



---

## *Strategic guidelines for the beef and dairy cattle value chain in Gaza Strip*

**ILS LEDA**



*September 2022*

---

## **ACKNOWLEDGEMENTS**

This document-proposal was elaborated by the ILS LEDA team (Acerra Francesca, Canzanelli Giancarlo, Milio Vincenzo, and Rucireta Giulia), that worked on inputs provided by the Livestock Focus Group.

Our greetings go, then, to all the components of the Focus Groups: Yousif Farahat, Nader Asalia, Mahmoud Alfarra, Abdelkareem Alfarra, Belal Herzallaha, Mansour Abu Oda, Waleed Abu Oda, Hanan Hamouda, Ikram Abu Reziq, Yasmin Aby Saed, Raed isaa, Heba Alattar, Tariq Ammar, Rasha Abu Swees, Iyad Alattar, Jaber aby amreen, Nedal Jnaid, Karema Aldanaf

The work was possible thanks to the precious facilitation provided by WeWorld-GVC field team and the collaboration of the WeWorld-GVC team.

## INDEX

ACKNOWLEDGEMENTS.....	1
CHAPTER 1. INTRODUCTION.....	3
CHAPTER 2. METHODOLOGY .....	4
CHAPTER 3. BACKGROUND .....	5
CHAPTER 4. THE VALUE CHAIN PERFORMANCE.....	5
4.1. COMPETITIVE ADVANTAGE .....	6
4.2. MARKET POSITIONING .....	8
4.3. GENDER GAPS .....	10
4.4. SUSTAINABILITY.....	12
4.5. VALUE CHAIN COMPONENTS.....	14
4.6. OBSTACLES.....	16
CHAPTER 5. THE STRATEGIC GUIDELINES FOR COMPETITIVE AND INCLUSIVE DEVELOPMENT .....	18
5.1. THE METHODOLOGY FOR THE ELABORATION OF THE STRATEGIC GUIDELINES FOR THE LIVESTOCK VALUE CHAIN DEVELOPMENT.....	18
5.2. FROM POTENTIAL AND NEEDS TO ACTION .....	18
REFERENCES.....	36
ANNEX 1. SUSTAINABILITY FACTORS AND NEEDS FOR THE BEEF AND DAIRY CATTLE VALUE CHAIN .....	37
ANNEX 2. ACCESS TO RESOURCES FOR THE BEEF AND DAIRY CATTLE VALUE CHAIN .....	39
ANNEX 3. PROFESSIONAL PROFILES AND JOB OPPORTUNITIES IN THE BEEF AND DAIRY CATTLE VALUE CHAIN.....	41

## Chapter 1. INTRODUCTION

This paper has been elaborated in the framework of the project *“Adolescents and Youth (AYs) for GREEN: Gaza Resilient Economy and Environment.”*

It is one of the expected results of the AYs for GREEN project, related to the Specific Objective: “To strengthen socio-economic resilience of vulnerable Adolescents and Youth (AYs), promoting/mainstreaming HDN approaches in 11 communities close or within the Access Restricted Areas (ARAs), in Gaza Strip: Khan Younis (Al Qarara, Abassan, AL Kabira, Khuzaa, Bani Suhaila, Alfukhari), Rafah (Al-Naser, Al Shokat), North Gaza (Beit Lahia, Beit Hanoon, Jabalia, UM Al Nasser)”.

The project is run through a partnership between Save the Children Italia Onlus, WeWorld-GVC, ILS LEDA, SYFS, Save the Children International OpT.

The paper aims at recommending strategic guidelines and a plan of action for the development of a competitive, inclusive, and sustainable LIVESTOCK value chain in the targeted territories.

The LIVESTOCK is one of the six prioritised value chains for the exercise, the other being beekeeping, date palm, poultry, vegetables and recycling. The prioritisation was realised in accordance to the following elements:

- Presence in the target communities/governorates
- Competitive advantages
- Resilience
- Prioritisation from public policies
- Presence in the target communities

According to the Focus Group, the interviewed livestock value chain experts, and the secondary literature review (National Investment Plan 2020-2022, Ministry of Agriculture’s Livestock Sector Strategy 2015-2019) the most important market for livestock products in the Gaza Strip is represented by cattle dairy products as well as beef meat.

For this reason, these Strategic Guidelines will be referred to the specific BEEF AND DAIRY CATTLE VALUE CHAIN.

For this purpose, the WeWorld/ILS LEDA comprehensive territorial approach CPA (Community Protection Approach)-RESCO (REsources for Sustainable COmpetitiveness), which addresses protection risks within communities, while fostering economic and social value chain development, was used.

The present paper includes the part of the approach regarding the assessment of the value chain competitive, inclusive and sustainable needs and opportunities, leading to the formulation of the correspondent development strategy, through the use other RESCO tool.<sup>1</sup>

In particular, chapter 2 will provide details about the RESCO methodology for the value chain assessment; chapter 3 will describe the background of the value chain; chapter 4 will analyse the

---

<sup>1</sup>ILS LEDA has been applying RESCO in 13 countries during the last 20 years.

assessment of the competitive advantages, inclusiveness, and sustainability of the value chain in the target areas; and, finally, chapter 5 will outline the Strategic Actions Guidelines and priorities for the value chain development.

The document is still a draft proposal, submitted to the endorsement of the local actors involved in the Value Chain Focus Group, through which the assessment was carried out.

## Chapter 2. METHODOLOGY

In general, the RESCO methodology seeks to recommend value chain strategic guidelines and plans and it can be applied to any sector. With regard to this specific project, the sector of intervention is agriculture and the RESCO methodology will assess the main characteristics, potential, and obstacles for each of the four selected value chains, by involving the main territorial actors.

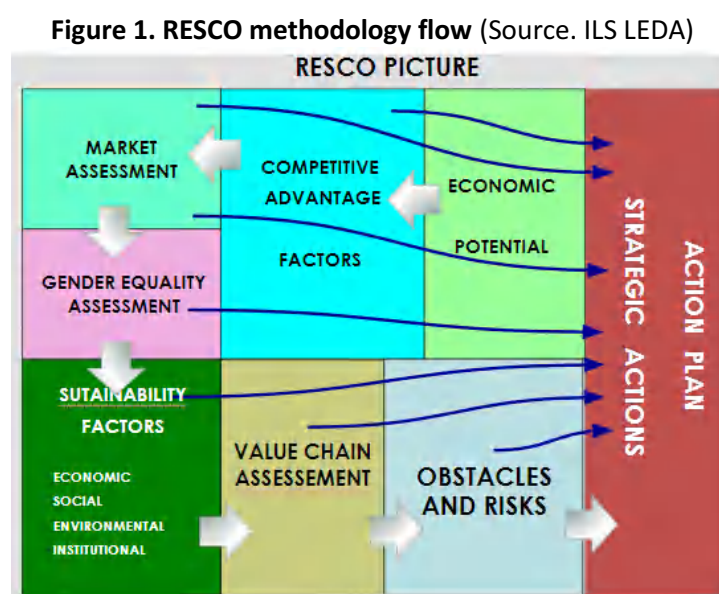
The assessment considers six main components, i.e.: the competitive advantage, the market positioning, the gender dimension/equality, the sustainability (financial, social, environmental), the value chain status, and the obstacles (to the value chain development).

For each component a set of factors are considered and, for each factor, specific variables are evaluated, according to a special scoring methodology.

The assessment is carried out by following these steps:

- 1) Webinars with 18 people representing local actors of the public and private sector, through a questionnaire;
- 2) Consulting secondary literature;
- 3) Meeting with experts.

The picture below illustrates the RESCO methodology logical and chronological flow.



### **Chapter 3. BACKGROUND**

Despite the difficulties of the Gaza Strip context<sup>2</sup>, beef and dairy cattle contribute to human capital allowing to the households of livestock keepers to meet their own consumption needs and requirements. Beef and dairy cattle produce food as milk, dairy products and meat, but also produce an income to buy other food as well as non-food item or financing education and medical expenses. Furthermore, beef and dairy cattle can be source of social capital giving to people in the Gaza Strip a safety net to sustain them in emergency (live animal offered for sale). This aspect is particularly important for highly vulnerable communities, such as those in the Gaza Strip which usually lack safety nets. In addition, beef and dairy cattle has an important traditional and recognised value in the Palestinian society (Rossignoli 2015).

On the other hand, keeping livestock is an important risk reduction strategy for vulnerable communities, and livestock are important providers of nutrients and traction for growing crops in smallholder systems. Livestock products, in fact, contribute 17 per cent to kilocalorie consumption and 33 per cent to protein consumption globally, but there are large differences between rich and poor countries (Rosegrant et al. 2009).

According to the Livestock Sector Strategy 2015-2019, there are two types of cattle production system in West Bank and Gaza Strip: intensive (industrial) and semi-intensive (traditional). Intensive production involves raising animals in a limited physical space where they are fed, watered, milked without outside grazing. The semi-intensive (traditional) involves the adoption of animals feeding on grazing plus supplemental feeding. Produces a higher yield per cow, intensive production requires more capital investment in infrastructure and management than semi-intensive production.

Despite a greater presence in the Northern Area, beef and dairy cattle breeders are widespread along the Gaza Strip and live in close proximity one to another.

### **Chapter 4. THE VALUE CHAIN PERFORMANCE**

The value chain performance, its opportunities and needs were assessed according to the following components

- 1) Competitive advantage
- 2) Marketing positioning
- 3) Gender gaps
- 4) Sustainability
- 5) Value chain components
- 6) Obstacles

---

<sup>2</sup> Closure, internal political Palestinian divide, complex crossing procedures, Government of Israel's restrictions on imports to the Gaza Strip, double (or triple) taxation system, limited access to inputs, high cost of feeding, poor access to financing, fuel and energy shortage, weak support from public services, fragile political context, limited access to agricultural areas, increasing levels of salinity in the water.

#### **4.1. Competitive advantage**

According to the National Investment Plan 2020-2022, meat and dairy industries are oriented toward domestic market. The number of dairy factories ranges between (9-15) factories, four of which have a high production capacity and competition in the local market, while the rest are small production units. They make up several types of dairy products (buttermilk, labneh, zabadi, cheese, ghee, local popular “kishik” etc.), the majority of production focusing on white cheese. Over the past years, the volume of dairy products produced in Gaza has significantly grown and local consumption has increased.

According to the interviewed experts, although different breeds of dairy cattle are reared in the Gaza Strip, farmers largely prefer the Polish and Holstein Friesians for their better milk production. Moreover, other diffused breeds are Dutch cows, with remarkable production of meat and milk, French and Belgian cows, with good quality meat production, the "Hereford" variety (the red color is dominant), the “Eerden Angus” (black), the "Shorton" (multi-colored) and the “Freezeen”, Other kinds of beef and dairy cattle are generally identified as local breeds that are usually crossbreeds of Holstein Friesians coming from Egypt or produced locally where the Holstein Friesians is often crossbred with beef cattle in order to increase profit and spread risks (dairy products vs. meat products).

According to the experts, species that are sold and raised are generally considered of good quality, and fresh meat is more popular and appreciated by the local customers than frozen. This is also reflected by the fact that the customers prefer to eat fresh meat on special occasions and holidays.

With regards to fresh cheeses and milk, in general, they are produced home-made from fresh cow's milk, by specialized families inheriting the experience and have been working on it for many years. Therefore, they are characterised by a unique, fresh, local flavour that is desired by the local consumer, which also appreciate their nutritional value. The rest of the dairy products (labneh and ghee) are distinguished by being homemade from fresh milk.

Another potential source of competitive advantage for meat and milk (even if today in very limited proportion) might come from the local initiatives of alternative fodder production. In fact, some interviewed experts revealed that the self-production of alternative fodder led to abundant production of creamy milk with a good smell, with higher proportion of protein and mineral salts, providing the best food according to the foundations of proper education and health care for cows in order to maintain and increase their productivity. Farmers are now feeding their livestock a substance that contains organic and mineral substances and food plants that can benefit the animal body more than before.

The RESCO focus group (August 2022) stated that the most valuable competitive advantages of the livestock value chain in the targeted Governorates are related to its main products: milk and meat. These competitive advantages are:

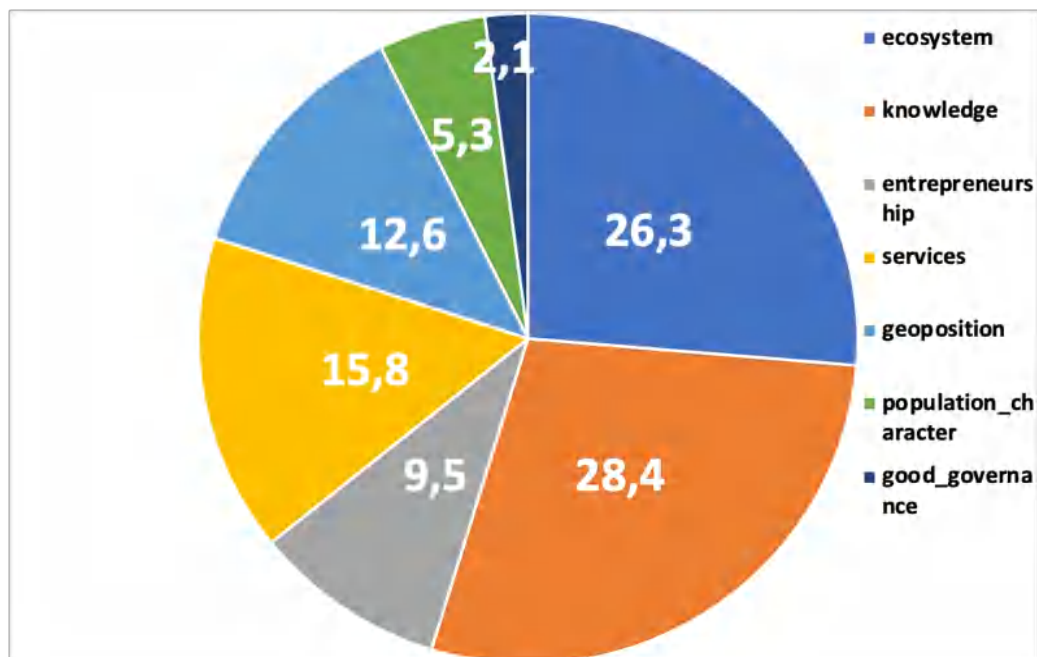


- ⇒ The **uniqueness of the product**: The local produced milk in Gaza Strip considered unique, as its full-fat, depend on local produced fodder that contains more nutrients. Most of cows are imported from outside Gaza strip, and they work on the hybridization with local cows to enhance the unique characteristics.
- ⇒ the particular **healthiness**: Alternative fodders, with high nutritional value, are used as an alternative to traditional fodders. In particular, the barley, used by local producers to feed livestock, produces higher quality meat.
- ⇒ **Abundance**: The local produced milk and fresh meat are available all year round, due to the fact that its use in the Gaza Strip is only for immediate direct consumption, and It's are not used in industries.

