cycle of interlinked activities was implemented, linking together ER1, ER2 and ER3. Depending on the needs of each project community, the individual farmers and CBOs were assisted with inputs, capacity training and market knowledge. Not all activities were done to all beneficiaries, there were several selections in order to keep the activities relevant and addressing real local needs.

Under ER1 *'Male and female livestock holders and CBOs have improved access to and management of water, grazing land, and fodder'* a set of complementary activities was done, starting mostly in Year 1 but continued to finalize some achievement in Year 2. These activities were;

- 1) Improve water harvesting, reservation, storage, resources rehabilitation, water management and distribution;
- 2) Strengthen CBO governance, management and capacity for collective initiatives;
- 3) Ensure that technologies benefit men and women equally, with equitable participation and decision-making role in resource management; and
- 4) Document, analyse and advocate on the impact of movement and access restrictions on livestock holders' livelihoods.

ER2 *'Male and female livestock holders have enhanced health, quality and productivity of their livestock and improved links to extension services'* connected with this by focusing on livestock productivity. Activities that were done include;

- 1) Raise awareness and build the capacities of targeted livestock holders/CBOs on animal husbandry, identification, treatment and prevention of contagious and non-contagious diseases;
- 2) Introducing and applying new high productivity techniques;
- 3) Spread and replicate proven techniques;

- 4) Link vulnerable livestock holders in Area C with existing CBOs for inputs and services;
- 5) Improve women's participation in mixed gender CBOs for equal access to information on animal health and production techniques and promote gender equity around division of labor and decision-making related to livestock.

Finally activities under ER3 '*Male and female livestock holders have better returns from increasing the value-added of their products*' worked from the first project phase to increasing farmers successful linkages with markets. Activities include:

- 1) Conduct demand and marketing assessments of livestock products and analysis of livestock dairy value chains;
- 2) Provide innovative techniques and inputs based on the assessment related to inputs, processing, quality control, marketing and marketing activities;
- 3) Strengthen CBOs' and households' capacity to implement sustainable income-generating initiatives, their marketing capacity and linkages with the private sector,
- 4) Strengthen the capacity of women's groups to produce demand-driven products and to market them; and
- 5) Improve the role and capacity of SMEs.

### 1.2.2 Analysis of Beneficiaries

The project was designed to target **livestock holders** with the potential to grow economically, but who are located in the most vulnerable locations in Area C, including those in so-called "hot areas" due to their proximity to illegal Jewish settlements, military training zones, or main roads used by Jewish settlers. It also covers areas that have high population of livestock and limited access to water and grazing lands. Small-scale farmers in those areas were targeted to benefit from the project.

Final beneficiaries reached through the project are more than 2000 sheep and goat holder households in 30 locations in Northern and Central areas in West Bank particularly Area C; 12,500 (individuals and members of 17 CBOs), and all livestock holders in target locations in general. Target groups included: 17 community based organizations (CBOs) serving 12,000 people (50 % female); 3 small/medium enterprises (SMEs) and social enterprises.

Most of the vulnerable farmers were based in Tubas, Jericho and Nablus since more farmers in these areas rely on livestock farming in comparison with Ramallah, Jenin and Jerusalem.

The average age group of beneficiaries was 48 years, and the average family size was 7; which is higher than the average family size in Palestine according to the Palestinian Central Bureau of Statistics. The selected beneficiary had an average of 256 heads of sheep; of which 141 are new born. There was a herd size range from 300 heads in some communities

in Tubas to 55 heads in Jenin and even 25 heads in some localities in Nablus. The ratio between males and females is 1:30 respectively.

Gender consideration was largely addressed in the project in terms of design and implementation. Activities were designed to integrate both men and women as livestock holders, CBOs members and producers. Training and demonstration sites were also designed to have male and female participants, as well as marketing, project management and governance elements of the project. In total 990 female farmers have benefitted from improved access to water (47% of participants under this activity), 480 female farmers (5.4% of participants under this activity) were supported to grow better fodder and 120 women (around 5.7% of the participants under this activity) have improved access to market information. Under ER3, 6 women received a full multiple day training course in Jordan, after which they shared their gained knowledge with 70 women in the West Bank. 56 women were selected to form 10 production groups, which received guided attention to set up collective production and market their produce through market linkages.

### 1.3 The Evaluation's Purpose

This evaluation was done at the end of the project, but when still several activities were ongoing. Both field data was first hand collected as well as desk research was done to work for the follow two overall objectives of the evaluation:

1. To assess the project's achievements and performance against the below criteria for standard evaluations.
2. To identify lessons learned and recommendations to improve future programming as well as opportunities for scale-up or replication.

As discussed below in methodology, the OECD DAC criteria for project evaluation were applied to answer the first question of the evaluation. Reviewing all the information, including the discussions with key stakeholders, led to a list of recommendations that both the implementing actors as well as the donor could take into account.

### 1.4 Methodology

Even though the standard criteria for good evaluations, the OECD DAC criteria, have been mostly followed in this evaluation, based on the ToR and discussions with the project team it was clear that the nature of the Rawasi project asked for a deep approach. The project has been built upon a market system and value chain approach, building its problem analysis, and activities on value chain thinking. This was clearly seen at the preparation stage and this has been tried to capture as well in the evaluation. At many stages the evaluation team

asked, what was the added value of these approaches? And how did these innovative approaches contribute to the project’s success.

To answer to the ToR and DAC criteria, a two track approach has been followed. In the first track secondary data has been gathered from the project team and online sources and used to gain a deep understanding of the project achievements. In this stage, the project achievements were reviewed against initial project ER’s and project design using project documents and data collected. The second track collected primary data from the project communities through evaluation tools such as focus group discussions and key informant interviews.

Measuring the direct achievements, project relevance and efficiency was mainly measured using the first track which depended on reviewing secondary data mainly provided by the Rawasi project team, while effectiveness, sustainability, and lessons learned were measured by using the second track that depends on collecting the primary data through Focus Group Discussion (FGD) and Key Informant Interview (KII). But both tracks were important for all the chapters.

#### 1.4.1 Track 1 Methodology

An extensive desk and literature review of all the documents provided by CARE, listed in table 1, was done prior to continuing with the other data collection.

No.	Document Reviewed
1-	Rawasi Midterm Evaluation
2-	Rawasi M&E Report and Collective Sheets
3-	Dairy Market System Assessment Full Report
4-	Baseline Beneficiary Questionnaire
5-	Baseline SMEs Questionnaire
6-	Baseline Locality Questionnaire
7-	Rawasi Financial Report
8-	Rawasi Log frame
9-	Case Studies and Success Stories
10-	Baseline Data Report
11-	Rawasi Methodology
12-	Rawasi Annual Reports
13-	Proposal document
14-	Dairy Market system assessment
15-	CARE WBG Economic Empowerment Program Design

16-	Rawasi Final report draft
17-	Training materials
18-	Legal documents and exit strategy documents

Table (1) Documents reviewed by Evaluation Team in preparation phase

Further steps were taken by reviewing the Output Results plan from the project with all data on achievements collected by the Rawasi project team previously and shared with the evaluators. As figure 3 shows, Outcome and Output Results were the reference that the evaluation team measured the direct achievements against. Important other steps that were taken were the evaluation of the Ministry of Agriculture’s Strategic Plans to check for relevance of the project, as well as a review of the local needs.

