مؤسسة نهر الأردن
Jordan River Foundation

UNESCO

Local Communities and Sustainable Tourism in Petra and Wadi Rum

Community-Based Assessment

Jordan River Foundation (JRF)

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EXECUTIVE SUMMARY

This community-based assessment was under the UNESCO project Local Communities and Sustainable Tourism in Petra and Wadi Rum, funded by the Government of Italy (AICS) and implemented by Jordan River Foundation (JRF), to generate evidence for the design of UNESCO's planned trainings and workshops for women producers and women-led associations in Petra and Wadi Rum. The assessment focused on the extent to which local products and related tourism-linked activities can be strengthened through better product quality, market readiness, entrepreneurship capacity, marketing, and safeguarding awareness within both World Heritage Sites (WHS). Additionally, it examined the broader ecosystem in which women operate, including seasonality, access to tourists, intermediary structures, licensing conditions, and the relationship between local livelihoods and heritage conservation.

The assessment adopted a mixed-methods, participatory, and gender-responsive methodology, where it combined a desk review of 27 secondary documents, 27 Key Informant Interviews (KIIs) conducted between 9 and 17 February 2026 with authorities, women-led associations, women producers, sellers, camps, hotels, tour guides, and local community representatives, and a mixed-method survey with 33 women producers in Petra and Wadi Rum conducted between 9 February and 1 March 2026.

The assessment found that a total of 64% of respondents operated as home-based businesses, 39% identified the activity as their main source of income, and 52% as a secondary source, while the remaining 9% are not income-generating yet. Moreover, product types differed clearly by location: Petra respondents were more concentrated in handicrafts, textiles, accessories, and heritage-inspired souvenirs, while Wadi Rum respondents were more concentrated in food products, followed by handicrafts/souvenirs, textiles/embroidery, and natural products.

It was also found that women's product activities in both locations are embedded in tourism; however, it is influenced by different livelihood patterns and market conditions. In Petra, the findings showed a more diversified but still highly seasonal ecosystem; tourism remains the backbone of local livelihoods, with PDTRA estimated that around 90% of livelihoods are tourism-based, and the survey confirmed that women's product activities are often additional source to their household income. Also, seasonality remained a defining constraint, where 38% reported that production are concentrated mainly in peak tourism seasons, 14% described them as irregular, and the remained 48% are not affected. When to comes to sales and income, only 52% said income increases a lot in high seasons.

Market barriers are also significant and it impacts the production activities, this includes low visitor flow and seasonality (67%), followed by high rent for selling space (19%) and permit or regulatory constraints inside the site (5%), among others. Nonetheless, Petra showed relatively stronger foundations for growth than Wadi Rum, where formalization is much higher, with 67% reporting they are fully registered or licensed, compared with 8% in Wadi Rum. In addition, it performed better on brand and market-readiness indicators; 43% reported having a clear brand identity, 43% reported having labels, and 38% reported having market-ready branded packaging. However, these foundations remained incomplete, as 48% still reported having no brand identity and 52% no labels. The demand side is promising, with women producers reporting that visitors value quality (86%) and authentic heritage linkages (86%) more than price (38%), which suggested that Petra's comparative advantage is in authenticity and quality rather than price competition alone.

In Wadi Rum, the findings pointed to a more informal and livelihood-critical production ecosystem, where the top barriers to selling more were limited access to selling points (92%), seasonality (67%), lack of marketing (33%), language barriers (33%), high rent (25%), and competition (17%). In addition, selling to hotels, shops, and camps is constrained mainly by transport and delivery challenges (58%), lack of contacts (50%), insufficient quantity (33%), and registration requirements, payment terms, and packaging/labels (17% each). At the same time, Wadi Rum presented clear opportunities because camps emerged as the highest-potential route to market; 92% said selling through camps would help increase sales, followed by exhibitions (83%), linkages with tour operators and guides (75%), and hotels (50%). This opportunity is reinforced by how buyers are perceived to choose products, with quality selected by 100% and both price and authentic heritage link by 58%. However, Wadi Rum's readiness to convert this demand remains weak; branding and labeling gaps are severe, for example, 83% reported having no clear brand identity, 83% reported having no labels.

Across both locations, the assessment confirms that the core needs are not limited to production skills alone, the main gaps concentrated in the full chain that links production to sales: seasonal planning, product positioning, branding and labeling, packaging design, storytelling, customer communication, pricing and recordkeeping, digital marketing, and structured linkage-building with tourism buyers. Additionally, it found that non-training constraints remain significant, including restricted or uneven access to selling spaces, high material costs, weak logistics and payment systems, limited business support for registration and documentation, and the need for more predictable market channels linked to visitor flows. Also, safeguarding awareness and sustainable practices remain uneven, especially where authenticity, heritage interpretation, eco-friendly packaging, and responsible visitor interaction need to be turned into practical business practices.

Based on these findings, the assessment recommends trainings centered around five interrelated areas: (i) Marketing and E-Commerce, with strong emphasis on digital marketing, product photography, content creation, WhatsApp Business, social media selling, and conversion-focused communication, is needed in both locations, but especially in Wadi Rum where direct tourist capture remains weak; (ii) Identity Management and Development should address product signature, branding, bilingual labeling, origin messaging, and heritage storytelling, especially given the weak brand assets in both locations and the need to distinguish locally made products from imported items; (iii) Product Design is required to improve packaging, portability, presentation, eco-friendly options, and adaptation to tourist preferences; (iv) Entrepreneurship and Business Management should cover seasonal planning, business models, costing and pricing, recordkeeping, cashflow planning, compliance basics, and simple supply agreements. In Wadi Rum, production planning and scaling are especially important; in Petra, authenticity, sales communication, and stronger market-facing presentation are particularly important.

Furthermore, the assessment highlights several non-training recommendations, these include: (i) establishing off-season sales channels; (ii) creating or expanding organized and transparent selling spaces; (iii) facilitating structured matchmaking with camps, hotels, shops, and tourism operators; (iv) supporting pooled logistics, delivery, and packaging solutions; (v) introducing simple supplier agreement templates and procurement support; (vi) providing practical assistance for licensing and documentation; and (vii) enabling shared tools such as printing support, packaging options, digital catalogues, and content corners. These measures are necessary because training alone will not overcome the structural barriers that currently prevent women producers from turning product quality and heritage value into more stable and higher-income market participation.

Jordan River Foundation

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LIST OF ABBREVIATIONS

Abbreviation	Full-Term
AICS	Italian Agency for Development Cooperation
ASEZA	Aqaba Special Economic Zone Authority
JRF	Jordan River Foundation
KII	Key Informant Interview
NAF	National Aid Fund
PAP	Petra Archaeological Park
PDTRA	Petra Development & Tourism Region Authority
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHS	World Heritage Site

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1. INTRODUCTION

Under the project "Local Communities and Sustainable Tourism in Petra and Wadi Rum", commissioned by UNESCO, funded by the Government of Italy (AICS), and implemented by the Jordan River Foundation (JRF), JRF conducted a community needs assessment to inform UNESCO's planned trainings and workshops, that aims to contribute to advancing the design and quality of local products produced by women producers and women-led associations to enhance marketability for local and international visitors, alongside workshops on the sustainable development of World Heritage Site (WHS) that emphasize the natural and cultural heritage values of Petra and Wadi Rum. To ensure an evidence-based design of these trainings and workshops, the assessment identified existing services and trends, in addition to highlighting key gaps and needs.

This assessment was developed as a strategic foundation for shaping the next phase of support in Petra and Wadi Rum, in addition, it recognized that local products are not only products offered to visitors; however, it is also expressions of identity, heritage, skills, and community-based livelihoods. For that reason, the assessment considered women producers and women-led associations within the broader environment in which they operate, including tourism demand, local production conditions, market expectations, and the wider institutional and heritage context. Therefore, and by doing so, it moved beyond a narrow focus on products alone and instead provides an understanding of the factors that influence quality, competitiveness, and sustainability.

The purpose of this assessment is to provide an analytical basis for designing relevant and practical interventions that respond to the realities of local communities in Petra and Wadi Rum. Also, the report was initiated to ensure that forthcoming trainings and workshops are grounded in evidence on what women producers and women-led associations currently do, what challenges they face, and where the most promising areas for support lie. In this regard, the report seeks to achieve several specific objectives to assess the current landscape of local products and selected services linked to tourism; to identify gaps affecting product quality, design, branding, packaging, pricing, and market readiness; to examine constraints and opportunities related to selling channels and customer access; to explore skills, capacities, and business practices among producers and associations; and to generate practical recommendations that can inform the content, direction, and priorities of future capacity-building activities.

Moreover, the assessment reflects period during which data collection and analysis were carried out to identify current conditions and immediate opportunities for intervention. Thematically, the report covers a connected set of issues that influence the local production ecosystem, including women's economic participation, tourism dynamics, product development, entrepreneurship, marketing practices, access to markets, and awareness related to the sustainable management and safeguarding of heritage values, in which, this defined scope ensures that the assessment remains focused on the needs most relevant to planned interventions with identifying the broader context that influences outcomes.

The importance of this assessment shows in its ability to connect field realities with decision-making, where its findings offer a practical basis for developing interventions that are better targeted, more responsive, and more likely to generate meaningful results. Furthermore, the value of the assessment is not limited to identifying training topics; it also helps clarify where non-training support, linkages, or enabling actions may be needed to improve outcomes. In this regard, the assessment contributes to a wider agenda that combines women's economic empowerment and sustainable tourism.

The report is structured to guide the reader from context to evidence and then to action; following this introduction, the methodology section presents the approach, tools, and sources used to conduct the assessment and explains the basis of the analysis, while subsequent sections profile respondents and stakeholders, outline the local context, and present the main findings across the core thematic areas covered by the assessment. The final section sums up these findings into conclusions and recommendations that can directly inform the design of planned trainings and workshops, with also highlighting broader considerations for future programming.

2. METHODOLOGY

This community assessment adopted mixed-methods, participatory, and gender-responsive methodology to ensure an inclusive, evidence-based understanding of community needs in Petra and Wadi Rum. The approach combines qualitative and quantitative methods to capture both measurable trends and in-depth community perspectives, with a particular focus on women producers and women-led associations, entrepreneurship skills, and sustainable development of WHSs. JRF conducted a desk review, followed by carrying out KIIs with key stakeholders, complemented by survey with women producers. The findings presented in this assessment were from all these sources.

2.1. Mixed-Method Survey

The mixed-method survey was conducted between February 09 and March 01, 2026, targeting women engaged in producing and selling tourism-linked local products in Petra and Wadi Rum. The survey combined structured close-ended with open-ended questions to capture measurable business and livelihood characteristics and contextual narratives related to production capacity and operational bottlenecks, product quality and market readiness, market access and sales channels, marketing and digital readiness, as well as sustainable practices and WHS safeguarding awareness. In total, 32 women participated (21 from Petra and 12 from Wadi Rum). Respondents were selected through an inductive sampling, nominated by women-led associations and cooperatives and PDTRA.

Furthermore, survey was analyzed using both quantitative and qualitative techniques; for quantitative responses were processed through cross-tabulations and correlation analysis, and for qualitative data from open-ended questions were analyzed using descriptive and coding approaches to capture emerging narratives and contextual insights that complement the quantitative finding.

2.2. KIIs

Between February 09 and 17, 2026, a total of 27 KIIs were conducted in Petra and Wadi Rum to capture stakeholder perspectives on community livelihoods, women's economic participation, and sustainable tourism-linked local products within this assessment. KIIs followed a semi-structured format, guided by questionnaires by stakeholder category, covering 9 thematic areas: (i) community livelihoods and tourism dynamics, (ii) women's economic participation and inclusion, (iii) local products and services ecosystem, (iv) product development, quality, and market readiness, (v) market access and digital engagement, (vi) entrepreneurship practices and business capacity, (vii) skills development, training, and capacity gaps, (viii) institutional, regulatory, and policy environment, and (ix) sustainable management and safeguarding of WHS.

Table 1: Interviewed Entities/Persons

Type of Entity	Number
Relevant authorities	3
Women-led associations/cooperatives	6
Women producers	3
Shops and Individual Sellers	4
Camps and Hotels	4
Tour Guides	4
Local Community	3

All KIIs were transcribed, translated where needed, and analyzed using a thematic analysis approach, combining deductive coding aligned to the pre-defined KII domains with inductive coding to capture emerging themes across stakeholder groups.

2.3. Desk Review

JRF undertook desk review to establish the evidence base for the assessment, map the local product ecosystem and market dynamics in Petra and Wadi Rum, and refine the needs assessment focus for women producers and women-led associations. In total, 27 secondary documents were reviewed, covering available assessments and sector reports, institutional and program documentation, relevant strategies and guidelines, and open-source references related to tourism value chains, local product development, women's economic participation, and WHS safeguarding considerations. Moreover, secondary data were processed using a qualitative thematic categorization approach, where key data was extracted into a structured matrix and coded against pre-defined analytical domains aligned with the assessment framework, as follows: (i) product development, quality enhancement, market readiness, and market access; (ii) opportunities for value addition through improved design, packaging, and storytelling; (iii) structural and market-related constraints affecting women's businesses and integration into tourism value chains; (iv) sustainability, authenticity, and WHS safeguarding considerations, including labeling and responsible production requirements; and (v) priority training implications in entrepreneurship, business management, branding, (digital) marketing, and market linkages.

Desk review findings were used to contextualize primary data and to inform the design of the KIIs and mixed-method survey. In addition, the review identified evidence gaps to be addressed through fieldwork, including limited up-to-date and gender-disaggregated data on women's business profiles, limited documentation of quality standards applied in practice and compliance barriers, insufficient evidence on actual sales channels and intermediary arrangements, limited structured evidence on tourist preferences and demand-side expectations, and fragmented information on prior training exposure and effectiveness.

2.4. Limitations

The assessment faced a number of limitations that should be considered when interpreting the findings. First, access to women producers for the survey was constrained by the recruitment because participant identification relied primarily on nominations by women-led associations and the PDTRA, which helped ensure relevance to the target group but also limited the achievable sample size and may have reduced coverage of less-connected women (e.g., informal producers operating outside associations or established selling points). Second, in Wadi Rum, a proportion of survey respondents had low literacy levels and limited formal education, which at times affected comprehension of survey questions related to business practices, costing, and market concepts. To mitigate this, research team used simplified and standardized explanations and, where needed, rephrased questions using locally familiar examples in addition to maintaining the intended meaning of the tool.