Furthermore, the RESCO focus group assessed those factors impacting with the afore mentioned competitive advantages, and the result gave the 3 main causes:

- 1) The **Ecosystem**, including microclimates, plants, soil, water, corresponding to the specific natural system made up of living organisms and the physical environment where they interact in an interdependent manner.
- 2) The **local knowledge**, particularly impacting on the healthiness of the products, and due to the capacity to make clean products, and free from contamination.
- 3) The **services**, corresponding to the presence of financial and non-financial business services, capable both of supporting existing businesses and establishing new businesses.

**Figure 2. Causes of competitive advantages of beef and dairy cattle value chain in the Gaza Strip**  
(Source. RESCO Focus Group, 2022)





## **4.2. Market positioning**

Gaza imports around 70 percent of the dairy products sold in its markets, the vast majority from Israel. The remaining dairy needs are met from the West Bank and from local production. This dependence on imported dairy not only undermines Gaza's ability to establish the local industry that meets the needs of the local population, it also forces small business in Gaza to unfairly compete with Israel's subsidized settlement products from the West Bank (Who Profits, 2015).

In general, the livestock sector globally is highly dynamic. In developing countries, it is evolving in response to rapidly increasing demand for livestock products. In developed countries, demand for livestock products is stagnating, while many production systems are increasing their efficiency and environmental sustainability.

Currently, livestock is one of the fastest growing agricultural subsectors in developing countries. Its share of agricultural GDP is already 33 per cent and is quickly increasing. This growth is driven by the rapidly increasing demand for livestock products, this demand being driven by population growth, urbanization and increasing incomes in developing countries.

This combination of growing demand in the developing world and stagnant demand in industrialized countries represents a major opportunity for livestock keepers in developing countries, where most demand is met by local production, and this is likely to continue well into the foreseeable future.

Historical changes in the demand for livestock products have been largely driven by human population growth, income growth and urbanization and the production response in different livestock systems has been associated with science and technology as well as increases in animal numbers. In the future, production will increasingly be affected by competition for natural resources, particularly land and water, competition between food and feed and by the need to operate in a carbon-constrained economy. In particular growing scarcities of water and land will require substantially increased resource use efficiencies in livestock production to avoid adverse impacts on food security and human wellbeing goals.

On the other side consumer demand will be more oriented towards welfare-branded and not-contaminating products, organic, and local food (Thornton, 2010).

For facing these new demand scenarios, and including general concerns about environmental sustainability (contamination, water need, climate change), the farmers are focusing their offer on four critical strategic issues:

1. **Breeding:** selection, crossing, advances in evolutionary biology, preservation of farm animal genetic resources, helping livestock adapt to climate change
2. **Nutrition:** advances in genomics, transcriptomics, proteomics and metabolomics, novel feeds from various sources, such as plantation crops and various industrial (including ethanol) by-products
3. **Animal diseases:** early detection of livestock parasitic disease, improved diagnosis and, along with greatly increased awareness and preparedness to deal with disease patterns that are

manifestly changing, advanced technology against disease, including DNA fingerprinting for surveillance, polymerase chain reaction tests for diagnostics, genome sequencing and antiviral drugs (Perry & Sones 2009).

#### 4. Climate change mitigation<sup>3</sup>: Grazing and manure management, water management, circular economy

In Gaza, as previously mentioned, meat and dairy producers are oriented toward domestic market, where local agribusinesses demand stable supplies of raw material.

The main by-products produced in the target communities are:

- Fresh/raw meat
- Processed meat
- Milk
- Yoghurt
- Ghee
- Cheese
- Labneh
- Kishik
- Butter
- Leather
- Jameed
- Organic soil fertilizer

According to focus assessment regarding their current and desired market positioning:

- The current markets are mainly local and for governorate, covering from 90 to 100% of the production. Only the leather is totally sold at national level.
- The producers would like to modify this picture, mainly increasing:
  - The national market by 10-20%
  - The local markets in almost all the cases (except ghee, kishik and jameed), for reducing imports and increase food security reasons. In the majority of the cases, the increase in the above-mentioned areas is compensated by the decrease at governorate level, as it is illustrated in the following table
  - Only for the leather, the focus group expressed the desire to reach the international market by 80%. Nevertheless, today there is no specific manufacturing expertise in the Gaza Strip for processing leather and the majority of it is sold to West Bank.

---

<sup>3</sup> Livestock food chains are major contributors to greenhouse gas emissions, accounting for perhaps 18 per cent of total anthropogenic emissions

**Table 1 – Current and desired markets for beef and dairy cattle value chain in Gaza  
(According to the focus group perception)**

<b>Product</b>	<b>Market Positioning</b>	<b>Local</b>	<b>Governorate</b>	<b>National</b>	<b>Inter-national</b>	<b>Total</b>
<b>Fresh/raw meat</b>	<i>Current Market</i>	25	75	0	0	100
	<i>Desired Market</i>	100	0	0	0	100
<b>Processed meat</b>	<i>Current Market</i>	10	90	0	0	100
	<i>Desired Market</i>	50	50	0	0	100
<b>Milk</b>	<i>Current Market</i>	10	90	0	0	100
	<i>Desired Market</i>	30	70	0	0	100
<b>Yoghurt</b>	<i>Current Market</i>	5	95	0	0	100
	<i>Desired Market</i>	30	60	10	0	100
<b>Ghee</b>	<i>Current Market</i>	70	30	0	0	100
	<i>Desired Market</i>	30	60	10	0	100
<b>Cheese</b>	<i>Current Market</i>	5	95	0	0	100
	<i>Desired Market</i>	40	50	10	0	100
<b>Labneh</b>	<i>Current Market</i>	5	95	0	0	100
	<i>Desired Market</i>	40	50	10	0	100
<b>Kishik</b>	<i>Current Market</i>	80	20	0	0	100
	<i>Desired Market</i>	50	45	5	0	100
<b>Butter</b>	<i>Current Market</i>	10	90	0	0	100
	<i>Desired Market</i>	40	50	10	0	100
<b>Leather</b>	<i>Current Market</i>	0	0	100	0	100
	<i>Desired Market</i>	0	0	20	80	100
<b>Jameed</b>	<i>Current Market</i>	100	0	0	0	100
	<i>Desired Market</i>	40	40	20	0	100
<b>Organic soil fertilizer</b>	<i>Current Market</i>	70	30	0	0	100
	<i>Desired Market</i>	100	0	0	0	100

#### 4.3. Gender gaps

The RESCO focus group highlighted the following assessment with regard to the gender gaps, with reference to three elements:

- Women’s participation to the value chain activities

- Women’s access to the value chain assets
- The implementation of governmental measures

**Table 2 – Gender Gaps for beef and dairy cattle value chain in Gaza**

<b>Value chain participation</b>	<b>SATISFACTORY</b>	<b>PARTIALLY SATISFACTORY</b>	<b>NOT SATISFACTORY</b>
Women working globally in the value chain			
Women in key position in local government with respect to the value chain development			
Women in leadership positions in the value chain?			
Women participating in representative bodies (eg: workers groups, trade unions, etc.)			
Women promoted last year in the value chain?			
Women benefited from training in the value chain, in the past year			
<b>Access to assets</b>	<b>SATISFACTORY</b>	<b>PARTIALLY SATISFACTORY</b>	<b>NOT SATISFACTORY</b>
Equality in the access to labour in the value chain for men and women			
Equality in the access to finance in the value chain for men and women			
Equality in the access to business services in the value chain for men and women			
Equality in the access to the resources produced (and the choice on how to use of these resources) for men and women, Within the framework of the value chain			
<b>Legislation and measures</b>			
Quality of the implementation of the Gender Equality National Strategy /measures/services			
Quality of Gender equality measures taken at company level			
Quality of the implementation of the reconciliation measures and facilities between family and work responsibilities			
Correspondence of the public care facilities for children and elderly are sufficient to the demand			
How the issues of sexual harassment, abuse and exploitation at work are sufficiently taken into account in the value chain (understanding of the issue, support for victims, measures against perpetrators, etc.)			
How the violence suffered by women in the private sphere (e.g. domestic violence, forced marriages, etc.) is sufficiently taken into account in the value chain (understanding of the problem, care for victims, support in pursuit of the perpetrators...)			

The critical issues regarding gender gaps are the following ones:

- Women's participation to the value chain activities

*Very critical issues*

- Few women in key position in local government department dealing the value chain development
- Few women in leadership positions in the value chain
- Few women participating in representative bodies (eg: workers groups, trade unions, etc.)
- Not too many women promoted in the value chain last year

- Women's access to the value chain assets

*Partially critical issues*

- Inequality in the access to labour in the value chain for men and women
- Inequality in the access to business services in the value chain for men and women
- Inequality in the access to the resources produced

- Implementation of governmental measures

*Partially critical issues*

- Public care facilities for children and elderly insufficient to the demand

#### **4.4. Sustainability**

The RESCO segment for assessing the sustainability of the beef and dairy cattle value chain focused on the following variables:

- *Economic sustainability*
- *Environmental sustainability*
- *Green economy*
- *Institutional sustainability*
- *Social sustainability*

##### **Economic sustainability**

Beef and dairy cattle livestock are an important economic activity in the Gaza Strip with the presence of around 600 licensed projects, including a large number of employees (especially during the period of *Al Adha eid*), providing more than 60% of formal job. Most of the livestock projects in Gaza Strip are considered family business, with the participation of both, man and woman.

The interviewed Value Chains experts stated that the average percentage of land allocated to livestock in the Gaza Strip varies according to ownership, between rent and private ownership, and between the breeder for meat and the breeder for milk. In particular, 70% of the land is privately owned while 30% of the land is rented and the projects have high costs. The average number of dairy cattle is 20 heads per dunum, and per head between 16-25 meters. Beef cattle need an area of 20 square meters per head. The number of farms is estimated at 365 milk farms

and the dairy cattle milk productivity rate reach an average of 23-24 litres per day, almost the same rate of West Bank.

The challenge to install and open the livestock projects in Gaza Strip is the high price of ongoing cost including land, water and electricity. Furthermore, weaknesses are: the lack of space, insufficient availability of veterinary care, lack of places dedicated to raising livestock and high rent used land.

The community is entitled to stay on, and use the land.

Other problem is the livestock lands need to be far away from the residential lands (which is a condition), and it is possible only for areas near to the borders, where there is no safe access.

### **Environmental, institutional, social, and financial sustainability**

As far as the environmental, institutional, social and financial sustainability are concerned, the prioritised needs regard:

- Favouring the establishment of Natural Reserve or Protected Zones, the improvement of the public regulations (plans or programmes) for protecting natural resources/environment, the development of Information Campaigns about environmental sustainability
- Facilitating the initiatives or programmes addressing the participation of citizens, through supporting voluntary corps for environment protection, the active work of association or foundation, organizing conferences or debates on environment sustainability, and promoting university education on environment sustainability
- Facilitating the access to resources, such as drinking water, irrigation water, electrical energy, access to public resources, access to private resources (land properties). The main challenge of livestock activities in Gaza Strip is the access to the projects which are located in the ARA and the security concerns of Israeli side, which procedures and escalations led to strong damages in the infrastructure, especially the water networks. People in Gaza Strip used the municipal water or the water wells for irrigation, but the electricity shortage affects on delivering the water through the needed pumps.
- Promoting green economy development, with particular reference to proper livestock manure management, the differentiated collection of waste and building waste warehouse, and the development of the circular economy (supporting recycling enterprises and enterprises for the generation of alternative energies, spreading organic food production). There are some recycling factories in Gaza Strip focusing on plastic and metals such as *Aramalawi factory*.
- Improving the institutional attention to social needs
- Improving the procedures to obtain municipal licenses
- Improving social sustainability, through supporting enterprises that use their social responsibility for social investments, facilitating SMEs managed by young people under 35 years of age/total SMEs, generate employment for people with mental and/or physical disabilities, generate employment for people with low skills and professional curricula. The limited financial income of the projects does not allow to do social investment activities.

#### 4.5. VALUE CHAIN COMPONENTS

The following figures show the stages and the components of the livestock value chain.