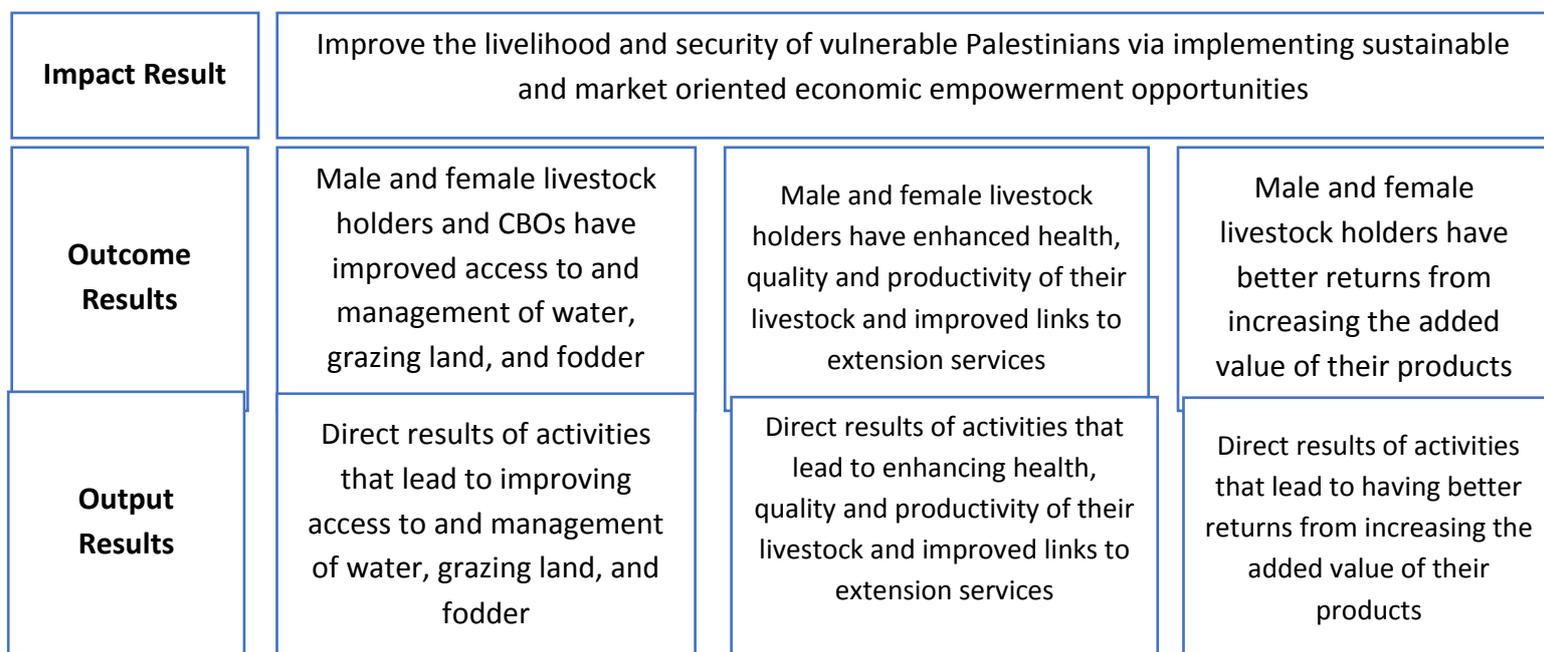


Figure (3) Rawasi results chain

#### 1.4.2 Track 2 Methodology

The information from Track 1 has been completed and deepened by collecting data from the field through Focus Group Discussion (FGD) and Key Informant Interview (KII). The target

groups of the FGDs were the benefitting farmers from the project communities. From four provinces (Nablus, Jenin, Tubas and Jericho) two focus groups from each of the locations were held with each 7 to 9 participating farmers, both male and female. Two different FGDs were done in Beit Dajan, representing farmers who benefited from different interventions in the village. These farmers were selected according to the target location and type of intervention to cover a wider range of activities received, which allowed the evaluation team to measure results across all project activities. The proposed list of focus group members was reviewed by CARE staff and modified based on some logistic considerations before focus groups took place. The gendered composition of each focus group in each location is seen in figure 2. The guiding questions used during the FGDs are in Annex 1.

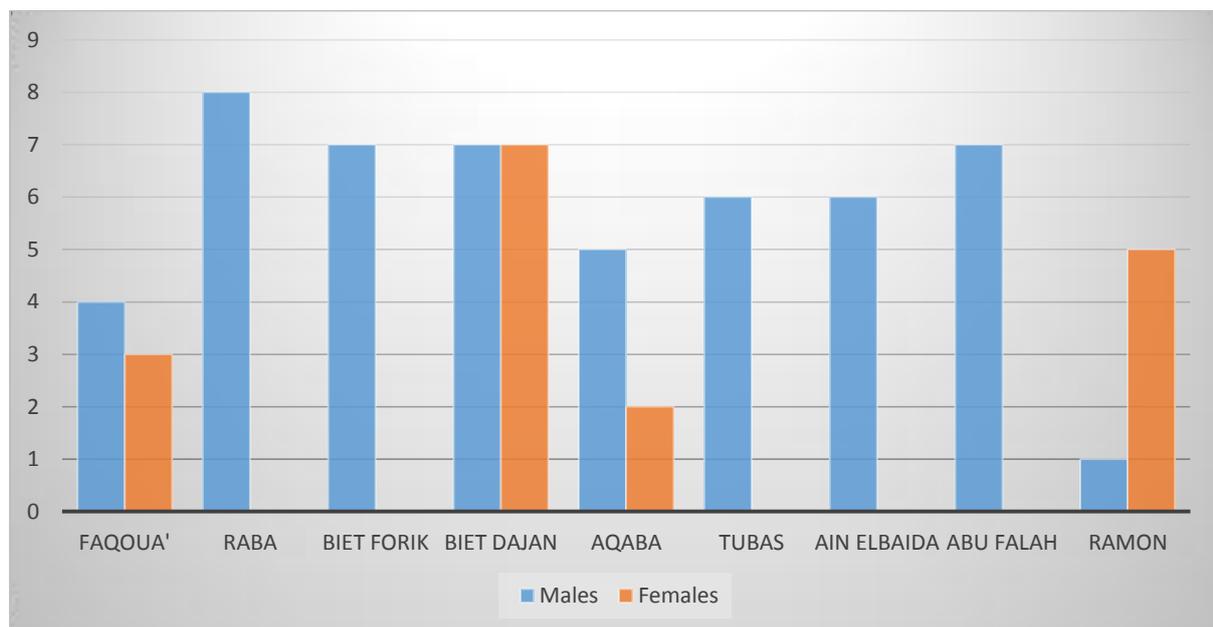


Figure 4 Distribution of Focus Group Discussions conducted in selected project communities

The evaluation team aimed for good gender representation within the FGDs; therefore four FGDs had both male and female members. In one community, the number of female members in the FGDs was higher than number of male members, such as in Ramon which has a women’s only cooperative.

Field visits and Key Informant Interviews (KII) were another important tool for data collection for the evaluators. Target groups that were included in field visits were benefitting farmers, cooperatives, SMEs, Rawasi project staff, private sector actors that had a role in the project (like a trader) and the MoA. To held the KIIs the evaluation team worked with a list of questions that could be followed but adjusted based on the target group. Guiding questions for the KIIs can be found in Annex 2. All tools have contributed to identifying recommendations on multiple levels.

### 1.5 Limitations to the Study

Though this evaluation aims to provide a clear picture of the overall success of the Rawasi project implemented over all project years, still several limitations to this study should be recognized.

The duration of implementing Rawasi project was 28 months (including extension), which is not sufficient for several results and outcomes to be fully shown and recognized. This is particularly true when it comes to the sheep and goat sector, where e.g. the enhanced breeds need about five years for its positive improvement to be clearly measurable. Another example is the tracking of high yielding forage seeds productivity over generations.

- Due to the fact that the majority of the beneficiaries live in Area C, which has access limitations and cultural constraints, the evaluation team realized that the complete randomization of the sample for FGD was not applicable. In order to mitigate the consequences of those limitations on the results and analysis, the evaluation team worked closely with CARE staff in selecting the FGD members because they are aware of the situation in the field.
- The project could have been better or more carefully evaluated if the project design had a control group to compare results and impact of the project on target groups before and after the project, and the effects of possible external factors.
- The meetings with PARC was basically carried out with the program manager; project manager appointed by PARC towards the Rawasi project couldn't be reached or contacted since his contract with PARC was finished by the end of the project and the time of the evaluation. As an alternative, the evaluation team contacted the project manager in CARE to collect information.

## Chapter 2: Relevance

Following the DAC criteria as discussed above, the evaluation first focusses on the topic of relevance. The analysis will mainly focus on the relevance of the project activities in the local setting, taking into account the standpoints from key stakeholders and daily challenges of beneficiaries. Furthermore, observations have been made about the relevance of Rawasi in the mandates and experiences of CARE and the implementing actors, as well as the relevance of the choice of implementation methods.

### 2.1 Relevance in National Context

Rawasi is designed to respond to needs and priorities identified by the Palestinian National Agriculture Sector Strategy “Resilience and Development” 2014-2016 (developed by the Ministry of Agriculture) in a way that will build stronger value chains in the dairy sector with increased returns for the small-scale farmers. As part of the interviews that the evaluation team conducted, a senior at the MoA who was the focal point of Rawasi project said that the MoA was not involved in the project design, however, Rawasi was in line with the strategy of the Ministry. He said it was the first time to have a project that is almost totally in line the ministry’s strategic plan. He added that Rawasi was a developmental project seeking sustainable results among other ways by raising awareness among farmers through demonstration sites.

Nationally spoken, the evaluation team has found that livestock farmers have not received any holistic value chain development support before Rawasi Project. A lot of other support efforts in this area of Palestine have instead focused on short term emergencies, without taking a longer term, or holistic or market-orientated approach. This was also confirmed by the programs manager from PARC. Therefore, Rawasi is considered a cornerstone in developing the livestock sector in the targeted areas. It also paves the way for other NGO’s to build on what has already been accomplished by Rawasi. The “National Agricultural Sector Strategy” of the MoA has set forth different objectives to be achieved between 2014 and 2016. Rawasi project has, in deed, contributed to the achievement of three objectives mentioned in the strategy which are:

- Efficient and sustainable management of natural resources. One of the indicators that measure this objective is the length of constructed and rehabilitated agricultural roads. According to the strategy, the national target is 4,000 km. Rawasi project has rehabilitated 10 km which represents 2.5% of the national target. Another indicator is the rangelands areas that have been rehabilitated. The target is 10,000 dunums. Rawasi managed to rehabilitate 2,000 dunums as grazing lands.
- Enhanced agricultural production, productivity and competitiveness as well as enhanced contribution of agriculture to food security. One of the indicators to measure this objective is the rate of increase in productivity in sheep milk. It is stated in the strategy that the target is 15%. Rawasi project has achieved an increase of 25% among the beneficiaries of the project.