3. RESPONDENTS AND STAKEHOLDER PROFILE

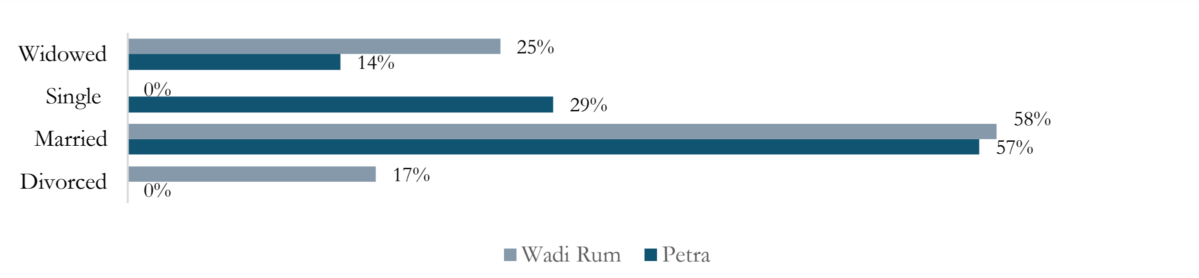
3.1. Survey Respondent Profile

The survey reached a total of 33 respondents, distributed in Petra (n=21) and Wadi Rum (n=12), as since the survey focuses on women engaged in tourism-linked local product activities in the two sites, all respondents were women (100%) and Jordanian (100%).

3.1.1. Socio-Demographic Characteristics

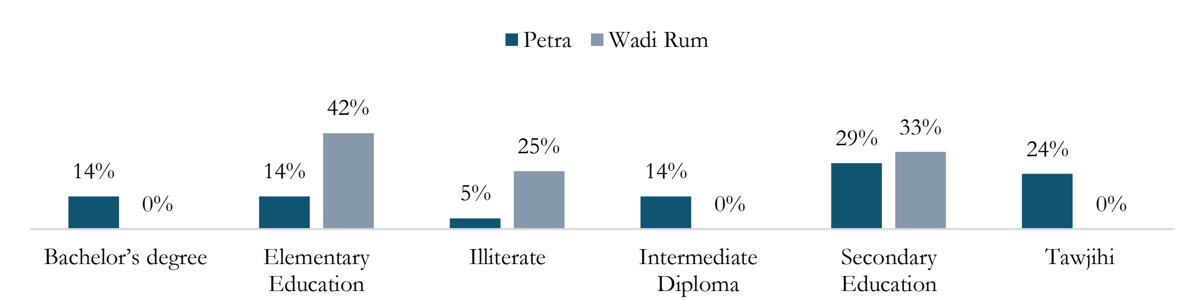
Over half of respondents were married (58%), while single (17%) and widowed (18%) respondents represented notable shares, and divorced women accounted for 6%.

Figure 1: Marital Status Among Respondents



Nearly half of the sample reported being the head of household (48%), with comparable levels in Petra (48%) and Wadi Rum (50%). For education levels were mixed; the most common level was secondary education (30%), followed by elementary education (24%) and Tawjihi (15%), while 12% reported being illiterate; the educational profile differed by site, as shown below.

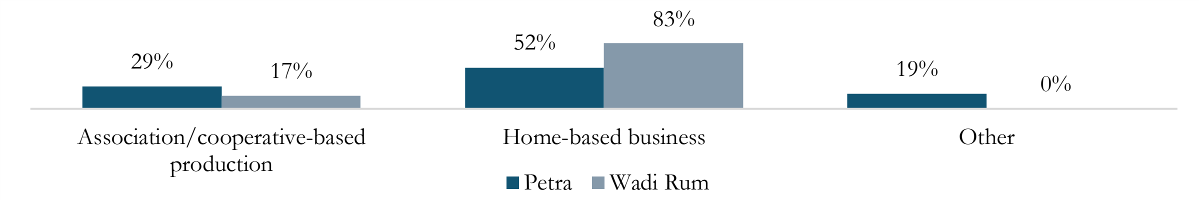
Figure 2: Educational Level Among Respondents



3.1.2. Economic Activity and Product Profile

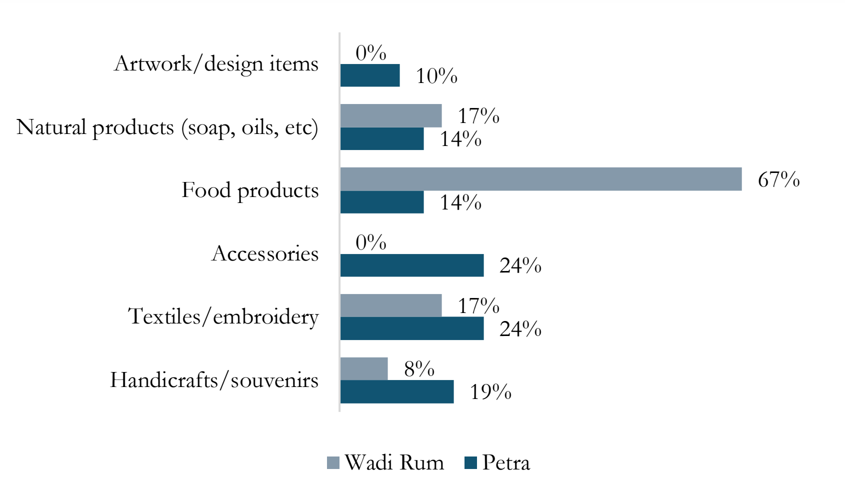
Respondents reported operating as home-based businesses (64%), while association/cooperative-based production accounted for 24% and other arrangements for 12% (e.g., small shop, sewing workshop, photography studio).

Figure 3: Type of Economic Activity



Women producers reported selling a range of product types, with multiple responses possible. Overall, food products were more common in Wadi Rum (67% respondents in Wadi Rum), while Petra respondents more frequently reported textiles/embroidery (24%), accessories (24%), and handicrafts/souvenirs (19%), alongside smaller shares reporting natural products (e.g., soap/oils) and artwork and design items.

Figure 4: Products Respondents currently produce and/or sell



In addition to product sales, 36% of respondents reported offering tourism-related services, which indicated that for a minority, income generation is linked to products and complementary visitor-facing activities to sustain their livelihoods.

3.1.3. Association Membership and Formalization

Membership in associations/cooperatives was reported by 39% of respondents, and these memberships were mostly in women's associations/cooperatives (92%).

Figure 5: Membership of a Cooperative/Association

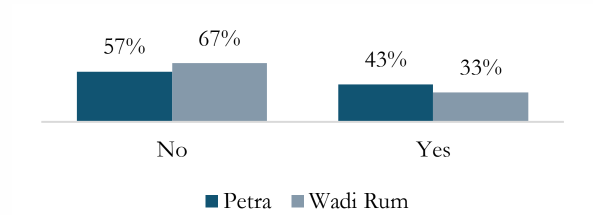
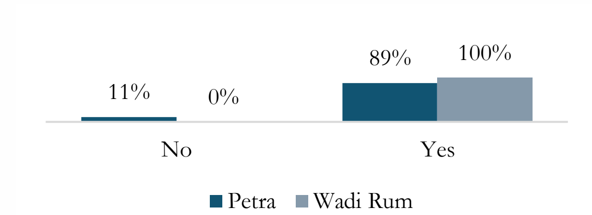
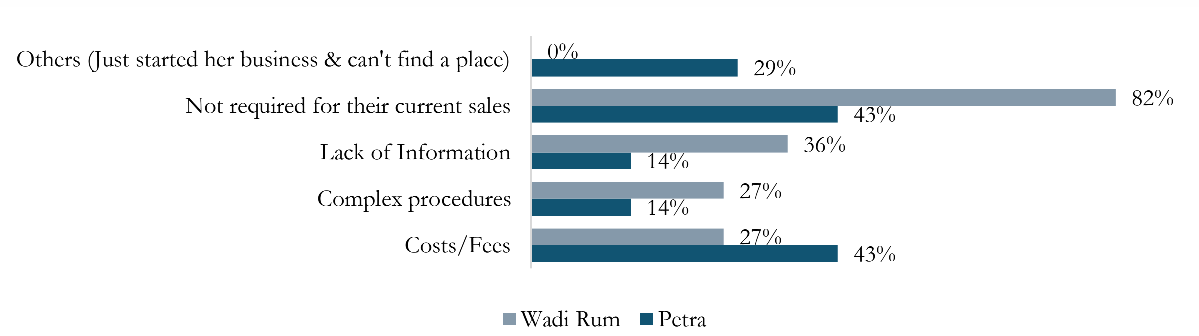


Figure 6: Membership of a Women-Led Cooperative/Association



Moreover, registration and licensing levels differed sharply by location: overall, 45% reported being fully registered/licensed, but this was heavily concentrated in Petra (67%) compared to Wadi Rum (8%). Among those not fully registered (55% overall, 33% in Petra, and 92% in Wadi Rum), the most frequently cited reasons included registration being perceived as not required for current sales, costs/fees, complex procedures, and, in Wadi Rum, lack of information about licensing requirements.

Figure 7: Main Reasons Women Producers are not fully registered/licensed



3.1.4. Experience, Labor support, and Livelihood Reliance

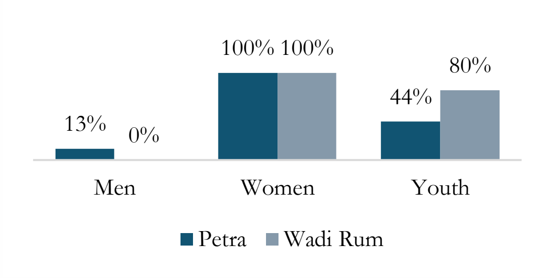
A considerable share of respondents had long-term engagement in their activity; 36% reported 10+ years of experience, while 33% reported 3-10 years, and 30% reported two years or less, which offered a mix of established producers and newer entrants. The table below presents the time periods of the respondents' businesses in locations.

Table 2: Years of Experience in Producing and Selling Local Products

Time Period/Location	Petra	Wadi Rum
<1 year	14%	8%
1-2 years	14%	25%
3-5 years	19%	42%
6-10 years	10%	0%
10+ years	43%	25%

The average number of people supporting the activity was 2.9 overall, with a higher average in Petra (4.0) than Wadi Rum (1.1), which indicated differences in household involvement, business scale, available support networks, or even the number of women engaged in these types of businesses. Among the 21 respondents who reported having workers and support, women were consistently involved, while youth participation (18-30) was also reported, particularly in Wadi Rum.

Figure 8: Type of Workers



Moreover, respondents' reliance on the activity as a source of household income varied by location; overall, 39% identified the activity as their main income source (24% in Petra, and 67% in Wadi Rum), and 52% as a secondary source (62% in Petra, and 33% in Wadi Rum), while 9% reported it was not income-generating yet (14% in Petra, and 0% in Wadi Rum). Consistent with this, average self-reported monthly income from the activity were higher in Petra (average 152 JOD) than Wadi Rum (average 72 JOD), which highlighted site-level differences in earning patterns that worth interpretation.

3.2. Stakeholder Landscape and Roles in the Value Chain

This section maps the stakeholder landscape, which play a role in forming women-produced products linked to tourism in Petra and Wadi Rum, as it clarifies how different actors influence production, market access, sales, and the enabling environment. In detail, the mapping is based on 27 KIIs in both locations, with covering supply-side actors (women producers and their associations) and demand-side and governance actors (tourism operators, retail points, guides, and authorities).

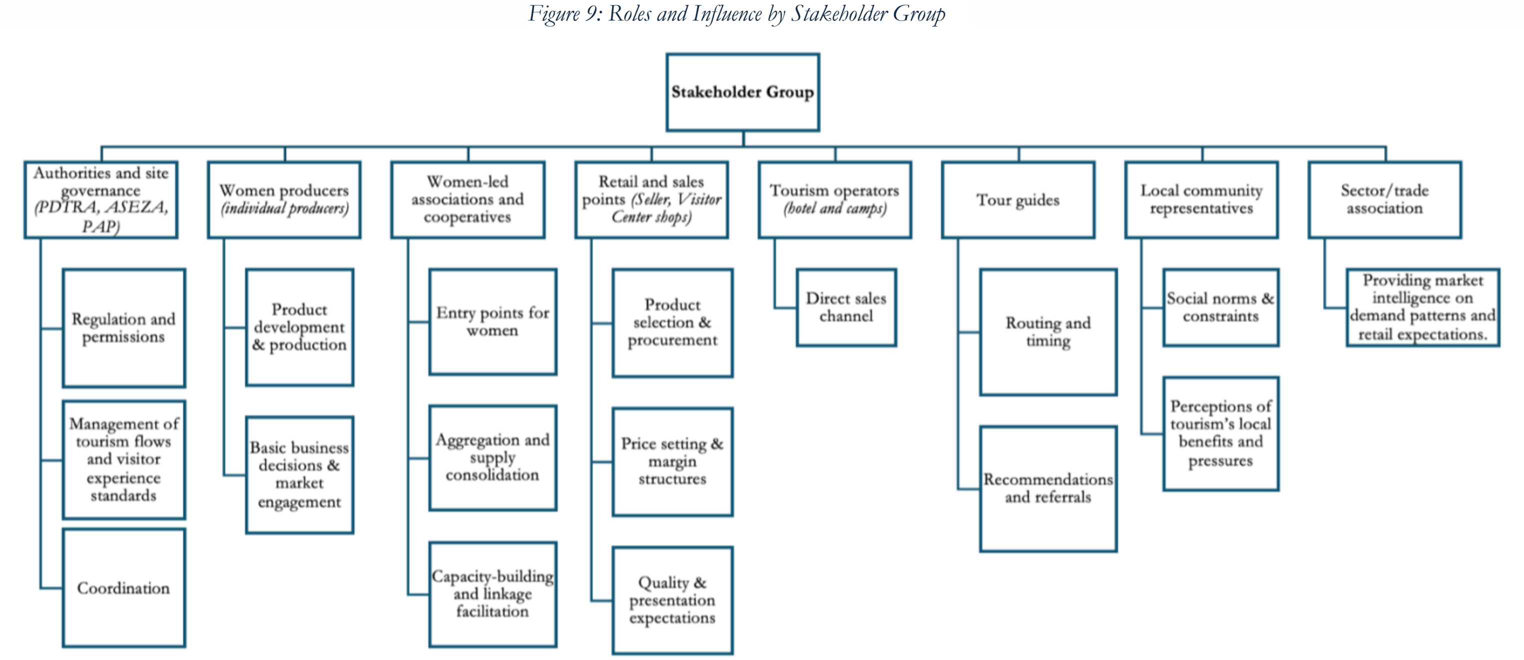
As pre-mentioned stakeholders' groups in the methodology section, the selection of them was to ensure that the assessment include the full journey from production to tourist purchase, as well as the institutional and informal factors that shape who can access markets and under what conditions.

3.2.1. Roles and Influence by Stakeholder Group

The interviewed stakeholders play roles in the tourism value chain, which is also relevant to women's producers, these include: (i) organization and aggregation (women-led associations/cooperatives); (ii) market placement and distribution (retail points, sellers, tourism operators); (iii) tourist-facing promotion and purchase decisions (tour guides, camps, hotels, Visitor Center shops); and (iv) enabling environment and access rules (authorities and site governance), which is changed and formed by local community dynamics.

The mapping showed that although women producers generate the core value, their ability to turn production into sustainable income depends on access and intermediation structures in Petra and Wadi Rum, where sales opportunities are influenced by regulators determining where selling is permitted, retail outlets setting product selection and pricing terms, and tourism intermediaries shaping visitor routes and purchasing decisions; therefore the assessment moves beyond producer capacity gaps to examine producer-market linkages, including aggregation through associations, referral and procurement practices, and regulatory and operational conditions that enable or constrain women's market access.

