



**Project Title:** Improving livelihoods of Sheep owners in the Jordan Badia through Enhancing Productivity and Quality of Sheep Wool

**Implementing Partner:** United Nations Development Programme

Project duration: Three years (2018-2021) (36 Months)

### Brief Description

The sheep wool sector in Jordan is heavily fragmented. There is no organized wool collection as a necessary part of the wool market chain. A lot of raw wool is out of the market channels. This is a key problem identified by livestock owners and wholesalers.

The sheep wool sector faces many constraints including; the low quality of initial production of the shear sheep wool, the use of traditional shearing equipment, which is not efficient and harming animals, the cost of shearing is higher than return at “farmer” level and the weak domestic trade and export.

The goal of this project is to promote Sustainable Livelihood through enhancing production and quality of sheep wool in the Jordan Badia. The strategy to achieve this goal has four primary components; Establishment of Shearing Service; Establishment of Collection Centres (Hubs) Facilities; Enhancing domestic Use of the Sheared Wool and building better knowledge and understanding.

To ensure viability and sustainability of wool sector, the project was designed based on a feasibility study conducted to analyse the wool sector at three levels: a) shearing operation, b) collection and sorting operation in the hubs and c) scouring operation, however, the market analysis revealed that the first two levels are feasible while the third option holds significant risks Accordingly the scope of the project considers the upgrade of wool production at shearing and sorting levels. The project will be implemented under the Jordan-United Nations Sustainable Development Framework (UNSDF) and UNDP’s country programme document (2018-2022)

The project financing will be provided by the Ministry of Environment/ Badia Restoration Program (BRP), with co-financing from UNDP. The total project cost is **2,582,180 US\$**, where **2,512,180 US\$** are requested from BRP and 70,000 US\$ in-kind contribution from UNDP

<b>Total Project Cost:</b>	<b>2,582,180 US\$</b>	
<b>Total resources allocated:</b>	<b>BRP</b>	<b>2,512,180 US\$</b>
	<b>In-Kind (UNDP)</b>	<b>70,000 US\$</b>

Jordan faces two overarching developmental challenges of exclusion and vulnerability: it has a rapidly expanding population (3.2% annual growth); it hosts nearly three million non-Jordanians, including 1.3 million Syrians, of whom 660,000 are registered as refugees; the population is highly urbanised (84%, 2015); average unemployment is 18.2% (2017); the poverty rate is estimated at 14%. these inequalities are especially influencing women and youth: unemployment rates for women are 33% (compared to men at 14%), and for youth aged 15-24 years at 35.6%. women's participation rate in the labour force stands at 15%, compared to 68% for men, placing Jordan at 143rd in the global ranking of 144 countries. socio-economic vulnerabilities vary widely between the 12 governorates, especially in terms of local economic development and a concentration of urbanised poverty. the impact of Syria crisis continues to impose localised burdens on vulnerable host communities in terms of livelihoods, employment opportunities, service delivery and sustaining social and economic stability.

There are precarious levels of environmental fragility: Jordan has extreme water scarcity and drought risks, threats to fragile ecosystems on land and in the sea, the degradation of arable land and desertification, the impact of rapid demographic growth and urbanisation, and dependency on imported, non-renewable and inefficient energy sources. The effects of climate change in terms of rainfall variation and decrease accentuate environmental problems that in turn will have serious developmental consequences for biodiversity, water sources, urban and rural life, and key industries. These problems have a disproportionate impact on women and vulnerable communities, exacerbating the causes and effect of inequality, poverty and unemployment.

As outlined in Vision 2025 and other policy initiatives such as the King's Discussion Papers, the Jordanian Government has taken important steps towards addressing these developmental challenges. The Jordan Response Plan (JRP) and the Jordan Compact provide a structured approach to addressing impacts from the Syria crisis. The Economic Growth Plan 2018-2022 and a new framework for decentralisation seek to accelerate local economic development. Jordan has also sought to target opportunities for green growth and the green economy through more effective use of energy sources as a potential for local development and lower energy costs. An Integrity and Anti-Corruption Commission has been established to develop accountability measures and build institutional confidence. Through its sponsorship of Security Council Resolution 2250/2015 Jordan has made clear commitments to increase inclusion of youth in decision-making at local and national levels and as key players to sustain peace and social cohesion. During the preparation of the National Voluntary Review (VNR), a multi-sector framework was established for consultation and engagement of stakeholders, identifying that further effort is needed to assist in the integration and monitoring of SDG indicators, and in the implementation of relevant policies and programmes at national and sub-national levels.

A rapid increase in economic activity, population growth and successive influxes of refugees over the last decade have imposed huge stresses on Jordan's urban and rural, as well as, Badia areas, let alone the fragile water and energy resources.

In March 2014, the Government of Jordan launched the National Resilience Plan (NRP) in cooperation with the United Nations, various donors and NGOs; the NRP seeks to address the growing fiscal burden faced by the Kingdom as a result of the Syrian crisis. The NRP includes a request of US\$ 4.295 billion to support the implementation of priority projects in the education, health, energy, municipality, water, housing and security sectors.

The living conditions of the Badia communities has been further deteriorating during the last ten years. The ecosystem services, water resources, biodiversity and waste management in the Badia regions were defined as priority challenges with high need of prompt intervention. Moreover, the increased socio-economic and agricultural activities, like livestock raising within and in the surroundings of the rangelands and natural reserves, wood cutting for heating and charcoal production purposes, excessive farming activities, all placed additional pressure on the natural values. Water scarcity in the Badia regions has worsened, where people of Badia are by now forced to survive on less than 30 litres of water per day, even though 80 litres of water are required to meet basic needs. The implications for health, especially for the vulnerable groups of population such as children and pregnant women, caused by limited use of water, are a cause of concern. On the national level, the shortage of water resources also affected most of the economic sectors, including agriculture, which forms major source of livelihoods for the most vulnerable communities. Most of the aforementioned challenges were further exacerbated by drought and the accelerated desertification, which apparently becomes a significant risk given that Jordan is the second most water-scarce country in the world, this is evident by the drop in the annual per capita share of water from 143 litres per capita in 2013 to 96 litres per capita in 2015, while the global average is 500 litres per capita. Competition in the Badia communities over scarce income and employment opportunities are particularly noted in the informal sector and in sectors such as construction, wholesale and retail, food services and agriculture, where foreign labour are most likely to be employed with lower wages than the national minimum wage (190 JD per month for Jordanians and 150 JD per month for migrant legal workers).

The households of the Badia communities in Jordan are considered among the least resilient to the external shocks that probably affect their livelihoods due to the limited income earning opportunities and the high dependency ratio. A recent study carried out by UN women (2014) highlights that the increase in competition over livelihoods and job opportunities has particularly affected young men and women-headed households (i.e. lower wages, increase of basic needs prices, fuel and rental accommodation).

### **Contributing Outcomes**

The present proposal is in line with the following outcomes/outputs of both national planning i.e. Jordan Vision 2025 as well as the Jordan-United Nations Sustainable Development Framework (UNSDF) and the UNDP's country programme document (CPD) for 2018-2022:

National priority: Vision 2025 pillars for a prosperous and resilient Jordan through: active and empowered citizens; an efficient and effective government.

National Priority: Vision 2025 pillars for a prosperous and resilient Jordan through: active and empowered citizens; safe and stable society; and dynamic and globally competitive private sector.

UNSDF outcome 3: Enhanced opportunities for inclusive engagement of people living in Jordan in social, economic and political spheres.

UNSD outcome 2: People especially the most excluded and vulnerable proactively claim their rights and fulfil their responsibilities for improved human security and resilience (Goals 1, 5, 6, 7, 8, 10, 11, 13).

### **CPD Outputs:**

Output 2.1: Employment opportunities and livelihoods strengthened, for stabilization, and return to sustainable development pathways

Output 2.2: Capacities at national and sub-national levels strengthened to promote local economic development (LED) and deliver basic services

Output 2.3: Nature-based solutions developed, financed and applied for sustainable recovery, and improving communities' resilience and living conditions

In addition, the project scope will be aligned with several other strategies and plans e.g. a) The National Agriculture Strategy (2015-2025) that supports economic growth through optimized agricultural value chain and empowerment of rural community; b) Poverty Reduction Strategy (2013-2020).

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## **II. SITUATION ANALYSIS: WOOL SECTOR IN JORDAN**

The Wool market in Jordan is heavily fragmented. There is no organized wool collection as a major component of the wool market chain. A lot of raw wool is out of the market channels. This is a key problem identified by livestock owners and wholesalers.

Wool production and collection processes lack the systematic approach, where wholesales are the common segments within wool market in Jordan with no processing or new real products of the wool. The sheep wool in Jordan is characterized with low quality and does not meet the standards of textile industry requirements. However, most of it is collected, packed and exported as greasy wool, therefore, the financial return is relatively low.

### ***Sheep and Goats in Jordan and Wool Production***

The livestock sector in Jordan contributes about 60 percent of the nation's agricultural output, and is considered a major source of income. Sheep and goats' husbandry creates dominating portion of that. Awasi sheep is the dominant sheep breed in Jordan and adapted to a wide range of harsh conditions in the Badia. Sheep and goats are raised mainly for their meat and milk. Sheep wool is an important by-product of the animal's husbandry. The most recent data of Nov. 2017 provided by the Ministry of Agriculture shows that number of sheep amounts 3,416,178 heads of which 1,520,908 (44, 5%) in the Badia and 1,045,118 goats of which 395,901(38%) heads in the Badia. The total number of sheep and goat keepers amounts 36,870, where their number in the Badia is smaller than outside the Badia at 41% and 59% respectively (table 1).