Figure 3. The beef and dairy cattle value chain stages (Source. ILS LEDA)

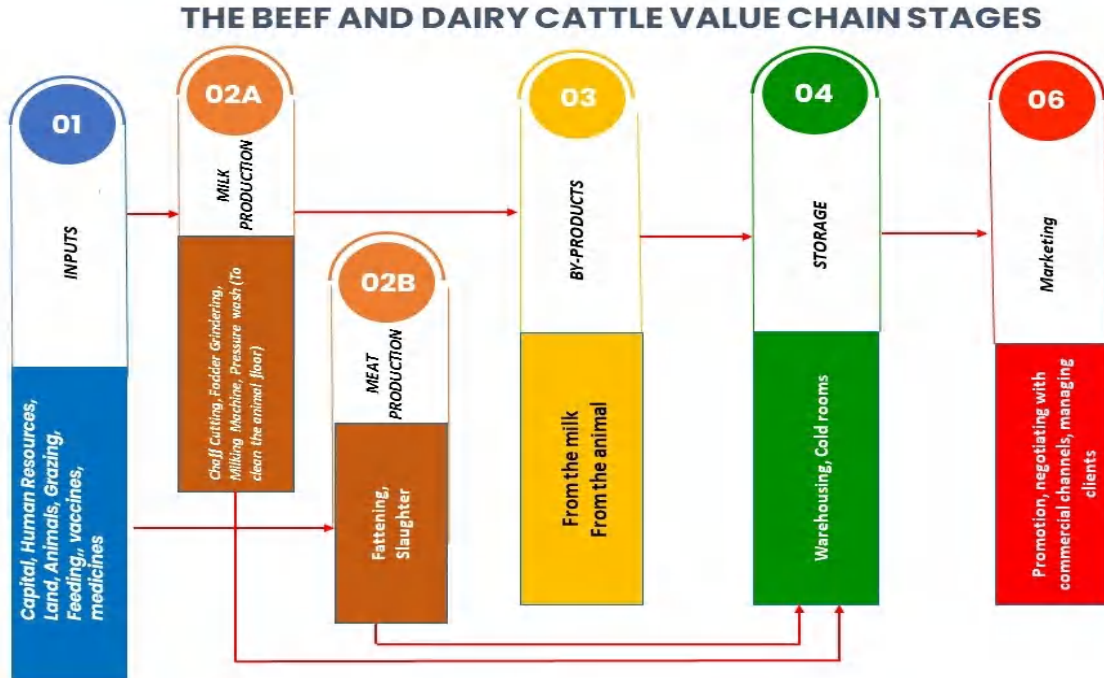
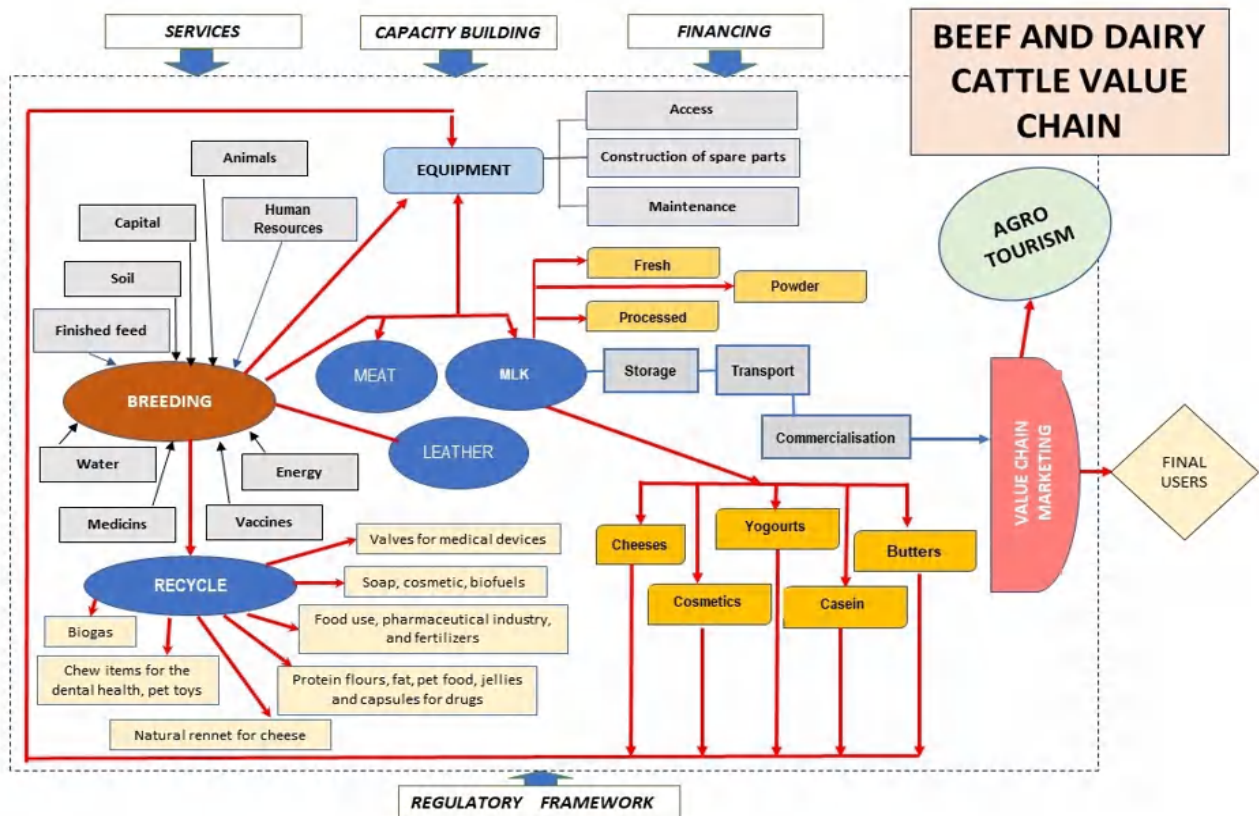


Figure 4. Beef and dairy cattle value chain components (Source. ILS LEDA)





The RESCO focus group assessed the following main components of the beef and dairy cattle value chain:

- 1) Inputs (raw materials, human resources, durable and not durable equipment)
- 2) Complementary activities
- 3) Buyers
- 4) Services
- 5) By-products

Annex 2 shows the detailed results of the RESCO Focus group

## **INPUTS**

Access to inputs is one of the main constrains to the value chain development in Gaza.

In particular, the restrictions imposed by the Government of Israel on imports to the Gaza Strip, including through the use of an expansive “dual use” list, prevent dairy processors from accessing equipment essential to upgrade technologically the dairy sector (limits in importing equipment to diversify milk production, laboratory equipment to conduct regular quality controls, labelling and packaging machines). Hence, 82 percent of dairy processors’ old machinery has low production capacities and need to be fixed regularly, eating away at their profits (Oxfam, 2017).

Feeding is one of the major costs for the livestock production. It counts for 75-85% of total milk production cost. The Gaza Strip, with very limited pasture land and low fodder production, is not self-sufficient in the production of animal feed. More than 90% of fodder is imported from Israel and the high cost of feed has forced small-scale famers to use low quality alternatives. Unfortunately, according the interviewed experts, Alternatives panicum, hydroponic barely, and other types of alternative fodder count only around 2% of the available fodder (Livestock Sector Strategy 2015-2019)

The Focus Group confirmed these constrains, and highlighted in particular the difficulties of:

- Access to seeds, pesticides, organic nutrients and agrichemical supplies, due to the high price, shortage, occupation restrict and bad quality of the inputs.
- Access to low-skilled staff, because of lack of experience of human resources
- Access to finance due to the difficult and complex conditions and standards required by the banks
- Access to inputs for green economy, regarding mainly access to credit lines and to new green technologies.

## **SUPPLY FOR GREEN ECONOMY**

At the same time, the RESCO Focus group highlighted the following main needs in the value chain supply for green economy:

- Access to equipment for alternative energy, for waste recycling and access to supplies made by recyclable material, that are not available because of its high costs

## SERVICES

As far as the access to services to the value chain are concerned, the RESCO Focus group highlighted the following main needs:

- The access to information and training has to be rendered permanent to ensure an extensive trainings and capacity building sessions
- The access to marketing and commercialization services to be improved, especially because of inability to packaging appropriately
- The access to fair trade circuits and fairs for organic products due to high cost of the certificates from the Ministry of Economy, as it requires a commercial registry, taxes and multiple legal procedures
- Access to services providing health insurance for workers

## EQUIPMENT

As for the value chain equipment, the RESCO Focus group highlighted the following main needs:

- Access to milk collection equipment (tanks, cooler, etc.) and wool shearing machine, because of the high price (including the transportation cost), the lack of information, the distance, and the siege

## BY-PRODUCTS

The new by-products that could be introduced in Gaza are:

Products from the milk	Product from the animal
Fresh milk, milk powder, long-life milk, other	Raw, fresh, and dried meat
<ul style="list-style-type: none"> <li>• Butter</li> <li>• Cheeses (fresh, mature cheese, ricotta, mozzarella),</li> <li>• Kefyr</li> <li>• Yogurt</li> <li>• Cream (heavy cream, sour cream, etc.),</li> <li>• Ice cream,</li> <li>• Whey</li> <li>• Casein</li> </ul>	<ul style="list-style-type: none"> <li>• Heart valves for medical devices (from the pericardium)</li> <li>• Hides and leather for bags shoes belts etc. (From skin)</li> <li>• Soap, cosmetic, biofuels (from the fat)</li> <li>• Biogas (from rumen content)</li> <li>• Natural rennet for cheese (abomasum)</li> <li>• Food use, pharmaceutical industry, and fertilizers (from blood)</li> <li>• Protein flours, fat, pet food, jellies and capsules for drugs (from bones)</li> <li>• Chew items for the dental health of dogs and cats, pet toys (from cartilage)</li> </ul>

### 4.6. Obstacles

The following table shows the obstacles prioritised by the RESCO Focus Group for achieving a competitive, inclusive, and sustainable development of the livestock value chain in the *Gaza Strip*, with particular reference to the 12 target communities, according to the priorities assigned by the RESCO Focus Group.

The prioritised obstacles regard:

- Access to productive resources: land, capital, equipment, and other inputs
- Access to services, including:
  - Financial services: access to credit, guarantee funds, assurance, etc.;
  - Capacity building: administrative, managerial know-how and commercial support;
  - Training on technical, legal, managerial and entrepreneurial capacities and training for increasing productivity, quality, and traceability;
  - Information on financial resources and markets;
  - Improvement of productivity and competitiveness: safe storage and post-harvest handling facilities, agronomic services, branding, entrepreneurial aptitude (resistance to innovation); facilitating collaboration with group marketing and other local players;
  - Innovation: Increase access to new technologies; Relations with research institutions, relations between public authority and communities, support start-up of women and young people;
- Regulatory framework, regarding the weak support from government to the value chain, at local and national level.

**Figure 5. Prioritised obstacles to the beef and dairy cattle value chain development** (Source. RESCO Focus Group)

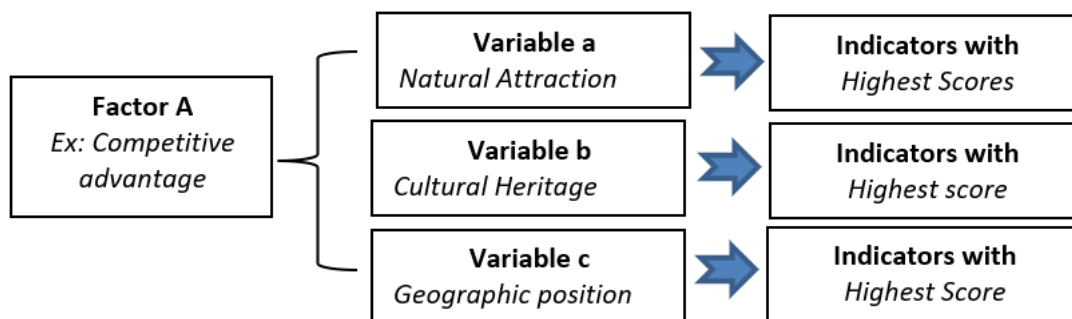


## Chapter 5. THE STRATEGIC GUIDELINES FOR COMPETITIVE AND INCLUSIVE DEVELOPMENT

### 5.1. The methodology for the elaboration of the Strategic Guidelines for the livestock value chain development

The RESCO methodology for the elaboration of the Strategic Guidelines for the beef and dairy cattle value chain development uses the inputs proceeding from the RESCO assessment (interviews), from the analysis of the secondary literature, and from the consultations with experts, and classifies all these findings in a number of fields of intervention.

The inputs refer to the impact indicators of each variable corresponding to each factor either if it is positive (points of strengths), or negative (points of weaknesses), as illustrated in the following example.



The correspondent strategic actions should be addressed in order to:

- Maintain the points of strengths in the long term;
- Remove the points of weaknesses, as they represent obstacles to the development of the value chain.

RESCO, finally, uses a simple algorithm for deriving the strategic actions for each one of the “variables” corresponding to the different “factors”.

In particular, the formula is, as follows:

$$Sa = f(V_i, Fa_n)$$

*Sa* = Strategic Actions

*V<sub>i</sub>* = Variable “i” of the Component “j”

*Fa<sub>n</sub>* = Factor “n”

### 5.2. From potential and needs to action

The main potential and needs referred to each factor and correspondent variable were illustrated in chapter 5.