- The agriculture sector has effective and efficient capacities, institutional frameworks, legal environment, infrastructure and agricultural services. One of the indicators to measure this objective is the rate of increase in productivity in fodders which is 15%. Rawasi project has achieved triple this rate; 45% among the beneficiaries of the project.

The choices in project design are based on CARE and partners' strategies in Area C and CARE's economic empowerment program that has uncovered a wealth of potential for value chain development in Palestine with high potential for females. The choice for the livestock sector and small-scale farmers in Area C has been clearly made based on their high vulnerability in the Palestinian setting. Since the difficulties for these communities stem from both the Israeli occupation, economic underdevelopment and environmental challenges, it can be surely stated that the intervention has reached one of the most vulnerable people in Palestine.

The Rawasi intervention also builds on CARE's and partners' previous experience of programming and research in the livestock and agricultural sector in Palestine and the wider Middle East region. Taken into account were also the specific partners' experience in Area C and in agricultural innovation, as well as their organizational mandates and competencies that fully align with the project objectives as noted in the project document and confirmed by interviewed stakeholders. The project design document includes a summary of key stakeholders' attitudes (who were consulted during the design of the project) towards the action in general and planned activities in particular. Furthermore, CARE undertook a planning workshop with participation of representative of the Ministry of Agriculture to verify project methodology and intervention objectives. Thus we can state a good level of involvement of key stakeholders in the preparation phases and following that a high level of cooperation and ownership among both national stakeholders as well as the local communities.

## 2.2 Relevance for Local Needs

The project responds to several factors that undermine food security and sustainable livelihoods of livestock holders in Area C, which were revealed through Value Chain analysis. From this analysis of the supply and demand side of goat and sheep dairy products, a set of obstacles can be clearly distinguished that stand in the way of smallholders to reach their full potential. Starting at the farmers' level, they are faced with high cost, low quality, limited knowledge and no use of local available materials when it comes to fodder for animals. Other key inputs like water and grazing land are surrounded by difficult access or high costs in the different communities. The availability of these inputs directly impacts their flocks' health and productivity as well as the profitability of their economic activities. Besides this, there is a limited availability of efficient extension services and low access to and high costs of veterinary services. Most farmers have weak market knowledge or interaction in order to anticipate, diversify and jump into market opportunities. Resulting,

most small dairy farmers have a small profit margin, also related to underdeveloped processing practice with a need for knowledge and equipment to reach higher and sustainable quality. Overall, there is limited access to credit for farmers and SMEs and very limited capacities of SMEs like CBOs and cooperatives to productively connect to markets. At the macro-level it is clear that there is very limited sector-specific infrastructure like a full cold chain, milk collection centers and refrigerated transport and under-developed infrastructure (road, water, electricity) and weak supportive policy and legal framework. These issues were validated as major obstacles in their personal situation in the interviews and focus group discussions with individual male and female farmers and CBOs members. Based on this understanding, Rawasi project aimed to fill the gap between existing needs and existing other efforts by the MoA or other developmental actors. In Rawasi cooperation and networking were stressed, while the value chain approach also ensured a holistic approach to the livestock sector at large and the livelihood of the smallholder in specific.

The intervention worked in three main parts, undertaking efforts both on 1) key inputs (water, grazing land and fodder), 2) productivity and production process and 3) closing the circle and market access. These three parts can be roughly connected with the three ER's of the project, as discussed in the introduction. While all components are closely related and hanging together, especially the activities under ER1 and ER2 were adjusted to the specific needs of the farmer households, the characteristics of their locality and the security options. It had to be sometimes decided that e.g. cistern rehabilitation could not take place due to close monitoring of the Israeli Army of the area and high risks of demolition and thus distribution of water tanks was applied. Or in other cases new barns could not be established, but new tools and connection to networks of veterinary services could still improve the production process of the farmers. This shows a highly flexible project design, as well as good communication between the beneficiaries, field workers and management who responded very well in general to local changes and new information.

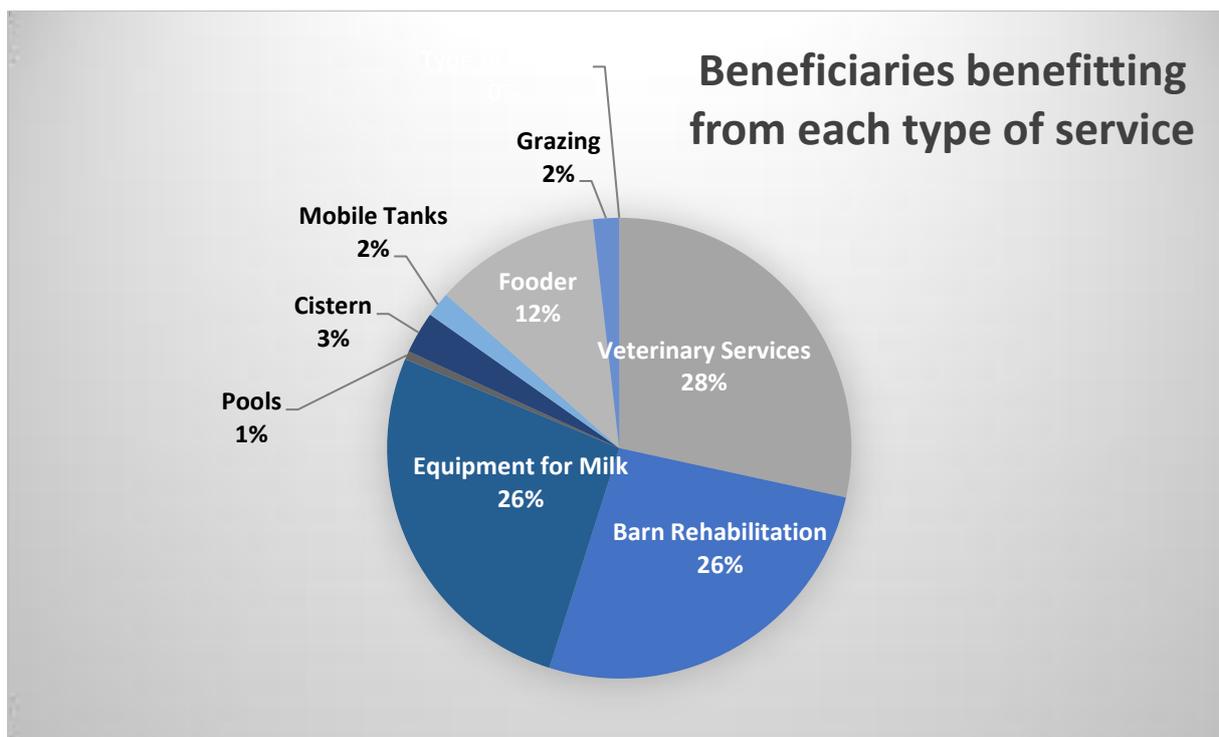


Figure 5 Percentage of farmers benefitting from each project activity under ER1 and ER2

When looking at which beneficiaries benefited from which activities mostly the following observation can be made. Most of the beneficiaries have received veterinary services, barn rehabilitation and equipment for milk. Each category of services includes training on the subject. The following sections will describe in more detail exactly how the activities were relevant under each topic; inputs, productivity and market access.

### 1) Input challenges.

As confirmed by interviews and FGD with the farmers who were trained to improve their capacities to manage and utilize natural resources and increase knowledge needed to improve their access to water and grazing land as well fodder. The project introduced innovative approaches of fodder production, water harvesting and capacity building of target groups. This was an integral part of capacity building of target groups and was reached through demonstration sites for water harvesting and fodder production. The project was structured in a way that livestock holders will consequently be able to practice new techniques in a safe environment and will not have to experiment with their own scarce resources. The project introduced innovative approaches of fodder production, water harvesting and capacity building of target groups. The capacity building programs of all actors were always developed by integrating different training tools and methods that took into account the uniqueness of Area C context through demonstration sites for water harvesting and fodder production. This kept them highly relevant and adjusted to local circumstances. For instance part of the training was theoretical supported by practical sessions, where the field days with pilots were implemented in a full participatory manner

with farmers either in selected farms or in the field school farms. All were delivered in a simplified way that allowed farmers to understand and adapt these techniques that proved to be effective in terms of cost reduction and produce quality and quantity. The project expected that livestock holders will consequently be able to practice new techniques in a safe environment and will not have to experiment with their own scarce resources. For instance part of the training was theoretical supported by practical sessions, where the field days with pilots were implemented in a full participatory manner with farmers either in selected farms or in the field school farms. All were delivered in a simplified way that allowed farmers to understand and adapt these techniques that proved to be effective in terms of cost reduction and produce quality and quantity.