Figure 9: Roles and Influence by Stakeholder Group



4. FINDINGS FROM PETRA

4.1. Community Livelihoods and Tourism Dynamics

Petra's local economy is a tourism-driven, and seasonality is a defining feature of how income and market activity are generated. Across KIIs and the women producers' survey, demand for local products and services rises in peak visitor months and contracts sharply in low periods, meaning women's sales, production planning, and household income stability remain highly sensitive to seasonal cycles and to growing unpredictability during regional shocks.

4.1.1. Tourism as the Backbone of Local Livelihoods

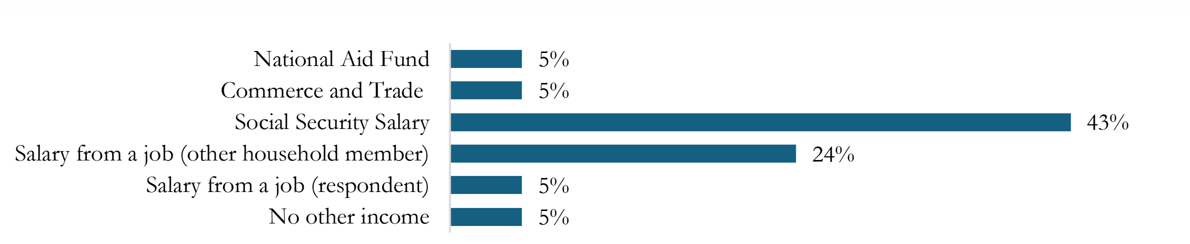
A consistent finding across interviews is that tourism represents the dominant source of livelihood in Petra, with limited alternatives outside the tourism economy. For instance, PDTRA estimated that around 90% of local livelihoods are tourism-based, with limited stable government employment, which highlights the urgency of diversification and upgrading the tourism product. Also, a local community interview described entering tourism as a necessity due to limited opportunities aligned with education or specialization.[1]

Interviews with tourism service providers reinforced that livelihoods are tied to international travel patterns, for instance, a four-star camp described an international guest base (including families) and noted higher movement and purchases in summer and lower demand in winter, despite some visitors valuing the winter camp experience. Likewise, Petra Canyon Hotel described Petra tourism as predominantly international (around 90%) and linked demand to European, Latin, and Asian holiday calendars, while noting reduced visitor numbers after COVID-19 and due to regional conditions and some nationalities hesitating to travel even when the visitor type remains broadly similar. Therefore, these indicated that local livelihoods are tied to international travel patterns and perceptions, which makes income opportunities highly sensitive to fluctuations in tourism movement.

Within this context, a woman seller described their economic participation as strongly tied to Petra-based work, with alternatives often limited to low-paid and socially constrained options (e.g., cleaning) or no work, making tourism a key determinant of women's ability to sustain livelihoods and invest in household stability and children's education.[2]

Survey findings among women producers in Petra, further confirm that women's economic participation is embedded within this tourism-dependent context; 38% reported offering additional tourism-related services alongside product sales, such as participation in bazaars and exhibitions, tourist-facing experiences (including photography and heritage dress), and heritage-oriented crafts and tailoring, which indicated that some women diversify within the tourism economy to increase earning opportunities and respond to visitor demand. Also, household income structures reflect limited alternatives, where most Petra respondents reported relying on other income sources that are typically fixed or wage-linked, especially social security salary (67%) and other household members' wages (24%), while only a small share reported no other income (5%).

Figure 10: Other Sources of Income



[1] KII with Qusai Amarat, Local Community, Petra, 16 February 2026.
[2] KII with Amal Al-Samaheen, Independent Seller, Petra, 09 February 2026.

4.1.2. Tourism Seasonality in Petra

Even before recent regional political instability, tourism in Petra followed stable seasonal patterns that structured demand for hotels, guides, restaurants, and retail, where tour guides described clear high seasons in spring (mid and/or late March to end May) and autumn (late September to end November), with a shorter New Year season. Hotels and visitor-center shops reported similar peaks, with higher activity in March - May and September, October, and November, and a lower season typically in December - February. Several interviewees identified April as a particularly strong month, while others highlighted that February to June is generally favorable, with noticeable drops afterward and limited visitation in low months. At the same time, other KIIs indicated that seasonality has become less predictable under current regional conditions,[3] for instance, tour guides described overlapping or disrupted seasons, and businesses noted fluctuating patterns that no longer follow the same rhythm, which makes planning harder for small businesses and for women producers who depend on stable demand cycles to organize production and manage household income. [4]

Survey findings reinforced that seasonality remains a defining feature of women's product-related activities, with also explaining variability in how women experience and plan for peak periods, where nearly half of respondents (48%) reported that their production is year-round, while 38% indicated activity is concentrated mainly during peak tourism seasons, and 14% described it as irregular; therefore, this showed that women's products are depending on seasons, which makes income planning sensitive to seasonality and to the growing unpredictability as described in KIIs.

When asked about months of stronger activity in Petra, responses show a concentration in the summer period; June (76%), July (76%), and August (76%), with September (57%) also standing out. In contrast, fewer respondents identified winter months as strong activity periods, including December (10%), and the spring period showed comparatively lower concentration (e.g., March 29%, April 14%, May 24%). Thus, these patterns highlighted the continued importance of seasonal demand, with illustrating that women's peak activity may be shifting or extending traditional spring/autumn peaks referenced by tourism actors in KIIs. Moreover, product-specific patterns in Petra further demonstrate that seasonality is not experienced equally across product categories; reported activity for handicrafts peaks sharply in June-September (100%), while textiles/embroidery also peaks in summer (June 80%, July 100%, August 80%, September 60%). Additionally, natural products (e.g., soap/oils) show a clear summer concentration (June-August 100%), while accessories appear more distributed across the year (including continued activity into October 60% and November 40%); therefore, seasonality may differ depending on products, as it was shown in category-specific demand cycles.

In addition, survey findings confirmed that seasonality turn into income fluctuation, for instance, 52% of respondents reported that income from this activity increases a lot in high seasons, and 29% reported it increases a little; only 10% reported no change (with 10% not sure), which lead to a conclusion that tourism seasonality can be driver of livelihood vulnerability; when visitor flows decline or peak periods become less predictable, women's sales and related income opportunities contract accordingly, limiting their ability to plan household expenditures and sustain business continuity.

4.1.3. Tourism-Driven Demand and Market Constraints

Women producers and women-led associations described a direct link between tourism intensity and production decisions, for instance, when tourist flows increase, demand rises and producers expand quantities, especially for tourist-linked items. Furthermore, the Wadi Musa Widows and Family Development association reported higher high-season demand for place-based designs such as Petra-themed t-shirts and prints (camels, horses, Petra symbols, and national imagery), while a woman producer described month-to-month income fluctuations tied to tourism levels and noted that slow periods require shifting what is produced (e.g., reduced tailoring/sewing demand before Ramadan).

[3] KII with Mohammad Hilalat, Tour Guide, Petra, 16 February 2026.

[4] KIIs with Mohammad Emad, Petra Canyon Hotel, Petra, 15 February 2026; Murad Hilalat, Shop in the Visitor Center, Petra, 15 February 2026; Saad Ghinemat, Shop in the Visitor Center, Petra, 15 February 2026; and Khadija Al-Hasanat, Woman Producer, Petra, 09 February 2026.

This reported pattern not only reflects the quantities, as it also shapes what types of products are prioritized, as an example, The same dynamic affects which products are prioritized, where Saydat Al-Anbat Association explained that heritage and handicraft products are more valued during peak tourist periods but become lower-priority purchases for the local community when tourism declines and households refocus spending on essentials; this reinforces that reliance on tourist demand exposes women's businesses to abrupt swings, while local purchasing rarely stabilizes income.

Moreover, women producer respondents reinforced this dynamic by showing that low visitor flow and seasonality is the most frequently constraint to selling more (67%), in which demand contraction in low periods is experienced as a primary market barrier by them. Additionally, cost and regulatory barriers were reported, though less frequently, including high rent for selling space (19%) and permit/regulatory constraints inside sites (5%), with open-ended responses further highlighted structural constraints that shape demand realization, such as weak purchasing power among local residents, limited financial capacity, the absence of a fixed display point, and lack of support/materials; factors that compounded vulnerability during downturns when tourism spending declines and local demand does not compensate.

A KII with Saydat Al-Anbat Association emphasized that many local products, particularly handicrafts and heritage items, are perceived as discretionary purchases rather than necessities. Moreover, Ms. Fawzia Al-Hasaant described their products as non-essential and often bought as gifts or for special occasions, which makes demand highly sensitive to broader economic pressures and to the overall tourism sector; therefore, this explained why declines in tourism or reductions in visitor spending translate rapidly into reduced sales, even when producers maintain product availability.

4.1.4. Visitor Spending Patterns, Market Structure, and Implications for Local Livelihoods

Beyond fluctuations in tourist numbers, interviewees suggested that visitor behavior inside Petra has changed in ways that reduce sales opportunities, for example, shops described tourists spending less time browsing, especially under perceived regional instability, with visitors increasingly rushing to see the Treasury and leaving quickly, which lowers the likelihood of shopping. Also, shop interviews noted a shift toward small, light, quick-to-buy items, alongside stronger price negotiation and a larger share of low-cost purchases; this was contrasted with earlier periods (notably pre-2016) when higher-value purchases (around 60-80 JOD or more) were more common, implying a market that increasingly rewards portable, lower-cost items, potentially at the expense of higher-value heritage crafts that require more time and investment. Furthermore, PAP linked growing price sensitivity after COVID-19 to broader global financial pressures and the expansion of low-cost travel, which influences visitor segments and affordability expectations.

Survey findings provided quantitative support to these demand-side dynamics by clarifying who women producers perceive as their main customer segments and where sales most commonly take place; respondents most frequently identified local residents (62%) as main customers, while Jordanian visitors (29%) and international tourists (29%) were also commonly reported; regional tourists were less frequently mentioned (10%), and 29% reported a mixed customer base equally. Therefore, even in a tourism-driven economy, women's sales are not exclusively dependent on international visitors; rather, local and domestic demand continues to play an important role, which becomes particularly relevant when international tourist behavior changes (shorter visits, reduced browsing time, and higher price negotiation) as described in KIIs.

Also, survey findings provided additional evidence on the price and value sensitivity of local product purchases by indicating what visitors are perceived to value most when buying local products, for instance, respondents most frequently selected quality (86%) and an authentic heritage link (86%), which suggested that purchase decisions are strongly influenced by perceived authenticity and product standards; factors consistent with the positioning of local products as meaningful souvenirs and gifts. In addition, unique design was also commonly reported (48%), while in contrast, price was selected by 38% of respondents, indicating that while affordability remains important, it is less dominant than quality and authenticity in shaping visitor preferences (from producers' perspectives). A smaller share identified ease of carrying (14%), while eco-friendly aspects were rarely mentioned (5%), which showed a limited demand around sustainability attributes in current transactions. Moreover, open-ended responses further explained this by highlighting that visitor-perceived value can be influenced by seller interaction and service quality (e.g., style and politeness of the sellers), along with product presentation considerations, which indicated that soft factors can affect conversion even when purchases are optional.

Also, KIIs suggest that tourism benefits are unevenly distributed, where local community interviews noted that businesses with stronger shops, influence, or special locations benefit more, while others stagnate; one interview stated that hotels capture a large share of visitor spending and increasingly provide shopping options within or adjacent to their premises, reducing customer flow to downtown markets and independent shops. [5] this affects how tourists encounter products; if spending is concentrated within hotels or controlled retail points, market access may depend more on structured linkages with those actors than on tourists flow in traditional market areas.

Despite the reported challenges, interviews pointed to an opportunity; a preference for Jordanian handmade products can create livelihood space when local sourcing is enabled, where the handicrafts association representative described strong visitor preference for locally handmade items, indicating income potential when products are visible and trusted as genuinely local; this directly supports later themes on market readiness, labeling, storytelling, and market access as practical entry points to strengthen women's market participation.

4.2. Local Products and Services Ecosystem and Value Chain Mapping

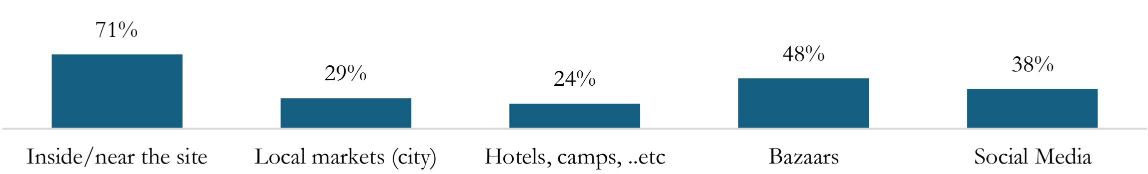
Petra's local products ecosystem is a tourism-linked value chain that moves through downtown Wadi Musa and Visitor Center outlets, with additional routes via hotels and camps and route influencers such as tour guides and tour offices. KIIs and survey data showed that while women producers use many channels, access to tourism sites is uneven and the chain remains fragmented, shaped by weak intermediation, limited delivery and digital payment capacity, authenticity pressures from imports, and upstream production constraints that limit continuity and scaling.

4.2.1. Primary Market Centers and Distribution Networks

KIIs consistently identified downtown Wadi Musa and the Visitor Center area as primary selling locations; downtown was also described as more accessible for women's engagement. [6]

Survey findings provided additional information and support to this market geography and confirmed that women producers rely heavily on tourism-linked channels, with using multiple complementary ways to reach buyers, where respondents reported through what channel they sell.

Figure 11: Locations of Selling Women Producers' Products



Also, the survey showed that access to the site environment is not uniform, for instance, 43% of respondents reported they can sell regularly inside or near tourism sites, and 33% can sell sometimes, while 19% reported no ability to sell inside/near the sites (5% were not sure).

Furthermore, Visitor Center shops were described as aggregation points, where one shop reported strict local-only sourcing and representation of multiple associations (e.g., embroidery, ceramics, silver), with revenues returned to each association based on sales; [7] another shop described affiliation with a women-led association and noted purchasing and displaying items from women beyond its membership to sustain livelihoods. [8] Also, KIIs noted tourism-facing outlets (hotel display corners and camp souvenir shops) [9] and

[5] Ibid.
[6] KIIs with Ibrahim Ayman, Local Community, Petra, 16 February 2026; Mohammad Khalil, The Jordanian Association for Handicrafts, Traditional & Folk Industries and their Trader, Petra, 15 February 2026; Fawzia Al-Hasanat, Saydat Al-Anbat Association, Petra, 09 February 2026; and KII with Ibrahim Ayman, Local Community, Petra, 16 February 2026
[7] KII with Murad Hilalat, Shop in the Visitor Center, Petra, 15 February 2026
[8] KII with Saad Ghinemat, Shop in the Visitor Center, Petra, 15 February 2026
[9] KII with Hashim Khaled, Seven Wonders Bedouin Camp, Petra, 16 February 2026

PDTRA efforts to formalize local products through the Visitor Center shop and community experience models (e.g., beit sha'ar).