**Table (1): Number and Distribution of Sheep and Goats in Jordan as of November 2017 (Ministry of Agriculture, 2017)**

Total No Sheep and Goats	Sheep and Goat Keeper No		Sheep No		Goats No	
	In Badia	Out side Badia	In Badia	Out side Badia	In Badia	Out side Badia
	10,202	21,778	1,020,908	1,895,270	390,901	749,217
	41%	59%	44,5%	55,5%	38%	62%
<b>4,461,296</b>	<b>36,870</b>		<b>3,416,17<sup>^</sup></b>		<b>1,045,11<sup>^</sup></b>	

Sheep number in the Badia is of high priority for our project proposal and will be the focus and the base for interventions proposed in this project, reference to the interest and mandate of the BRP. Even though, all other sheep owners in Jordan will benefit direct or in direct from facilities intended to be established for improving production and quality of sheep wool in the Jordan Badia; the direct beneficiaries' group are those herds prevailing adjacent to the Badia areas, in Madaba, Salt, Karak, Great Amman Municipality, Jerash, Ajloun, East Irbid and Rammtha that are estimated approximately one million of sheep heads. Thus, the suggested interventions are targeting two to two and a half millions of sheep heads. The rest prevails scattered mainly in the Jordan Valley and Wadi Araba.

Accordingly, total amount of raw sheep wool may range between 4.5 and 5 thousand tons per season, since one head can produce between 1.8 and 2.0 Kg per year/season. This estimate has been supported by the exporters met during the field survey. In addition, hairs of the goats can be part of the target, although the uses are different and the importance is less than the sheep wool

### ***Characteristics of Awasi Sheep Wool***

Awasi wool is greasy and belongs in general to coarse or carpet wool group. The fleece of adult Awasi consists of 3 components, 69% wool, 24% hair and 7% Kemp. The staple length ranges between 12 to 16 cm, while fiber diameter ranges between 32 to 36 micron. (FAO, *World Animal Review, journal on animal health, production and products no. 44 – 1982*). The Awasi wool is reported to have good glance that is preferred by processor. However, animal health, feeding source, age and sex (male/female), affecting the above described characteristics of the wool; ewes have less quality than rams and the quality deteriorates with age

The Awasi wool has white to beige color; some individual animals may have brown and grey fleece segments.

### ***Shearing Operations and Costs***

Shearing the wool is an important biological operation that sheep keepers are obliged to do to free animals from their fleece in hot summer months. It decreases body heat and enables sheep keeper to treat skin diseases and parasites. Delay or not shearing the fleece may lead to drop productivity and fertility of the sheep animals.

The cost of shearing ranges from one JD per head at the beginning of the shear season to 0.7 JD at the end. Whereas, the price of the shorn fleece per head does not exceed 0.15 JD (0.07 - 0,08JD/kg), farmers are not covering 20% of the shearing cost; some farmer even, neglect or delay shearing, due to lack of financial resources.

Shearing of the raw sheep wool, is being practiced manual in primitive, spontaneous, and unorganized way. Shearing is mainly done during April-May by Syrians, due to lack of trained locals, using tradition shear equipment (blade shears) that of low efficiency and harming animals.

Manual shearing using blade shears contribute to low quality and quantity of yielded shear wool of individual animals; it shortens the staple length and leaves certain fibre uncut. Farmers stated that machine shearing might increase shear yield up to 30%; this communication obtained during the field trip to Marsa Matrouh of Egypt (conducted during the preparation of this document).

### ***Wool Collection and Storage.***

The shear wool collection processes can be described and summarized as follows:

1. small and medium intermediaries: they collect shear wool directly from sheep keepers on their own cost and gather it in open areas, without any proper shelter. In most cases, they wait several months to find buyers or exporters, however, in some occasions they might wait for more than one season to sell the collected wool, this perhaps contributes to increase the possibility of wool contamination;
2. Exporters are selective in terms of wool quality and collection areas. That is, they prioritize areas of least dirt and good wool quality such as Ma'an area. However, most exporters have shelters for collected wool, but they still lack the best practices of wool storage;
3. The sheep keepers themselves: in this case, the sheep keepers collect and deliver the sheered wool either to the small or medium-size collectors or to the exporters, in most cases they incur the cost of transportation. Since the Syrian crisis sheep keepers become not interested in delivering their sheared wool, so it ends up either improperly stored or disposed of.

The collected wool is being transported lose in bulk or slightly compacted in sacks, this volume transportation is not effective and incur high cost. Exporter on the other way uses compressed packaging, producing bales of 200-300 kg, in order to spare volume.

### ***Scouring and Processing***

Scouring is the ultimate operation for all kind of wool to give the wool the initial value to be processed: scouring comprises washing and drying operations.

Sorting is the pre-operation to scouring, it is the only operation done by Jordanian exporters. They separate brown and grey colour and odd and very dirty parts then compressed white parts to bales of 200- 300 kg. After sorting, the white part makes in average 50% of the raw wool amount (reported the exporters); that means when one tone exported is corresponding to two tones raw wool. Sorting, however, is an operation that should be performed by the farmer or at the initial collection steps to concentrate quality parts and reduce bulk transportation.

No large-scale washing practices was reported throughout the field survey. Small amounts for family uses are usually washed manually.

However, expanding export, stated the exporters, depends on the quality and grade of cleanliness of the wool; the advanced domestic processing the higher return from outside. Nevertheless, exporters are hesitant for initiating scouring process; they claimed that they are facing some obstacles; which can be summarized as follows;

- Weak financial capacity to establish an expensive scouring line
- Uncertainty of sustainable water resources for scouring/washing raw wool
- High cost of water and electricity
- Ambiguity of domestic supply of raw wool collection and pricing (see local trade)
- Lack of solid feasibility study for wool scouring

### ***Local Trade and Pricing***

Most important for a stable commodity sector is excluding speculation in pricing and delivery, although, the wool is not perishable and of durability, few exporters fix the price and the collected amount for export. In such difficult situation, the farmer is left alone. In the case of Jordan, the wool sector is far unorganized.

Among exporters, there is no communication or coordination regarding export price that they can better negotiate. Instead, they speculate in domestic and export prices.

Sheep keepers are not always able to sell their shear wool in cash, exporter and consequently the collector, depends mostly on delayed payment from foreign buyers that can last up to 12 months after delivery.

A proper trade and fair pricing can be obtained through establishment of reference and coordination bodies, such as limiting collection of raw wool to cooperatives of sheep keepers and establishing a wool board or a central association for wool trade, which can function as reference for foreign buyers and local producers/collectors as well.

### ***Local Uses***

Twenty to thirty years ago, wool was used for many domestic purposes more than currently; each family, especially in the Badia relied on wool to make mattresses, sleep covers and carpets. Sheep wool was usually mixed with camel wool or goat hairs to produce Bedouin tents. In the eighties and nineties, initiatives were made by number of NGOs (such as Jabal Beni Hamida) to enhance handicrafts small enterprises of sheep wool as income generating activities such as: utilizing hand woollen yarn to produce carpets, rugs and knitted textile assortment. All such activities utilized considerable part of produced wool. Synthetic polyester replaced largely the home wool uses and the domestic hand works and small enterprises failed due to lack of sustainability. The excess of raw wool beside lack of processing and export constrains, led to very low prices.

Other methods of wool uses are known and should be promoted; as example, low quality wool can be utilized to produce insulation material. A trail was up looked at Marsa Matrouh that is worth to be adapted, in which low quality wool (as example; colored wool, which makes 30% of the crud wool) is made to pads of different thickness that can be used in different insulation purposes since it is not flammable, and could be even introduced again in the household uses.

If part of the local wool, processed to finished good quality yarn competing imported, it would evolve the handwork small business again. This approach and creation of another innovative income generating activities around the hubs could be thought about as next phase of the project.

### ***Export and Competition Perspective of Awasi Wool.***

The conducted field survey to the wool sector in Jordan (in preparation for this document), showed that there are three main exporters having facilities; they stated that export of raw wool was interrupted during 2011-2015, due to political situation in Syria, this was an export route to Turkey closed and exports dropped down to 500 tons. The carpet wool in general, suffered worldwide, after 2008 financial crisis and was replaced widely by synthetic fibre. This situation confused sheep keeper and exporter as well and resulted in accumulation of the collected raw wool, where the price dropped down to between 70-85 JD per ton for sheared wool in Jordan.

The exporters reported also that they imposed hard efforts to overcome this situation and opened new export market niches to India, Egypt and Turkey with rather higher transport costs. During this year (2017), they succeeded to export more than four thousand tons mainly to India. Part of the exported amount tapped the accumulated/ stored raw wool from stagnation previous years.

The Jordanian exporters are ambitious to open more market niches for Awasi wool in west and east Europe; one exporter succeeded even to export initial amounts to England and Germany and is trying to reach the American buyers.

Mainly, white part of the sheared wool is being demanded without washing or any other treatments. Yet, the accumulated collected amounts of raw wool and the slow recovering of the export gives no chance for farmers to raise the price of sheared wool.

There is an urgent need, therefore, to establish organized and sustainable wool enterprise(s) in Jordan for enhancing productivity and improving benefit, which will promote export with higher value that in turn benefit the sheep keeper community.

To summarize, the following are main constraints facing Wool Sector in Jordan

- 1) Low quality of initial production of the shear sheep wool
- 2) Use of traditional shearing equipment, which is not efficient and harming animals
- 3) Shearing cost higher than return of sheared wool at farmer level.
- 4) Lack of local trained shearer
- 5) Lack of proper and efficient infrastructure for collection and transportation of the raw wool
- 6) Weak domestic trade and export
- 7) Weak of domestic uses of local wool

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### **III. PROBLEM STATEMENT**

Livestock breeding forms the major source of livelihoods for most of the Badia communities in Jordan. However, a series of factors progressively and drastically reduced these livelihood opportunities e.g. the availability of natural pastoral lands, increase of food-feed crops compared to the prices livestock products, cessation of regional markets ...etc. Sheep wool is a major livestock by-product in the Jordan Badia in terms of its significant contribution to the sheep health and the extra income for livestock keepers. Nowadays, It becomes apparent that wool imposes extra financial burden of the livestock owners due to the sharp decline of its prices and the increase of shear cost.

The pre-feasibility study revealed that sheep keepers are the least beneficiaries in the value chain of wool sector, they incur unaffordable shear cost compared to the price, often they incur the



shear and transport cost. On the other hand, it was clear through the casual observations the lack of the modern practices related to shear, collection and storage operations, resulting in further deterioration of the raw wool quality.