In depth analysis of existing resources in different target locations was thoroughly done by project team prior to defining interventions to ensure relevance. This was evident through activities on improving water resources. For example, hydroponic water harvesting systems were applied in some locations, water tanks and pools were used in other locations to ensure the use of existing resources. While interventions around input challenges have been well-designed, more follow up was needed during the project to ensure the success of every intervention to its full potential. Several farmers were provided with seeds for millet production but some were not informed that they can reproduce seeds from the same plants. Some have consumed all millet production without having any knowledge on how to collect produce another round. Monitoring to ensure constant knowledge across different target group in target locations might help validating results and applicability of interventions.

## **2) Productivity challenges**

The activities undertaken under this heading were also found relevant as they made relevant and suitable improvements to the farmer's situation. The most significant example of this was the introduction of new breed rams to increase quality and productivity, which was a highly discussed topic for several years already in Palestine but never implemented because of the fact that it was difficult to find desired improved breeds in the local market. The project as also made a relevant contribution through improved access to veterinary and extension services, farm management and animal husbandry as well as developed quality of dairy production. The project responds to existing knowledge and resource gap in target communities and provides relevant techniques and input to overcome livestock productivity issues. Interviews and FGD with target communities reveal relevance of these activities and overall high appreciation. The activities increased milk production through introducing new breeds, better shelters and shelter management and decreased the rates of abortion, mortality rate and disease infections. Some cases of inadequate intervention were spotted through interviews where lack of veterinary support to new rams and the limited awareness of the farmers resulted in the death of these rams and therefore, loss of intended result. Though there will always remain the risk of sudden animal death, it is advised the project

will always continue to study the holistic needs of the farmers to receive the inputs and avoid any loss of inputs.

### **3) Access to markets**

In order to serve the ultimate goal of the project -increasing the returns livestock holders have from their products- a set of complementary activities was implemented starting from a market system/ value chain analysis of dairy products with business planning and capacity-building opportunities for CBOs and SMEs who served as connectors to the market for smallholders. Because all following activities were based on research, assessments and testing, the evaluators have concluded of a very high relevance for the project communities. The elaborate market system assessment had been concluded in the first year of the project and its results had immediate impact on the activities in the whole Rawasi program, allowing a close relevance for the project communities. Through its identified options for better and more sustainable connection to consumers, it carried the potential to let farmers benefit from high quality production and fair market linkages. The completion of the study gave way to the start of the other activities that focus on specialized, high-impact training and intervention at the CBO/SME level. Most of these activities continued in Year 2, to follow up on the improvements in the first phase of the project – namely the improvements in the production phase of milk. In order to close the cycle of ER3; value chain inputs were provided to 7 CBOs/SMEs to strengthen livestock holders’ access to markets and optimize their products’ value chain. This included the creation of four dairy production units and provision of complementary packaging machines to the SMEs.

It was noticed that these activities were always connected with capacity building programs and that they holistically updated the skills, capabilities and activities of the farmers. E.g. some of the production units were building on the original skills of women in dairy production. This shows their high relevance and compatibility with the local setting. The project has utilized various innovative approaches to ensure applicability and rapid response to needs and external risks that might occur during project implementation. Identifying the value chain’s constrains by the project had a considerable contribution as it not only increased the amount of production and enhanced its quality but also decreased the cost of the production in a way that ensured better management for natural resources and management of production inputs.

Other approaches that were used were the knowledge transfer and peer-to-peer training, market analysis as a base for several activities as well as the tailor-made capacity building approach. The utilization of peer to peer transfer of knowledge facilitated wide and accessible knowledge sharing as well as created societal responsibility among the schooled farmers. This is evident in PARC, CARE and ICARDA selection of male and female livestock holders in the CBOs to participate in a tailor-made training on farm management, animal husbandry and processing where these trained individuals transfer their knowledge to other members of their CBOs. In depth analysis of social and market systems to define relevant support to improve return and the added value of products, which is evident through the

tailor made training for women and CBOs on marketing skills, packaging and quality control as noted by target groups.

## Chapter 3: Efficiency

This chapter discusses the key question how well did the various activities, approaches and management structures transformed the available resources into the intended results, in terms of quantity, quality and timeliness.

### 3.1 Activities

The evaluation team found several cues to say that the activities have been planned and implemented in a cost-efficient way; namely the selection of activities was done based on previous experience, the team selected only the most relevant and successful methods and the implementing team brought comparative experience from other countries as well through ICARDA. As will be discussed in the next chapter Effectiveness, all goals have been reached and several of them were exceeded during the project duration. When looking at the planned targets and the reached amounts, the project has been able to use the same resources for reaching a good amount of male and female farmers as well as high productivity increases and increased market activity. This is an important facet of efficiency.

### 3.2 Project Management

Project management can also be described as efficient as clear communication channels were applied with all stakeholders. The consortium consisted of CARE WBG, PARC and ICARDA with both their project managers and senior managers involved; this could have been a burden to efficient implementation. But the tasks and responsibilities were clearly divided in most areas and were fully supported by CARE field and office staff as far as the evaluator could notice. Close cooperation between CARE WBG, ICARDA and PARC was noticed, with decision being taken collaboratively and making good use of the information/resources available. Regular meetings with MoA ensured high cooperation from MoA, copying or multiplying impact wherever possible which was increasing the efficiency of the inputs given into Rawasi.

### 3.3 Methods and Approaches

Rawasi has been innovative and path breaking to apply the value chain approach in the livestock sector in Palestine. It has been a crucial step that research like the Dairy Market Assessment and value chain strengthening activities have been done in this under addressed sector in Palestine. While aid activities do take place in this sector, they will miss out on including a value chain approach and thus don't provide holistic links between the actors that could help the farmer with a more sustainable income. Therefore it is very likely that Rawasi has reached much higher targets when it comes to sustainable benefits for the farmers, than aid projects that leave out market thinking. Though no actual comparison can be made between other paths that could have been taken, it is clear from the continuous in-

project learning and the very good achievement of results (more than originally targeted) that the chosen approach has been successful and efficient.

In addition, a simple “value for money” exercise shows that a very reasonable amount of the project budget was directly spent on project equipment and supplies, with secondly human resources being the main budget line. This includes however also veterinary staff and field workers who can be counted as direct services to the beneficiaries.

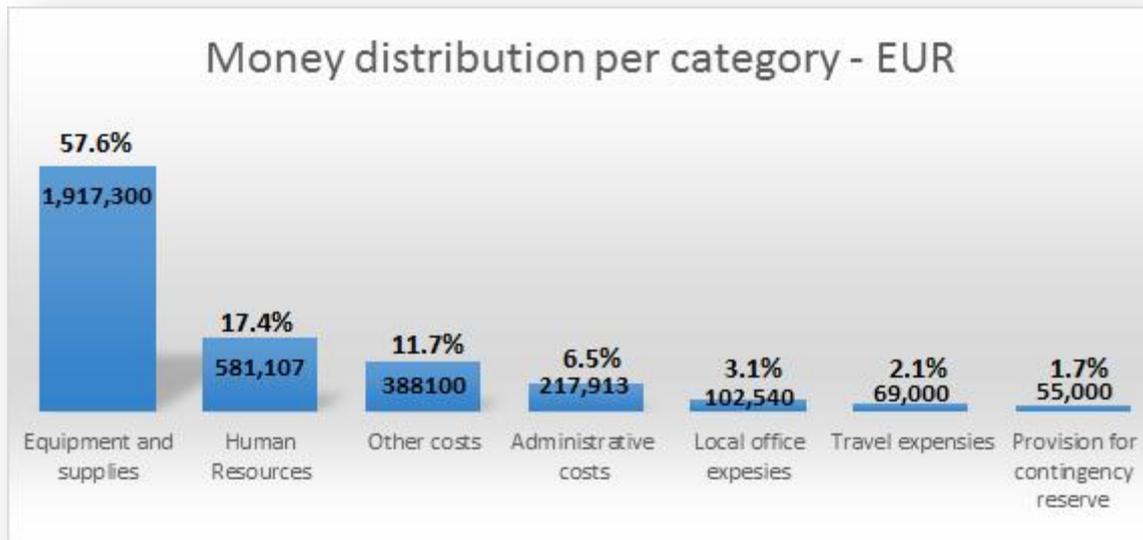
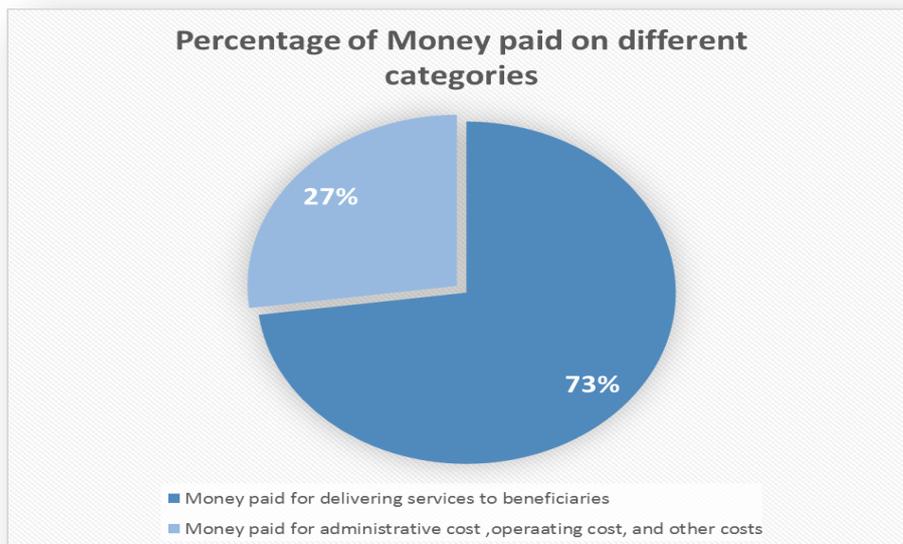


Figure 6: Project budget spent during whole project duration, per specific budget lines.