The process from addressing strategic action to the abovementioned needs foresaw:

1. Identifying individual action for each variable
2. Clustering complementary actions
3. Eliminating duplications
4. Including each action in correspondent “strategic fields”

According to the previous assessment the following strategic objectives are envisaged for the development of the livestock value chain

- 1) Increase production of milk, for reducing the import, and preparing to the external markets
- 2) Increase the productivity
- 3) Realise a brand policy, for coordinating the efforts to produce and sell “GAZA Made” dairy and beef meat
- 4) Facilitate access to finance

On the other side the RESCO assessment has also provided at least for strategic fields of action, such as

- a) Governance
- b) Capacity Building
- c) Service System
- d) Infrastructure

The following picture 6 shows how each strategic field contribute to the achievement of the objectives

**Figure 6. “Strategic Fields” by Objectives** (Source. ILS LEDA)

Strategic fields Objectives	Partnerhips and Governance	Capacity Building	Service System	Infrastructure
<b>Increase production</b>	<ul style="list-style-type: none"> <li>•Partnership for increasing land for grazing and farming</li> <li>•Efforts for alternative fodder</li> <li>•More incentives and less bureaucracy</li> <li>•Relationships with other agriculture sectors for fodder</li> </ul>	<ul style="list-style-type: none"> <li>• Improve animal health and welfare</li> <li>• Improve entrepreneurship</li> <li>• Improve technologies management and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Veterinary</li> <li>• Knowledge sharing</li> <li>• Business services</li> <li>• Start UP</li> <li>• Diversification</li> <li>• Access to finance</li> </ul>	<ul style="list-style-type: none"> <li>•Web site</li> <li>• Infrastructure for fodder supply</li> </ul>
<b>Increase productivity</b>	<ul style="list-style-type: none"> <li>•Union for sharing access to input and market, technology and best practices</li> <li>•Research for Improve animal health and welfare</li> <li>•Promoting Green and Circular economy</li> </ul>	<ul style="list-style-type: none"> <li>• Improve entrepreneurship</li> <li>• Improve technologies management and maintenance</li> <li>• Improving professional skills</li> </ul>	<ul style="list-style-type: none"> <li>• Business</li> <li>• Veterinary</li> <li>• Maintenance</li> <li>• Food security</li> <li>• Start up</li> <li>• Access to finance</li> </ul>	<ul style="list-style-type: none"> <li>• Milk collection hub</li> <li>• Water communitarian infrastructure</li> <li>• Irrigation system</li> </ul>
<b>Realise a branding policy</b>	<ul style="list-style-type: none"> <li>• Union for common agreement for sharing quality standards, enabling promotion of local meat and dairy, guaranteeing food security</li> </ul>	<ul style="list-style-type: none"> <li>• Vocational training</li> <li>• Special training on marketing, quality control, certification</li> </ul>	<ul style="list-style-type: none"> <li>• Certification</li> <li>• Standard Quality Control</li> <li>• Marketing</li> </ul>	<ul style="list-style-type: none"> <li>• Web site</li> </ul>
<b>Increase chances for financing</b>	<ul style="list-style-type: none"> <li>•Improving the regulatory system (tax, incentives, etc.)</li> <li>•Realise agreements with bank</li> <li>•Design new mechanisms (Guarantee Fund, Insurance Fund)</li> <li>•Relationships with international cooperation</li> </ul>	<ul style="list-style-type: none"> <li>• Project proposal elaboration and financing</li> <li>• Project management</li> <li>• Business planning</li> </ul>	<ul style="list-style-type: none"> <li>• Support Project Proposals</li> <li>• Support Identifying Opportunities</li> <li>• Support access to Banks</li> <li>• Info on national programs and plans</li> </ul>	<ul style="list-style-type: none"> <li>• Web site</li> </ul>

Considering the priorities emerged from the analysis of the livestock value chain status and potential, and the AYs for GREEN Project goals (see table below) these strategic actions are clustered according to three levels of priorities:

*Priority N° 1: Actions correspondent to the objectives and proposals of the AYs for GREEN Project, and, at the same time, correspondent to the “High Priorities (HP)” indicated by the RESCO group*

*Priority N° 2: Actions correspondent to the “High Priorities (HP)” indicated by the RESCO group, but not explicitly foreseen by the AYs for GREEN Project plan of activities and budget*

*Priority 3: Actions not included in the previous cases, and recommended to be carried out beyond the AYs for GREEN Project*

In the framework of the AYs for GREEN Project, the Value-chain strategic guideline will:

A - Contribute to Increase awareness of issues affecting vulnerable adolescents and youth; strengthen capacity to support youth in terms of economic and social empowerment, their participation in decision-making processes, as well as promote gender equality (OP1.1)

B - Indicate the priorities for supporting:

° the most promising economic sectors and setting-up new economic activities (A2.4), for which 120 talented youth (male and female) will receive seed funds and support to develop their own youth-friendly businesses in the social or agricultural sector, which will either generate their own incomes or generate a social practice change

° the relative knowledge gaps to be addressed by ad-hoc TVET opportunities (A2.3), through which 100 on-the-job training and coaching opportunities will be offered to 100 TVET adolescents, youth and university graduates, in partnership with the private sector

° the criticalities that should be addressed through the community led initiatives (A1.5), aimed at designing community initiatives focusing on improving an enabling environment in terms of essential infrastructures to strengthen the livelihood potentials for new entrepreneurs, better protection of communities, their resources and environment.

### **5.3. The Strategic Guidelines and Action Plans**

The strategic guidelines for action are described with reference to:

- ⊗ the priorities, as previously defined,
- ⊗ the strategic field: Governance, Capacity Building, Service System, Infrastructure
- ⊗ the level of application, that could be
  - Multi-value chain, correspondent to those actions that are common to all the value chains, and should be carried out through a common governance mechanism
  - Value Chain, correspondent to those actions that are specific for the value chain, and should be carried out through a value chain governance mechanism
  - Community level, correspondent to those actions that regard the involvement of community actors and beneficiaries, and shall be carried out through a community level governance mechanism (Community Protection Committee). This level regard only the priority 1 actions, referred to the A&Y Green Project.

### A.1.1. GOVERNANCE

#### MULTI-VALUE CHAIN LEVEL

**AM111** – Realise a Federation of Unions, composed of the representatives of the six value chain Unions, with the aim of:

- ✚ Coordination
- ✚ Facilitate the access to finance
- ✚ Facilitate the links with international organisations
- ✚ Promote all together the value chain products

#### Action Plan

- *AM1111 Realise a Workshop, for at least 30-35 participants on the following topics: The importance of establishing a Federation of the value chain Unions in order to coordinate common activities, access to financing sources, facilitate links with international organisations*
- *Simulation exercise to establish action priorities*
- *Rules for operation*

*The participants are selected as it follows: 11 people working within the value chains selected at community level; the rest as representatives of each value chain; in both cases at least the 40% are women.*

*AM1112 Define an action plan for the following 12 months*

*AM1113 Realise a website linked to the website of all the six value chain Unions*

*AM1114 Define the procedures to communicate with the value chains*

*AM1125 Monitor the implementation of national government support*

**AM112** – Facilitate the establishment of a multi-value chain Working Group between the Federation of Unions and national authority departments –Agriculture, Economy, Education, the Environmental Quality Authority (EQA), the Palestinian Water Authority (PWA), etc.– for common activities:

- introducing/improving incentives/programmes supporting the livelihoods of specific groups in the community;
- establishing financial measures, such as reducing tax on importing new technologies; and reducing the price of raw materials that are added to plastic to degrade through proper taxation and by reducing bureaucratic procedures
- Introducing or improving specific financial mechanisms for the value chains (loans facilities etc., reducing the price of equipment (grinder for the treatment of light materials, grinder for the treatment of waste with a special configuration, shredder, granules for grinding medium-large components, office equipment) through proper taxation and by reducing bureaucratic procedures.
- Identifying, among the national development plan, what measures can be used for supporting the prioritised value chains
- providing more information on their programmes in favour of the prioritised value chains;



- Identifying a monitoring system for verifying the application of these measures.
- boosting circular economy, starting from the waste recycling
- facilitating access to fair trade, through applying favourable regulations (tax, etc.)
- facilitating sales to public institutions, through scaling up school-milk feeding program to promote milk consumption, and applying favourable regulations
- improving the relationships with the local communities

**Action Plan**

*AM1121 Identify representatives from each institution*

*AM1122 Realise a meeting for presenting the territorial strategic development priorities, as resulted by the CPA-RESCO exercise*

*AM1123 Identify programmes or plans from each involved institution that could provide support to the value chains*

*AM1124 Solicit and commit each institution to facilitate the use of the identified programmes at support of the prioritised value chains, and take correspondent measures*

*AM1125 Monitor the implementation of national government support*

**VALUE CHAIN LEVEL**

**AL111** – Realise a value chain union of the actors, starting from the participants to the Focus Group, for taking common initiatives, for:

- improving the access to agrichemical supplies
- organising collective purchasing for reducing the cost, and, when possible, through collective use
- establishing relationships with other agriculture sectors (mainly for fodder), and national government for facilitating implementation of effective measures
- safeguarding the ecosystem, through activating green economy, boosting organic production, and improving population habits towards environment

**Action Plan**

*AL1111 Realise a 2/3 days training session for the Focus Group on “Value Chain Management: How to establish a Union, through identifying and carrying-on collective actions on access to agrichemical supplies, organising collective purchasing, establishing relationships with other agriculture sectors (mainly for fodder), and national government, safeguarding the ecosystem*

*AL1112 Identify the best organizational form*

*AL1113 Meetings with other value chain’s actors for stimulating their membership*

*AL1114 Realise the formal procedure for the establishment of the new organization*

*AL1115 Realise meetings with the Palestinian Beef and Dairy Cattle organisations, and establishing links with them*

*AL1116 Make an action plan*

## **A.1.2 CAPACITY BUILDING**

### **MULTI-VALUE CHAIN LEVEL**

**AM121** – Improve entrepreneurial aptitude and enable medium, and long-term entrepreneurial vision, with a positive approach to innovation, with priority to women, through working on:

- i. the positive factors influencing the entrepreneurial developmental vision, such as financial implications, contribution to the community and recognition of the community, and removing the negative factors, such as work-family unbalance, additional stress, and potential risks
- ii. improve management capability on administration, planning, funding, competitive advantage, innovating, and marketing

#### Action Plan

*AM1211 Select the implementing entities (university, TVET, etc.), and realising an agreement with them*

*AM12112 Design the appropriate training course(s): approximately 10 days for 30 -35 participants. They are: 11 people working within the value chains selected at community level; the rest as representatives of each value chain ; in both cases at least the 40% are women. Define the course program and the schedule*

*AM1213 Identify the participants' entry profile, and know-how*

*AM1214 Design the appropriate training course(s) -approximately 10 days for 30-35 participants, including representatives of each value chain and each municipality -, and the schedule*

*AM1215 Implement the course, foreseeing the monitoring of two outputs: [1] the increase on individual know-how; [2] the enterprise evolution (medium term monitoring about the impact of the course)*

**AM122** – Improve capacities in environment protection and green economy:

- a) mainly on how to protect the environment at the various levels: population behaviour; public authorities' policies, and business behaviour and production (towards green economy);
- b) realising awareness campaign on the importance of protecting the environment and combating climate change, on the importance of Waste management sustainable practices for reducing CO<sub>2</sub>;
- c) facilitating exchange of information on best practices on how combating climate change, also linking to international network and programs, such as Climate Action Network, Network Nature, European Environment agency, UN Environment Program, EEP Africa, etc. d) how to access to information (to input, new technologies, credit lines, etc.), mainly in the areas of recycling, and organic productions, highlighting the most advanced processes and technologies, and the public program at support, including possible available incentives.

#### Action Plan

*AM1221 Select the implementing entities (university, TVET, etc.), and realising an agreement with them*

*AM1222 Define criteria for selecting the beneficiaries (e.g.: young, small, entrepreneurs and cooperatives; business already operating in the field of organic production or recycling, etc.), and selection modalities (call for selection, origin from the targeted communities, decision taken by the CPCs, etc.)*

*The participants are: 11 people working within the value chains selected at community level; the rest as representatives of each value chain ; in both cases at least the 40% are women*

*AM1223 Identify the participants' entry profile, and know-how*

*AM1224 Design the appropriate training course(s): approximately 10 days for 30-35 participants -, and the schedule*

*AM1225 Implement the course, foreseeing the monitoring of two outputs': [1] the increase on individual know-how; [2] the enterprise evolution (medium term monitoring about the impact of the course)*

**AM123** – Realise a training intensive 8-10 days course on “Know how for accessing to capital” addressed to service providers, with particular reference to:

- Elaboration of business plans for accessing to bank finance
- Know-how on project financing, and achievement of the conditions for eligibility for accessing to the funding opportunities from national and international private and public entities
- Improvement of capacities in negotiation

#### Action Plan

*AM1231 Select the implementing entities (university, TVET, etc.), and realise an agreement with them*

*AM1232 Select at least 15 service providers interested to this kind of course*

*AM1233 Identify the participants' entry profile, and know-how*

*AM1234 Design the training course - approximately 10 days -, and the schedule, to be carried on through 3 sessions:*

#### Session 1: Elaboration of business plans (B.P.) for accessing to bank finance

- What is a B.P and what for; Model for a B.P. for a small farm. Deep Explication of the various parts
- Simulation of a BP
- Elaboration of a BP. 3 working group work on 3 different cases
- Presentation and discussion in plenary session

#### Session 2: Know-how on project financing (P.F.)

- What is the P.F., and what for; criteria for identifying the sources of funds at national and international levels (for instance as per international cooperation: embassies, and websites with tenders, and grants)
- Models for requesting the funds
- Simulation of a project proposal for tender
- Establishment of three working groups for the preparation of correspondent proposals
- Presentation and discussion in plenary

#### Session 3: Improvement of capacities in negotiation

- How to make the environment comfortable

- How to establish negotiation parameters
- What support documentation
- What communication strategy
- What exit strategy

*AM1235 Evaluation of the increase in individual know-how*

**AM 124** – Realise a cycle of communitarian conferences (one for each municipality) for improving awareness on the importance of environmental protection for a local sustainable development, and for maintaining the value chain competitiveness

Action Plan

AM1241 Preparation of the conferences, mainly from the speakers' side, that will include:

- Representative of AYS for GREEN project
- Representative of the CPCs
- Representative of the Palm date Focus Group
- Experts from TVETs, universities and other relevant service providers
- Representative of the European Union
- Representative of the Gaza and National Authorities

AM1242 Launch of the conferences, via media, and social media

AM1243 Organisation of the conferences

**AM125** – Improve capacities in project financing and favouring access to capital, through:

- + Introducing a guarantee fund and solidarity insurance funds
- + Facilitating an agreement with banks for access to capital, use national programmes, and interacting proactively with international cooperation
- + Support for facilitating access to international funding, through projects, grants, crowdfunding, etc.; to bank credit (guarantee fund, solidarity revolving fund, etc.), local companies (social responsibility)
- + agreements with financial institutions that reduce difficulties (guarantees, interest, grace period, insurance, etc.) of access to credit
- + identifying national programmes and plans for the development of the value chains and facilitating their implementation in Gaza
- + using international cooperation proactively
- + identifying appropriate opportunities, such as: asset finance for equipment (disbursed direct to suppliers where possible), revolving credit, guarantee fund, insurance, etc.