The wool sector in Jordan suffers several challenges and constraints that undermine its growth, perhaps the lack of wool-related domestic industries is one of the principal causes why this sector has not grown. Whatever the measures and interventions that might be taken to develop this sector, it is important to consider that sheep keepers should be placed at the heart of interventions since they are the primary source of wool value chain. This can be achieved through improving the technicalities of shear and reduce of its cost. On value chain level, improving the wool sector requires fundamental upgrade in the wool production operations, collection and storage. Improving of the wool quality would contribute to enhancing export and create more domestic demand that could be in turn improve the income of the livestock owners.

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#### **IV. UNDP'S COMPARATIVE ADVANTAGE AND WORK IN BADIA COMMUNITIES ON LIVELIHOODS AND EMPLOYMENT**

UNDP has significant comparative advantage for achieving the national development priorities. It is a long-term trusted partner of the Government and others for its leadership in developing policy and enabling implementation for resilience, enabling inclusion and addressing inequalities. UNDP is recognised by national and local partners as playing a highly relevant role in Jordan's developmental progress, and in delivering upon partners' priorities. It has a consistent record in building effective cross-sectoral partnerships, especially in bridging gaps and changing behaviours between state institutions and citizens, and in delivering impact at scale with efficient utilisation of limited resources. In particular, UNDP has demonstrated specific comparative advantage in leading support to resilient national responses, especially to the Syria crisis and other aspects of the humanitarian-development nexus relevant to different crisis scenarios. Development stakeholders have identified UNDP's impartiality, flexibility, responsiveness, local presence and strong delivery channels as key elements of its comparative advantage, especially on areas of technical expertise and capacity building. UNDP is also recognised as having significant comparative advantage in the national context due its thought leadership on developmental issues, especially in relation to providing an institutional capacity for implementation of the 2030 Agenda. UNDP is well placed to support the government in building its capacity in its convening and coordination role and in facilitating cross-disciplinary and multi-sector collaboration on complex developmental challenges.

UNDP Jordan has been working in support of national social and economic development in Jordan, based on a number of national strategic documents including the National Agenda (2006-2015) and its updated version the "Jordan New Economic and Social Vision 2015-2025", as well as the relevant policies and strategies such as the Poverty Reduction Strategy (2012-2020), the National Employment Strategy (2011-2020), the Environment Strategy, among others. In addition, UNDP has contributed to the development of the National Food Security Strategy in collaboration with the concerned governmental organizations, including Ministry of Agriculture.

In line with its work to support the Government of Jordan to pursue sustainable development,

UNDP- Jordan implemented development-oriented projects in various areas of the Kingdom, including the Badia area. UNDP-Jordan has also extensive experience in livelihoods and economic recovery.

Short-term employment creation and microbusiness development for young livestock herders

UNDP has been implementing the emergency employment project in Mafraq Governorate with a focus on Badia communities, including the municipal areas of Um Al Jimmal, Sabha, Dafyaneh, Al Salihiah, and Nayfeh, and is currently expanding to the municipal areas of Hosha and Sarhan of Mafraq. The project is designed to bridge emergency employment and sustainable livelihoods creation, targeting vulnerable Jordanians in Badia communities. A total of 750 men and women in the six municipalities of Sama Sarhan, Sabha, Salheih, Um Al Jimal, Hosha and Rehab in Mafraq, started the month community voluntary initiatives with an incentive of 208 JD per month with a savings ratio of 50 percent (104 JD).

The participants completed the community voluntary activities undergo a training to build their life skills and basic business skills to expertise in establishing and running microbusinesses. Once they complete the training, the participants are encouraged to submit a business plan individually or collectively, to be financed by UNDP through multiplying the savings accumulated during the voluntary service activities. The project provides advisory and mentoring services (accounting, legal, marketing, etc.), in order to ensure the sustainability of established microbusinesses and to promote its socio-economic impacts on improving the standards of living of people in the Badia communities.

Livelihoods diversification for livestock herders through developing value chain on dairy and supporting cooperatives.

Most of microbusinesses started up for livestock herders are on livestock and dairy products. UNDP proceeded with the further support to ensure sustainability and growth of these businesses through value chain development on dairy products and cooperation development support. Accordingly, UNDP conducted a value chain analysis on dairy products, with a focus on Mafraq, and an assessment to identify how best to support cooperative development.

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## V. PROJECT STRATEGY

### 1- Project's Rationales and Strategic Considerations

A rapid feasibility study has been conducted analysing the wool operations on three levels: a) shearing operation, b) collection and sorting operation in the hubs and c) scouring operation. The assessment has been applied as a case study using 500,000 sheep heads as base line for calculations; the detailed study is attached in annex (1); the assumptions and their results are summarized as follows:

#### **Feasibility of Shearing Operation**

**Provision of shear techniques;** this service will include the provision of two options for shearing equipments to satisfy the different sheep keeper modalities, as follows:

1. Provision of **mobile shear unit;** it shall consist of two electrical shear equipment and a electricity generator of adequate capacity to run the electrical shear; both are mounted

on a small trolley with one-axe wheels, which can be pulled by another vehicle such as a truck or pick up to serve the flocks in any remote area. This option will minimize transportation or moving large flocks

2. Provision of **small shear unit (hand clippers)**; this shearing unit is mobile and handy of a capacity of 400-500 watt. It has electrical expandable wire rope and could be tab electricity in any residential or remote area, very suitable for smallholdings;

Using a conservative assumption of productivity for the trained local shearer to shearing 100 heads per day, needed shearing units are estimated (140 clippers and 30 mobile units) to shear 500,000 sheep heads timely in one season at capital investment cost of **226,000 JD**, table (2) below. The clippers targeting small herds prevailing around urban areas where electricity is available, while the mobile units are thought to serve medium to big size herds in remote areas.

**Table (2): estimated number of shearing units needed to shear 500,000 heads per season**

Target segment of herd size	Portion in heads	Assumed productivity Heads/day	Number of Shearing units needed	Shear unit price JD	Total Price JD
Small herds less than 100 heads (43%)	214,613	32	<b>140</b> clippers	500	70,000
Medium to Big size herds (57%)	285,387	200	<b>30</b> mobile	5,200	156,000
100%	<b>500,000</b>				<b>226,000</b>

### **Cost of Shearing Operation:**

The study assumed three costs options against providing shearing service through cooperatives:

1. Farmer pays one JD in cash to cooperative and recovers 0.14 JD per head, when selling the sheared wool, the actual cost is 0.86JD per head.
2. Farmer pays only 0.14 JD in kind delivering the sheared wool to the cooperative; the actual cost is 0.14JD per head.
3. Farmer pays 0.14 JD in kind delivering the sheared wool to the cooperative and 0.36JD in cash for shearer, the actual cost is half JD per head.

The first option is the prevailing option, made by Syrian shearers, which is unfair for the sheep keeper and must be improved.

The second option is unrealistic and needs number of requirements to be realized. Certain costs for shearing the sheep keeper still must bear. Important is to decrease the shearing cost as much as possible.

The conducted feasibility study showed that the third option is most reasonable and attractive for the three parties; the sheep keeper, the cooperative and the shearer, using the modality described below. It decreases the shearing cost to half JD per head.

However, this pricing modality can be revised during implementation in consultation with concerned stakeholder.

### **Profitability of Shearing Operations**

Against providing shearing service to all 500,000 heads, using all shear units the cooperative(s) in such an area would collect 1,000 tons shear wool (500,000heads X 2 kg) at a value of 70,000JD current prices. The estimated cross income of 70,000JD per season will be generated through two operations; direct operating of the 30 mobile shearing units and lending the 140 clippers.

Whereas, the mobile units should generate (285,387 heads X 0.14JD) = **39,954.180JD**, while the clippers should generate (214,613 heads X 0,14JD) = **30,045.820JD** per season. Hence, for the clippers to insure this income the lending price should be approximately 4JD per day (3.58JD), which is reasonable for the sheep keeper. The sheep keeper may pay it in cash (4JD per day) or in kind (60kg wool per day).

The provision of this service will incur certain running cost for cooperative (provider of shearing units). The running costs and revenue are estimated as follows;

*Transportation of providing shear equipments* **0.5JD per ton**

*Maintenance for shearing units* **0.192DJ per ton**

*Labor to direct collect the sheared wool* **10JD per ton**

*Transportation cost for collected wool per ton* **5JD**

*Extreme consideration for Depreciation of all shearing units (20%)* **45.2JD per ton per season**

*The total running costs resume as per collected ton per season* **60.892JD;**

**70.000 – 60.892 = 9.108JD revenue per ton per season**

**Total revenue per season = 9.108JD X 1000 ton = 9,108JD**

Such calculation is based upon the efficiency assumption of the first season, in the second and following seasons the efficiency of using the shear units is expected to increase, where consequently the net revenue per ton per season will improve.

However, that is a reasonable option assuming that the cooperative(s) when succeeded to provide the service for 500,000 heads using all shearing units. Such investment will save 250,000JD direct shearing costs per season for the sheep keepers in the target area, a direct financial impact for the local community. In addition, there will be a direct financial impact for the cooperative(s) at a total of **9,108JD** and **180,000JD** income for local shearer and other seasonal jobs for community members.

This scheme of operation and pricing will make the shearing service sustainable, in the way that it will guarantee the recovery of the capital investment of the shearing equipments (226,000JD) and generate feasible income for the cooperatives and local community.

### **Profitability of Collection and Sorting Operation in the Hubs**

In this interpretation, the estimations of the feasibility study are used and the four suggested hubs are considered as one integrated business.

The hubs will receive the sheared wool from cooperatives or and from sheep keeper at current prices of 70 JD per ton. Sorting operation will be practiced under the hubs creating jobs for surrounding community, especially women. After separation of color and odd parts, 50% percent of the wool will be gained as marketable/exportable white wool. This part will be pressed to bales of 200-300 kg and either exported direct by the cooperatives that running the hubs or through brokers. Other parts will be sold to cost prices or processed to other uses.

The estimated capital cost for construction and equipment of the four hubs is calculated at 546,800JD (440,000 construction + 106,800 equipment). When considering the depreciation (10%), yearly rate will be 54,680JD. The annual operating cost is being estimated at a lump sum of 147,360JD (see details in tables (3 &4).