The total budget of the project was 3.330.960,00 € . The percentage of the money spent on equipment supplies, and services delivered to beneficiaries was 73% of the total budget which is relatively acceptable compared to other projects implemented in this area as shown in figure 7.



*Figure 7 distribution of money spent on different categories*

## Chapter 4: Effectiveness

This chapter continues with the questions how well project objectives have been reached over the course of the implementation. Special attention has been given for the importance of the specific methodologies and methods of implementation chosen, including the value chain approach and capacity building approach, and their contribution to Rawasi's success. These questions have been looked at from the diverse perspectives of different stakeholders, including the most vulnerable in the target group (women) and the MoA and private sector.

### 4.1 Reaching Project Objectives

#### 4.1.1 Improving access to inputs (ER1)

As explained in the project introduction and project's relevance, the Rawasi project followed a value chain approach that started to look at the inputs from the farmers and ending with the end consumer. In this way suggestions were found to significantly improve the farmers' position in the dairy value chain, so they could increase their profit. There is no better place to start than to look at the expensive inputs that the farmer is relying on to produce his or her products. This is exactly what the project did and it worked on water, fodder and grazing land spread out over different activities. While delays have taken place in the first year, all activities have been successfully implemented and especially the water activities have reached more farmers than first planned. More than 2,000 farmers (including 990 women) have better access to water and reduced costs, while 15,768 dunums (1,200 dunums more than planned) have been rehabilitated for the farmers to use as grazing land. It speaks for the project that different techniques were found to reach the same goals, depending on the circumstances of the community (e.g. water tanks vs water cistern if building was hard). Below the evaluators will summarize some of their observations about how well these activities reached their goal.

One of the innovative and successful actions of the project carried out in the field of water improvement were the "demonstration sites" on water micro catchments harvesting systems. It was evident from interviews that water harvesting demonstration sites were used in areas that have more rainfall to support collecting water for forage crop and other types of trees. Interviewed farmers indicated that water harvesting contributed to increased productivity not only for livestock but also for other agricultural crops in general as was evident in Abu Falah village where farmers have planted olive trees around the catchment area. They have also indicated the soil erosion decreased which lowered water cost and increased olive production by 50%. Not only did this technique benefit target groups in Area C but it also benefited areas next to the Wall as stated by interviewees from Faqqua village where this has partially solved water problem in the village. In terms of defining water resources required in each location the project carried out rehabilitation and construction of

water cisterns and water well. All confirmed that water availability has decreased cost of purchased water, increased availability of water, decreased the cost by 50 to 10 NIS per cubic meter in Faqqua. In terms of water resource management interviewed livestock holders from Abu Falah noted that this intervention has contributed to better water management where they confirmed they started to rely on water available in the water wells and utilize rain water for that purpose. In Tubas interviews also confirmed that the pipes installed on top of the animal shelters was used to collect water in water tanks to be used during summer where it has provided them with water for a period of six months. This in turn increased availability of water during long period that was not available before. It was also evident that unintended results occurred due to water management such as improved olive production by 50% in Abu Falah.

ICARDA introduced high yielding forage seeds to increase fodder production in target locations. After project implementation, it is apparent that farmers have increased the fodder plantation by 34% and increased the production by 45% as shown in Figure 8. This was achieved after the beneficiaries had received training on fodder production and after their attitude towards fodder had changed positively.

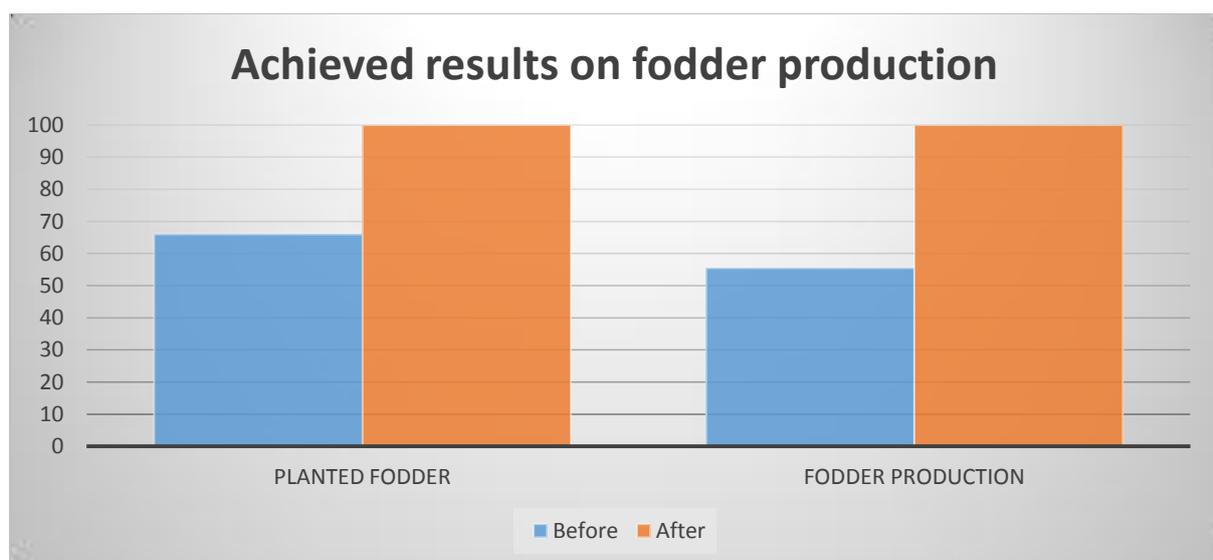


Figure 8 Achieved results on fodder production

Interviews in Aqqaba confirmed that the millet production, done with the seeds distributed by the project, has reached eight tons; which was used for animal feed. All interviews confirmed that fodder production at local communities has decreased fodder cost by 20% where it can be harvested three times per year. The new types of fodder, especially the millet, has increased milk production by 10% as stated by all interviews. Further, increased access to water increased fodder production in target areas as clarified through interviews. On the other hand, some interviews revealed that millet was not successful in some target locations such as Abu Falah due to lack of water (low rainfall rate). The project needs to

reconsider areas where such intervention is suitable through further analysis of the climate and availability of water.

All interviews confirmed that rehabilitation of agricultural roads has encouraged farmers to access their lands and increased access to grazing fields. Both through better access and rehabilitation of more than 15,000 dunums the time farmers could spend on the grazing land per year has been raised. Planted areas have increased by 28% and consequently the grazing period has increased by 34% as shown in figure 9. The grazing period was around 70 days and it has reached more than 100 days per year. This has had a positive impact on milk and sheep production. Further, they have asserted that all target locations have limited access roads overall and therefore these agricultural roads served as alternative roads in case of closure of main roads by Israeli military. The roads did not only increase access to grazing lands, but served the overall accessibility of the communities include their access to other inputs, to veterinary services, to dealers and to markets. The other way other, communities now became more accessible for dealers and services as well (like vets and traders with cold vans), lowering the prices that these communities would pay. This highly needed increased infrastructure facilitates marketing of dairy products by shortening travel time and thus lowering costs and preventing any possible products spoil. Some roads had to be completed only till the base course level, as further construction would have caught the attention of the army and greatly increased the risk of destruction. Such roads are still useable but not ideal for all cars.