From a distribution-readiness perspective, the survey suggested that expansion beyond in-person selling is still constrained by logistics and payment infrastructure, where 48% reported they do not offer delivery/shipping, while 29% offer delivery within the governorate and 24% offer delivery inside and outside the governorate. Similar to this, payment acceptance remains largely cash-based, with 100% reported accepting cash, while 38% can accept Cliq and 29% can accept Visa (with limited mention of digital wallets); these findings are relevant because they affect producers' ability to leverage social media and remote buyers, and to convert sales in settings where visitors increasingly prefer quick transactions.

4.2.1.1. Gatekeepers and Intermediaries

KIIs highlighted that the product value chain can be defined along with where products are sold, also by who influences tourist movement and purchasing opportunities. Associations and guides described tour guides as linkers in the chain, including through commission practices and the ability to steer purchasing. Also, tour guides emphasized that purchasing is often opportunistic, tourists may buy at any shop along the route, and purchases are not necessarily tied to a fixed stop, though some groups may have customary shop visits.

Survey findings provided additional evidence on the extent to which women producers rely on intermediaries and the constraints that shape access to institutional buyers and tourism operators, for example, only 24% of respondents reported selling through intermediaries and resellers, while 76% reported not doing so, which showed that for most women in Petra, sales are structured around direct selling channels rather than intermediation. However, where intermediaries are used in Petra, the reported challenges pointed to bargaining asymmetries consistent with gatekeeper dynamics, where 60% cited high commission, while other responses referenced ad hoc arrangements or lack of clarity in how sales occur.

4.2.2. Who Produces and Supplies

Supply-side interviews indicated that Petra's local product ecosystem is built on a mix of association-based production and independent producers, with some hybrid models connecting the two. Within associations, women often work through collective workshops, and marketing is commonly managed through association channels (e.g., shared social media pages). Moreover, the Wadi Musa Widows and Family Development association illustrated a multi-activity model (sewing workshop, production kitchen, wedding supplies rental, baked goods) and described supplying a Visitor Center sales point while using a repurchase/resell approach to help maintain women's income continuity. Additionally, the Jordanian Association for Handicrafts described sourcing handmade souvenirs from local producers to supply bazaars and reduce imports, with noting that in practice much sourcing still comes from independent (women and men) producers rather than associations.

4.2.4. Production and Demand

Across KIIs, the products were described as a combination of heritage-inspired crafts and practical items, at the same time, with current visibility concentrated in silver and ceramics and a perceived gap in other market-demanded items reflecting Jordanian identity. Moreover, Interviewees described most selling products including scarves/handkerchiefs, magnets, silver, natural stone/gem items (display-dependent), and Petra-linked symbols (e.g., camel/horse/caravan motifs). However, tour guides noted that Petra competes with broader national souvenir categories (e.g., Dead Sea items), while associations described nationality-based preference differences (e.g., embroidery vs archaeological/heritage items), suggesting scope for better targeting by segment and season. At the individual seller level, reported strong sellers included durable bronze items, patterned scarves, and place-linked accessories; storytelling was described as part of the sales approach to increase perceived value.

4.2.4.1. Authenticity Pressures

A recurring concern is to have products that are widely available beyond Petra and not linked to local heritage, which means tourists may see similar items elsewhere globally, as it will leads or led to weaken differentiation and makes it harder for genuinely place-based products to stand out without strong signaling (e.g., origin, labeling, storytelling).[10] Several interviewees linked this to competition from cheaper imported goods, for instance, PAP described "Made in Petra" as a long-standing direction, yet constrained by imports, as large shops may find imported goods cheaper than buying from local associations. From the association perspective, competition also appears through design copying or theft, where original designs are reproduced elsewhere at lower quality, whereas tourists may not be able to distinguish authentic and original products from copies; this can create an income risk for producers and a reputational risk for local crafts.[11]

Survey findings provided an additional evidence on the extent to which producers perceive their products as heritage-linked and the degree to which authenticity is actively signaled to buyers; over half of respondents (52%) reported their products are strongly linked to local heritage and traditions, while 29% reported a partial heritage linkage; 10% indicated their products are not specifically heritage-based, and 10% reported being uncertain about what qualifies as heritage or tradition.

At the same time, the used mechanisms appear uneven; 43% reported having a clear brand identity (name/logo) and 43% reported their products have labels, while around half reported having no brand identity (48%) and no labels (52%). Moreover, storytelling is more common; 62% reported they always provide a story or explanation when selling (19% sometimes), yet a meaningful share still does not provide interpretation (14%) or is unsure how to do so (5%).

4.2.4.2. Inputs and Production Constraints

On the production side, KIIs highlighted two interrelated constraints; rising input costs and fragile supply chains, where Saydat Al-Anbat association described cost pressures driven by rising silver prices, which increases production costs for artisans and can limit competitiveness in a price-sensitive market. Moreover, Wadi Musa for Widows and Family Development association emphasized that raw materials are largely sourced from Amman, and that shortages, such as thread and fabric gaps, create delays that disrupt production continuity. It is worth mentioning that these constraints are particularly important for women-led associations and women producers that do not have bulk purchasing power or diversified supplier networks.

Survey findings provided support to these KII observations by showing that sourcing and production constraints are widespread among women producers, where 57% reported sourcing raw materials mainly from other cities (e.g., Amman), compared to 43% relying on local suppliers; 10% reported using imported materials bought locally, which indicated that local production is frequently dependent on supply chains beyond the immediate area, which therefore aligned with the KIIs evidence that upstream inputs are not locally secured and can be vulnerable to shortages and transport-related disruptions.

Consistent with KIIs on rising costs, 81% of women producers reported high cost of materials as a core production challenge; constraints were not limited to price: 67% reported lack of tools/equipment, and 52% reported limited availability of materials, which indicated that even when demand exists, producers may struggle to maintain continuity and scale due to both input access and production capacity limitations. Additional constraints included workspace limitations (19%), and smaller shares reporting constraints related to utilities (14%) and time due to responsibilities (14%), in addition other constraints further pointed to barriers that interact with production feasibility, including transport, limited local market size, and limited support/storage; factors that can amplify supply chain fragility and reduce resilience during shocks.

Furthermore, Scaling was flagged as structural: large quantities are difficult without organized production lines, and some souvenirs are assembled rather than locally manufactured (e.g., magnets), limiting local value added.

4.2.5. Partnerships and Proposed Linkage Models

Despite fragmentation, KIIs pointed to practical ways to strengthen value chain linkages, where some stakeholders emphasized the importance of relationship-building and familiarity, for instance, camp

[10] KII with Fawzia Al-Hasanat, Saydat Al-Anbat Association, Petra, 09 February 2026
[11] KII with Fawzia Al-Hasanat, Saydat Al-Anbat Association, Petra, 09 February 2026

interview mentioned that visiting associations and seeing their products makes sourcing and partnership easier, which implies that market linkages are often relationship-driven rather than purely transactional.

Local community interviews suggested strengthening market linkages by either creating a single high-traffic unified sales point where products are curated and sold by skilled sellers, or formalizing producer, shop supply and reselling agreements to improve product flow through existing shops; these proposals build on existing aggregation points (Visitor Center shops, bazaars, hotels, and camps); however, it calls for more structured arrangements and support

Survey findings further specified which linkage opportunities women producers themselves prioritize, and they mirrored the KII emphasis on strengthening partnerships with high-traffic tourism actors and organized market points. What frequently opportunity reported was participation in exhibitions and bazaars (57%), followed by selling through camps (48%), and both dedicated market space (43%) and online sales platform support (43%). Also, linkages with tour operators/guides (38%) and selling through hotels (38%) were also commonly selected, which indicated that producers see direct partnerships with tourism intermediaries and accommodation providers as viable ways to increase sales, alongside more structured and visible selling points.

4.3. Women's Economic Participation, Inclusion, and Barriers to Engagement

Women's economic participation in Petra is shaped by a tourism-driven local economy in which women's entry points are often mediated through women-led associations and other structured and semi-formal arrangements. Across KIIs and survey findings, opportunities for women to produce and sell are enabled by association-based models and selective market spaces, but remain uneven due to social norms and mobility constraints, limited and regulated access to selling locations under WHS-related arrangements, and practical market-facing gaps (especially language, selling skills, and marketing).

4.3.1. Associations as Entry Points to Income and Visibility

Women-led associations were repeatedly described as key mechanisms for enabling women's income and visibility, for instance, Saydat Al-Anbat Association reported that since 1999 it has supported 400+ women through part-time engagement, while Wadi Musa Widows and Family Development described an empowerment model aimed at shifting widows from assistance to self-reliance and reported empowering around 80 women, with a smaller number of active income-generating households currently sustained through projects. Also, local community and PAP interviews emphasized that recognized associations, notably in silver, gold, and handicrafts, remain the most viable way for women's access and visibility in or near the site, especially given WHS constraints on commercial activity and the recognized association model inside the archaeological area.

With regards to self-reliance and shifting social perceptions, the two interviewed women-led associations were considered as income generation for women producers, so they will be able to provide for themselves and their households; for example, Saydat Al-Anbat emphasized building women's confidence and ability to face challenges, while Wadi Musa Widows and Family Development stressed breaking stigma and normalizing women's work, especially for widows. Moreover, Wadi Musa Widows association noted that that transport allowances, lunch during trainings, and occasional in-kind support helped reduce mobility and cost barriers and encouraged women's participation.

Regarding women's employment and sourcing linkages, the hotel noted that structured procurement from women's associations remains limited and is more often replaced by hosting meetings and seminars supporting home-based businesses. Also, the camp interview was more open, reported no structural barrier to sourcing from women's embroidery associations and describing women's skills as improving over time, which implied that camps could be accessible channels if linkages are actively organized.

4.3.2. Constraints and Barriers

Several KIIs emphasized that women's participation remains shaped by social norms, particularly around acceptable work environments and women's visibility in public spaces and what is considered acceptable work. For instance, Saydat Al-Anbat highlighted continuing resistance to women working in non-traditional sectors (including hotels, despite being perceived as safe), and noted that norms can also restrict women's education and mobility (e.g., studying outside the area). Moreover, local community interviews described women benefiting less than men and youth from tourism because direct participation in tourism-facing roles remains sensitive, especially due to the sensitivity between tourist behavior and local norms and concerns around harassment/boundary crossing; some also noted that women's absence from certain public-facing market areas (e.g., specific commercial streets) reflects these patterns.

At the same time, KIIs suggest gradual change, where interviewees observed more women becoming visible in markets with a growing presence of women tour guides, and increased visibility of women-produced local industries, with women finding it easier to engage in spaces with fewer men (workshops, production spaces, and some shops/companies).[12] Beyond norms, practical barriers also constrain participation, for instance, the woman producer noted that the workshop location is far from residential areas, which make daily attendance difficult; the same interview showed that participation often depends on household enabling factors such as access to transport, supportive family members, and help with household responsibilities, which implied that scheduling and transport support matter for project/program design.

Survey findings provided evidence on the practical constraints affecting women's ability to sell more, particularly to tourists, showing that barriers extend beyond social norms; the most frequently reported barrier was seasonality/low visitor flow (67%), which showed that women's sales opportunities are highly dependent on tourism movement. This was followed by limited access to selling points (43%) and language barriers (43%), with indicating that even when tourism demand exists, women's ability to benefit is shaped by access to selling locations and the ability to communicate with visitors. Additionally, respondents identified lack of marketing (38%) and competition (33%) as common constraints, while fewer cited high rent for selling space (19%) and permit/regulatory constraints inside sites (5%), in addition, other responses further pointed to constraints that interact with tourism downturns, including weak purchasing power among local residents, limited financial capacity, lack of a stable display point, and lack of support/materials.

Some KIIs challenged a purely gender-norm explanation, for example, an independent seller argued that women's work in Petra had historically been common and that the key obstacle was enforcement and penalties rather than gender, which suggested that perceived barriers vary by time period and type of activity. Another interview noted women's inclusion among independent suppliers without detailing specific gendered barriers, beyond the broader need for structured support. [13]

Institutional factors further shape inclusion, for instance, PDTRA noted that youth (18-35) are typically targeted and women can be included beyond 40 depending on design, but emphasized that many associations do not open membership to youth (young women and men), which limit renewal and entry. Also, PDTRA also described a *"funding-first mindset"* in some associations that can weaken sustained engagement. At the same time, it highlighted livelihood diversification options for women heads of households (e.g., greenhouse cultivation of aromatic/medicinal plants such as za'atar and sage).

Furthermore, PAP described an earlier inclusion intervention tied to site governance; women previously selling illegally were relocated to Al-Beidha cultural village into shared kiosks, supported with merchandise financing and a one-year stipend; after the stipend, a recognized association was formed and their situation reportedly improved, which explained how WHS-related regulations can constrain or enable participation depending on whether formalized access mechanisms exist.

KIIs indicated that many barriers for women producers arise at the point of selling, especially when communicating with tourists and marketing products, for instance, tour guides noted that the key gap is often sales and marketing capability rather than production, with men perceived to have more selling experience, they also emphasized that, with foreign tourists, outcomes depend more on language and marketing style than on gender itself, suggesting skills-based gaps that can be addressed through practical training (sales techniques, product storytelling, basic selling language, and confidence in customer interaction). Furthermore, they highlighted that intermediaries could influence results; when a guide presents a product as locally made and/or women-led, it can strengthen marketing and increase sales by directing tourist attention and building credibility.

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[12] KII with Qusai Amarat, Local Community, Petra, 16 February 2026.
[13] KII with Mohammad Khalil, The Jordanian Association for Handicrafts, Traditional & Folk Industries and their Trader, Petra, 15 February 2026

4.4. Product Development, Quality, and Market Readiness

Findings in Petra showed that product readiness for the tourism market is impacted by how well women producers and associations can align products with tourist demand and travel constraints, with also ensuring heritage-linked differentiation, consistent quality and finishing, and packaging, labeling, and product information that build trust. Across primary findings, respondents highlighted that tourists are drawn to Petra-identity products and practical souvenirs; however, competitiveness and scaling depend on producers' ability to standardize specifications and maintain credible authenticity signals, in addition to meet larger orders despite constraints in inputs, tools, storage, labor, and production organization.

4.4.1. Market Fit: What Tourists Buy, and How Product Design Adapts

KIIs consistently indicated that successful products in Petra align with tourist travel realities; small, simple, useful, easy-to-carry, and reasonably priced items, for example, the woman producer described designing specifically for tourists (small, simple, not expensive), while the independent seller stressed place-linked designs and simple packaging that fits in bags. Demand reinforced this; Visitor Center shops reinforced these patterns by listing most selling items, such as scarves, shemaghs, handkerchiefs, caps, magnets, small items, simple and light pottery, and silver as gifts. Also, the camp reported demand for handkerchiefs, scarves, authentic rugs, heritage pieces, and handmade items.

Survey findings further specified what women producers believe they need to improve to better meet tourist expectations, and they largely aligned with the KII emphasis on packaging, design adaptation, and interpretive value. The most frequently cited improvement was storytelling/being able to explain the product (57%), followed by packaging appearance (48%) and design uniqueness (43%), while a smaller share cited quality consistency (24%) and finishing (14%), while pricing was rarely selected (5%). Other responses (19%) pointed to enabling factors that affect market fit in practice, including English communication (not knowing how to speak English), availability of labor, and conditional engagement (e.g., willingness to produce for tourists if a good offer exists).