**Table (3): Estimated size of the hubs according to Sheep number from the Badia and adjacent areas that can be served by suggested hubs**

Badia area	Estimated Sheep No	Expected Wool yield (ton)	Hub size and cost		
			Covered hub area msq	Open area	Cost JD
North East Badia	٥٢٠٤٥٩	1,000	1,000	2000-3000	80,000
North West Badia	٥١١٨٣٨	1,000	1,000	2000-3000	80,000
Middle Badia	٩١٤٨٣٧	1,800	1,800	4000-5000	144,000
South Badia	٨٧٩٢١٨	1,700	1,700	4000-5000	136,000
Total sheep heads in the Badia and adjacent areas	<b>2,826,352</b>	5,500	5,500		<b>440,000</b>

**Assuming** that the four hubs will collect and sort the whole part of the estimated produced wool in Jordan of 5,000 ton (*total yield of the Badia and adjacent areas*) at the current price of 70JD per ton, net revenue of 148,280 JD would be gained, when the cooperatives that run the hubs exercise the direct export activity. The breakeven unit point for this assumption is the handling of minimum **1,255** tons of sheared wool. Table (4) shows the breakeven point.

**Table (4): Estimation of revenue and breakeven point for running the hubs**

Cost item	Requirement	Cost /unit/JD	Total/JD
<b>Capital Costs</b>			
Construction	5,500 msq	80/msq	440,000
Equipment (1 set for each hub) X 4		26,700JD	106,800
		<b>total</b>	546,800
Depreciation per year (10%)			54,680
<b>Running costs</b>			
Annual running cost	X4	30,240 JD	120,960
Wool purchasing price JOD/ton	5,000 ton	70 JD	350,000
<b>Total processing costs per year</b>			<b>525,640</b>
Wool selling price (First grade)	2,500 ton	280 JD	700,000
Total return (700,000 – 525,640JD)			174,360
<b>NET Revenue per ton (174,360/5,000)</b>			<b>34.872</b>
Breakeven point unit <b>1,255 ton</b>			

This assumption is hard to reach, since the cooperatives will not be able to capture the whole amount of the wool produced, due to open market mechanisms and competition with the other collector of the private sector. Consequently, the estimated hub sizes should be revised, during implementation, relating to the portions expected to be captured by the cooperatives for truth grounding the hub business.

The wool exporter in Jordan has similar cost items; when they exported four thousand tons in 2017 means that they gained minimum revenue of 237,248 (8,000 ton X 29.656 JD estimated revenue). However, the conducted feasibility study and the practices of the exporters indicate that collection and sorting operation are feasible and profitable. The breakeven point shows that the hub business must collect, sort and export at least **1,255** tons in one season to cover the running cost and start gaining profit.

**The challenge** is how can part of these revenues goes back to the initial producer (**sheep keeper**) and how can the cooperatives capture part of the wool market through hubs, when competition emerges between private exporter and the cooperatives of the hub business. This can be realized through the following measures that shall be implemented by the project:

1. *Establishing one reference and coordination body, such as a wool board or a central association for wool trade or a commodity union. The reference and coordination body should make a seasonal price revision for the sheared wool to minimize price speculation and to protect farmer in recommending fair prices.*
2. *Conducting solid training for cooperatives in terms of collection, sorting and marketing.*
3. *The shearing service must cover 2 million sheep heads in the Badia and from adjacent areas to guarantee the capturing considerable part of the sheared wool*
4. *The hub business must practice the direct export to gaining the whole margin of export profit.*

### **Profitability of Scouring (washing and drying) Operation.**

The conducted feasibility study made for the purpose of this project indicates that scouring operation is far not feasible for the domestic wool amount. The smallest scouring line of 0.5 ton per hour would have a breakeven unit point of 8,199 ton sorted white wool equivalent to 16,398 raw sheared wool, table (5) below, while the local wool resources will not exceed 6,000 tons. Such a scouring line must depend on other sources or greater domestic production volume.

**Table (5): estimation of revenue and break even for running the scouring line**

Cost item	Requirement	Cost /unit/JD	Total/JD
<b>Capital Costs</b>			
Construction	2,400 msq	120/msq	288,000
Equipment (forklift, press, weigh, electric connection etc)1 set		27,700	27,700
Scouring line	1 set	154,000JD	154,000
<b>total</b>			<b>469,700</b>
Depreciation per year (10%)			<b>46,970</b>
<b>Running costs</b>			
Annual running cost		Per ton 85.5JD	235,125
Wool purchasing price JOD/ton (sorted white wool)	2,750 ton	280 JD	770,000
Total processing costs per year			<b>1,052,095</b>
Scoured Wool selling price (80%)	2,200ton	353JD	776,600
<b>Revenue</b>			<b>-275,495</b>
<b>NET Revenue / sorted ton -275,495JD /2,750 ton)</b>			<b>-100.18</b>
Break even (sorted white wool) <b>8,199 ton</b>			

**The conducted feasibility study does not recommend the scouring process to be conducted in the country, taking in consideration, in addition, that the Jordanian Awasi Wool would lose its preference as raw commodity by different buyers and that washed wool is not much demanded outside, since each buyer would wash it again for his own purposes.**

## 2- Project Objectives, Outputs and Activities

The project is designed to achieve the main goal of **“Promoting Sustainable Livelihoods in the Jordanian Badia through enhancing production and quality of sheep wool”**.

This goal is in-line with the objectives of the integrated community action plan (CAP) developed by the BRP. The scope of the project is expected to contribute to the two major components of CAP; the physical intervention and the socio- economic component, in particular, promoting income of the rangeland community, through supporting certain income generation activities, aiming at improving productivity of livestock (direct and indirect products).

The project goal is expected to be fulfilled through the following specific objectives:

1. Enhance the livelihoods of livestock owners in the Jordan Badia to alleviate the increasing strains on the natural pastoral lands.
  2. Promote the use of modern techniques and machines in the shearing operations across the Jordan Badia
  3. Improve the quality of raw wool.
  4. Develop the capacity of rangeland local cooperatives to provide the shearing service to their beneficiaries of livestock owners.
  5. Reduce the cost of raw wool collection and transportation.
  6. Organize the wool sector trade markets.
  7. Contribute to mitigate the environmental impacts that may result from throwing the sheared wool in open spaces.
  8. Introduce and provide technical training to farmers/sheep keepers on the modern shearing techniques, prevention of fleece contamination, wrapping of fleece and packing...etc.
  9. Enhancing the local uses of local wool.
- The project intends to handle ambiguities and constrains of the wool sector in Jordan as a holistic approach. It will deal with all steps throughout the wool sector, with more attention to initial producer, the sheep keeper community, who is the most vulnerable actor in this business.
  - The project will try to establish a functioning shearing service through providing proper techniques and adequate training and awareness for farmers to produce good quality shear wool. It will mobilize the rangeland cooperatives to manage the shearing service, the collection and sorting of the shear wool and it will enhance local trade, processing and export and trade for the benefit of all partners. To do so, the project will provide the needed infrastructure and machinery. The project covers the major components of the wool sector value chain; a) production of initial good quality shear wool, b) organizing the local collection, c) the processing operations, d) improve its marketability and e) enhancing local uses of the wool.

- The project adopts resilience-based approach to respond to effects of the inappropriateness and constraints of the current wool production and collection systems. Such approach would ensure that these effects would not result in avoiding long-term impact on the livelihood, thus contributing to the sustainability of livelihoods
- The project recognizes the importance of an enabling environment for implementing these sets of actions as well as enhancing capacity for better management of the “wool sector” in Jordan through better technical knowledge and understanding of the values that wool sector may bring to the local development in the Badia region, and enforcement of relevant legal instruments.
- The project will draft a comprehensive plan, which will offer viable solutions for the wool sector. Such plan should be part of a wider strategy aimed at improvement of sheep business and resolve problems of wool market.
- The project will target the entire Badia region and close adjacent areas; project activities should go -whenever possible and fund available - beyond this and in coordination with the concerned partners. The project should prioritize the Rangelands Local Cooperatives (RLCs) that were established by the Badia Restoration Program and the Jordan Cooperative Corporation to facilitate conveying support to local community of herders and enhancing the sustainability of the rangeland management<sup>1</sup>.
- The project will be implemented by UNDP in full coordination with BRP. The Ministry of Agriculture and through the Jordan Cooperative Corporation and Department of Livestock Services will also play an important role in executing specific “on ground activities” given the mandate and the capacities they have. Given the vast areas of the Badia region, coordination and collaboration with local authorities (e.g. Mayors/governors) will be established and maintained during the different phases of implementation.
- The project will establish partnerships with relevant national and local NGOs, CSOs, university and research institutions particularly those located within/close to the project localities.
- An advisory committee will be established bringing all partners, where key partners are represented. A project manager shall be appointed to assume the responsibility of the project’s implementation process and to deliver –in coordination with all partners- the activities proposed in the project and to specifically to ensure:
  - the overall coordination and effective/timely implementation of project’s activities;
  - an effective and steady interaction among all the project’s and stakeholders partners during all its implementation activities
  - sound monitoring of project’s implementation progresses with reference to both financial and operational level;
  - a continuous evaluation of its performance in order to prevent and mitigate any strategic and operational risk;
- The implementation of the project relies considerably on the active involvement and participation of all stakeholders particularly the livestock owners and herders and local CBOs at both levels; project localities and national.