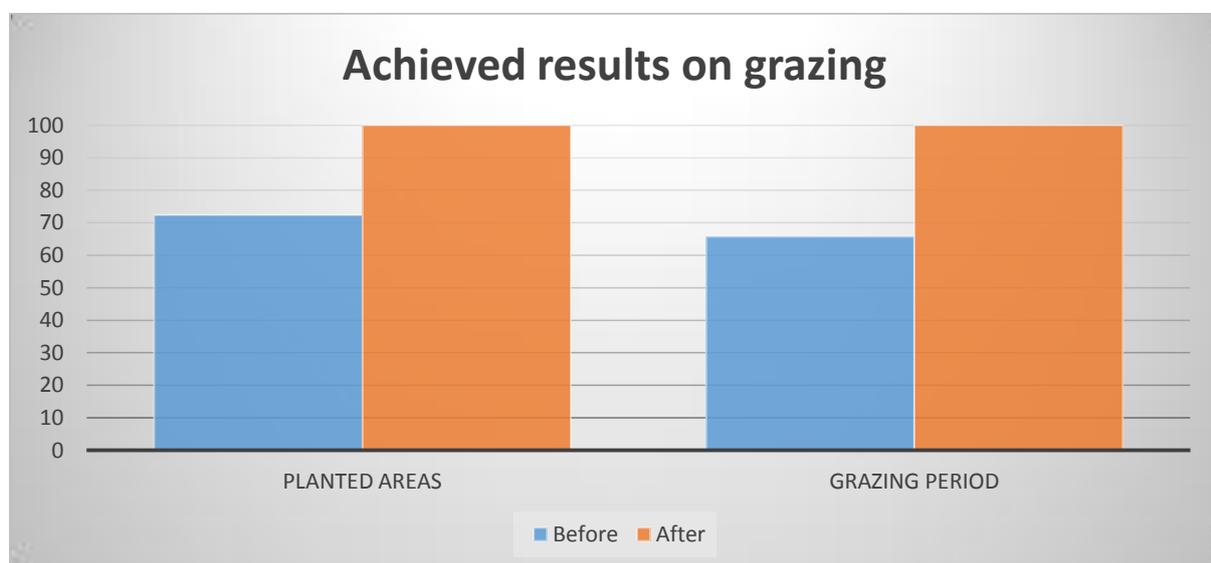


Figure 9 Achieved results on grazing

#### 4.1.2 Improving production process (under ER2)

The next step in the value chain process was a closer look at the productivity of the livestock and with that the health and living situation of the animals. With healthier animals (less

abortion or newborn deaths and less sick animals), productivity (more milk, meat and higher twin-rate) can be higher leading to more profit. Simple improvements in fodder, barn management could also improve this was proven, while very complex interventions like the introduction of new breeds was also a proven practice for better flock. The project worked in a smart way by thinking both in short and long term goals for productivity. Simple changes in barn management and feeding already improved short term strength and health of the animals in a cost-efficient way, while breeds improvement was a long-term branch of the project. Similarly, VET visits were key to increase health of the flock short term, but connection of farmers to VET networks and services is likely to keep the livestock more healthy in the long-term. Below are the observations about the specific activities and its results from the field.

Training for increased capacity was not only given at individual level but also aimed at the CBO management. Interviewed CBOs emphasized the significance of different types of trainings obtained under the project; especially good governance and management. Women groups in particular indicated significance of training on dairy production, hygienic collection and production of dairy products and packaging. The learning visit to Amman was highly appreciated by women through knowledge they obtained on production of cheese, labneh and jamid. Exchange and learning meetings among CBOs from different locations were confirmed through interviews as one of the means to transfer knowledge and experience among target group where they learned areas of success and obstacles that face some groups and methods to replicate or overcome the problems. Thus the participants appreciated the comprehensive training package.

One of the better barn practices spread during the project was that of barn separation. All interviews confirmed that rehabilitation and construction of barns contributed to increased production by 50% where separation of small animals from the rest of the livestock decreases possible mortality. It also decreased abortion and diseases where infected animals can be separated from the rest of animals. Interviews also asserted that animals have increased in number, size and weight. These barns also provide a conducive and clean environment for milk production. Enhanced breed rams have also succeeded based on interviews, in improving productivity of animals and increase milk production.

Twinning rate has increased by 32% due to the introduction of a new breed of rams. Lactation period has also increased by 16% (from 3 months to 4 months) because of multiple reasons. In fact, training has a major impact on improving the lactation period, not to mention the barns which provided better conditions for the sheep. It's worth-mentioning that the prolonged lactation period increases milk production. Useful training and equipment have also contributed to minimizing the percentage of spilled milk which dropped by 57% as shown in figure 10.

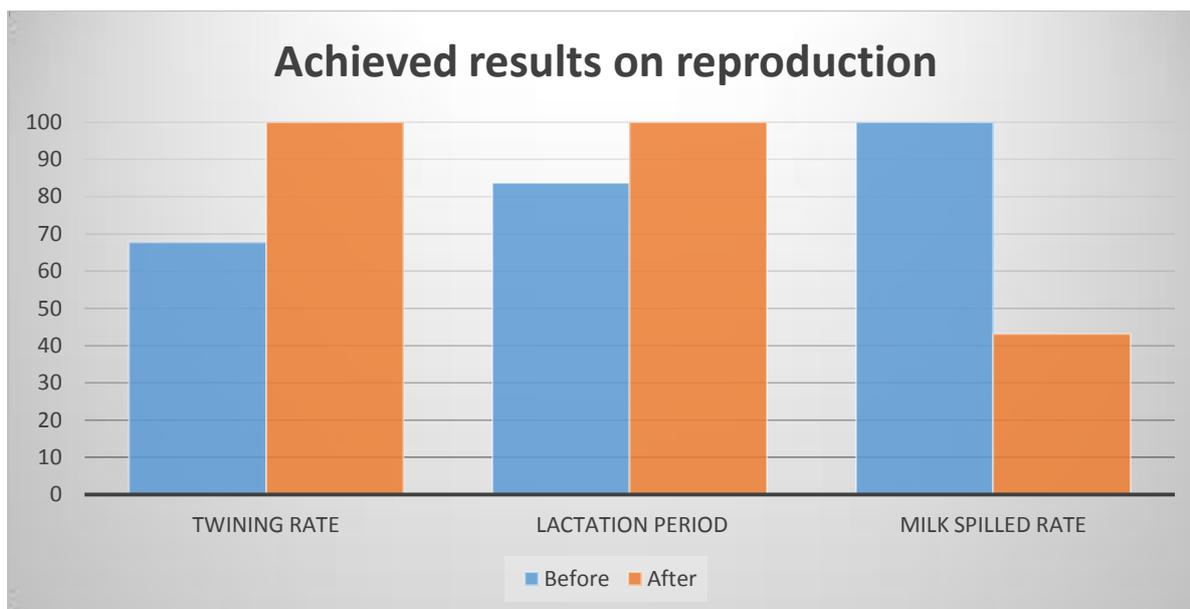


Figure 10 Achieved results on reproduction

Based on the success of the enhanced breeds, Beit Forik CBO, for example, indicated that it is planning to establish a special section to produce enhanced breed rams. This was not, however, confirmed through all interviews where some indicated that results are yet to be defined because tangible results require more time (about 5 years). Three FGD out of five confirmed this result. Three farmers in the FGD stated that the ram has died or infected other animals with a disease it had. It was evident that the majority of interviews appreciated animal tagging that was done by MoA in coordination with project partners and stated its benefits in tracking animals, follow-up new breeds, track vaccinated animals. A few interviewed farmers indicated adverse effect of the animal tagging on their livestock which was infected with some disease and therefore, died. All FGD confirmed significance of veterinary training that improved their skills to provide advice and support to other livestock holders in their communities. They asserted their request for more training programs in this issue to identify primary veterinary interventions whenever needed, which contributes to decreasing mortality rates. Stainless steel containers were confirmed by all FGDs as one of the means to allow farmers to produce high quality milk for dairy products.

482 beneficiaries received vet services; which includes training and consultation. 92% of those beneficiaries received free vet services. Regarding the number of visits per year, it increased by around 50% (from 4 days to 8 days per year). These services provided by Rawasi project and other partners have reduced the expenses of extension and medical services. Extension services cost dropped by 46% while the medical services cost dropped by 39% as shown in figure 11. Beneficiaries have managed to save money, usually spent on these services, to employ it in other activities to increase production. As a result of good vet

services and training provided by Rawasi project, the percentage of mortality among newborn sheep has significantly decreased by 59%. Also, abortion has decreased by 54%.