4.4.1.1. Customization, Co-Design, and Responsiveness to Customer Preferences

Customization emerged as a practical competitiveness strategy, for instance, the woman producer described a co-design approach, listening to customer needs, proposing additions, and finalizing designs through consultation. Moreover, Associations, such as Wadi Musa Widows and Family Development association, described demand-responsive planning, increasing quantities when specific items move in the market. The same association shared an innovation idea that combines affordability and circularity, upcycling used wedding dresses into redesigned items.

Survey findings suggested that women producers already perceive themselves as actively engaged in product improvement, at least in principle. All respondents (100%) reported that they develop or improve their product designs regularly, which aligns with KII evidence that producers adapt products in response to customer needs and tourism demand. Moreover, producers most frequently described design improvement through quality-related practices (e.g., improving finishing, using good raw materials, maintaining hygiene and proper storage for food products, and ongoing monitoring of quality), as well as through intentional heritage linkage (e.g., always linking products to Petra heritage and building designs based on local heritage), which indicated that what respondents describe as design often combines aesthetic choices with production quality and authenticity.

4.4.2. Heritage-Linked Identity and Differentiation

A repeated message across KIIs is that products perform best when they are clearly of Petra, for instance, a Visitor Center shop emphasized that best-performing designs draw on Petra identity (Treasury motifs, camel symbols, local embroidery elements).[14] Also, PDTRA described a heritage-based direction, with prioritizing ceramics, pottery, silver, and jewelry linked to Nabataean history, with training and graduation projects inspired by museum and site motifs. At the association level, Saydat Al-Anbat positioned silver jewelry as a core identity product grounded in Nabataean motifs and heritage stories (inspired by Petra

[14] KII with Murad Hilalat, Shop in the Visitor Center, Petra, 15 February 2026.

Museum pieces and rock carvings), with also stressed originality and avoiding copying. PAP reinforced this through authenticity expectations, including rejecting unrelated symbols in the site context.

4.4.3. Structured Production Systems and Quality Control Practices

Several women-led production models demonstrated structured production and quality assurance practices, especially where associations operate workshops; for instance, Saydat Al-Anbat described a fully equipped workshop covering all stages of production (from melting to finishing), with quality-control roles, item documentation (weight, measurements, design), and a design database and catalog to replicate pieces consistently. In addition, the association clarified a realistic handmade standard: minor variations are acceptable and sometimes valued, but safety and functionality defects (sharp edges, major sizing issues, poor finishing) are rejected.

Furthermore, the other association practical quality control through rework and correction (e.g., repeating embroidery when thread breaks), in addition, the woman producer described structured processes (measurements, efficient cutting, ironing/pressing, fitting and minor alterations) and emphasized that consistent craftsmanship drives referrals, and as she said: *"quality markets itself"*,[15] which indicated that in the absence of formal branding systems, consistent workmanship functions as an informal quality indicator.

Survey findings indicated that women producers perceived their product quality as strong, which complements the KII focus on quality systems and repeatable production practices, for instance, 71% rated their product quality as very high (consistent and meeting tourist expectations), while 19% rated it as high with minor issues; only 5% rated it medium and 5% were unsure. At the same time, At the same time, when asked what factors affect product quality, responses pointed to specific pressure points that can undermine consistent quality over time, for instance, 48% reported no major issues, but a notable share highlighted constraints linked to materials quality (24%) and, for relevant product types, storage life (19%), in addition to other responses reflected operational issues that can indirectly affect quality, including high input prices, variability in flour quality affecting bread texture, cost of final packaging, limited availability of essential materials, and potential machine/equipment problems.

4.4.3.1. Hygiene and Shelf-life Constraints for Food and Natural Products

Survey findings for food and natural products indicated that hygiene/safety and shelf-life issues are present but not widespread, with similar patterns, for instance, 40% of respondents reported facing hygiene/safety or shelf-life challenges, while 60% reported no challenges. Among those who reported challenges, the main issues were storage constraints (40%) and expiry (40%), followed by heat and humidity (20%), which suggested that preservation risks are primarily linked to storage conditions and maintaining product freshness over time, rather than being experienced across all food and natural product producers.

4.4.4. Packaging, labeling, and Information Gaps; A Recurring Readiness Constraint

Despite generally positive quality perceptions, packaging and labeling were repeatedly flagged as readiness constraints; a local community interview noted overall quality is good but packaging needs improvement.[16] Likewise, the woman producer highlighted lacking packaging/labels and stressed that first impressions matter for tourist sales. Tour guides added that written information strengthens credibility for products where use, benefits, and ingredients matter, and warned that mislabeling origin (imported vs local) undermines integrity. Also, the independent seller highlighted a readiness risk when product images differ from reality, leading to complaints.

Survey findings quantified the packaging gap and clarify the types of improvements producers prioritize, where only 38% described their packaging as market-ready (branded), while 24% reported using basic packaging only and another 24% reported no packaging; 14% indicated packaging is not applicable to their products. When asked what packaging improvements are needed, the most frequently cited need was branding/visual identity on packaging (62%), followed by eco-friendly packaging (38%) and better protection for travel/transport (14%); 14% reported no improvements needed. Additionally, other responses emphasized practical and low-cost readiness supports, including cloth bags, adding a brochure,

[15] KII with Khadija Al-Hasanat, Woman Producer, Petra, 09 February 2026.
[16] KII with Qusai Amarat, Local Community, Petra, 16 February 2026.

and producing custom stickers, while one response highlighted the absence of packaging altogether due to limited support and weak sales incentives.

4.4.4.1. Product-Service Features and After-Sales Practices

Interviews indicated that market readiness in Petra includes service components that strengthen trust and customer satisfaction; for instance, Saydat Al-Anbat association mentioned that packaging made from recycled materials that includes product and/or story information, alongside delivery options and after-sales services such as guarantees, exchange, and repair. Similar to this, a tour guide noted trust can be strengthened through follow-up contact (phone number for feedback).[17] Additionally, Visitor Center shops described complaint handling; issues are rare but resolved (e.g., scarf unraveling), defective products are avoided, and customer concerns are addressed to protect credibility.

4.4.5. Capacity to Meet Orders: Scaling Readiness, Inputs, and Quantity Fulfillment

A consistent readiness constraint is order fulfillment at scale, where PDTRA noted that even 100 pieces may take a month or more, highlighted limits in production speed and process capacity. Similarly, local community interviews linked scaling limits to materials and resources and limited support, affecting continuity. From the hotel perspective, limited sourcing from women's associations is driven by concerns about meeting orders, quality, and quantities. Also, PDTRA flagged ceramics inputs as a constraint, noting reliance on outside clay and efforts to analyze "Nabataean clay" to identify a suitable local alternative. Furthermore, the handicrafts traders' association added that consistency depends on professionalism; skilled artists can maintain standards even at scale (e.g., 100 pieces at the same quality), but this requires organized systems.

Moreover, survey findings showed this picture by showing that many producers perceive themselves as able to respond to larger demand, but with clear obstacles that align with the KII concerns around staffing and production systems. Two-thirds of respondents (67%) reported they can meet large orders, while 14% can meet medium orders, 14% reported capacity depends on season/materials, and 5% reported they can produce only small quantities. However, when asked about the specific capacities required if orders increase, readiness appears uneven; 67% reported sufficient raw material availability and 52% sufficient production space, but only 43% reported adequate storage for raw materials and just 29% reported sufficient tools/equipment capacity. Additionally, capacity related to labor and scaling operations was more constrained, with only 19% reporting an ability to hire/add production staff, and 5% reporting sufficient capacity to manage production workflow/process, which means that scaling is more limited by production organization and resource mobilization than by willingness to take orders.

4.4.5.1. Standardization, Pricing Consistency, and Perceived Value

KIIs emphasized that tourists judge value through the price-quality relationship; dissatisfaction often comes from buying low-quality items cheaply and regretting it later.[18] Also, it was highlighted that inconsistent pricing for the same product (e.g., shemagh ranging widely) undermines trust.[19] In addition, PAP noted that associations price differently because some calculate full costs while others do not, which affect competitiveness and supply relationships. Also, PDTRA stressed that competing beyond small-shop levels requires standardized specs (uniform thickness, dimensions, shape, quality).

4.4.6. Identified Gaps and Opportunities for Local Product Development

KIIs identified concentration risks and clear opportunities, for instance, PDTRA noted current market visibility is concentrated in silver and ceramics, with gaps in other demanded items reflecting Jordanian identity, and mentioned inactive associations with infrastructure that could be reactivated if management and staffing gaps are addressed. The handicrafts traders' association emphasized that many common souvenirs are still imported, indicating unmet potential for local manufacturing and product development.

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[17] KII with Saad Ghinemat, Shop in the Visitor Center, Petra, 15 February 2026.
[18] KII with Tamer Nawafleh, Tour Guide, Petra, 16 February 2026.
[19] KII with Mohammad Hilalat, Tour Guide, Petra, 16 February 2026.

Examples of opportunity included distinctive creative products such as local Petra sculptures and models, and eco-oriented concepts like using leftover wood scraps for souvenirs (decorated boxes).[20] Also, one Visitor Center shop pointed to high-demand growth areas (embroidery and silver, especially Treasury symbolism), but stressed the need for training, design development, and tools, in addition to diversification toward youth and children products.[21] Also, Wadi Musa Widows and Family Development association identified an upgrade need based on a market study, specifically the missing need for an embroidery machine. Wadi Musa Widows and Family Development identified a concrete upgrade need from a market study, they did, an embroidery machine.

4.5. Market Access, Sales Channels, and Digital Engagement

Market access for women producers and women-led associations in Petra is influenced by how well they can connect to high-traffic sales channels (Visitor Center shops, bazaars, hotels, camps, and exhibitions), navigate intermediaries (guides and tour offices), and build trust at the point of sale through clear local origin, storytelling, labeling, language, pricing, packaging, and payment options. Also, recent shocks and changing visitor behavior have increased interest in external outreach and selective digital marketing, but the use remains uneven.

4.5.1. Sales Channels and Access Points

KIIs repeatedly identified bazaars/downtown markets, Visitor Center shops, hotel display corners, exhibitions, and tourism businesses with camps and hotels as the main channels through which tourists encounter local products. Visitor Center shops as a central sales option for women-led products, for instance, Wadi Musa Widows and Family Development reported its main souvenir sales point there, while shop interviews described walk-in sales supported by basic customer service, complaint handling, and electronic payment availability. PDTRA positioned the Visitor Center shop (and linked online visibility through Visit Petra/Petra products) as a key marketing mechanism, while noting that the model is still new and partnership-dependent for scaling.

KIIs showed that hotels can support market access through both display and production arrangements, but with uneven depth, for instance, Saydat Al-Anbat described shifting toward hotel supply after losing a key client due to regulatory changes; it also noted that hotel display corners can sometimes be free of rent and commission, while commission models may include margin-control conditions. Also, Wadi Musa Widows and Family Development described hotel partnerships mainly through embroidery production for textiles (e.g., curtains, bedspreads, table covers), without guaranteed on-site display or direct sales space.

4.5.1.1. Intermediated Market Access for Women Producers

Women do not always market independently; associations and retails often act as facilitators; Wadi Musa Widows and Family Development noted it markets on behalf of women who cannot market directly and uses exhibitions and workshops while listing women's names and phone numbers for customer contact. Also, a Visitor Center shop described purchasing/displaying products from women beyond membership as a livelihood-support mechanism.[22]

Respondents clarified that access to hotels, shops, and camps is constrained by a combination of networks, and market readiness requirements, where multiple responses allowed), the most frequently reported barrier was transport and delivery (38%), followed by lack of contacts (29%) and insufficient quantity (24%). Readiness-related constraints were also cited, including packaging and labeling (19%), payment terms (14%), and registration requirements (10%), while quality consistency was less frequently reported (10%). Additionally, respondents suggested that Open-ended responses in Petra further suggest that market access constraints are often reinforced by weak market pull and bargaining dynamics, including perceptions that products are too expensive, expectations for low prices in exchange for large quantities, limited demand or outreach from outlets, and limited experience.

[20] KII with Mohammad Khalil, The Jordanian Association for Handicrafts, Tranditional and Folk Industries, and their Traders, Petra, 15 February, 2026.
[21] KII with Murad Hilalat, Shop in the Visitor Center, Petra, 15 February 2026.
[22] KII with Saad Ghinemat, Shop in the Visitor Center, Petra, 15 February 2026.

When asked what market-access support is needed, producers' responses largely mirror these constraints and emphasize practical linkage models, for instance, strengthened selling opportunities through hotels and camps, expanded participation in bazaars and exhibitions, and stronger marketing support, including e-marketing and promotion beyond Petra and, in some cases, international exposure. Moreover, several producers highlighted enabling supports that would make these channels feasible, such as English language training to communicate with foreign visitors, training to expand staffing/production capacity, transport support, and financial support (e.g., purchasing larger quantities, covering licensing costs, or securing materials). Responses on who should provide such support most frequently pointed to PDTRA, alongside hotels, private sector actors, civil society and development organizations (including local NGOs and international agencies), and specialized training providers; however, a subset of respondents expressed uncertainty or lack of trust in support availability (e.g., don't know, no entity).

4.5.2. Purchase Timing and Visitor Decision Moments

KIIs described souvenir purchasing as time-bound; the camp reported most buying happens during activities and after dinner, with some purchases in the morning before departure; the hotel interview described quick purchase windows after breakfast or dinner (often 5-10 minutes). Also, tour guides emphasized that souvenir stops are not a default itinerary element; they usually happen by customer request or spontaneous interest. Some purchases occur late in the trip after visitors form an overall impression, including on routes to other destinations (e.g., Aqaba/Dead Sea).

Survey findings suggested that these short decision windows increase the importance of quick trust and clarity cues at point of sale, for instance, less than half of producers reported having a clear brand identity (name/logo) (43%), while 48% reported having no brand identity (10% partly).

4.5.2.1. Intermediaries Shaping Sales

KIIs described that when guides explain an item as local and handmade or women-led and sometimes compare it to imported products; this can increase purchasing without overt pressure. Moreover, the hotel interview reinforced that guides could increase conversion by sharing language and heritage and place narratives. Community views varied, for instance, some stressed storytelling materially increases selling chances and that guides and photographers are best positioned to persuade; others said storytelling helps in some contexts but is not consistently play the final call.

Moreover, survey findings aligned with this intermediary role by showing that producers do not consistently provide interpretation on their own, where 62% reported they always provide a story/explanation when selling (19% sometimes).

4.5.2.2. What Increases Sales: Storytelling, Information, and Visual Identity

KIIs agreed on one message; selling depends on information and credible presentation, for instance, shops described sharing stories when known with avoiding misinformation, and focusing on accurate explanations of product quality, especially because visitors ask about heritage and traditional clothing use. Also, guides added that display and written text can influence purchasing, and even simple packaging becomes more attractive when it carries a visual identity and Petra and Jordan landmarks; a Visitor Center shop referenced brochures/informational materials as a way to reassure customers that products are local and not imported.