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<sup>1</sup> The list of RLCs to be discussed and finalized during the inception phase by BRP, JCC and UNDP



- The implementation of the project activities will recognize and operate in alignment with the latest development at policy level and ensure synergies with such development e.g. Jordan Vision 2025.
- Furthermore, it is of utmost importance that project implementation allows for a sufficient level of coordination and synergy with other ongoing relevant projects and interventions.
- The project will ensure that a crosscutting gender focus is incorporated into the different actions of the project. A road map of gender mainstreaming across the outputs of the project shall be explored at an early stage of the implementation

### **The Strategy of Implementation**

The strategy to achieve the project objective consists of the following key outputs with a set of a wide range of activities to be implemented in coordination with different stakeholders;

1. The quality of shear wool is improved in accordance with market standards
  - Provide adequate technical training and awareness to livestock owners on health, cleanliness and feeding practices that improve wool quality.
  - Develop a practical set of “practioner guidelines”
2. Best techniques, practices and shearing machines are introduced, provided and widely used across the Jordan Badia regions.
  - Investigate and introduce the best practices from other regions and countries;
  - Provide proper shearing equipments,
  - Provide on-job training for shearers on how to use the new shearing equipments effectively
3. Capacity of rangeland local cooperatives to provide the shearing service to individual sheep keeper enhanced;
  - Select cooperatives that are willing to run shearing service
  - Train cooperatives how to manage and run shearing services
4. Raw wool collection organized and inland transportation cost minimized
  - Establish shear wool collection Hubs;
  - Identify cooperatives that are willing to run the collect shear wool hubs;
  - Develop collection scheme including sample of agreements and procedures to organize the relationship between cooperatives and Collection hubs;
5. Wool sector trade markets are organized for the benefit of all partners
  - Define effective institutional set ups to organize wool trade markets
  - develop and operationalize a pilot scheme on the variables that drive the trade market
  - Conduct assessment for justified and fair value chain pricing within the whole wool sector

6. Environmental impacts of wool elimination and disposal are minimized
  - Develop an appropriate instrument (legal/operational) to document proper disposal of the sheared wool.
  - Raising awareness among the herders on environmental and health impacts of the disposal of wool into the open space.
7. Uses of local wool enhanced.
  - Establish a pilot unit for wool scouring, drying and processing to finished yarn
  - Promote the use of low quality wool (colour wool, which makes 30% of the crud wool) to produce pads of different thickness that can be used in different insulation purposes since it is not flammable, and could be even introduced again in the household uses.
  - Train local community to run the pilot unit and to initiate hand works and other innovative works.

The project will be implemented in the three Badia areas (North, Middle and South) with focusing on sites of importance in terms of livestock populations.

The above listed outputs and objectives shall be achieved through the implementation of the following main phases/components:

### **3. Enhancing raw wool quality at farm level**

Clean and good quality fleece of the sheep is expected to minimize losses of raw sheared wool and brings higher reward for the sheep keeper. There are three major factors responsible for quality of raw wool at farm level; clean and hygiene fleece, cleanness of the stable and the balanced feed portion. Balanced nutrition contributes improving fibre length and rawness.

However, it is a matter of making sheep keeper aware about the factors that are affecting the raw wool quality and how to improve husbandry of his flocks. The project therefore will conduct intensive training, awareness and extension sessions regarding clean and hygiene husbandry, veterinary measures and balanced animal feeding. The project will produce the needed brochures and extension material and manuals to keep farmers informed about raw wool quality. The project will follow up and supervise the practice of the farmer along the project implementation.

### **4. Establishment of Shearing Service**

#### ***4.1 Provision of Shear Techniques***

This service may be provided through two modalities to accommodate the different needs of sheep keepers and owners. the two modalities are as follows:

1. Provision of **mobile shear unit**; it will be consisting of **two** electrical shear equipment and electricity generator of adequate capacity to run the electrical shear; both are mounted on a small trolley with one-axe wheels, which can be pulled by another vehicle such as a truck or pick up to serve the flocks in any remote area. This option will minimize transportation or moving large flocks

2. Provision of **small shear unit (hand clippers)**; this shearing unit is mobile and handy of a capacity of 400-500 watt. It has electrical expandable wire rope and could be tab electricity in any residential or remote area, very suitable for smallholdings
3. A case study made in preparation for this project document reveals that approximately 500,000 sheep heads need 140 handy small units, and 30 double shear mobile units to be sheared timely in the season over two months. The number of shear units can be changed according to distribution of herds in each area.
4. The project will be committed to achieve the target of shearing the number of sheep heads in each phase of the project implementation.

#### ***4.2 Modalities for Running the Shearing Units***

- 1) All modalities and shearing units will be outsourced to the beneficiary Rangeland Cooperatives. Number of **units** provided to a cooperative will depend on sheep numbers to be serviced by the cooperative in its area.
- 2) The Rangeland Cooperative either provides direct service or lend the **unit** to the sheep owner, who operates the unit, shearing his own flocks.
- 3) The Cooperative gets the service rewarded in kind (sheared wool of the herd) and in-cash, upon negotiated price. The sheep owner will pay the difference if the shearing cost is higher than the value of the gathered sheared wool and visa verse. In this case, the cooperative, which provide shearing service, became ultimately a raw wool collector and the main portion of raw wool will be captured there. In fact, this service system may not be able to cover the needs of all sheep owners in the Badia or the whole country. However, a certain part may remain outside this service and still relies on traditional way of shearing and collection.
- 4) Rangeland Cooperatives shall be selected to run the shearing service exclusively, according to certain criteria; such as willingness, capacity, good management, and facilities available, number of animals to be served in the area... etc.
- 5) Number of cooperatives in each area/Badia and number of **shearing units** for each cooperative will be identified after conducting of an assessment survey.
- 6) Provision of equipment and running of the shearing operation will be accompanied with adequate training to improve capacity and skills of the cooperative and local shearer as well.

#### ***4.3 Modality for Pricing the Shearing Service;***

Based on the results of the conducted feasibility study made in preparation for this project document, following reasonable scheme is suggested; the trained local shearers either member of the cooperative that possess the shear equipment or free locals, shall be associate to the cooperative and part of the shearing service system. When a farmer ordered a shearing service, shearer uses the appropriate shearing unit and conducts the service; following cases are observed (see feasibility of wool operations);

1. The sheep keeper pays against the service all sheared wool (in kind) to the cooperative and 0,36JD/ per head in cash to the shearer.

2. From farmer's point of view he is paying half a JD instead of one JD per head to Syrians (0.14JD as wool + 0.36JD in cash = 0,5JD); he is saving half JD per head, which will be reasonable and attractive to sheep keeper.
3. Local shearer found job gaining money; a trained local shearer can shear 100 head per day and works 48 days per season = 100 heads X 48 days X 0,36JD = 1,728JD, even if the shearer escorted two assistants for this job they remain good paid. With improved experience, he will shear more heads per day and raised his income
4. The cooperative receives against each provided service operation(s) (shear equipment and associated shearer) every ton wool to a price of 70JD; the cooperative will have certain overheads as maintenance, depreciation, fuel for the shear equipment and transportation of the collected wool to the hubs, estimated at around 30 JD per ton, 40 JD will remain as gross profit, which can be used to expand the service, buying more shears, raise the price of the sheared wool or distributed as profit to members
5. This scheme is flexible, whereas, sheep keeper and cooperative, not by dealers, will determine the initial prices of the sheared wool.

## **5. Establishment of Collection Centres (Hubs) Facilities;**

### **5.1 Construction of Collection Hubs;**

Such kind of facility shall be installed in central accessible locations of the Badia to receive collected shear wool from cooperatives or individual farmers who is not served by the cooperatives. The size and equipment of the hub depends on the volume of wool expected to be collected.

The project suggests initially four collection hubs; each consists of a covered facility (hanger) and adequate open area. The size of the covered and uncovered area are estimated in table (3) below according to estimated sheep number that can be served in each Badia area. Each hub facility shall be provided with continuous water supply, electrical current, one forklift, one press for making compressed bales and one loading ramp.

### **5.2 Modalities for Running the Collection Hubs:**

For the initial stage, the project suggests allocating the property of the Hubs for the JCC; the hubs should be established on governmental land. According to appropriate selection criteria, capable rangeland cooperative(s) will be select to run the hubs according to a fair lease or rent system. In later stage, collection hubs should be over handed to successful cooperatives. In case no capable cooperative found, a private body will be by competition process will be qualified to run the hubs through lease or rent system.

The hubs will receive the sheared wool from cooperatives or and from sheep keeper at current prices of 70 JD per ton. Sorting operation will be practiced under the hubs creating jobs for surrounding community, especially women. After separation of color and odd parts, 50% percent of the wool will be gained as marketable/exportable white wool. This part will be pressed to bales of 200-300 kg, either exported direct by the cooperatives that running the hubs or through brokers. Other parts will be sold to cost prices or processed to other uses.

## **6. Enhancing domestic Use of the Sheared Wool;**

Scouring of the sheared wool on large scale revealed not feasible, yet there is certain domestic demand for washed wool, which should be satisfied. Therefore, certain amount must be cleaned (washed) after the sorting operation for both white and colored wool. Both can be used for different purposes again. The processing of colored wool could be promoted for insulation or house uses. This will create income-generating activities for local communities, and will enable utilizing considerable part of the local production especially the colored part and contribute to enhancing the profitability of the collection hubs.

To realize such intention, a small pilot washing unit should be established attached to one (a central) collection hub, using drum wash machine, drying and opening equipment. Additional processing, such as carding and spinning could be added later on upon demand. This unit should include production testing and marketing of wool pads for insulation purposes. This pilot unit should be run as part of the hub business.

## **7. Training and Awareness**

Introducing new shearing and wool collection services will demand concentrated capacity building and awareness efforts for the sheep keepers and related rangeland cooperative. The project intends to conduct intensive training activities regarding shearing and collection management. Training will include recruiting professional trainer to provide on-job training for shearer and the conduct of shearing competition among shearer and cooperatives. Training sessions will be repeated every season engaging more local beneficiaries.

One important part of the capacity building is training of the hub cooperatives how to operate such business effectively and how to export their sorted wool, including conducting excursions for restoration of the export ties to Turkey and opening export venues to other countries. Part of the training will be devoted to running the pilot washing and processing unit involving the community around the hubs.

## **8. Marketing and Export Strategy**

Marketing of a product has two well known pillars;

- A) Sustainable manufacturing of a product (commodity) at certain specs or ingredients with a registered trademark (branding) and suitable packaging; and
- B) Consistent promotion of the product with trademark approaching the target consumers and using the appropriate media and seeking the most retail, distribution and delivery channels

### **8.1 Sustainable Manufacturing at good Standards**

Awasi wool will be always produced as by-product in Jordan as long as sheep are raised. It has its value as raw material commodity for processing different assortments in domestic and outside market, thus it must be produced at certain standards of quality to obtain good resilient price when marketed / exported.