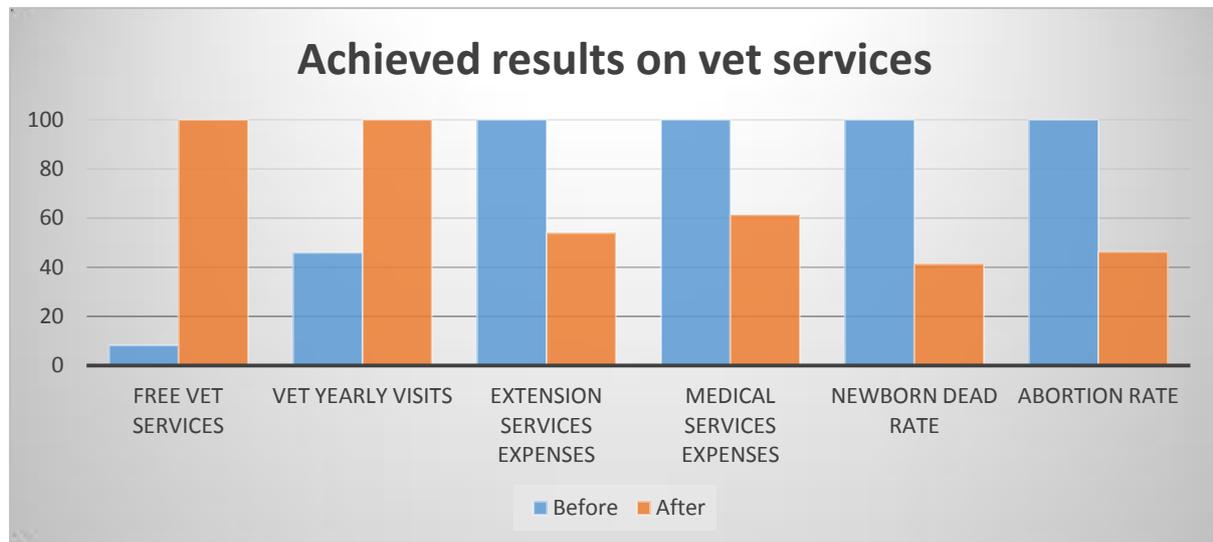


Figure 11 Achieved results on vet services

#### 4.1.3 Closing the circle; connecting to markets (under ER3)

The final stage that the project has been working towards was ensuring that the farmer could place its production on the market and reach the end consumer in a profitable and fair way. This phase includes not only marketing, but everything from processing to logistics to end markets and consumers. There are different roads to the end consumer, as also the Dairy Market System Assessment clearly identified, and not one fixed way was promoted by the project. Different approaches will work for different communities and farmers, but the project tried to find the improvements and upgrades for the different type of producers and communities. It was clear that some farmers already benefitted from a stronger position with the trader, increased production and higher quality. Others were collectively organized, produced higher qualities and quantities, learned about packaging and marketing and were connected with higher end markets. This was done through dairy units. The newly gained market knowledge was crucial for all participants, who can now make better choices about the type of products they produce and the actors they want to connect to in order to reach the consumer. This last phase is especially a phase where the position of women traditionally has been important, because of their major role in processing, making it therefore the ultimate opportunity to increase their decision-making power and involvement. What follows is information from the field about the major activities done in this section.

All beneficiaries were aware of the Dairy Market System Assessment that was done in the first phase of the project and all confirmed it was the basis for several activities, especially the dairy units that were established.

The work women compromised many different parts and not all parts could be reviewed thoroughly. Some of the important steps included the development of an operational manual, specific training courses for women, included a multiday workshop in Jordan, sessions on entrepreneurial skills and exchange visits and tours to other women from similar communities. Several of these trainings, sessions and events pushed the boundaries of women in a way that they said and did new things that opened up their thoughts and their mind to more innovative and entrepreneurial thinking in their business. The interviewed women were able to compare between their production prior and after the establishment of the dairy unit and attending the training, and concluded that they used to have a more manual, conventional way of production which was less hygienic. They also said before to not be aware of classified packaging compared with the current new production techniques and skills. Interviewed women also confirmed that marketing training and the project improved their skills and provided an important opportunity for networking and participation in food exhibitions. Women in Frush Beit Dajan have participated in seven food exhibitions which increased their revenue which was used to repay their debts, cover some running expenses and distribute the rest to CBO members.

FGD stated that customers' reaction to production has improved where the shape of the cheese produced is better due to the use of the presser

#### 4.2 Implementation Strategy

Overall it was noticed that the chosen management structures, division of roles and channels of communication within the consortium were effective and contributed to the overall success of the project. Responsibilities were clearly shared between the implementing actors and partners PARC and ICARDA contributed to exactly the fields that they were fluent in. The project staff however had strong communication between them and frequent meetings were held between the direct project responsables.

The evaluation team observed that the M&E system and risk management were also strong, supported by these frequent meetings that allowed the team to jump into new development (demolition orders e.g.) as well as new information. On several occasions information directly from the field was discussed by senior project staff and enabled them to respond successfully. This cannot be assumed in all projects with so many involved actors. Examples of this are the adjustments of working methods because of threats from the Israeli army and planning new marketing activities due to new learned information.

Though no comparison can be made with other projects, it is very likely that the targets from the project could not have been reached if the value chain approach was not applied as successfully by the project partners. It was seen before how emergency short term

project can keep farmers very vulnerable. Though vulnerability is very high in Area C due to the Israeli occupation, farmers with stronger networks, new skills and new techniques are made less dependent. Also the emphasize on capacity building of CBOs and the selection of feasible agricultural practices are key contributors to the success of the project can the evaluation team state.

## Chapter 5: Impact

As previously shown the project has reached its targets and fulfilled its activities. This resulted in a strong impact on the project communities, which was noticed by the evaluation team at different levels. This chapter will focus on some of the higher level changes or impact that has been made by Rawasi, looking at different target groups and being aware of the possibility of indirect or unintended impact as well.

### 5.1 Project Impact on Male and Female Livestock Farmers

Targeted farmers that were included in the project have all increased their technical skills and knowledge to improve their economic activities. This should lead and was already visible in the project it will lead to more sustainable management of natural resources and more efficient barn management. Many farmers also practice a more efficient production process. Over a longer period this should increase the productivity of their flock even more and reduce the stress on their livelihood even more. Increased access to water and grazing land will reduce the farmer reliance on the local markets while higher quality of production, processing and marketing will allow the farmer to benefit from more returns on their product. Other benefits also came from the collaborative work that was initiated among farmers in CBOs and the linkages that have been made through them. Access to collective services like purchasing, selling, veterinary support reduces transaction costs and improves profitability.

The evaluation team noticed that farmers skills and confidence were improved, having an impact on household confidence and reduced stress. Local networks were also strengthened which in some places have led to increased cooperation among local farmers, which is positive as it increases their resilience. The project has also had an impact on the visibility of women in the community; for several of them it became more acceptable to move and participate outside their households. In some communities that were small steps, improving the skills of women, empowering them in relation with the middle men and broadcasting their production. In other communities, space was found to work on this more elaborately and female production groups were started and women participated in exchange visits. It is too soon to notice the full impact of these activities, and one should especially be aware of any unintended impacts like increased burden, but several women expressed their content with the activities and stated to feel more equipped.

### 5.2 Project Impact on CBO's

In Rawasi there were 17 community based organizations (CBOs) involved who in total are currently serving around 12,000 farmers. Many project activities have improved these organizations into centers of knowledge, skills and services to the farmers to a level that they were not capable of before. This included both materials inputs as well as extensive capacity building programs. This led to about 51 CBOs members from all communities who

were intensively trained in interlinked topics (management, governance, gender, and marketing) and can serve as resource persons in their communities. They have already transferred this knowledge through community training and lessons are being applied by each CBO. Strengthening these CBOs has a very positive impact on local society as collaboration is supported and benefits are gained for all farmers. These CBOs, when applying the representative structures displayed in the trainings, will also be able to service as communication and advocacy tools for the areas, addressing among other the Palestinian local government. The CBOs were also trained in advocacy activities related to demolitions and stop-work orders, helping them to respond as quickly as possible and establishing new connections with legal actors. These actors might be able at some points to delay demolitions and at least provide some support to the effected families. This was already applied during the project and should be able to continue after the project exists.

Overall the evaluation team noticed that the CBOs have improved management systems and in most cases members are more active. CBOs are contributing to a higher added value to the dairy products and an increased income for the farmers. Several CBOs were also introduced to other market actors and private sector to improve the deals these CBOs make for purchasing and selling and to open possibilities of market option for the near future.

### 5.3 Project Impact on the Dairy Value Chain in Northern Palestine

Though the evaluation team was not capable to have a more structured and in-depth look at the impacts on the whole sector or whole dairy value chain, it is clear that the project has made lasting changes in this area as well. Overall, on a high level analysis there have been more linkages established between all value chain actors. If a visual perspective would have been taken, the connections walking through the value chain would be denser, shorter in some cases (excluding middle men) and with less actors isolated.

Market information was also increased through the studies and assessments done in the project, as well as by increased capacity of CBOs on this topic. This is recognized as crucial for holistic value chain development. Overall, the project also contributed to more local production (less loss and more milk) and many CBOs and farmers reported increased sales and better return on their products. By establishing production groups, the potential is created for these groups to establish more direct and formal relations with private sector on a larger commulative high quality production scale actors who can market and display their products on a larger market (this includes SMEs and companies dealing with marketing, transportation, retailers, exporters, processors, etc.). This will make local cheese and yoghurt products more widely available for the average Palestinian consumer and will be a very positive step in the right direction.

## Chapter 6: Sustainability

The sustainability of the Rawasi intervention has been looked at on different levels; starting with the local ownerships of project activities and outcomes, then the funding and management structures working towards sustainability at the meso-level, then the social and cultural factors sustaining the project's success at the macro-level. Overall the project is seen as well-designed to include local ownership and to have had clear exit strategies contributing greatly to sustainability of project activities. The selected agricultural innovations, dairy units and trainings were also specifically picked with an eye on feasibility, continuation and (environmental) sustainability. The project activities were welcomed by the local target groups that fully participated, though it should be noted that some material activities can in the future be harmed by demolition, damage or lack of continuation due to financial constraints of the farmers. Below are the factors discussed that were recognized as most important for the sustainability of the project.