Survey findings reinforced that producers themselves identify the information layer as a priority improvement area, for instance, when asked what support they need to improve storytelling and presentation, 86% of respondents selected packaging text and labels (Arabic and English), 43% selected support on how to write product stories linked to heritage, and 38% selected support on how to present products to visitors (sales pitch), while only 5% reported no support needed. Also, KIIs emphasized language as a market enabler; English as a baseline, with Spanish and French valuable; Arabic alone was described as insufficient for most international tourists.

4.5.3. Digital Engagement: Current Practice and Key Barriers

KIIs indicated that digital engagement is viewed as important; however, adoption often constrained by skills, trust concerns, and the realities of selling in a tourism destination. Saydat Al-Anbat described how crises

triggered a strategic question, *"if tourists can't come to us, why don't we reach them online?"*, which increased interest in online platforms and social media. Also, the association reported actively managing social media pages (responding to inquiries, sharing updates), which strengthened engagement through reels and posting schedules, and upgrading branding with a new logo and clearer visual identity in 2026. However, it also highlighted gaps in paid promotion and boosting, building visibility on Google, discoverability, and developing a stronger brand identity.

Likewise, Wadi Musa Widows and Family Development association reported active social media use to showcase products and described this as significantly helping increase sales. As for individual producers working through associations, digital presence may be mediated, a woman producer noted that digital channel use exists but is limited to the association's page, where embroidery, sewing services and prices are posted.

Survey findings provided a more detailed view of current marketing practices and confirmed that most promotion remains relationship-based, with uneven digital adoption, for instance, the dominant promotion channel is word of mouth (86%), followed by social media (76%), product display (43%), and exhibitions (38%), while partnership-based promotion through hotels/camps/guides/tour operators was less commonly reported (19%), and paid advertising was rarely used (5%).

Local community interviews described social media use among women producers as inconsistent; roughly half have some presence, while others rely on person-to-person networks.[23] Another local community interview mentioned that social media selling is limited, and that time and consistency are key obstacles; after short trainings, many cannot sustain page management.[24] This was reinforced by an observation that many customers and visitors tend to buy what is physically available in front of them, which limits the immediate payoff of online marketing if it is not connected to a reliable fulfillment and delivery mechanism.

Survey findings illustrated the use vs. effectiveness gap, where 71% reported using social media for marketing and/or selling (33% for both marketing and selling; 38% for marketing only), while 24% do not use it (and 5% have an account but do not use it actively). However, producers also reported multiple constraints preventing more effective online selling; lack of skills (43%), difficulty producing content (38%), lack of time (24%), and weak internet (14%), alongside other issues such as limited reach and limited know-how. Among those who do not use social media (or do not use it actively), the main reported barriers in Petra were again skills/knowledge (19%), with smaller shares citing time constraints, difficulty writing content, and device limitations. Furthermore, access to basic tools is relatively high but does not turn into digital readiness; 95% reported having a smartphone, yet only 33% reported having good internet, and only 14% reported access to camera/lighting tools; design capability (e.g., Canva) was rarely reported (5%).

Also, KIIs captured trust and context constraints; the independent seller described fear of scams and complaints when online images do not match actual products, while guides noted weak connectivity inside Petra reduces in-the-moment digital use. At the same time, other interviews observed that some tourists check Google, Instagram, and maps and may step away to decide privately; the hotel interview added that tourists often search online for symbolism and story before buying (especially accessories). Furthermore, producers described digital as complementary to on-ground channels and partnerships, often requesting promotion support, digital marketing training, better photography and design capacity, and financing for tools, materials, and advertising, alongside stronger linkages with hotels and camps.

4.5.3.1. Payments and Consumer Trust Mechanisms

Payment options and consumer protection practices are considered as additional components of market readiness and access, for instance, Visitor Center shops reported cash and card payment (Visa and others), and PDTRA confirmed electronic payment availability through the shop model. PAP emphasized that consumer protection mechanisms matter for destination trust; while pricing is open in a tourist market, fraud and scamming cases (e.g., card manipulation) are addressed through official complaints, refunds, and penalties, which supported legitimacy for compliant sellers.

[23] KII with Ibrahim Ayman, Local Community, Petra, 16 February 2026.
[24] KII with Qusai Amarat, Local Community, Petra, 16 February 2026.

4.5.5. Beyond Walk-In Sales: Partnerships and External Markets

While Petra market access is often framed as local and walk-in, some interviews demonstrate external reach and partnership-driven routes. Wadi Musa Widows and Family Development reported international reach for some products (e.g., embroidered farwas reaching France, Italy, and UK since 2018). Also, Saydat Al-Anbat described diversifying channels (hotels, bazaars, exhibitions, Visitor Center) after regulatory and market shifts. An independent seller described relying on external networks by contracting with a women's association in Ajloun for soap due to limited nearby options.

4.5.6. What Is Needed to Make Channels Work?

PDTRA underscored linking trained artisans to associations and employment opportunities so the cycle is completed (training → production → marketing); where this aligns with shop-level views that growth requires digital and e-marketing and additional external activities and programs to showcase outlets beyond walk-in sales, in addition, one shop suggested improving the physical customer experience by creating an official organized display space outside the shop to support browsing and entry.[25] Therefore, any intervention in Petra shall not focus only on production; it should also focus on strengthening the full pipeline from skills development and production organization through to market-facing presentation, partnerships, and multi-channel marketing.

4.6. Entrepreneurship Practices and Business Capacity

Entrepreneurship capacity is influenced by how well women-led associations and women producers turn skills into viable businesses within a highly seasonal tourism market. The primary findings showed that performance depends on practical business fundamentals, governance and role clarity, cost-based pricing and recordkeeping, continuity planning under fluctuating demand and input constraints, and customer-oriented selling practices that protect trust, reputation, and "Made in Petra" value.

4.6.1. Business Models and Governance Capacity

A clear contrast emerges between associations that operate as institutions and other models that remain informal or dependent on individuals; for example, Saydat Al-Anbat described operating as an integrated institution, with formal accounting, banking documentation, structured accounts, and social security coverage for employees, positioning these systems as compliance tools and decision-support mechanisms under fluctuating demand. Similarly, Wadi Musa Widows and Family Development described structured governance, including a five-year plan, an internal procurement committee responsible for purchasing and invoice approval, Excel-based documentation, and defined roles (treasurer, workshop manager, president) that support continuity beyond individuals. At the same time, PDTRA noted that some associations have buildings and equipment but remain inactive due to weak management, leadership changes, limited administration, or lack of technical supervision, which reduced effective use of available assets. Another KII warned that association models can drift toward purely profit-driven retail unless they are intentionally structured for incubation and producer development. [26]

Moreover, survey findings among women producers complement these KIIs insights by indicating that forward planning is often present, but remains largely informal; 57% reported having a clear plan but not written, while 19% reported having a written plan; 19% reported having no plan, and 5% reported they are not sure what a business plan is; although while most producers have near-term direction, planning is frequently undocumented, potentially limiting follow-through, access to finance/support programs, and the ability to systematically manage seasonality and growth.

In terms of priorities, producers stated goals for next six months are strongly market-oriented and align with the broader assessment themes on market access and readiness, where the most frequently selected goal was increasing sales to tourists (90%), followed by expanding selling channels (67%). Around half of respondents also prioritized strengthening the production and product offer; launching new products

[25] KII with Murad Hilalat, Shop in the Visitor Center, Petra, 15 February 2026.

[26] KII with Mohammad Khalil, The Jordanian Association for Handicrafts, Traditional & Folk Industries and their Trader, Petra, 15 February 2026

(52%), improving product quality and consistency (52%), and increasing production capacity (52%), while 43% identified improving packaging and labeling as a key goal.

4.6.2. Financial Management and Pricing

Costing and pricing were repeatedly presented as a main measure of business maturity, for instance Saydat Al-Anbat described systematic pricing based on calculating fixed and variable costs, setting full product cost, and adding a profit margin, with pricing transparency toward members. Also, it reported using an integrated accounting system to track sales performance (what sold and what did not; best sellers by year) and adjust product decisions (reduce high-cost/low-sales items, expand high-demand lines, discontinue weak-return products). Moreover, Wadi Musa Widows and Family Development described detailed costing practices (e.g., bread costing based on flour yield, wages, utilities), and reported a revolving finance model with three funds offering grants and loans, where grants can shift into loans over time, and repayment ability is screened at household level. In contrast, the independent seller described pricing as often random and profit-driven, with weak recordkeeping, and requested accounting and entrepreneurship training to clarify profitability and make it sustainable.

Survey findings complemented these KII contrasts by indicating relatively strong self-reported costing behavior among producers, where all respondents (100%) reported that they usually set prices by calculating costs and a profit margin, rather than pricing purely by experience or competitor comparison. At the same time, when asked to position their prices relative to other products in the market, responses suggest that most perceive their pricing as broadly aligned with local norms; 52% reported their price is similar to comparable local products, while 19% reported being higher and 19% lower (10% were unsure). Compared to imported products, perceptions were more mixed: 43% reported their price is similar, while 24% reported being higher and 24% lower (10% unsure).

From market-facing perspectives, tour guides stressed that fixed pricing and transparency about origin (local vs imported) improve reliability, while highly variable pricing undermines trust, particularly for visitors seeking quick, low-cost purchases. A local community member linked overpricing by some shops to harm to visitor experience and Petra's reputation. Also, the camp described demand as strongest in a mid-range band (about 20-50 JOD, product-dependent) and emphasized avoiding exploitation. Moreover, PAP linked business improvement to practical selling and specialization so each shop or association becomes known for a distinctive product and brand, while another KII noted price variation can be legitimate when tied to materials and quality, but only if specifications and product stories are clear. [27]

4.6.3. Operational Planning and the Constraints of a Seasonal Tourism Market

KIIs indicated that entrepreneurship capacity in Petra is linked to operational planning under seasonality and shocks, for example, Saydat Al-Anbat noted that tourism demand is not constant and that production is time-intensive (e.g., a ring can take 4-5 hours and some pieces a full day), which makes scaling and timely order fulfillment difficult without strong planning and sufficient labor. Also, Wadi Musa Widows and Family Development described market-informed guidance, identifying oversupplied project ideas, steering women toward better opportunities, and stabilizing incomes by buying and reselling women's products when individual selling channels fluctuate.

At the producer level, a woman producer linked continuity problems to limited ability to buy inputs in bulk, where shortages disrupt production; she reported coping by bringing materials from home when procurement systems fail. Also, she proposed establishing a sewing workshop and/or factory in Wadi Musa to absorb graduates and enable task specialization (skilled stitching roles versus simpler finishing tasks), which will improve productivity and moving beyond fragmented artisanal work toward more organized production lines.

Moreover, several interviews emphasized that the market is highly relationship-based (who knows whom) and that transactions often remain informal, with few clear agreements and the possibility that continuity stops at any time. Local community interviewees identified delivery and logistics and networking as among

[27] KII with Mohammad Khalil, The Jordanian Association for Handicrafts, Traditional & Folk Industries and their Trader, Petra, 15 February 2026

the hardest practices for women producers, since they rely on contacts and personal networks, which means weak logistics and informality can constrain growth even when product quality is strong.

Survey findings complemented these insights by showing that producers report strong basic recordkeeping, but their cost structure reinforces vulnerability under seasonal fluctuations, for instance all respondents (100%) reported that they record sales and expenses, which indicated tracking practices, in addition, it was profitability was reported as moderate, with the average stated profit margin for Petra's main product line is 21.7%, which limits the buffer available to absorb low-season downturns or input price shocks.

Furthermore, expense patterns explained why operational planning remains challenging under demand volatility; the largest reported expense category is raw materials (90%), and most respondents characterized their expenses as primarily variable/production-related (52%), while 10% reported fixed costs as dominant and 38% reported a mix of both. Additional cost pressures in Petra include utilities (33%), labor (24%), and rent (19%), alongside packaging/labels (14%), marketing/advertising (14%), and equipment/tools maintenance (14%); smaller shares cited licensing/permits/fees (10%) and transport/delivery (5%).

4.6.4. Commercial and Customer-Oriented Practices

Another highlighted theme was that entrepreneurship ecosystem in Petra is also driven by commerce and customer experience, especially in a WHS setting. PDTRA noted that some market actors still present products in unsuitable ways, especially weak packaging and poor presentation, which reflects gaps in customer-oriented practice, and emphasized that core business skills (pricing, costing, and project management) are essential for sustainability rather than optional add-ons.

Also, PAP outlined professionalism standards expected from sellers, including courteous communication, appropriate appearance, name badges, keeping goods inside shops, cleanliness, and avoiding visual distortions that affect the site's aesthetics, which highlights that selling practices influence the WHS visitor experience, destination reputation, and business performance. In addition, tour guides described informal accountability mechanisms that reinforce these expectations; when complaints occur, guides may stop recommending a seller and/or shop, creating reputation-based consequences even without formal contracts. At the same time, guides cautioned that formal guide–producer partnerships carry risks when business discipline is weak, including inflated prices, price-quality mismatch, and false claims about local and handmade origin.

Moreover, the hotel reported connecting tour groups to "Jordanian home" food/experience providers upon request (often via tour offices) without taking commission, and hosting meetings and seminars with the PDTRA and external organizations to support small/home-based projects. Similary, the camp emphasized prioritizing visitor satisfaction and avoiding customer exploitation, which reinforced that trust-based selling is central to business continuity in Petra.

4.6.5. Competitive Pressure, Imports, and Cost Structures

High operating costs and competitive pressure influence entrepreneurship decisions, for example, Visitor Center shops noted that rent and fixed obligations (including salaries) are substantially higher than in other areas, and become difficult to sustain during periods of weak tourism. In addition, they described strong competition from cheaper imported goods (e.g., Chinese and Indian items), which can undercut local products that are typically more expensive and not always in demand; in response, some retailers reported selectively stocking imported items that still reflect local identity (place-linked symbols and styles) to maintain sales.

Demand conditions reinforce these pressures; interviews indicated that purchasing often concentrates on low-cost items, and heavy price negotiation is common, which further reduces margins. These realities reinforce the need for clearer business planning, product segmentation, in addition to value communication; so that local products can compete on meaning and quality rather than price alone, with also ensuring that entrepreneurship does not shift toward general products (without any identity), that weakens "Made in Petra" differentiation.

4.7. Skills Development, Training Exposure, and Capacity Gaps

Skills development and capacity-building are already active across associations and PDTRA, covering a wide base of technical skills (e.g., silverwork, sewing/embroidery, ceramics, and food processing); however, findings showed that participation is uneven and that training does not consistently lead to sustained income without stronger market-facing skills (branding, packaging/labeling, sales, communication, and digital marketing), clearer paths to market linkages, and practical enablers such as equipped workspaces, tools, and structured follow-up that supports production continuity and real market entry.