Action Plan

AM1251 Identify at least 10 service providers for the participation to the training activity, organized on an intensive course

AM1252 Identify the trainer, and contract her/him

AM1253 Design the course, to be carried out on 4 days, as it follows:

1<sup>st</sup> day: Interactive lectures on:

- How to find information on funding opportunities and international cooperation agencies
- How to understand the peculiarities and requirements from each agency
- Guidelines on how to write down project proposals

2<sup>nd</sup> day: Simulation: An interactive simulation on an example of project proposal, and how it will be evaluated

3<sup>rd</sup> day: Working groups: At least 3 working groups are organized for elaborating three project proposals correspondent to 3 different donors

4<sup>th</sup> day: Evaluation in plenary session

AM1254 Evaluate the knowledge increase

### **VALUE CHAIN LEVEL**

**AL121** – Create more professionals for the following job opportunities linked to the value chain strategies, through training-on-the job:

Sales Manager	Marketing manager
E-Marketing manager	Social Media Manager
Veterinarian	Animal Nutritionist
Plant production specialist	Food Industry Engineer
Worker in charge of machinery and equipment	Product quality laboratory manager
Packaging operator	Production Manager
Product quality control analyst	

#### Action Plan

AL1211 Select the implementing entities (university, TVET, etc.), and realise an agreement with them

AL1212 Define criteria for selecting the beneficiaries (e.g.: women, young, small, entrepreneurs and cooperatives; business in expansion, etc.), including participants from each municipality, and selection modalities (call for selection, origin from the targeted communities, decision taken by the CPCs, etc.)

AL1213 Identify the participants' entry profile, and know-how

AL1214 Design the appropriate training course (s) - approximately 10 days for 25-30 participants -, and the schedule

AL1215 Implement the course, foreseeing the monitoring of two outputs: [1] the increase on individual know-how; [2] the enterprise evolution (medium term monitoring about the impact of the course)

**AL122** – Reinforcing the TVET system for introducing vocational course on new skills for the following job opportunities, such as the following

IT Manager	Fund Raising Manage
Food Distributor or Broker	Public Relation Officer
Multi-media Designer	Digital Breeder
Fodder specialist	Research and Development Manager
Equipment maintenance expert	

Action Plan

AL1221 Select the implementing entities (university, TVET, etc.), and realise an agreement with them

AL1222 Define criteria for selecting the beneficiaries (e.g.: women, young, small, entrepreneurs and cooperatives; business in expansion, etc.), including participants selected at level of each municipality, and selection modalities (call for selection, origin from the targeted communities, decision taken by the CPCs, etc.)

The participants are: 11 people working within the value chains selected at community level; the rest as representatives of each value chain; in both cases at least the 40% are women

AL1223 Identify the participants' entry profile, and know-how

AL1224 Design the appropriate training course (s) - approximately 10 days for 30-35 participants -, and the schedule

AL1225 Implement the course, foreseeing the monitoring of two outputs: [1] the increase on individual know-how; [2] the enterprise evolution (medium term monitoring about the impact of the course)

**AL123** – Improving capacities in project financing and preparing specific proposals to submit to financial institutions or partners, such as banks, international cooperation agencies, private sectors (activating its corporate social responsibility, crowd funding operations, etc.), with priority to:

- Establishing productive infrastructure (water and irrigation systems, research laboratory on alternative fodder, animal health care and nutrition, web sites, etc.)
- Provide support to the already designed fodder plant
- Support the establishment of a viable milk collection hub
- Support the improvement of the quality control laboratory

Action Plan

AL1231 Identify at least 10 service providers for the participation to the training activity, organized on an intensive course

AL1232 Identify the trainer, and contract her/him

AL1233 Design the course, to be carried out on 4 days, as it follows:

1st day: Interactive lectures on:

- How to find information on funding opportunities and international cooperation agencies addressed to the value chain development
- How to understand the peculiarities and requirements from each agency
- Guidelines on how to write down project proposals

2nd day: Simulation

An interactive simulation on an example of project proposal, and how it will be evaluated

3rd day: Working groups

At least 3 working groups are organized for elaborating three project proposals correspondent to 3 different donors

4th day: Evaluation in plenary session

AL1234 Evaluate the knowledge increase

**A.1.3. SERVICE SYSTEM**

**MULTI-VALUE CHAIN LEVEL**

**AM131** – Improve service providers’ assistance for

- + administrative, organisational, legal, and commercial sector
- + accessing to finance, such as opportunities of the banking system, of national program measures and incentives, international funding agencies, including, for each one, procedures, and conditions for eligibility and access

Action Plan

AM1311 Realise a quick check-up (via e-mail, telephone, etc.) on the interest of service providers in providing consultancy on the above-mentioned topics

AM1312 Verify the capacities of the service organizations in providing effective, and efficient assistance, through meeting them, and obtain/sharing needs for capacity building

AM1313 Identify experts for capacity building of service providers

AM1314 Prioritise and detail the content of the training

AM1315 Realise the capacity building, that could be organized through coaching (for instance 10 days coaching for each topic) for at least 2 service providers/each

**AM132** – Realise a map of the available services, facilitate coordination of the services, and more proximity to the businesses, through an HUB for providing information and consultancy at distance

Action Plan

AM1321 Conduct a one-day training session of the AYs for GREEN project on “Territorial Service System: What is it, What for, How to build it”



AM1322 Identify the service providers supporting businesses and agriculture development in Gaza, through meeting each one individually, and collect information about their activity (ILS LEDA provides a tool). At the end of the meeting identifying the interest to join the Hub

AM1323 Conduct 1-2 days' workshop with the interested service providers, for analysing possible synergies and coordination, according to existing networks, and -possibly- identifying the way how to manage and operationalize this coordination through the Hub

AM1324 Realise the map of the available services, with geo-localisation and identify the informatic modalities of interaction (Social Group, etc.)

AM1325 If agreed at the end of the workshop, make the system working, through simple operational regulations (how to manage the demand, how to provide comprehensive support through diverse competences, how to get the funds of the coordination and promotion, etc.)

AM1326 Realise a communication campaign of the Hub

### **VALUE CHAIN LEVEL**

**AL131** – Favour the access to job opportunities provided by the beef and dairy cattle value chain potential development, through carrying on information campaign on business and job opportunities generated by the beef and dairy cattle value chain development in all its component (milk, dairy, meat, by-products in concentrates and feed supplements, cosmetic, and waste recycling)

#### Action Plan

AL1311 Prepare a brochure illustrating the main characteristics of the Gaza beef and dairy cattle value chain development strategy, as envisaged by the Project

AL1312 Prepare a simple lecture about the topic

AL1313 Realise a one-day workshop for each community, organized in two sessions:

Session A – Morning: Introduction and debate on Questions and Answers

Section B – Afternoon (after tea break): Individual Meetings with interviews on curriculum and opportunities for the participants

**AL132** – Support to start up, with specific regard to young and women entrepreneur candidates, which regard innovative products either for exploiting the good milk and the residual of waste (see examples on the table)

Products from the milk	Product from the animal
Fresh milk, Milk Powder, Long-Life Milk, other	Fresh and Dried Meat
<ul style="list-style-type: none"> <li>• Butter</li> <li>• Cheeses (fresh, mature cheese, ricotta, mozzarella)</li> <li>• Kefyr</li> <li>• Yogurt</li> <li>• Cream (heavy cream, sour cream, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Heart valves for medical devices (from the pericardium)</li> <li>• Hides and leather for bags shoes belts etc. (From skin)</li> <li>• Soap, cosmetic, biofuels (from the fat)</li> <li>• Biogas (from rumen content)</li> <li>• Natural rennet for cheese (abomasum)</li> <li>• Food use, pharmaceutical industry, and fertilizers (from blood)</li> </ul>

<ul style="list-style-type: none"> <li>• Ice cream</li> <li>• Whey</li> <li>• Casein</li> </ul>	<ul style="list-style-type: none"> <li>• Protein flours, fat, pet food, jellies and capsules for drugs (from bones)</li> <li>• Chew items for the dental health of dogs and cats, pet toys (from cartilage)</li> </ul>
---	--

Action Plan

*AL1321 Advertise the organisation of a public conference on the initiative "SYOB: Start-up Your Own Businesses" for young people, and the organization of a first launching workshop*

*AL1322 Prepare a public workshop for launching SYOB with the participation of at least 50-60 people, (of which at least 50% women), including participants selected at level of each municipality, according to the following steps:*

- *introduce the beef and dairy cattle value chain development strategy, and the new business opportunities*
- *introduce the organization of the SYOB training course*
- *introduce the minimum requirements for participating to the training course, and submitting to participants a test-questionnaire on entrepreneurial skills*
- *select 30 people for the training course*

*AL1323 Realise the training course focused on the following main sessions:*

Session 1:

- *What is an entrepreneur: its economic, social, and communitarian role; the propension to risk, and the passion to find innovative solutions*
- *Basic elements for administrating a business*
- *Written test submitted to each participant*
- *Selection of 2/3 of participants (or the people with a minimum score to the test) to access to the following sessions*

Session 2: How to make a business plan

Session 3:

- *Form working groups, according to the business (among the targeted ones) chosen from each participant*
- *Coaching the preparation of the business plans, facilitating access to basic information (market perspective, and technologies), and redaction*

*AL1324 Provide grants to the best businesses plan*

*AL1325 Organise "post start-up" entrepreneurial coaching*

**AL133** – Strengthen service providers, with particular reference to

- Veterinary services for artificial insemination, hormone synchronization, multiple ovulation and embryo transfer services, blood test for cattle, quality control of vaccines and drugs, surveillance of disease
- Farming services with particular reference to increasing cattle longevity, improvement of animal welfare, genetic resistance to diseases; food security; fodder production, reduction of antibiotic treatments
- Business support, with particular reference to administrative services

#### Action Plan

AL1331 Realise a quick check-up (via e-mail, telephone, etc.) on the interest of service providers in providing consultancy on the above-mentioned topics, about advanced veterinary, farming, and business support

AL1332 Verify the capacities of the service organizations in providing effective, and efficient assistance, through meeting them, and obtain/sharing needs for capacity building

AL1333 Identify experts for capacity building of the service providers

AL1334 Prioritise and detail the content of the training

AL1335 Realise the capacity building, that could be organized through coaching (for instance 10 days coaching for each topic) for at least 2 service providers/each

#### **A.1.4. INFRASTRUCTURE**

##### **MULTI VALUE CHAIN LEVEL**

**AM141** – Design and realise a Website for the Federation of Unions, linked to the website of the six Value Chain Unions, for facilitating exchange of information, inform about the interesting initiatives, being a vehicle of communication with the extern, national and international communities

**AM142** – Realise water and electricity communitarian infrastructure with particular reference to equipment for alternative energies such as solar panels, biofuel and others

**AM143** – Build public care facilities for children and elderly

#### Action Plan

Each community will select the infrastructures to prioritise, which will be realised based on budget availability.

For each one of the prioritised infrastructure the action plan is the following:

AM14A1 Share the prioritized infrastructure with the value chain focus group

AM14A2 Define the terms of reference for the infrastructure

AM14A3 Define the desired place of installation

AM14A4 Launch the call for selection

AM14A5 Assess the candidates and select the winner(s)

AM14A6 Define and execute the grant contract

AM14A7 Monitor the execution

##### **VALUE CHAIN LEVEL**

**AL141** – Design and realise a web site for facilitating exchange of information, advertising about the products, inform about the interesting initiatives, being a vehicle of communication with the extern, national and international communities, favouring the value chain brand policy

**AL142** – Build a milk collection hub, through a cooperative formed by the farmers

**AL143** – Support the implementation of a sustainable plant for alternative fodder

**AL144** – Realise water communitarian infrastructure

Action Plan

Each community will select the infrastructures to prioritise, which will be realised based on budget availability.