- Institutional capacity of CBO SMEs: capacity building of 17 CBOs provides continuous efforts to support members from livestock holders in their communities. Marketing and project management skills can be utilized for future projects. Project approach to target CBOs instead of targeting individuals directly increases capacities of CBOs and creates the bases for better understanding of the needs of their members. This also increases ownership of the whole process and therefore works towards maintaining its results.
- SMEs stated that they have learned, through Rawasi project, to shift from traditional production methods to semi-automized processing techniques which has developed quality and improved their access to market.
- Adopt new innovative methods and techniques such as water management and forage production. In addition to increased productivity of the fodder, the seeds can be used to be planted through more than one season as in the case of millet. Introduction of new enhanced breed rams contributes to improving livestock meat and milk production.
- Rawasi project plays an important role taking into consideration the targeting of Knowledge Attitude Practice through trainings which provide beneficiaries with long term skills. The relevant socio-economic attitudes of beneficiaries has changed positively due to awareness-raising activities carried out by Rawasi project. Both knowledge and attitude have an influence on farmers' practices. The Program Manager in PARC states that the project targeted small-scale farmers and marginalized communities who have no access to markets due to their presence in Area C. The project has also tackled various factors that contribute to improving the knowledge of small farmers such as behavior, attitude and best practices.

- The project had a clear exit strategy for each project component and especially the work with the CBOs and dairy units. PARC states that one of the tools they used was a “project manual” which was distributed to all partners. This manual included all work procedures and beneficiary selection criteria; in order to ensure transparency. PARC concluded that Rawasi was a pilot project and recommended conducting similar projects at a larger scale.
- The peer to peer approach also transfers knowledge within the community and ensures crowding in by direct interaction between benefited farmers and other farmers who haven’t been targeted by the project.

## Chapter 7: Conclusions

This evaluation has been able to establish that Rawasi has been completed in a relevant, effective and efficient manner. It was noted that the project had a high impact on both the target groups and the whole value chain and its results are likely to last. It is highly recommended that future project from the EU or other actors will build forth on this intervention in the livestock sector, as it was commented this sector contains some of the most vulnerable people in the West Bank who live under many threats and hard circumstances in Area C.

While the project originally was planned for two years, an extension of a four months was pursued until beginning 2016. The evaluation team noticed that the nature of the work under Rawasi made this extension very likely and highly recommends that future projects can take a longer duration. In the view of the team, two years of implementation was not sufficient for all the results to be captured by either M&E or evaluation, and at the same time some of interventions require more follow up to get the desired results level.

Many interviewed stakeholders considered Rawasi as a development project as opposed to an emergency project, meaning that it had a holistic long-term approach that focused on market orientated interventions to connect the smallholders with a sustainable income improvement; namely by improving input, production and market access. It was however noticed by the project teams that the long-term versus short term intervention was different than target groups expected and it caused some initial hesitation in a few activities to get farmers cooperation (e.g. in the use of logbooks which was unheard for them and its benefit wasn't immediately clear). The project however focused greatly on practical improvements for the farmers, and increasing their knowledge and skills.

There was a consensus from all Rawasi partners that the project was very relevant and well-designed to suit local needs and the national context; the Ministry of Agriculture confirmed it was very much in line with their strategic objectives. The participatory approach taken by Rawasi project among all partners was a model for other project implementers to follow. The consortium that included CARE, PARC, and ICARDA managed to achieve the desired results due to the fact that roles and responsibilities were clearly divided among them. The evaluation team noticed good information sharing; both within the consortium and with external stakeholders and the project team was able to respond well to the changing situation or new information.

Rawasi has identified that the main systemic constraints affecting women active, sustained and full participation in the value chain are: cultural barriers (limited mobility, the traditional role of women which is mostly limited to the reproductive role); and the weak enabling environment (e.g. poor inheritance rights for women). In order to better and effectively engage women in dairy value chain; women empowerment interventions should

be comprehensive and adopting an integrated framework that uses economic empowerment as an entry point to tackle wider social issues, not just at the household level but also at the community level.

For instance, and in addition to targeting women in the value chain and business packages; capacity building activities related to agency and technical training, business skills, leadership, negotiation, gender and communication for women should be integrated in the different areas. It is also very important to provide avenues for engaging men (male leaders and men's cooperatives) to increase their gender sensitivity, and community wide awareness-raising on gender related issues such as inheritance and property rights and other barriers to women's mobility.

The main activities of Rawasi were done under three formulated Expected Results (ERs) in the fields of inputs, production and market access. All activities were completed within the time frame and all targets under these ERs were reached and even exceeded at several occasions. When it came to introduction of new techniques to improve access and availability of inputs as well as to increase productivity, often demonstration sites or peer to peer trainings were used and resulted to be highly effective. The new techniques and approaches (innovation in animal feed mixtures, mixing blue and green water harvesting tools, conservation agriculture) promoted by Rawasi project in water harvesting and planting fodder had remarkable results and impact not only on the direct target group but also on other community members and CBO members. The demonstration sites and field school farms were new innovative tools that contributed to increasing knowledge and skills of farmers through practical application of experiments and observation of results on the ground.

Under ER3, the improved production of the farmers and their decreased dependency on expensive, external inputs was linked with market actors to increase the income these farmers received from their hard work. Market information was improved and CBOs and production groups were trained to improve their production and marketing. Building dairy production units and work with CBOs and SMEs by Rawasi project had fruitful results on the target livestock holders. This part of the project is however also the last part of the circle that still needs more attention and support to really take off. To enable a larger scale impact, the evaluation team noticed together with the project team that refrigerated vehicles to transfer the milk, packaging skills, and more marketing connections are required.

In conclusion, the evaluation team can note that Rawasi project had direct results on the resilience of Palestinian people who live in Area C and it equipped them with the needed tools and skills required to better meet their basic needs. Moreover, the project was successful in targeting the most vulnerable people who live in marginalized communities.

## Chapter 8: Recommendations

Reviewing all project details and accomplishments led to recommendations on several levels for the project team, donor as well as other stakeholders.

Project Management level:

1. The two year duration of the project did not suit the nature and activities planned in the project very well; a longer time frame is highly recommended. Several of the activities require a longer time span to be fully implemented, follow up on and evaluated. One example of this is the rams from the new breed distributed to farmers; impact can reasonably be shown from the third generation on. Also in some other cases, farmers would have needed more time to get familiar and comfortable with the new techniques (that they could now test only once e.g. during one planting season, which was not sufficient). And this is also applicable on women meaningful participation on HH and community level.
2. The involvement of the MoA at the different stages was recognized as good and crucial for project success and sustainability. Whenever possible and appropriate it should be encouraged that the MoA continues to accommodate certain services or networks that were established under Rawasi.

Activity level:

3. 990 women were targeted in all project activities , while this excludes female members of the household who received also direct inputs for their farm or barn, which is recognized that it did had an indirect positive impact on their situation too. It is however still advised to continue in any next initiative to set higher targets for women beneficiaries so more female producers in the dairy sector can be included. Some suggestions how this could be accomplished is through increasing awareness about women's participation in income-generating projects, and through encouraging women-owned businesses to be involved in such projects.
4. Due to the seasonality of sheep milk production (which runs for 3 months per year), it is recommended to train CBOs and women groups to work on the preservation of milk along with cow milk during the off season. This will help them to work for longer time during the year.
5. It was noticed that the selected SMEs, CBOs and women groups need more support on branding and packaging. Their current packages are not presentable which minimizes their marketing opportunities.
6. Some innovative practices needed more follow up among the farmers as in some cases wrong management of the inputs was noticed (in the example of the missed millet production). It is thus recommended to have enough staff or other follow up mechanisms to ensure that the participating farmers apply the right techniques and don't miss out on its benefits.

The evaluation team noticed several topics that remain crucial for a more well-developed dairy sector and are summarized here to encourage actors to take this up in future programming.

- A. A missing cold chain remains a major weakness in the dairy sector and it is highly encouraged for future projects to focus on this as well. Most target CBOs and women groups are based in remote localities and they should be assisted in marketing their products to more densely populated areas. They therefore need refrigerated vehicles to transport their products to markets and to maintain the quality and food safety of the products.
- B. Even though the project in their short time frame was still able to involve work with traders, advertisement and giving the dairy products exposure on the market relations with other private actors for actual purchasing remained weak. It was noticed e.g. at the end of the project that SMEs didn't buy dairy products from CBOs and women groups on a regular basis. More networking should be done to better connect CBOs and women groups with SMEs to set a cornerstone for sustainable and long term cooperation. Building on the knowledge and experience gained in Rawasi, other intervention could continue to build a strong chain that includes farmers, CBOs, women groups and SMEs.