4.7.1. Existing Training Landscape

Several KIIs described women-led associations as having evolved beyond production into local training and capacity-building entities, where, for instance, Saydat Al-Anbat reported evolving into a district-level training center with partnerships to deliver diverse trainings, including silverwork, copper crafts, ceramics, and food-related production (e.g., chocolate and cheese-making). Wadi Musa Widows and Family Development reported high training volume (e.g., 12 workshops in one month), covering food processing (sweets, halawa/rahat, jams, labneh, spices, maqluba), sewing, embroidery (dresses, jackets, shawls, t-shirts), and additional areas such as dairy, herb growing, supermarket management, poultry, bird rearing, soap-making, and accessories. Also, the association described peer-learning through exchanges with other associations, accountants, and specialists, and noted strong uptake for specific initiatives (e.g., a white cheese project).

At the institutional level, PDTRA described its role as a training center with workshop capacity of around 10 trainees, designed to produce artisans and connect them to labor-market opportunities. In addition, it provided examples of delivered programs, including: (i) a 6-month sewing workshop followed by employment of more than half of trainees within the workshop; (ii) loom/wool value-chain training (sourcing, washing, spinning, dyeing, and production of bags/rugs/bedspreads); (iii) a long tourism-English program with the U.S. Embassy (9 months for the first cohort) linked to labor-market pathways; and (iv) photography/video editing training (6 months for 16 girls, with some receiving grants afterward).

Moreover, survey results among women producers indicated that, despite the presence of multiple training providers and training activity described in KIIs, participation is not widespread, where for instance, 43% of respondents reported having attended training related to entrepreneurship, product development/design, quality enhancement, or marketing, while 57% reported they had not attended any such training. In terms of reported learning ways among women producers, they included self-learning and experience "by myself" and "through practice", learning through associations, and learning through short courses or formal training. Where trainings were attended, examples included silverwork and wax casting, handcraft communication skills, pastries production, product design and quality management, soap-making (glycerin), photography diplomas, business, entrepreneurship, and accounting, marketing, and project management. Additionally, respondents identified gaps in prior trainings that aligned with later market-readiness themes in this assessment, where missing areas included digital design skills (design on computer), AI and digital marketing, laser-related skills, mold-making, business administration, and natural soap production, alongside practical concerns such as short training duration or discontinued training.

4.7.2. Training Content Needs

Based on the KIIs, training needs are recommend to address the full cycle from production to sales, for instance, PDTRA emphasized combining craft production with packaging, brochures, visual identity/logo development, marketing and sales, and business skills (pricing, costing, and project management); this was echoed by other interviewees who described constraints increasingly located in selling, promotion, and market access rather than production capability alone.

Digital marketing and promotion were repeatedly flagged as priority gaps, for instance, Saydat Al-Anbat highlighted the need for professional digital marketing and platform development, including skills in paid promotion and boosting, improving Google visibility and discoverability, and strengthening brand identity. Similarly, community interviews stressed that the challenge is sustaining marketing practice over time, not only completing short courses.

Tour guides emphasized frontline market-facing skills that directly affect conversion; communication and language (described as the most important), patience and interaction management, and understanding bargaining expectations shaped by other tourism cultures. Also, they stated that sales and marketing as a key women-focused gap, more limiting than production skills. Also, Visitor Center shops focused on design development and tools (product-line dependent), and the value of benchmarking exposure in tourist markets to guide product ideation. PAP emphasized etiquette and communication style, presentation and appearance, compliance with site rules, cleanliness, and specialization in a distinctive product.

In reference to the survey, it contained a self-assessment, where the women producers evaluate their knowledge and capacity among several training topics; high shares rated themselves at levels 4-5 (strong) in product development/design improvement (76%), quality enhancement and consistency (86%), costing/pricing and profitability (81%), and record-keeping/basic finance (76%). In contrast, fewer rated themselves strong in packaging and labelling (38%), market access and partnerships (19%), online selling (19%), and digital marketing (33%), which directly aligns with KII observations that constraints are increasingly concentrated in branding, selling, promotion, and market access rather than the ability to produce. Additionally, self-ratings for entrepreneurship basics and business planning were mixed (38% rating 4-5), which suggested that many producers have practical experience, but may benefit from structured planning and business model clarification.

4.7.3. Skills Continuity and Inclusion

Several KIIs emphasized the need for skills continuity to sustain women's livelihoods and to ensure that specialized heritage-linked skills do not decline as current artisans and women producers age. For instance, Saydat Al-Anbat association highlighted the importance of training a new generation of young women to transfer silvercraft skills as artisans grow older, as well as stressing that skills transfer is essential for sustaining local identity products and maintaining production capacity over time.

At the individual producer level, a sewing-track graduate pipeline was described as under explored and used, where she also noted that each year girls graduate from sewing tracks, estimated around 20-30 per school, yet there is no local workplace or factory to employ them. Therefore, her pre-mentioned proposal of a local sewing factory or workshop in Wadi Musa could absorb graduates and enable task specialization, which would strengthen workforce absorption and productivity in addition to reducing the gap between training outputs and employment opportunities. At the community level, interviewees emphasized that training should be delivered through specialized centers with supervision and should cover, along with technical skills, product photography and presentation, customer handling, and marketing. Also, training shall aim to gradually shift cultural norms toward greater acceptance of women's economic roles, which suggested that training can have economic and social impact on women.

4.7.4. Business and Operational Skills Gaps

Business skills were repeatedly described as a central sustainability barrier; Saydat Al-Anbat requested upgrades such as advanced accounting systems, improved Excel use, and more accurate cost calculations under volatile raw material prices. It also identified proposal writing as a major gap often requiring paid external support, alongside capacity needs in packaging/brochure development and organizing training workshops with partners, which reflects resource mobilization and administration challenges. Also, Wadi Musa Widows and Family Development described addressing these gaps through specialized trainers for project management, cost calculation, project assessment, sustainability/maximizing benefit, and profit/loss understanding. From the private sector side, Petra Canyon Hotel recommended capacity areas that would help suppliers. especially women's associations, meet procurement expectations; vocational and technical skills, marketing and computer skills, English, e-marketing, and general producer skill development, linking training priorities to buyer requirements.

4.7.5. Beyond Training

Several KIIs stressed that training must be paired with enabling infrastructure and follow-up, for example, the handicrafts traders' association emphasized that priority support is not only training content but incubation infrastructure, equipped workspaces (including a comfortable working environment) to raise productivity, quality, and production capacity, in addition to market-facing guidance to help craftspeople meet demand and replace imports. Additionally, a tour guide similarly prioritized enabling local production

of basic high-demand items rather than importing them (e.g., handkerchiefs, caps, t-shirts), implying a shift from fragmented artisanal outputs toward market-oriented local production when skills and capacity allow.

Finally, KIIs emphasized that training outcomes depend on follow-up and coordinated support, for instance, PAP stated that follow-up after training should be led by the authority, with support from entities such as UNESCO. As an example, PAP cited local youth trained and employed through the Al-Habis Castle restoration project, with coordination continuing afterward, which illustrated a model where training is linked to real employment and sustained coordination.

4.8. Institutional, Regulatory, and Policy Environment

Findings indicated that the institutional and regulatory environment affects women's market participation through rules governing selling spaces in/around the WHS, the cost and complexity of compliance, and coordination and follow-up across responsible entities. While selling has become more organized through recognized associations and kiosks, access conditions and compliance burdens remain uneven.

4.8.1. Governance and Coordination

KIIs reflected a multi-actor environment with distributed responsibilities, where, for instance, PDTRA described its mandate around sustainable development and economic empowerment (support, rehabilitation, training, and labor-market linkages), while market organization and shop regulation were described as closer to a municipal function. However, women-led associations reported coordination and follow-up gaps that affect compliance and growth; Saydat Al-Anbat described limited follow-up from the Cooperative Associations Union and late official notices, while Wadi Musa Widows and Family Development similarly cited weak governance and limited institutional coordination as constraints.

At implementation level, interviewees stressed that expanding and stabilizing market initiatives, especially the Visitor Center shop and marketing model, requires stronger multi-stakeholder partnerships. A shop interview noted that support can involve government actors, international organizations, civil society, the local community, and associations, but effectiveness depends on coordination. Moreover, PAP described coordination as mainly procedural, typically starting with calls then meetings and official letters, which reflected the administrative nature of engagement in the WHS context.

Support was seen as most impactful when it includes tangible linkages and predictable engagement, yet some KIIs suggested a decline over time, for instance, Wadi Musa Widows and Family Development noted earlier PDTRA support (purchasing from bakery and production kitchen and placing orders for tourism events) but reported reduced support and highlighted rent as a key challenge. Saydat Al-Anbat added that while participation in exhibitions is encouraged, related costs (transport and accommodation) are not covered, which limits women's engagement.

4.8.2. Access to Selling Locations and Operating Conditions

Access to selling locations becomes one of the most consistent limitations affecting women's ability to participate economically; for local community interviewees, they described location as the main factor affecting where producers can sell, and emphasized that obtaining a sales spot is difficult, especially when costs and access conditions are high.

Moreover, associations' experiences explain how access can also involve strict operational conditions, as an example, Saydat Al-Anbat association mentioned the allocation of a shop space at the Petra Visitor Center, which was granted in 2019, as tied to strict requirements, including a 10,000 JOD legal guarantee, product restrictions, and official intervention on displayable designs. Additionally, the association reported that promised improvements, for example unified packaging and a website, were not delivered, and that maintenance delays sometimes required the association to cover improvement costs. The same interview described an authority-controlled artisan tent model with limited days and hours, where additional operating costs are not covered and limited promotion reduces sales viability.

For the individual seller, she reported the administrative requirements to operate (photo, IDs, no-objection letter, and fees), and noted that operating under a kiosk requires a legal arrangement under the owner's name or written approval. As for one of the shops, he noted that the process is not clear yet, where he

mentioned that associations applied and were approved and allocated space based on agreed arrangements, without providing full detail on selection criteria.

Survey findings indicated that 62% reported no guidance/training, while 38% reported they had received such guidance, which suggested that, alongside formal access constraints (permits, guarantees, fees, and allocation decisions), there is also a capacity gap related to understanding and navigating operating requirements, particularly important in a regulated WHS setting where non-compliance can lead to enforcement and loss of access.

4.8.2.1. WHS Market Governance

The WHS context creates a regulatory environment in which commercial activity is legally restricted, yet selling continues through recognized associations. PAP described a 2023 enforcement shift, where a security campaign closed violations and only recognized associations remained. Since September 2025, in addition PAP reported that recognized associations started receiving more organized kiosks under authority management, with violations handled through legal procedures. Moreover, PAP emphasized core obligations for sellers, including no illegal vending, compliance with permitted activity type (souvenirs vs refreshments), and adherence to authenticity rules. An ongoing challenge remains along the route from the Basin Restaurant toward the Monastery, where PAP indicated a further campaign may be needed to improve organization.

4.8.3. Compliance Burdens and the Cost of Formal Operation

Saydat Al-Anbat association described compliance requirements as a material burden that consumes resources and creates operational risk, where it also highlighted annual audited financial statement requirements as costly (including fees and logistics), and noted that taxation applies to surplus despite cooperative/not-for-profit status. Additionally, the association described electronic invoicing as a new compliance requirement introduced without adequate support, which creates additional difficulty. For Wadi Musa Widows and Family Development association, it provided a related example of uneven exemption rules: "While some association activities may be exempt from taxes, specific operations such as a bakery and clinics were described as licensed with annual fees and not exempt;" therefore, these examples showed that the cost of that the cost of compliance can reduce the viability of women-led interventions, particularly in periods of low tourism movement.

4.8.3.1. Formalization and Support Functions

KIIs captured examples of how institutional support can facilitate formalization and improve market readiness; the woman producer described obtaining a practice license through the Vocational Training Corporation via an exam and noted that applying required proof of training and/or experience from her association. Also, PDTRA noted product enablement support that can include lab testing, product development, packaging, and licensing, with citing support to a woman honey producer as an example. At the same time, the same producer interview described a negative experience with an official training program, which was through the National Aid Fund (NAF), linking the issue to poor trainee selection and weak follow-up rather than training content, which indicates that institutional programming quality affects whether support turn into sustained outcomes.

4.9. WHS Sustainable Management, Safeguarding, and Conservation Linkages

WHS safeguarding in Petra is linked to women's product activities mainly through authenticity and heritage interpretation in product narratives, and women producers' awareness and application of sustainable safeguarding practices.

4.9.1. Authenticity and Interpretation as Safeguarding Tools

KIIs suggest that safeguarding is reinforced when women's products are linked to Petra's cultural identity and communicated through credible interpretation. For instance, community perspectives stressed that products sell better when connected to place and heritage, and that storytelling increases selling chances when it provides accurate context tied to Petra.[28] Also, Visitor Center shops described practical authenticity

[28] KII with Qusai Amarat, Local Community, Petra, 16 February 2026.

signaling, including using brochures and informational materials to reassure customers that products are locally made and not imported, and using storytelling when information is known while avoiding misinformation, which reflect the importance of credibility in a heritage setting where visitors ask about heritage and traditional uses. Tour guides reinforced that interpretation cues (display, written text, and simple packaging with Petra-linked symbols) and appropriate language on labels/information can strengthen trust and understanding.

Moreover, survey findings showed that this "safeguarding-through-interpretation" approach is not yet consistently supported by strong awareness of sustainable development and WHS safeguarding principles among women producers. For instance, 33% reported they had only heard of sustainable development and WHS safeguarding in tourism-related activities, 29% reported being not familiar, 10% were somewhat familiar, and 29% reported being very familiar; this points to a need to treat safeguarding awareness as a practical market-readiness component so that product narratives, labeling, and heritage messaging are applied more consistently

4.9.2. Practices Applied and Feasibility of Greener Shifts

Survey findings explained that sustainable and safeguarding-related practices are present among a portion of women producers but are not yet consistently embedded across production and sales. The most reported practice was using eco-friendly materials where possible (57%), followed by following site rules related to selling and visitor interaction (43%) and reducing waste (38%). In contrast, responsible sourcing of materials was less frequently reported (14%), and 33% reported no specific practices, suggesting that a significant segment is not actively applying sustainability-related measures in their current operations.

Despite uneven current practice, willingness to adopt greener options appears relatively high in Petra, even with modest cost implications. When asked whether they would shift to more eco-friendly packaging and/or materials if costs increase slightly, 67% responded yes, 29% responded maybe, and only 5% responded no. This indicates that while cost sensitivity remains a constraint, there is a meaningful readiness among most producers to adopt greener inputs and packaging, provided the cost increase is manageable, supported the feasibility of integrating eco-friendly packaging and materials into market readiness interventions.

4.9.4. Strengthening Safeguarding Awareness and Compliance Capacity

In Petra, women producers' responses indicated that strengthening WHS safeguarding in market-facing activities requires awareness-building and clearer operational guidance; the most frequently reported needs were greater safeguarding awareness (71%) and clearer guidance and rules for selling and visitor interaction (71%), followed by practical training (62%), in addition fewer respondents identified a need for materials and/or tools to apply sustainable practices (24%), while only 5% reported that safeguarding is not a priority for their business. Responses on who should provide this support most pointed to PDTRA and civil society and development organizations (including NGOs and training institutions), though some respondents expressed uncertainty or lack of a clear support provider.