The project will trace supervise and insure the establishment of the following standards and steps for Awasi Wool to achieve good quality requirements for marketing/exporting;

1. Improving the initial quality of shear wool through proper feeding and applying cleanliness measures in animal husbandry,

2. Enhancing the capacity of rangeland cooperatives to provide the shearing service to individual sheep keeper,
3. Providing the necessary training to farmers/sheep keepers on shearing technique and prevention of fleece contamination
4. Insure good sorting at minimum impurities in the collection hubs through training and developing certain procedures.
5. Packing the sorted wool in bales of 200-300 Kgs
6. Soliciting a brand name suggested as Example (**Awasi Wool of Jordan**)
7. Rapping the Bales with labelling indicating the Trademark besides the other specs such as fibre length and diameter and year of production.... etc.
8. Instruct the customs not to allow export of any deliveries without this labelling.

## **8.2 Consistent Promotion of Commodity**

Awasi wool is a by-product and will be marketed as good raw commodity with a Trademark. It will be delivered generally in big lots, thus no specific retail strategy needed.

The project will trace, supervise and insure the establishment of the following procedures and steps for successful and sustainable marketing/export;

- 1) Establish coordinating export through establishing of a reference wool body such as *a wool board or a central association for wool trade or a commodity union*
- 2) Establish a web site for wool, managed by the reference wool body with a small database log to facilitate general contact between buyers and exporters.
- 3) Train cooperative(s) or who is running the collection hubs how to manage export operations
- 4) Organise and conduct excursions for potential local exporter (cooperatives or who runs the collection hubs, private and wool body) to restore export ties or/and explore new buyers (at least to two import countries)
- 5) Prepare appropriate advertising material and soliciting them in proper media and the website.

The project will be committed to market all collected and sorted wool along the implementation period.

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## **VI. MULTI-YEAR WORK PLAN**

Establishing of a sustainable shearing and collection system is an innovative intervention, which needs to be introduced gradually with intensive training and awareness. The implementation period will stretch over three actual shearing seasons (36 months) and it will include supervision and backstopping in terms of testing and revising arrangements among stakeholders of the wool sector with the following strategy;

- It is most reasonable to start establishing the shearing and collection system targeting 500,000 sheep heads in the first year in a Badia area

- In the second project year, shearing and collection service should be expanded targeting another number of 1,500,000 heads of sheep animals including the establishment of the small scouring facility for enhancing the local uses.
- In the third project year, the shearing and collection service and marketing will be consolidated to sustainable practices.
- Each phase will be evaluated and lessons learned will be used to improving next phase respectively.
- Needed infrastructure and equipments must be provided ahead of each phase

A detailed work plan and timetable for executing the suggested project strategy (phases and activities) to achieve project objectives, is shown in table (6) below.

**Table (6): Project Action Plan and Time Table**

Proposed Project Activities	First Year		Second Year				Third Year				Fourth Y	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Outcome: Quality and added value of sheep wool improved;</b>												
<b>Output1.</b> Initial quality of shear wool improved												
1.1. Provide adequate training and awareness to farmer on health, cleanliness and feeding practices that improve wool quality.	X	X	X	X	X	X	X	X	X	X	X	X
1.2. Develop a practical set of “practitioner guideline”			X									
<b>Output 2:</b> Machine shearing widely provided and adapted												
2.1. Provide proper shearing equipment; - Prepare specs and Purchase shearing equipment	X	X			X	X						
2.2. Provide on-job training to using shearing equipment effectively				X	X			X	X			X
2.3. Evaluate Phases						X				X		
Proposed Project Activities	First Year		Second Year				Third Year				Fourth Y	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
<b>Output 3:</b> Capacity of rangeland cooperatives to provide the shearing service to individual sheep keeper enhanced												
3.1. Select cooperatives that are willing to run shearing service collect shear wool		X	X	X				X				X
3.2. Train cooperatives how to manage and run shearing service		X	X	X	X			X	X			X
3.3. Suggest and test scheme and agreement forms for providing and running shearing service		X	X	X	X			X	X			X
3.4. Recruit shearing trainer (Australian) & Locals			X	X				X				X

3.5. Provide training for local shearer				X				X				X
3.6. Conduct demonstration and shear competitions				X				X				X
<b>Output 4: Raw wool collection organized and inland transportation cost minimized</b>												
4.1. Establish Wool collection hubs												
- Assess hub size and proper location for each Badia Area(N, M, S) according to function/use purpose and expected volume of potential wool in the Badia area	X	X		X	X							
- Design each hub	X	X		X	X							
- Construct hubs through tendering	X	X		X	X							
- Identify equipment needed for each hub	X	X										
- Prepare specs and purchase equipment for each hub	X	X		X	X							
4.2. Develop collection schemes at fair prices between cooperative & collection hubs				X	X			X				X
4.3. Identify who will run the hub in each Badia area through lease/rent agreement				X	X	X		X	X			X
4.4. Train cooperatives how to sort wool				X	X	X		X	X			X
<b>Proposed Project Activities</b>	<b>First Year</b>		<b>Second Year</b>				<b>Third Year</b>				<b>Fourth Y</b>	
	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>
<b>Output 5: Wool sector trade organized for the benefit of all partner</b>												
5.1. Establish central association or wool board or commodity union		X	X	X	X							
- Conduct awareness campaign		X	X	X	X							
- Conduct workshops and seminars for relevant persons and entities		X	X	X	X							
5.2. Conduct assessment for justified and fair value chain pricing within the whole wool sector				X	X	X						
5.3. Enhance Marketing and Export of raw wool												
- Train cooperative how to manage marketing wool			X	X	X	X	X	X	X	X		
- Conduct excursions for potential exporter to establish market channels			X	X	X	X	X	X	X	X		
- Connect cooperative to foreign buyers			X	X	X	X	X	X	X	X	X	X
- Establish of a information			X	X	X	X	X	X	X	X	X	X



website for wool in Jordan managed by central association or wool board or commodity union and run it												
<b>Output 6:</b> Environmental problems associated with throwing/burning wool in the open fields is minimized												
6.1. Develop an appropriate instrument not to disposal of the sheared wool.	X	X										
6.2. Establish a coordination mechanism to engage the royal Administration for Environment Protection (RANGERS)		X	X	X	X	X	X	X	X	X	X	X
6.3. Raising awareness among the herders of environmental and health impact of the disposal of wool into the open space.		X	X	X	X	X	X	X	X	X	X	X
<b>7. Uses of local wool enhanced</b>												
7.1 Establish a pilot unit for wool scouring, drying and processing to finished yarn				X	X							
7.2 Promote the use of low quality wool (colour wool, which makes 30% of the crud wool) to produce pads of different thickness that can be used in different insulation purposes since it is not flammable, and could be even introduced again in the household uses.						X	X	X	X	X	X	X
7.3 Train local community to run the pilot unit and to initiate hand works and other innovative works.				X	X	X	X	X	X	X	X	X
<b>Reporting</b>	X	X	X	X	X	X	X	X	X	X	X	X

## VII. RESULTS AND PARTNERSHIPS

### ***Socio-economic and environmental Benefits***

- The project will promote innovations and good practices, in a rather neglected field of sheep wool industry and this has a clear and strong relevance to gender. Wool processing, sorting, grading, dyeing, knitting, will evolve again and are areas for greater participation for women. Stakeholder engagement meetings, in preparation for the project have had equitable

participation from women and men and issues highlighted by both women and men have, therefore, been considered in the development of this project.

- The capacity building efforts planned in terms of training to establishing shearing services and wool collection system will strengthen the social spirit for cooperative work
- The project seeks, in general, to enhancing the resilience of people, communities in their ecosystems through improving efficiency in the use of resources and improving rural livelihoods and social well-being. By the end of the project, the beneficiaries will have the capacity to continue to identify their needs and seek to identify ways for resolving them.
- The outputs of the project will have direct and tangible economic impact for the sheep keeper community members in saving half of the shearing cost and marketing their sheared wool. The communities around the collection and processing hubs will benefit from the created seasonal jobs. Local shearer and their helpers will be trained to professionals gaining considerable income during the shearing season.
- This project is a good opportunity also for the rangeland cooperatives to make substantial revenue through the contractual arrangements in shearing and collection of wool. Extra benefits could be attained from the sales and export of the collected wool by the cooperatives.
- The approach for organizing the wool sector will contribute to consolidation and sustainability for local wool trade and export.
- Shearing animals removing their fleece in time without harm will enable the farmer to treat animals against parasites and therefore will enhance the health, productivity and fertility of the animals.
- The project will contribute positively to environmental sustainability by protecting environment through the efficient removal of wool from the animals and their environment. It will contribute to maintaining the traditional practices of Bedouins keeping their sheep in the Badia, restoring degraded rangelands through nutrient recycling from the manure dropped while grazing contributing to the quality of environment on a long-term basis.

### ***Partnerships***

The project scope necessitates establishing collaboration and partnerships with a wide range of stakeholders. It is designed in manner that allows and give chances for such partnerships. At this stage, the project is anticipated to have close working relationship and partnership with Jordan cooperative corporation and several beneficiaries working under its umbrella. The JCC will have a distinguished contribution to the sustainability of project; beside its mandatory function and supervision for all cooperatives, the JCC has tasks for the wool project and wool business to fulfil;

- 1) Provision of four appropriate pieces of land, in the suggested four Badia areas, for the collection hubs to be constructed, which will be exclusively the property of the JCC
- 2) Enter in selection and lease process for an operator (cooperatives or other private entity) to run the hubs
- 3) Participate in putting specs for hubs construction and all other equipments needed for the project.

- 4) Participate and contribute in all training sessions to be conducted in the project implementation process

The ministry of Agriculture and through and different entities will be a key partner given of course their mandate over “livestock management” in the country. The partnership with BRP is already in place but it is envisioned that this proposed project will be further contributing to develop it and take into a new era of collaboration.

The scope of the proposed project entails business aspects; therefore, the engagement of private sector is certainly of an added value and would be one of the important elements for ensuring project sustainability beyond the project timeframe.