*For each one of the prioritised infrastructure the action plan is the following:*

*AL14A1 Share the prioritized infrastructure with the value chain focus group*

*AL14A2 Define the terms of reference for the infrastructure*

*AL14A3 Define the desired place of installation*

*AL14A4 Launch the call for selection*

*AL14A5 Assess the candidates and select the winner(s)*

*AL14A6 Define and execute the grant contract*

*AL14A7 Monitor the execution*

## A.2 PRIORITY N°2

### A.2.1 GOVERNANCE

#### **MULTI-VALUE CHAIN LEVEL**

**AM211** – Involve universities in order to include issues related to environmental protection in university curricula

#### **VALUE CHAIN LEVEL**

**AL211** – Facilitate the establishment of a beef and dairy cattle Working Group with national authority departments (Agriculture, Economy, Education, the Environmental Quality Authority (EQA), the Palestinian Water Authority (PWA), etc.) for

- a) providing more information on their program in favour of the value chain*
- b) Establishing community-based breeding programs, which include developing an animal recording scheme, and promoting animal identification and traceability scheme*

**AL212** – Safeguard the unicity of the product, through a brand policy, proper advertising, labelling, traceability, and geographical recognition, through a training workshop, the establishment of the objectives, the advertising messages, the values to be transmitted, and the regulations for the brand management (organization, modalities and instrument for controlling the respect to the regulation,



the assignment of the label, etc.), the realization of the Brand Label, and supplying it to the members, and launch of an advertising campaign (raising funds, if necessary)

### **A.2.2 CAPACITY BUILDING**

#### **MULTI-VALUE CHAIN LEVEL**

**AM221** – Facilitate gender equality, through: (a) awareness campaigns for facilitating gender equality in the distribution of roles and activities within the value chain; (b) strengthening capacity of women for combating harassment (recognising the phenomenon, reporting or denouncing it, verifying if it happens to other women, knowing the law and the women rights; supporting TVET in improving their offer of integrated professional training for women, including issues such as: Awareness, Self-esteem, Gender equality principles, Negotiation power; Defence against harassment; Information about job opportunities; Professional training for responding to the job opportunities

#### **VALUE CHAIN LEVEL**

**AL221** – Facilitate the generational transfer of knowledge, through initiatives such as the "University of the professions" and exposure to innovative practices, through networking actions

**AL222** – Build capacities for marketing experts

**AL223** – Facilitate learning processes through:

- a) Exposure to international best practices, with particular reference to innovative solution for animal health, milking hygiene, nutrition, animal welfare, and environment
- b) Organise a competition to reward the best practices in beef and dairy cattle management


### **A.2.3 SERVICE SYSTEM**

#### **MULTI-VALUE CHAIN LEVEL**

**AM231** – Support for facilitating access to international funding, through projects, grants, crowdfunding, etc.; to bank credit (guarantee fund, solidarity revolving fund, etc.), local companies (social responsibility) Facilitate the dissemination of information on international cooperation programmes

**AM232** – Improve social sustainability, through supporting enterprises that use their social responsibility for social investments, facilitating SMEs managed by young people under 35 years of age/total SMEs, generate employment for people with mental and/or physical disabilities, generate employment for people with low skills and professional curricula

**AM233** – Improve specific support to women entrepreneurs, through a special help desk for:

-  supporting companies in favouring women access to job



- ✚ providing information to women about the opportunities of jobs provided by the value chain development strategy
- ✚ Adapting services for the development of the value chains to the needs of women

**AM234** – Strengthen initiatives or programmes (cleaning campaigns, waste collection, training courses with/involving schools, reforestation campaigns, rational management of water resources, etc.), for improving the participation of citizens, the presence of voluntary corps for environment protection, and the active work of association or foundations; Facilitate fund raising for organising at least 3 Conferences or debates on environment sustainability and climate change, involving international experts, and agencies

### **VALUE CHAIN LEVEL**

**AL231** – Awareness campaigns for facilitating gender equality in the distribution of roles and activities within the value chain

**AL232** – Improve the control of the soil quality

**AL233** – Map the business needs (demand) and the unemployed people offer

## A.3 PRIORITY N°3

### **A.3.2 CAPACITY BUILDING**

#### **VALUE CHAIN LEVEL**

**AL321** – Improve the capacity of Ministry of Agriculture to take care of the animal health (preventive and illness cares, such as plague, foot-and-mouth disease, smallpox, measles, quality of medicines for cattle)

### **A.3.3 SERVICE SYSTEM**

#### **VALUE CHAIN LEVEL**

**AL331** – Support innovation, through:

- a) Support to the research of alternative fodder, linking Ministry of Agriculture, university, and farmers, and supporting fund raising
- b) Support forage seed and forage production, enforcing feed and forage seed quality, and using appropriate organic fertilizers
- c) Support to farms for multiplying dairy heifer

**AL332** – Monitor the advance of science and practices with regard to animal health, milking hygiene, nutrition, animal welfare, and environment

**AL333** – Strengthen the marketing services, through improving capacities of the existing service providers

**AL334** – Improve the access to information on technologies for the green economy



## References

- Dumas et al. (2008). Plants: a natural solution to enhance raw milk cheese preservation? Retrieved from <https://www.sciencedirect.com/science/article/pii/S0963996919307690>
- Ministry of Agriculture (2014) Livestock Sector Strategy 2015-2019. LEX-FAOC165804. Retrieved from <http://extwprlegs1.fao.org/docs/pdf/pal165804.pdf>
- Ministry of Agriculture (2019). National Investment Plan for food and nutrition security and sustainable agriculture 2020-. 2022 (NIP 2020-22). Retrieved from <https://www.moa.pna.ps/uploads/STRATEGIES/16383480410.pdf>
- Mora, L., Toldrá-Reig, F., Prates, J.A. & Toldrá, F. (2019). Cattle Byproducts. In *Byproducts from Agriculture and Fisheries* (eds B.K. Simpson, A.N.A. Aryee and F. Toldrá). Retrieved from <https://doi.org/10.1002/9781119383956.ch3>
- OXFAM (2017). The dairy sector in the Gaza strip - Oxfam briefing note. Retrieved from <https://policy-practice.oxfam.org/resources/the-dairy-sector-in-the-gaza-strip-620176/>
- Perry, B., & Sones, K. (2009). Global livestock disease dynamics over the last quarter century: drivers, impacts and implications. Rome, Italy: FAO. (Background paper for the SOFA 2009)
- Rosegrant et al. (2009). Water for Agriculture: Maintaining Food Security Under Growing Scarcity. *Annual Review of Environment and Resources* 34(1). DOI: 10.1146/annurev.envIRON.030308.090351
- Rossignoli et al. (2015). Dairy cattle, livelihoods and resilience in Gaza Strip: a case study. *New Medit* n. 1/2015. Retrieved from [https://newmedit.iamb.it/edizioni\\_new\\_medit,229,229,2015,158,1006,dairy-cattle-livelihoods-and-resilience-in-gaza-strip:-a-case-study.htm](https://newmedit.iamb.it/edizioni_new_medit,229,229,2015,158,1006,dairy-cattle-livelihoods-and-resilience-in-gaza-strip:-a-case-study.htm)
- Thornton, P. K. (2010, September). Livestock production: recent trends, future prospects, Retrieved from <https://doi.org/10.1098/rstb.2010.0134>
- Who Profits (2015, July). The Land of Milk and Money: The Israeli Dairy Industry and the Occupation. Retrieved from <http://www.whoprofits.org/content/land-milk-and-money-israeli-dairy-industry-and-occupation>

## ANNEX 1. SUSTAINABILITY FACTORS AND NEEDS FOR THE BEEF AND DAIRY CATTLE VALUE CHAIN

Variables	Scores		
<b>Programmes for protecting the environment</b>	<b>Many</b>	<b>Some</b>	<b>Few</b>
Natural Reserve or Protected Zones			
Public regulations (plans or programmes) for protecting natural resources/environment			
Information Campaigns about environmental sustainability			
<b>Effectiveness of the programmes for protecting the environment</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
Natural Reserve or Protected Zones			
Public regulations (plans or programmes) for protecting natural resources/environment			
Information Campaigns about environmental sustainability			
<b>Programmes for facilitating the involvement of citizens in the environment protection</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
Initiatives or programmes for facilitating the participation of citizens			
Presence of voluntary corps for environment protection			
Active work of association or foundation			
Conferences or debates on environment sustainability			
University education on environment sustainability			
<b>Effectiveness of the programmes for facilitating the involvement of citizens in the environment protection</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
Initiatives or programmes for facilitating the participation of citizens			
Presence of voluntary corps for environment protection			
Active work of association or foundation			
Conferences or debates on environment sustainability			
University education on environment sustainability			
<b>Access to environmental resources</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
Drinking water			
Irrigation water			
Electrical energy			
Access to public resources			
Access to private resources (land properties)			
<b>Green Economy</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
Is the differentiated collection of waste applied?			
Is the circular economy spread in the district?			
Presence of recycling enterprises			
Presence of enterprises for the generation of alternative energies			
Organic food production			
Conservation of natural heritage			
Preservation of rare animal species			
Conservation of historical and cultural heritage			
	Low contamination	Medium contamination	High contamination

Perception on the atmospheric contamination in the territory/area			
<b>Perception of the risks in the territory/area</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>
Floods			
Drought			
Landslide			
Earthquake			
Typhoons/hurricanes/cyclones			
Sand storms			
Fires			
Release of hazardous materials (chemicals, oil, toxic waste)			
<b>Institutional Sustainability: Governmental programs</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
Level of execution of government plans for the value chain development in the district			
Level of attention of the official government for the development of the value chain in the region			
Presence of specific financial mechanisms for the value chain (loans facilities etc.)			
<b>Institutional attention to social needs</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
Shelter			
Water			
Sanitation			
Livelihoods			
Health			
Child protection			
Security			
Access to justice			
Administration / civil documentation			
Formal education			
Non-formal education			
Vocational training			
<b>Social Sustainability</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
Ability to generate employment for people with mental and/or physical disabilities			
Ability to generate employment for people with low skills and professional curricula			
SMEs managed by young people under 35 years of age / total SMEs			
Enterprises that use their social responsibility for social investments			
<b>Financial Sustainability</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
Potential to secure loans for the business sector			
Availability of financing specific mechanisms for the value chain (credit lines, etc.)			
Availability of incentives/programmes supporting the livelihoods of specific groups in the community			

## ANNEX 2. ACCESS TO RESOURCES FOR THE BEEF AND DAIRY CATTLE VALUE CHAIN

	Easy availability = Low priority
	Medium availability = Medium priority
	Non availability = High priority

VALUE CHAIN PERFORMANCE: INPUTS				
VARIABLE	COMPONENT	EASY ACCESS/AVAILABILITY		
		YES	WEAK	NO
INPUTS 1 - Agriculture	Seeds			
	Fertilisers			
	Pesticides			
	Organic nutrients			
	Agrichemical supplies			
INPUTS 2 - Environment-Infrastructure	Soil			
	Irrigation			
	Nurseries			
INPUTS 3 – Human Resources	Low-skilled staff			
	Highly qualified staff			
INPUTS 4 – Financial Resources	Own			
	Banks			
	Government programmes			
INPUTS 5 - Information	information on market demand			
	Technology information			
INPUTS FOR GREEN ECONOMY	Bio-fertiliser			
	Credit lines for green livestock			
	Non contaminated soil			
	Information for green farming technology			
VALUE CHAIN PERFORMANCE: EQUIPMENTS AND BUYERS				
EQUIPMENT (DURABLE GOODS)	animal housing/shelter			
	fencing system			
	feeding equipment			
	watering equipment (drinkers, waterers and water tanks, etc.)			
	Livestock trailer for transportation			
	manure spreader			
	milk collection equipment (tanks, cooler, etc.)			
	wool shearing machine			
SUPPLIES (CONSUMABLE GOODS)	Supplies for tools and machinery			
	Supplies for packaging			
	Supplies for Covid19 protections			
	Equipment using alternative energy			

<b>EQUIPMENT AND SUPPLIES FOR GREEN ECONOMY</b>	Waste recycling through proper equipment			
	Supplies made by recyclable material			
<b>BUYERS</b>	Intermediary vendors			
	Wholesalers, Storage			
	Shops, Market places, Supermarkets, Commercial Chains			
	Individual consumers (People buying goods directly at the production place, or at own shops, or via internet)			
	Fair Trade circuits			
	Industry (Transformers of the products)			
	Public Entities (School, Hospitals, local administrations, others)			
	<b>VALUE CHAIN PERFORMANCE: SERVICES AND BY-PRODUCTS</b>			
<b>SERVICES</b>	Assistance for sowing, time sowing method, irrigation, management, resilience against pests and diseases, harvest productivity, variety control, performance stability, etc.			
	Technical, administrative, organisational services			
	Marketing/Commercialisation			
	Training			
	Support in the development of Cooperatives, networking			
	Support in the development of alliances / associations			
	Access to finance			
	Soil quality monitoring			
<b>ADDITIONAL ACTIVITIES</b>	Fairs, festivals			
	Cultural events			
<b>ADDITIONAL ACTIVITIES FOR GREEN ECONOMY</b>	Echo-tourism activities			
	Fairs for organic products			
<b>BY-PRODUCTS</b>	Livestock for sale for home raising			
	fresh/raw meat			
	Processed meat			
	frozen meat			
	dried meat			
	Milk and dairy products (cheese, yoghurt, labneh, ghee, buttermilk, zabadi, kishik/flour paste and buttermilk, etc.)			
	wool products			
	organic soil fertilizer			
	Leather			
	animal fibres			
	animal fats for food uses (Chewing gum, omega 3, margarine, lard, etc.)			
	animal fats for non-food uses (soap, biodiesel, perfume, plastics candles, detergents, cosmetics, crayons, lubricants, cement, ceramics, chalks, etc.)			