While projects and initiatives under implementation are known to the implementing partner and already identified for synergies, partnerships with new and emerging initiatives will also be pursued, and while the project’s framework and scope may not be reduced, it may be adjusted to accommodate for these synergies and new partnerships. The project management structure may be adjusted to accommodate for these, however at no additional cost to the resources allocated for project management.

### ***Stakeholder Engagement***

Several stakeholders -from the public and private sectors- are expected to benefit directly and indirectly from the project activities, including:

1. Sheep keepers (or pastoralists) specially those raising Awassi sheep in Jordan Badia. Training on modern sheep shearing practices, skirting/sorting/handling of shorn wool, and improving the efficiency of wool collection is expected to increase the amount, quality and returns of wool clip
2. Local sheep shearers through building their capacities on proper shearing of sheep which will increase the number of shorn sheep per day; thus, earning more money from shearing.
3. The Rangeland Local Cooperatives RLCs (The primary beneficiaries) through playing a key role in providing the modern shearing machines through lending or shared cost to sheep shearers
4. Traders of wool through receiving tonnage of quality wool, which facilitates wool export at reasonable prices.

The project is also expected to contribute to the work currently being done by Ministry of Environment/Badia Restoration Program particularly with respect to rangeland management, through strengthening the position and role of the rangeland cooperatives, which are expected to manage all the affairs of the BRP after 2019.

The engagement of Ministry of Agriculture through joint activities will ensure integration and synergies with their relevant interventions in Badia region particularly with respect to enhancing animal health, and obtaining reliable data on wool production in the country.

In preparation for this proposal, a field survey assessment and stakeholder analysis were conducted to identify key and relevant stakeholders who could have a role in project implementation.

The early consultations with the stakeholders’ community were followed by conducting a rapid assessment of the wool value chain in Jordan Badia to identify the bottlenecks and opportunities related to wool issues (sheep shearing, handling, collection, storage, processing and marketing).

The results of the assessment of wool value chain were shared with representatives of the RLCs, MoA, MoEnv/BRP, JCC and UNDP to know the responses of participants on how to develop and structure the wool value chain in the country and what the potential required interventions are.

### ***Knowledge***

The proposed project is envisioned to produce many knowledge products that could be of benefit to different stakeholders including decision makers and scientific/research community e.g. feasibility studies, socioeconomic surveys, and marketing strategies. Media products are also expected to be disseminated documenting lessons learned and helping in raising awareness. The project will develop a clear plan to create visibility for knowledge and lessons learned generated by the project so others can benefit.

## VIII. RESULTS FRAMEWORK

EXPECTED OUTPUTS	OUTPUT INDICATORS	DATA SOURCE	PLANNED ACTIVITIES	RESPONSIBLE PARTY	Input
<b>Output 1</b> Initial quality of shear wool improved	1.1. Grade of cleanliness of the wool	<i>JCC &amp; MoA BRP</i>	<ul style="list-style-type: none"> <li>- Conduct capacity needs assessment to identify the needs</li> <li>- Provide adequate training and awareness to farmer on health, cleanliness and feeding practices that improve wool quality.</li> <li>- Select appropriate location for establishing storage facilities across the Badia region.</li> <li>- Conduct special training on best storage measures and practices including safety measures.</li> </ul>	UNDP, BRP, JCC/MoA	Experts/researchers and technicians Total: USD TBD
	1.2. No. of sheep keepers switching from manual shearing (using blade shears) to mechanical shearing	<i>JCC &amp; project records</i>			
	1.3. No. of proper storage measures and facilities established.	<i>JCC, MoA &amp; project records</i>			
<b>Output 2</b> Machine shearing widely provided and extensively used.	2.1. No. of sheep keepers switching from manual shearing (using blade shears) to mechanical shearing	<i>JCC &amp; project records</i>	<ul style="list-style-type: none"> <li>- Provide proper shearing equipment</li> <li>- Provide on-job training to using shearing equipment effectively (including necessary maintenance).</li> </ul>	UNDP, JCC	Experts/researchers & technicians Total: USD TBD
	2.2. Amount/quantities of wool collected per shear per time unit (season)/ increase in shear yield				
<b>Output 3</b> Capacity of rangeland cooperatives to provide the shearing service to individual sheep keeper enhanced;	3.1. No. of capacity assessments conducted for the relevant cooperatives and sheep keepers	<i>BRP, JCC &amp; project records</i>	<ul style="list-style-type: none"> <li>- Select cooperatives that are willing to run shearing service</li> <li>- Train cooperatives how to manage and run shearing service</li> <li>- Adopt -in coordination with JCC and other concerned entities- a proper approach for distributing the equipment.</li> </ul>	UNDP, JCC/MoA	Experts/Instructors Total: USD TBD
	3.2. No. of capacity development plans/activities carried out for the target groups.				
	3.3. No of sheep keepers benefiting from training programs	<i>BRP, JCC &amp; project records</i>			
	3.4. No of sheep keepers using the shearing machines appropriately				

<b>Output 4</b> Raw wool collection organized & local transportation cost minimized	4.1. Quantities of wool collected at storage facilities	<i>BRP, JCC &amp; project records</i>	<ul style="list-style-type: none"> <li>- Establish shear wool collection Hubs;</li> <li>- Identify cooperatives that are willing to run the collect shear wool hubs;</li> <li>- Develop collection scheme, agreement and fair prices between cooperative and Collection hubs;</li> </ul>	UNDP, BRP, JCC/MoA & Private Sector	Experts/ technicians Total: USD TBD
	4.2. <i>Cost Savings Percentage</i> of shearing services				
<b>Output 5</b> Wool sector trade organized for the benefit of all partners	5.1. New business model for wool collection is in place.	<i>JCC</i>	<ul style="list-style-type: none"> <li>- Suggest and test scheme and agreement form for providing and running shearing service and pricing</li> <li>- Establish central association or wool board or wool commodity union;</li> <li>- Conduct assessment for justified and fair value chain pricing within the whole wool sector</li> </ul>	UNDP, BRP, JCC (CBOs)/MoA & Private Sector	Experts/admin & finance team Total: USD TBD
	5.2. No. of sheep keepers engaged in the project activities.	<i>BRP, JCC &amp; project records</i>			
	5.3. A well-established framework for wool sector is in place and institutionalized.	<i>BRP, JCC</i>			
<b>Output 6</b> Environmental problems associated with throwing/ burning wool in the open fields is minimized	6.1. Amount of wool being disposed in open space	<i>MoEnv, RANGERS, BRP &amp; JCC</i>	<ul style="list-style-type: none"> <li>- Develop an appropriate instrument (legal/operational) to document proper disposal of the sheared wool.</li> <li>- Establish a coordination mechanism to engage the royal Administration for Environment Protection (RANGERS)</li> </ul>	UNDP, MoEnv, RANGERS & JCC/MoA	Experts/support team Total: USD TBD
	6.2. No. of awareness activities conducted and No. of livestock keepers engaged in such activities.	<i>BRP, JCC &amp; project records</i>			

<p><b>Output 7</b> Uses of local wool enhanced</p>	<p>7.1 No. of Jobs created</p>	<p><i>BRP, JCC &amp; Project Records</i></p>	<ul style="list-style-type: none"> <li>- Establish a pilot unit for wool scouring, drying and processing to finished yarn</li> <li>- Promote the use of low quality wool (colour wool, which makes 30% of the crud wool) to produce pads of different thickness that can be used in different insulation purposes since it is not flammable, and could be even introduced again in the household uses.</li> <li>- Train local community to run the pilot unit and to initiate hand works and other innovative works.</li> </ul>	<p>UNDP, BRP, JCC and RLCs</p>	<p><i>Experts/ support team</i> <i>Total: USD TBD</i></p>
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## IX. PROJECT BUDGET

The project budget is estimated at a total of **(2,512,180US\$)**, whereas **303,200 US\$** as general management and backstopping costs for the project implementation. This budget intends to cover the activities and needed facilities in most efficient manner. Greatest part of the budget **(2,021,352US\$)** will be devoted to providing suitable technologies and establishment of sustainable collection and handling facilities for sheep wool. **68,000 US\$** will be used for capacity building of the sheep keeper community and relevant rangeland cooperatives. The estimated budget, according to main activities and facilities is shown in table (7) below:

**Table (7): Estimated Project Budget according to main Activities and Facilities**

Project Main Activities	Costs Contribution US\$	
	BRP	UNDP
<b>Component 1: production of good quality raw shear wool</b>	<b>68,000</b>	<b>0</b>
1- Training & awareness for herders and community on proper hygiene, veterinary measures and balanced feeding for animals (trainer, training venues)	5,000	
2- Training and awareness on shearing practice for cooperative members and other community members and conduct shear competitions during training	25,000	
3- Recruiting Shearing Professionals for training the local trainers		
4- Training and awareness on collection and handling/sorting of the raw shorn wool in hub facilities	5,000	
5- Training and awareness on export and restoring of export channels and enhancing contact to foreign buyers	30,000	
6- Conduct excursion for potential local exporters to potential import countries		
7- Establishment of a information website for wool in Jordan managed by central association or wool board or commodity union	3,000	
<b>Component 2: shearing and handling of shorn wool for higher value</b>	<b>2,021,352</b>	<b>0</b>
8- Shearing equipment (JOD 226,000x4 set) to serve 2 million heads	1,276,836	
9- Construction of collection facilities ( calculated and estimated as per local market at JOD 350,000) for the four hubs;	503,669	
10- Equipment for each hub JOD 26,700 x 4	150,847	
11- Infrastructure for the 4 hubs (water, electricity, roads, fencing, sewage)	40,000	
12- Equipment for pilot unit to enhancing local wool uses	50,000	
<b>Component 3: Implementation and Management</b>	<b>303,200</b>	
13- Project backstopping (UNDP) <ul style="list-style-type: none"> <li>• Communication officer (part time/20%) US\$ 15,000</li> <li>• Operations/procurement officer (part time/20%) US\$ 10,000</li> <li>• Finance/admin support assistant (part time/30%) US\$ 15,000</li> <li>• Technical backstopping (part time/30%) US\$ 30,000</li> </ul>		<b>70,000</b>
14- Project staff & support staff <ul style="list-style-type: none"> <li>- Project coordinator (36 months X US\$ 3,000 = 108,000)</li> <li>- Project field officer (36 months X US\$ 2,200 = 79,200)</li> <li>- Driver (36 months X US\$ 1000 = 36,000)</li> </ul>	108,000 79,200 36,000	
15- Transportation and logistics	50,000	



16- Verification studies and surveys: <ul style="list-style-type: none"> <li>- Assessment to select capable cooperatives to run mobile shearing services and collection hubs</li> <li>- Assessment to select suitable location for Hubs and its construction and establishment</li> <li>- Identification of proper technologies and specifications for needed machinery and equipment</li> <li>- Assessment of justified and fair value chain pricing within the whole process</li> </ul>	30,000	
<b>Total US\$</b>	<b>2,392,552</b>	
<b>GMS<sup>2</sup> US\$ (UNDP)5%</b>	<b>119,628</b>	
<b>Grand Total of the project costs US\$</b>	<b>2,512,180</b>	

## X. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans in table 8 below: *[Note: monitoring and evaluation plans should be adapted to project context, as needed]*

**Table (8): Monitoring Plan**

Monitoring Activity	Purpose	Frequency	Expected Action
<b>Track results progress</b>	Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs	Quarterly, or in the frequency required for each indicator.	Slower than expected progress will be addressed by project management
<b>Monitor and Manage Risk</b>	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken
<b>Learn</b>	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project	At least annually	Relevant lessons are captured by the project team and used to inform management decisions
<b>Annual Project Quality Assurance</b>	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance

<sup>2</sup> GMS: General Management Services. The GMS fee encompasses costs incurred in providing general management and oversight functions of the organization as a whole. These costs are incurred in support of its activities, projects & programs, and services provided, that cannot be traced unequivocally to specific activities, project or programs. Furthermore, these costs are incurred throughout and at all levels of the organization

<b>Review and Make Course Corrections</b>	Internal review of data and evidence from all monitoring actions to inform decision-making	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections
<b>Project Report</b>	A progress report will be presented to the Project Board and key stakeholders, consisting progress data showing the results achieved against pre-defined targets	Annually, and final project report	M&E used data to jug progress for decision maker and donor

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## **XI. GOVERNANCE AND MANAGEMENT ARRANGEMENTS**

UNDP will take the entire responsibility of the implementation in accordance of the UNDP's modality of "Direct Execution", including following up all issues related to planning, implementation and management of project activities including reporting, accounting, as well as the achievement of project objectives. It is also responsible in maintain a good level of coordination with all partners and key stakeholders. This will be done through the establishment of a Project Management Unit (PMU) for the management and oversight of project implementation. A project team including a manager, technical officer and an assistant will be appointed and will be in charge of the day-to day activities.

In recognition of the role of Ministry of Agriculture as an entity with a mandate over the supervision/management of livestock sector and rangeland resources in the country, a full coordination with the concerned entities/personnel at the ministry shall be put in place.

Given the diversity of activities proposed in the project, UNDP and in coordination with BRP will establish an ad-hoc partnership agreement with a research institution to be responsible for the implementation of specific activities aiming at maximizing the benefits of wool sector.

UNDP as an implementing partner will also assign a local NGO with the necessary capacity to implement the "awareness, extension and education" activities.

MoEnv and the other concerned ministries have a considerable role as well in the implementation -although not directly on the ground activities- but rather through providing technical guidance and support whenever needed.

The project advisory committee will be specifically established to provide strategic, long-term guidance for the programme and provide consultations whenever needed. The committee will make recommendations on issues such as the prioritization of project activities, shifts in strategic direction when required and help to secure project partnerships with other relevant institutions. It will meet twice a year and include representatives from UNDP, BRP and JCC. The membership of other concerned agencies will be considered as well in light of the diversity of the project outputs. Potential members are, academic/ research institutions, NGOs/CBOs.

The project will be in need of the services of one international consultant and around 4 national consultants to assist in conducting the surveys and delivering specialised training. Due to the existence of a number of technical components/activities in the project, the partnership with the research institutions is highly needed given that the assets of having academic and research institutions located across the country and almost in every governorate.

The project may be in need of the technical support of FAO and other specialized agencies , particularly best practices and knowledge/experience sharing, therefore, it is envisaged that a strong liaison to be established between the project management team with the concerned people at these agencies.

Given the nature and scope of the project, the involvement of key stakeholders as principal partner should be ensured at an early stage of /and throughout project. The figure below summarizes the proposed organization structure for the project.

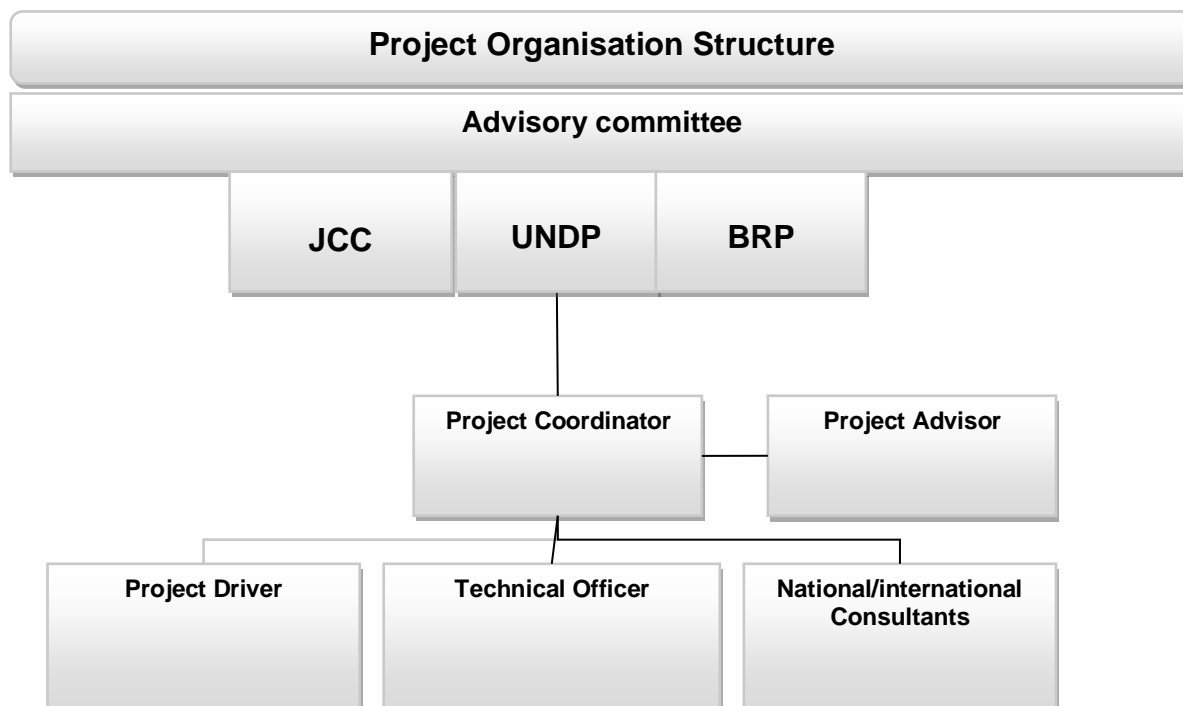


Fig. 1: the proposed organization structure

## XII. RISKS ASSUMPTIONS AND MITIGATIONS

There are many risks that might be associated with this project. However, they were assessed as “low” during the proposal preparation phase. The risks and possible mitigation measures are summarized in table below (9):

**Table (9): Expected Risks, Rating and Mitigation Approach**

Risk	Rating	Mitigation Approach
• Lack of interest by the concerned institutions	Low	The project management team to make the necessary efforts and coordination (regularly) to explain the objectives and outputs of the project
• Lack of interest by the targeted communities/ groups	low	The project management team to develop a clear strategy at an early stage for the engagement of host communities in the different phases of the project.
• Negative perception of segments of the public regarding project due to limited information of the programme activities and un-managed expectation	low	Stronger focus on communicating results and working with target group and communities Joint analysis and mitigation of “public perception” risks is strengthened
• Lack of national capacities to perform some technical tasks	low	Soliciting international expertise, but with the involvement of national experts to ensure knowledge sharing.

<ul style="list-style-type: none"> <li>• Overlap and conflict in managing the project results.</li> </ul>	low	Set and agree at an early stage of the project an appropriate mechanism to manage the project after the project lifetime.
<ul style="list-style-type: none"> <li>• Intra governmental cooperation</li> </ul>	low	Intragovernmental agency liaison by the Project Management Unit Analysis of coordinated activities by the Project advisory committee Overview of coordinated activities by the Project advisory committee
<ul style="list-style-type: none"> <li>• Market risks (Prices and demand) Political Situation that may affect or interrupt exporting the collected wool to certain countries in the region.</li> </ul>	low	The project to develop -in full coordination with JCC and BRP- an appropriate marketing strategy with proper alternatives
<ul style="list-style-type: none"> <li>• Decisions on projects types and locations do not take into consideration environmental/health issues</li> </ul>	low	Include environmental selection criteria Promote environmental awareness and advocacy and involve the concerned entities at MoEnv Establish standard operating procedures
<ul style="list-style-type: none"> <li>• Lack of clarity on division of responsibilities as well as different agenda amongst stakeholders</li> </ul>	low	The project will depend on diversified implementation modalities that include engaging and contracting of local authorities, community based organizations, NGOs, and private sector.
<ul style="list-style-type: none"> <li>• Lack of commitment and interest of cooperatives</li> </ul>	low	The programme will follow a participatory consultative approach to assist national counterparts in reaching a consensus and agreement on key issues of concern. The project will be working with the CBOs/cooperatives through their umbrella; the Jordan Cooperative Corporation.
<ul style="list-style-type: none"> <li>• Decisions on projects activities do not take into consideration gender (and other vulnerable groups issues)</li> </ul>	low	Adopt a road map of gender and youth mainstreaming across the outputs of the project at an early stage of the implementation
<ul style="list-style-type: none"> <li>• Limitation in data and information availability</li> </ul>	low	The project management team to invest good efforts at an early stage to collect the necessary data as well as identifying the gaps, so relevant activities and surveys are performed to get the required data.