## ANNEX 3. PROFESSIONAL PROFILES AND JOB OPPORTUNITIES IN THE BEEF AND DAIRY CATTLE VALUE CHAIN

LIVESTOCK GENERAL JOB OPPORTUNITIES		
Area	Position	Duties
<b>ADMINISTRATION</b>	Accountant	Ensuring a company is operating securely and effectively
		Preparing and reviewing operational reports
		Drafting of reports for management control
		Verifying that taxes are paid promptly and correctly, according to the calendar of tax deadlines
		Maintaining all policies and procedures manuals
		Issuing and inserting the invoices
		Monitoring of payments and collections
		Managing and maintaining all department databases
		Preparing periodic and annual tax returns (tax return, single certification, VAT settlement)
	Management Control Responsible	Carrying out economic accounting of the company's production and distribution system
		Drawing up the financial statements
		Developing short- and medium-term forecasts
		Analysing and simulating the results of actions in prefigured contexts
		Producing management reports, documents, which examine and report on the state and economic-financial performance of the company, evaluating its overall performance and proposing the necessary corrections in the event of any imbalances
		Verifying the compliance with legal obligations for general accounting
		Assisting managers in compiling annual budget information and reports
	Purchase Manager	Organizing the procurement of raw materials and ensure their assortment, defining the quantity and delivery times
		Implement the plan of supplying the raw materials necessary for the production process
		Collecting data relating to the raw material requirements of the production area, collaborating with the Production Manager, the Controller and the Sales Manager
		Carrying out surveys of and identifies the best quotes offered by suppliers based on the quality / price ratio, delivery times and payment conditions
		Managing relations and negotiations with suppliers with whom it defines the order and delivery procedures, the payment methods and verifies compliance with the agreed procedures, managing any complaints and returns
		Checking the incoming quality of the purchased goods and follows the handling and flow process towards the production cycle
		Dealing with the storage of raw materials and inventory management
		IT Manager
	Managing the website, takes care of e-mail, any Intranet-Extranet network and, possibly, the system for managing electronic commerce	

<b>COMMERCIALIZATION / MARKETING</b>	<b>Financial Grants Officer</b>	Assuming responsibility for compliance with all local, national, and international grants
		Overseeing approved funding contracts from a financial perspective to ensure that documentation and reporting requirements are met prior to due dates
		Preparing and/or reviewing information and reports for internal and external stakeholders
		Developing and modifying policies/procedures/systems in accordance with government regulations and organizational needs and objectives
		Overseeing external monitoring visits, reviews, audits, and cross-site evaluations
		Facilitating regular meetings with fiduciary partners to ensure proper spend of all available funding
		Working with Program Managers to create program budgets
	<b>Fund Raising Manager</b>	Developing and managing campaigns that bring in funds from various sources
		Developing and executing fundraising strategies
		Fostering ongoing relationships with possible donors
		Elaborating proposals in collaboration with the other company sectors for receiving funds, including participation to calls for tenders
		Planning and hosting fundraising events
	<b>Sales Manager</b>	Managing and coordinating relations with commercial channels, negotiations and commercial contracts with customers who purchase company products
		Managing the company's customer / distributor portfolio, through communication and promotion actions
		Defining the commercial policy of the company, understood as a way of configuring offers based on the types of customers / distributors served, the needs and tastes of consumers and the characteristics of competitors
		Promoting alliance and partnership policies with other companies or with customers / distributors satisfaction
		Managing relations with the production and Quality Control area
		Monitoring local and national regulations
	<b>Marketing manager</b>	Developing and executing a results-driven, multi-platform communications strategy and plan in line with corporate and brand direction while reflecting local priorities
Performs analysis of the market served and potential markets, in terms of detecting the needs of customers / distributors and consumers, following the evolution of demand and the behaviour of competitors		
Conceiving, developing and managing communication and promotion campaigns aimed at customers / distributors and consumers, identifying the best business development policies, promoting and protects registered trademarks or, in any case, owned by the company		
Creating and managing all marketing materials and collateral in line with brand direction		
Implementing online marketing activities including social media, demand generation, lead generation, etc.		
Tracking effectiveness of various campaigns and course corrections as required		
Managing communications spend and working with vendors and agencies to create and/or localize communications and marketing activities and develop supporting assets		



	Leading the planning and implementation of PR and initiatives related to the brand
<b>E-Marketing manager</b>	Assisting in the formulation of strategies to build a lasting digital connection with consumers
	Planning and monitoring the ongoing company presence on social media (Twitter, Facebook etc.)
	Launching optimized online adverts through Google Adwords, Facebook etc. to increase company and brand awareness
	Maintaining partnerships with media agencies and vendors
	Preparing online newsletters and promotional emails and organize their distribution through various channels
	Providing creative ideas for content marketing and update website
	Collaborating with designers to improve user experience
	Measuring performance of digital marketing efforts using a variety of Web analytics tools (Google Analytics, WebTrends etc.)
	Acquiring insight in online marketing trends and keep strategies up-to-date
<b>Social Media Manager</b>	Leading the business' social media content strategy and calendar to drive engagement, audience growth and conversation across all social platforms
	Establishing flexible short term and long-term social media goals across all platforms and consistently analyse to measure success
	Designing and implementing content plan to align with business goals and communication strategy
	Developing, implementing, and managing innovative ideas and promotions that influence campaigns, driving greater relevance, engagement, and growing social media communities
	Collaborating with departments to ensure that social media campaigns and concepts are appropriately integrated and amplified across platforms to support established objectives
	Interacting with customers on social channels, answering customer service questions, customer reviews, and escalate as applicable
	Working relationship with digital creative agency
<b>Food Distributor or Broker</b>	Selling product to stores
	Negotiating product placement and pricing
	Assessing current supply and inventory for clients
	Creating an actionable promotion plan for clients' products
	Discussing the discontinuation of products
	Connecting brands and manufacturers with potential buyers
<b>Public Relation Officer</b>	Networking with wholesalers, manufacturers and store owners
	Creating and maintaining a positive company brand for employees and clientele
	Promoting and maintaining with governmental authorities, for lobbying
	Working closely with function managers in the process of company product launches to ensure maximum exposure and protocols are followed
	Prepares internal and external communications

		Providing support as a media liaison and write media releases, speeches and promotional materials
		Creating public relations opportunities and media coaching for senior managers, working with clients, advertising agencies, media and suppliers, value chain actors, and sectoral local and national unions
		Promoting positive issues and addressing negative issues, assisting with the management of incidents that arise
	Multi-media Designer	Ideating, creating and editing of graphic/packaging design, digital and multimedia content
		Networking with printers and other stakeholders on new artworks, packaging updates and colour-proofs.
		Assisting in the development of marketing collaterals for print and digital media, including video editing and website content updates etc.

LIVESTOCK BREEDING SPECIFIC JOB OPPORTUNITIES		
Area	Position	Duties
BREEDING	Farm Manager	Planning and implementing breeding programmes
		Implementing new technology which minimises cost and enhances yield
		Recruiting and managing staff and ensuring they work safely and effectively
		Managing cash flow and developing and monitoring budgets
		Monitoring the health and welfare of the livestock
		Ensuring the farm is compliant with various legal guidelines and working to minimise the environmental impact of the business, for instance via waste disposal
		Keeping records on the movements of all livestock in to and out from the farm
		Marketing and selling the livestock to a variety of customers
		Negotiating with suppliers
		Managing any farm diversification activities
		Undertaking practical work as necessary depending on the volume of work
		Supervising all the farm activities
	Farmer	Herd and lead cattle to pasture
		Look after the livestock (clean the animals and check their health)
		Feed the animals with manual or automatic systems (carry out animal feeding, etc.)
		Providing forage for livestock
		Clean the rooms or premises (stables, feeders, etc.)
		Select the cattle to be slaughtered
		Provide assistance to births and artificial insemination procedures
		Milking animals and controlling milk production
Carry out ordinary or extraordinary maintenance on equipment, plants or machinery		
Prepare the necessary equipment for processing (attach the milking clusters to the pipeline, etc.)		
Animal Breeder	Adjusting controls to maintain building temperatures required for animals' health and safety	

	<p>Attaching rubber collecting sheaths to the genitals of tethered bulls and stimulating the animal's organ to induce ejaculation</p> <p>Incubating eggs until hatching</p> <p>Injecting animal semen into female animals for breeding purposes</p> <p>Examining animals to find illnesses or injuries</p> <p>Maintaining logs of semen</p> <p>Feeding animals</p>
<b>Digital Breeder</b>	<p>Use new technologies such as drones, GPS maps, 3D cameras, to control farms and fields</p> <p>It uses sensors equipped with intelligent spectra, which detect temperature differences in animals, signalling possible diseases and health status of the animals</p> <p>Check 3D cameras that scan the teats of the cows to improve milking efficiency</p> <p>It is updated and reports other innovative information technologies</p>
<b>Pasture Manager</b>	<p>Be responsible for the care and performance of pastures and farm animals, the condition of livestock facilities and equipment, the condition of all grazing infrastructure, the quality and supply of forage/feed, and the quality and quantity of meat produced</p> <p>Be responsible for managing fertility and putting up multiple cuts of hay</p> <p>Perform ongoing equipment maintenance and repair</p> <p>Ensure optimal health and welfare of all livestock through grazing management, winter feed quality, appropriate supplemental minerals, regular veterinary care and attentive daily observation</p> <p>Develop and track annual budget and meet budget goals</p> <p>Manage and continuously improve the grass quality on the farm through a regenerative approach and practices</p> <p>Manage and effectively cycle nutrients through composting</p> <p>Work to minimize greenhouse gas emissions where possible</p> <p>Assure compliance with all local, state, and federal regulations related to meat &amp; dairy product production.</p>
<b>Veterinarian</b>	<p>Verify the welfare conditions of farmed animals and their transport</p> <p>Examine animals and detect illnesses or injuries, prescribe medication, perform surgeries</p> <p>Plan and execute of prophylaxis interventions for the control of infectious diseases</p> <p>Verify of animal feed and the correct use of veterinary drugs</p> <p>Vaccinate animals</p> <p>Enforce food safety standards</p> <p>Check for transmissible diseases and quarantine animals as necessary</p>
<b>Animal Nutritionist</b>	<p>Assess the relative nutritional values of various feeds</p> <p>Interpret forage analysis</p> <p>Use specialist computer software to devise diets and produce reports</p> <p>Formulate diets that meet their requirements/objectives analysing nutritional disorders</p> <p>Maintain awareness of technical and scientific developments</p>
<b>Faunist Technician</b>	<p>Design, organize and analyse the reconnaissance of the faunal consistency and biotic capacity of the territory to reach and / or maintain a rational balance between species conservation and their correct use in respect of biodiversity</p>

		Determine the management objectives by planning withdrawals and injections in respect of biodiversity
		Design wildlife introduction for conservation purposes
	Plant production specialist for units of cultivar barley	Support/implement Speed Breeding trials including sowing, harvesting, and threshing
		Carry on/Assist/supervise leaf sample collection for genotyping
		Carry on/Coordinate the testing of the selected Speed Breeding lines
		Tabulate data pertaining to different trials
	Quality Control Officer	Monitor the compliance to the quality standards, such as food safety, public health, animal health and animal welfare (as usually integrated into one HACCP-based program)
		Recommend actions for achieving the quality standards as foreseen by national and international regulations
<b>DAIRY INDUSTRY SPECIFIC JOB OPPORTUNITIES</b>		
<b>PRODUCTION</b>	Dairy process manager	Coordinating and planning production in order to achieve the established objectives
		Organising and coordinating the production departments, deciding the processing criteria and production rhythms
		Allocating the workforce and follows the internal logistics
		Managing and monitoring the transformation flows of raw materials into finished products, establishing workflow policies and procedures that improve efficiency without compromising safety or quality
		Coordinating the production activity with that of the other sectors of the company
		Evaluating machine resources to ensure continued production and minimal downtime, and intervenes in the event of production stoppages or poor-quality products
		Establishing a balance between increased productivity and reduced costs of manufacturing operations, setting productivity goals
		Ensuring all safety and health standards are met to keep an organization accident-free
		Communicating regularly with upper management regarding problems or issues impacting production
		Motivating, supporting and providing guidance to production staff
	Milker	Prepare milking equipment and bulk tank for milking
		Bring in cows for milking or help other employees bring in cows if needed or requested
		Wear gloves when milking to help prevent spread of mastitis-causing organisms
		Follow recommended pre-milking preparation of cattle before milking
		Milk all cows in an orderly, proper and consistent manner
		Guarantee that milk shipped meets the current State Public Milk Ordinance
		Inform the manager about possible mastitis or other problems and for possible treatment
		Clean the milking parlour, holding area and bulk tank room
		Operate all milking equipment as recommended by the manager and factory specifications
		After milking, be sure all machinery and sanitation procedures are followed according to manufacturer's specification

	Cheesemaker	Check the characteristics of the milk
		Select the raw milk suitable for the production of the specific cheese
		Select the rennet
		Manage the phases of milk processing and transformation of the raw material into cheese or dairy products (pasteurization, curdling, spinning, maturing and possible smoking)
		Control the quality of products
		Select the best package
		Provide packaging
		Provide storage
	Food Industry Engineer	Developing new food products and processing methods using computer modelling software
		Coordinating with other engineers on projects such as designing packaging machinery, manufacturing facilities, or distribution networks
		Conducting research on food science topics such as new ingredients, processing techniques, or food preparation methods
		Developing new methods for processing foods to improve taste, appearance, storage life, and other characteristics
		Consulting with manufacturers about how their current equipment could be improved
		Conducting tests on new products to determine shelf life, nutrient retention, taste, smell, etc.
		Designing equipment that meets specific product requirements, such as machinery for cutting vegetables or machines that dispense beverages
		Evaluating new food processing technologies and equipment to ensure they meet industry standards
		Conducting sensory tests to evaluate products based on taste, smell, texture, and other characteristics
	Worker in charge of machinery and equipment	Identifying the machinery and equipment to be adjusted for the different stages of production
		Setting the operating parameters of the machinery for the processing of raw materials and semi-finished products
		Maintain cleanliness and hygiene of production plants
		Recognizing the most frequent operating anomalies
Performing routine maintenance (cleaning, component control, etc.)		
QUALITY CONTROL	Product quality laboratory manager	Following and drawing up the manuals for the quality of products and production processes
		Developing business improvement plans, follows and coordinates laboratory activities, controls suppliers and production processes
		Organising, coordinating and scheduling checks, analyses and specific procedures to assess the quality of incoming raw materials and outgoing finished products, and therefore verifies whether they meet the requirements of the regulations or market requests
		Supervising the controls and tests, and verifying the factors that determine a quality deterioration of the products

		Checking the stages of the production process, the materials purchased and check the progress of the products after commercial distribution, providing, in case of problems, the withdrawal and the necessary analyses	
		Following the company's relations with verification and control bodies and authorities as well as relations with external laboratories	
	Product quality control analyst	Taking care of the execution of tests, acceptance tests and laboratory analysis of products; elaborates the results verifying their congruence with the reference standards	
		Monitoring the quality standards during all stages of the production process of an agri-food company	
		Checking that the processing and storage of the food produced complies with the regulations	
		Checking that the packaging of the food produced complies with the regulations	
		Guarantees the periodic maintenance of the systems	
	RESEARCH LABORATORY	Research and Development Manager	Carrying out research aimed at the design of new products and packaging, the improvement, from a qualitative point of view and cost reduction, of the products already marketed by the company and the optimization of processes
			Identifying and defining product / process quality standards
			By monitoring the various stages of production, from the purchase and storage of raw material to the storage of the finished product, according to the pre-established quality standards
By carrying out product analyses, including the assessment and quality control of raw materials, semi-finished products, finished products, packaging and as regards the production and processing of food products			
Choosing the most suitable machinery and equipment for production and for the analysis laboratory			
Research laboratory operator		Carrying out all activities related to research in the laboratory as established by the laboratory manager: carrying out tests / tests in the laboratory, implementing research programs and experimental analyses, drawing up the technical documentation, checking the procedures and quality of the research, and experimentation with new products / components	
		Verifying compliance with research standards	
STORAGE	Storage manager	Managing the entire packaging process from start to finish, including designing new packages or labels and ordering supplies	
		Supervising and/or carrying out the activities that make it possible to prepare the food product for storage, transport and sale: crimping, bottling, pasteurization, sterilization, labelling, palletizing, wrapping, i.e. all those operations that serve to protect the product and preserve it from deterioration	
		Reviewing contracts with vendors to ensure compliance with company policies and standards	
		Coordinating with suppliers to ensure that adequate materials are available for production runs	
		Evaluating the environmental impact of various packaging materials to identify more sustainable solutions	

		Developing new packaging materials, such as biodegradable plastics or recycled paperboard
		Determining the best approach to use when designing packaging for a new product
		Reviewing artwork for product labels or packaging designs for content violations, such as inappropriate language or images
		Maintaining inventory records for all raw materials and finished products to ensure efficient use of storage space and effective production planning
		Carrying out all the activities necessary for the preparation of the machinery and their proper functioning
	Packaging operator	Preparing the machinery for packaging
		Carrying out the daily set-up of the machinery and, where necessary, making corrections
		Taking care of the loading of materials (with bottles, tetrapak cards, labels, etc.)
		Taking care of sterilization, pasteurization, and all those processes that preserve food products from deterioration (cellophane wrapping, seaming, etc.)
		Making sure that the machines operate in compliance with production standards
		Carrying out random checks on the packaged product
		Identifying manufacturing defects
		By recording the data relating to the operation of the machinery
		Guaranteeing the hygienic-sanitary safety of the premises and machinery
		Preventing the contamination of food by physical, chemical and biological contaminants
	Warehouse officer	Liaising with customers, suppliers and transport companies
		Coordinating and monitoring the receipt, order, assembly and dispatch of goods
		Using space and mechanical handling equipment efficiently, making sure quality, budgetary targets and environmental objectives are met
		Having a clear understanding of the company's policies and vision and how the warehouse contributes to these
		Coordinating the use of automated and computerised systems where necessary

**MEAT INDUSTRY SPECIFIC JOB OPPORTUNITIES**

Area	Position	Duties
PRODUCTION	Production Manager	Interprets and enforces company policies and safety regulations to workers
		Confers with all supervisors, and managers to coordinate activities of individual departments
		Creates production schedules and estimates worker hour requirements for completion of job assignments
		Compiles and submits accident reports required by the company for industrial, and/or meat plant accidents
		Security - Warns violators of rule infractions, such as wandering plant, smoking, or eating in plant, and contacts SECURITY DEPARTMENT when persons engaging in suspicious or criminal acts are seen
		Assigns duties and examines work for exactness, neatness, and conformance to policies and procedures



	Establishes or adjust work procedures to meet production schedules
	Advises employees on care and preservation of packaging of items received, stored, and shipped; methods and use of equipment in handling, storing, maintaining, and shipping stock; and related problems
	Determines work procedures, prepares work schedules, and expedites workflow
	Studies and standardizes procedures to improve efficiency of subordinates
	Manage accurately the production company human resources, including motivation and control
	Reviews production costs and product quality and modifies production and inventory control programs to maintain and enhance profitable operation of Meat Plant
	Communicating regularly with upper management regarding problems or issues impacting production
	Motivating, supporting and providing guidance to production staff
Food Industry Engineer	Developing new food products and processing methods using computer modeling software
	Coordinating with other engineers on projects such as designing packaging machinery, manufacturing facilities, or distribution networks
	Conducting research on food science topics such as new ingredients, processing techniques, or food preparation methods
	Developing new methods for processing foods to improve taste, appearance, storage life, and other characteristics
	Consulting with manufacturers about how their current equipment could be improved
	Conducting tests on new products to determine shelf life, nutrient retention, taste, odor, etc.
	Designing equipment that meets specific product requirements, such as machinery for cutting vegetables or machines that dispense beverages
	Evaluating new food processing technologies and equipment to ensure they meet industry standards
	Conducting sensory tests to evaluate products based on taste, smell, texture, and other characteristics
Meat process and package worker	Refer to work orders to determine the amount and type of meat to be processed
	Calibrate food processing machines and ensure that they are set at the correct speeds for each processing procedure
	Prepare raw materials by removing bones and fat and cutting them into standardized cubes or slices
	Cut, trim and separate edible portions from offal and ensure that they are appropriately cleaned under running water
	Use knives and choppers to perform cutting and chopping activities and ensure that all cut and chopped meats are stored in a proper manner
	Make use of scales to weigh meat before and after each process and ensure that each stage is documented for reference purposes
	Processing meat products such as steaks, chops, roasts, and ground beef

	<p>Pack cleaned and processed meat into appropriate packaging, ensuring that it is covered properly with plastic wraps</p> <p>Create or acquire labels for each packet by ensuring that type, date of expiry, and weight is mentioned on them</p> <p>Inspect packed meat products for any conformity problems and ensure that any non-conformance products are isolated or discarded</p> <p>Cleaning work areas, equipment, and utensils after processing is completed</p>
Food Nutritionist	<p>Formulating/reformulating foods to make them healthier (i.e. lower salt, higher fibre, higher protein)</p> <p>Supporting Product Development of new products and reformulations</p> <p>Assisting with the design of products for people with special medical needs</p> <p>Monitoring regulatory compliance</p> <p>Following scientific literature and marketing trends and advising the business on trends that could be feasibly supported by nutritional science</p> <p>Advising food safety/toxicology, and allergens</p> <p>Nutrition labelling compliance with Food Standards and other local and international laws Nutritional education</p> <p>Addressing consumer enquiries</p> <p>Preparing nutritional marketing material for in-house use or for public use</p> <p>Promoting speaking related to general nutrition and/or products</p>
Food Technologist	<p>Designing new food products based on market developments</p> <p>Studying issues related to the improvement of existing products</p> <p>Studying the processes and technologies most suitable for the production of a specific food</p> <p>Carrying on research on raw materials and on food and organic derived products</p> <p>Maintains relations with suppliers of raw materials</p> <p>Defining and monitoring the purchase, storage and processing phases of the raw materials used in food production</p> <p>Defining and monitoring the various stages of food processing and storage</p> <p>Developing the quality control systems for food products</p>
Worker in charge of machinery and equipment	<p>Adjust machine speeds, settings according to standards set by the Company and Manufacturer • Monitor and record downtime events on each line relating to machine problems</p> <p>Liaise with Management and Maintenance regarding functioning of all machines</p> <p>Assist in switch overs and machine film, labels and line supplies replenishment</p> <p>Conduct basic pre-operational checks and shut-downs when needed</p> <p>Assist maintenance personnel in preventative maintenance and minor repairs</p> <p>Monitor cleanliness of the machines. Help with cleaning of the machines, when needed</p> <p>Identifying the machinery and equipment to be adjusted for the different stages of production</p> <p>Setting the operating parameters of the machinery for the processing of raw materials and semi-finished products</p> <p>Maintaining cleanliness and hygiene of production plants</p>

		Recognising the most frequent operating anomalies	
		Performing routine maintenance (cleaning, component control, etc.)	
QUALITY CONTROL	Product quality laboratory manager	Following and drawing up the manuals for the quality of products and production processes	
		Developing business improvement plans, follows and coordinates laboratory activities, controls suppliers and production processes	
		Organising, coordinating and scheduling checks, analyzes and specific procedures to assess the quality of incoming raw materials and outgoing finished products, and therefore verifies whether they meet the requirements of the regulations or market requests	
		Supervising the controls and tests, and verifying the factors that determine a quality deterioration of the products	
		Checking the stages of the production process, the materials purchased and check the progress of the products after commercial distribution, providing, in case of problems, the withdrawal and the necessary analyses	
		Following the company's relations with verification and control bodies and authorities as well as relations with external laboratories	
		Sanitation Technologist	Support the Quality Plant Team in ensuring products meet the quality standards and food safety requirements of the company and its customers
	Collect samples for completion of tasks in the QA Microbiology and Chemistry Lab		
	Assist in food safety audits		
	Perform daily operational checks; verification of pre-operational checks, chemical concentration checks and conducts sanitation audits		
	Perform quality verifications e.g. metal detector checks		
	Perform Thermometer Calibration, Light Intensity Checks, Monthly Glass/Brittle Plastic		
	Perform finished product quality checks and collecting retention samples		
	Perform incoming product quality checks		
	Perform sampling of finished products for micro and physico-chemical analysis		
	Perform evisceration, animal welfare, and other animal inspection tasks		
	Managing inventories for lab supplies		
	RESEARCH LABORATORY		Research and Development Manager
		Carry out in-house and external trials where applicable. - Support technical sales staff in terms of samples and customer queries	
Lead customer presentations (new ideas, sales visits, various issues...)			
Liaise with suppliers in terms of information and samples			
Drive project completion on time and consistently, ensuring the company's creditability remains in high esteem at all times			

		Initiate, manage, and monitor pro active collaborative research studies with external third parties to discover new functional ingredients which will add value to food processing activities
		Choosing the most suitable machinery and equipment for production and for the analysis laboratory
	Research laboratory operator	Carrying out all activities related to research in the laboratory as established by the laboratory manager: carrying out tests / tests in the laboratory, implementing research programs and experimental analyzes, drawing up the technical documentation, checking the procedures and quality of the research, and experimentation with new products / components
		Verifying compliance with research standards
STORAGE	Packaging Manager	Managing the entire packaging process from start to finish, including designing new packages or labels and ordering supplies
		Supervising and/or carrying out the activities that make it possible to prepare the food product for storage, transport and sale: crimping, bottling, pasteurization, sterilization, labeling, palletizing, wrapping, i.e. all those operations that serve to protect the product and preserve it from deterioration
		Reviewing contracts with vendors to ensure compliance with company policies and standards
		Coordinating with suppliers to ensure that adequate materials are available for production runs
		Evaluating the environmental impact of various packaging materials to identify more sustainable solutions
		Developing new packaging materials, such as biodegradable plastics or recycled paperboard
		Determining the best approach to use when designing packaging for a new product
		Reviewing artwork for product labels or packaging designs for content violations, such as inappropriate language or images
		Maintaining inventory records for all raw materials and finished products to ensure efficient use of storage space and effective production planning
		Carrying out all the activities necessary for the preparation of the machinery and their proper functioning
	Packaging machine operator	Preparing the machinery for packaging
		Carrying out the daily set-up of the machinery and, where necessary, making corrections
		Taking care of the loading of materials
		Taking care of sterilization, pasteurization, and all those processes that preserve food products from deterioration (cellophane wrapping, seaming, etc.)
		Making sure that the machines operate in compliance with production standards
		Carrying out random checks on the packaged product
		Identifying manufacturing defects
		By recording the data relating to the operation of the machinery
		Guaranteeing the hygienic-sanitary safety of the premises and machinery
Preventing the contamination of food by physical, chemical and biological contaminants		

		Working with the storage management department to ensure that all products are stored properly
	Warehouse manager	Liaising with customers, suppliers and transport companies
		Coordinating and monitoring the receipt, order, assembly and dispatch of goods
		Using space and mechanical handling equipment efficiently, making sure quality, budgetary targets and environmental objectives are met
		Having a clear understanding of the company's policies and vision and how the warehouse contributes to these
		Coordinating the use of automated and computerised systems where necessary
		Responding to and dealing with customer communication by email and telephone
		Keeping stock control systems up to date and make sure inventories are accurate
		Planning future capacity requirements
		Organizing the recruitment and training of staff, as well as monitoring staff performance and progress
	Cold Storage Operator	Weighing whole and animal parts and packing according to set specifications in preparation for freezing and Cold Room storage
		Operating blast freeze equipment and packing finished product for blast freezing
		Packing finished product in cases in preparation for Cold Room storage
		Operating Cold Room equipment and regulating temperatures
		Packing finished product onto delivery trucks
<b>WOOL INDUSTRY SPECIFIC JOB OPPORTUNITIES</b>		
<b>ALL CYCLE</b>	Textile Manufacturer	A textile manufacturer supervises workers who make products that contain fibers, such as clothing, tires, yarn, and insulation. To oversee the conversion of a raw product (either natural or man-made fibers) into usable goods
		In addition to supervising front line staff on the factory floor, textile manufacturers monitor inventory and oversee quality control
	Sheep shearer	Control the health risks (cuts, wounds) associated with mowing
		Check the cleanliness of the tools used for mowing
		Perform sheep shearing in a traditional way (scissors and sheep binding) and facilitated (with electric machines)
		Provide for the management of the collected wool (as waste or any other use)
	Carder	It oversees the succession of operations that make it possible to arrange an initially disordered mass of textile fibres (unprocessed material / staple) in a set of great length (almost spun) wound in reels, using carding machines by setting the parameters relating to the processing phases
		Driving the carding machine (carder)
		Carry out routine maintenance on the carding machine (carding)
	Fashion Designer	Making product sketches, sampling of colours and materials, design and development of models of their own creation or based on customer requests
	Product manufacturer	Warping and actual weaving
		Set up computer-controlled weaving machines, check the manufacturing process, correct breakdowns and finish fabrics

<b>OTHER</b>	Consultant	It offers its consultancy for the design of the necessary systems
		Identifies the most suitable animal species for breeding, in relation to the characteristics of the company and the environment in which it operates
		It defines the ideal hygienic conditions of the environments in which the animals are raised and monitors some critical parameters (temperature, humidity, etc.)
		Identify the most suitable technologies for the type of farm
		Provides information on animal nutrition and growth times
		Monitor the health of farmed animals
		It organizes and carries out research and experimentation activities to reduce production costs and improve quality
		Collaborate in the training and / or assistance of breeders



Cover photo: by [Stijn te Strake](#) on [Unsplash](#)