5. FINDINGS FROM WADI RUM

5.1. Community Livelihoods and Tourism Dynamics

Primary data in Wadi Rum consistently indicated that tourism is the backbone of local livelihoods, which play a primary role in income generation and stability, in addition to women's ability to sustain production and selling. Across the stakeholders and women producers, interviews and survey showed that described a highly seasonal economy that is also increasingly vulnerable to external shocks and shifting market conditions. Within this context, local product sales and service-based incomes rise and fall together with visitor flows, especially, access to tourists is uneven depending on location on the tour route and the time available for shopping.

5.1.1. Tourism as the Dominant Livelihood Base and Source of Vulnerability

Tourism was described as the primary livelihood source for most households in Wadi Rum, for instance, a local community interview characterized tourism dependency as near-total, where he stated that almost everyone depends on tourism and that tourists account for the large majority of local income, with limited government job alternatives.

Survey findings reinforced the limited availability of alternative income sources among women producers' household, where 58% reported no other income sources beyond the product activity, while 17% reported social security salary and 17% reported a salary from another household member; smaller shares reported National Aid Fund support (8%).

From the camp perspective, they similarly described dependence on foreign visitors, with noting that Jordanians represent only a small share of demand; this dependency turns directly into vulnerability, where associations and producers explained that when tourism stops, women's selling becomes hard, and production and sales activity decline sharply.[29] Moreover, ASEZA stressed that the most weak livelihoods are day-to-day tourism transport services (e.g., cars, camels, horses, hiking, climbing), where income depends on working each day.

5.1.2. Seasonality Patterns

Interviewees broadly agreed that Wadi Rum's economy follows seasonal cycles, although exact peak months varied across stakeholders. Also, one tour guide described high season roughly from mid-March to end of May, while summer is lighter due to high temperatures,[30] while another guide explained that summer becomes weaker due to extreme heat, while winter can remain active because foreigners continue to visit and tolerate winter conditions.[31] One of the camp interviews linked seasonality to European holiday calendars, which emphasized April - May as the strongest months, with additional activity around New Year/Christmas and relatively light movement through much of the remaining year,[32] in addition to another camp operator summarized activity as concentrated in autumn and spring.[33]

For women producers, seasonality reflects into work intensity and income fluctuation, where one producer, Zarefa Al-Mazneh, described working daily when tourism is active, while work becomes seasonal and concentrated in peak months when tourism is weak. Moreover, the other producer, Khadra Eid, noted that even with year-round daily work, demand and earnings remain uneven across higher and lower tourism periods. Furthermore, Nashmiat Umm Al-Dami association reported increasing bazaar/event participation in active months, while shifting to simpler production and internal improvements during quiet periods. Similar to that, ASEZA described that during peak periods, people shift toward maintenance and preparation for the next season.

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[29] KIIs with Amal Al-Huwaitat, Nashmiat Umm Al-Dami Association, Wadi Rum, 10 February 2026; and Khadra Eid, woman producer, Wadi Rum, 10 February 2026.

[30] KII with Obada Al-Zawaydeh, tour guide, Wadi Rum, 17 February 2026.

[31] KII with Salamah Al-Zalabiah, tour guide, Wadi Rum, 17 February 2026.

[32] KII with Mohammad Mutleq Al-Zalabiah, camp, Wadi Rum, 17 February 2026.

[33] KII Abu Marwan Al-Zalabiah, camp, Wadi Rum, 17 February 2026.

Survey findings confirmed this fluctuation in how seasonality is experienced at the producer level, where around 42% reported that production/sales is year-round, 42% said it is mainly concentrated in peak tourism seasons, and 17% described it as irregular. When asked which months they sell the most, responses agreed around March (75%) and April (67%), with additional concentration in September (58%) and February/May (50% each), in addition a smaller share identified June-August (33% each) and October-November (33% each) as top-selling months, while January and December (25% each) were least frequently mentioned. Therefore, this pattern aligned with KIIs emphasizing spring peaks, with also indicated that a portion of women still experience selling months outside the classic high season, which depends on product type and sales channels.

Product-specific survey patterns showed that seasonality is not agreed on across products, for instance, within handicrafts, reported peak months are concentrated in June-September (100% each month), with no reported peaks outside this window. For textiles and embroidery, it appeared more distributed, with reported peaks in January-May (50% each month), a drop in June-August (0%), a strong peak in September (100%), and continued peaks in October-December (50% each month). For food products, it showed the most consistent year coverage, with the strongest peak in March (88%) and April (75%), moderate peaks in February (63%) and May (50%), and continued activity across June-November (38% each month). Moreover, natural products showed peaks beginning in March-August (50% each month), a clear high point in September (100%), and no reported peaks in October-February (0%).

Also, survey findings confirmed that seasonality turned into income fluctuation for women producers, where 75% reported that income from this activity increases a lot in high seasons, while 8% reported it increases a little, 8% reported no change, and 8% were not sure.

5.1.3. External Shocks and Declining Predictability

Beyond normal seasonality, interviewees stressed that external shocks have deeper and longer impacts, where Burda Cooperative Association described severe disruption linked to regional events, including periods where tourism was almost stopped and women continued volunteering without financial return for extended periods. Additionally, the local interview noted that seasonality used to be clearer but has become disrupted due to wars reducing tourism activity, similar to this, camps described COVID-19 and the Gaza war as creating heavy impacts and limiting their ability to upgrade and develop services;[34] therefore, ASEZA proposed a mitigation option; a financial fund built from high-season revenues to support people during downturns.

5.1.4. Access to Tourists is Uneven

KIIs indicated that even in good seasons, income depends on whether tourists physically reach specific producers and selling points, and several interviewees linked sales outcomes to routing and limited shopping time. Moreover, Burda Cooperative Association noted that sales remain constrained because it is not located on the main tourist route, so groups may not reach them even during peak periods. Also, the shop interview observed that tourists increasingly enter quickly and leave quickly, often buying only if they immediately like something, with higher price sensitivity than before COVID; the same interview added that guides are now often rushed and move groups quickly, leaving limited time for browsing. Tour guides reinforced that purchasing mainly happens during tours at bazaar points along the route, often later in the trip after visitors compare options, and that souvenir demand follows tourism volume directly.[35]

Survey findings reinforced that access to tourists is uneven and channel-dependent; while 58% of women producers reported selling inside and near tourism sites, half also rely on local markets in town (50%) and other channels (50%), only one-third reported selling through hotels/camps (33%) and one-quarter through bazaars (25%), while social media selling remains very limited (8%), which suggested that direct contact with tourist flows is not consistently secured and digital channels are not yet compensating for on-ground access constraints.

[34] KII with Abu Marwan Al-Zalabiah, camp, Wadi Rum, 17 February 2026.

[35] KIIs with Salamah Al-Zalabiah, tour guide, Wadi Rum 17 February 2026; and Obada Al-Zawaydeh, tour guide, Wadi Rum, 17 February 2026.

Customer profiles further confirmed this mixed access, where the most frequently reported main customers were local residents (58%), while Jordanian visitors (25%) and international tourists (25%) were reported at similar levels; regional tourists were less common (8%), and 17% reported a mixed customer base, , which means that many women producers depend heavily on local demand, and their ability to benefit from tourism remains depending on whether visitor routes and stop points.

5.1.5. Market Pressures and Evolving Tourism Supply Conditions

Interviews suggested that livelihood dynamics in Wadi Rum are also shaped by market structure and competition, where a camp operator described intensified competition driven by the entry of outside investors through camps established outside the Rum reserve, alongside a shift in tourist expectations toward higher-standard tents (e.g., bathrooms) that many older Bedouin camps struggle to meet; the same interview noted the large size of the camp market and suggested a gradual multi-year upgrading plan as a realistic adaptation pathway.[36] In addition, Rum Ladies Association highlighted affordability as a coping approach, where items are priced at accessible levels to sustain purchases when tourists are more price-sensitive and demand remains highly tied to foreign visitor flows.

Survey findings confirmed that these pressures are experienced most strongly at the level of market access and price sensitivity, for instance the dominant barrier reported by women producers was limited access to selling points (92%), followed by seasonality/low visitor flow (67%), lack of marketing (33%), and high rent for selling space (25%), with competition was reported less frequently (17%). Also, pricing responses suggested a constrained ability to raise prices; none of the respondents reported pricing higher than other local producers, and 50% reported pricing lower (50% similar); compared to imported products, 50% also reported pricing lower (17% similar; 33% not sure). Moreover, most respondents reported setting prices using costs plus a profit margin (58%), but a sizable share relies on experience-based pricing (33%) (and 8% relies on competitors), which showed that affordability is a market strategy, however, pricing and costings practice are not uniform across producers.

5.2. Local Products and Services Ecosystem and Value Chain Mapping

Women products and services ecosystem is embedded in the tourism value chain, where the demand is through tours and camps, and products flow through a limited number of formal and informal market points. Moreover, a local supply gap was identified as a consistent theme, where many souvenirs are sourced from outside, while locally produced items remain uneven in quality consistency and market linkages.

5.2.1. Market Points and Tourist Product Engagement

Interviewees described three main market points through which tourists buy products: desert-route bazaars, Visitors' Center shops, and camps. In detail, tour guides explained that bazaar points are positioned along key desert shops, such as: Ain Lawrence and Khazali, and tourists often compare options across several stops before buying; they also noted that bazaar selling points are licensed to specific individuals who may operate directly or bring outside investors.

Additionally, KIIs referenced a women-focused market points at the Visitors' Center and a handicrafts place, where visitors can see production and take photos. As an example, the Rum Art Shop described a similar formal model, with noting full affiliation with the authority through a handicrafts workshop, and that products are produced by the workshop with women involved, using local inscriptions, such as: Jabal Khazali, as the basis for artistic souvenirs. Additionally, camps were consistently referred as the core of the tourism experience (including meals, tours, hiking, night walks, Bedouin lifestyle), with highlighting that visitors often spend more time in camps than in the Visitors' Center, which makes camps a strategic market point for improving women's product linkages if arrangements exist.[37]

[36] KII with Abu Marwan Al-Zalabiah, camp, Wadi Rum, 17 February 2026.

[37] KIIs with Abu Marwan Al-Zalabiah, camp, Wadi rum, 17 February 2026; Mohammad Mutleq Al-Zalabiah, camp, Wadi Rum, 17 February 2026; and Saleh Numait, ASEZA, Wadi Rum, 10 February 2026.

5.2.2. Women-led Associations as the Main Production and Aggregation Channel

Women's associations were repeatedly referred to as supporting women's participation, due to it is combining production with aggregation and outreach. For instance, Nashmiat Umm Al-Dami Association described its role as creating a local space for women to access trainings locally and functioning as an aggregator and/or reseller by taking products from women who cannot go out and marketing them on their behalf, with sales visibility largely dependent on bazaar participation inside and outside Wadi Rum. Another association, Rum Ladies Association described a weaving/loom-based production line combined with sewing assembly (mats transformed into bags, and wallets/bracelets), using a distributed model where each woman produces specific pieces and items are prepared in advance because the tourism season passes quickly; it also identified underdeveloped market routes including pending Visitor Center linkages, potential camp agreements.

A long-established cooperative, Burda Cooperative Association, described a broader heritage crafts base (camel hair/wool products, heritage hangings, hand-fringing handkerchiefs, accessories, authentic rugs), and noted additional home-based food and dairy capabilities with perceived potential for more stable income but limited marketing channels; it also referenced earlier institutional linkage through a Visitor Center display point and institutional purchasing/gifting mechanisms that enabled payments to women.

5.2.3. Home-Based Food Services

Food services and production were mentioned as it operates largely through informal and request-based arrangements, for instance, women producers described receiving orders through individuals connected tourists, with their production based on demand and logistics constrained by household transport; therefore, customers often pick up orders. Also, products most mentioned included *Shrak* break and occasional pastries, with catering prepared upon request.

5.2.4. Supply Gap and Weak Differentiation

In reference to local community member, locally produced souvenirs do not consistently meet demand or expected quality, which resulted in a market where many items are imported and the local offer is weakly differentiated, where he stated that most souvenirs (e.g., shemaghs, perfumes, general items) are brought from outside and that local production is almost no relevant to demand, with also suggested camp-based selling corners as a solution if stronger association production capacity exists.

Moreover, camps interviews reinforced that bazaars often carry non-local (including Chinese) goods and that products across Jordan can be similar, which therefore reduce uniqueness by area. Also, they emphasized that women and associations exist with products, but the issue is quality and the ability to offer a Rum-linked identity product at a level to meet the expectations. Therefore, they proposed directions, such as developing Rum-specific lines (weaving, stone engraving, sand blasting/etching, copper items, and Wadi Rum motif printing), and, in addition to do improvements by strengthening quality first, then linking producers to camps for regular access.

While KIIs described a market dominated by imported items and weak Rum-specific differentiation, most women producers still perceive their own products as heritage-linked to some degree, where 42% reported their products are strongly based on local heritage (design, symbols, materials, techniques), and 42% reported a partial heritage linkage (some traditional elements alongside modern features), while 17% reported their products are not specifically heritage-based. Open-ended responses explained that heritage linkage is often expressed through materials and traditional methods (e.g., using wool and traditional production approaches), along with quality and integrity indicators that producers associate with authentic local products, such as using high-quality raw inputs, maintaining hygiene and correct packaging, and relying on customer feedback to improve.

5.2.5. Inputs, Tools, and Production Flow in the Value Chain

Survey findings suggested that women's production is relatively locally sourced; however, it still exposed to cost and equipment challenges that limit continuity and scaling; most respondents reported sourcing raw materials from local suppliers (83%), while 33% also source from other cities (e.g., outside Wadi Rum), which indicated that inputs are largely local; however, not always consistently available through nearby

suppliers. Production challenges were reported as cost- and capacity-driven, where the most common challenge was the high cost of materials (83%), followed by limited availability of materials (50%) and lack of tools/equipment (50%). Also, workspace limitations (25%) were reported, while utilities constraints (water/electricity) (8%) were less common.

Current tools and equipment reported by women producers reflected small-scale and household-based production setups, for isntance, available tools included basic packaging supplies and molds (cake molds, soap molds/racks, ma'moul molds), cooking equipment (saj with firewood, trays/oven, gas, cutting boards), sewing tools, and a basic traditional loom (nato device). However, priority needs to improve production focused on upgrading and stabilizing core equipment; mixers/blenders, kneading machines, refrigerators, better ovens, improved gas availability and flour supply, large-capacity fryers, a modern loom, and upgraded sewing-related equipment (e.g., new sewing machine, embroidery machine, and overlock/derzeh machine).

Consistent with these constraints, the survey showed limited use of advanced technologies to improve efficiency or product variety, where 83% reported not using advanced technologies/equipment, 8% reported yes, and 8% were not sure, which reinforced that improving the production flow is likely to depend on practical tools rather than use technologies.

5.3. Women Economic Participation, Inclusion, and Barriers to Engagement

Women's economic participation in Wadi Rum is present; however, remains influenced by social acceptance, mobility constraints, limited enabling infrastructure, and weak market-facing mechanisms. Also, women are most able to participate through women-only associations, workshop-based production, and home-based work, while direct engagement in mixed public selling environments (especially desert bazaars) is more constrained.

5.3.1. Main Participation Pathways

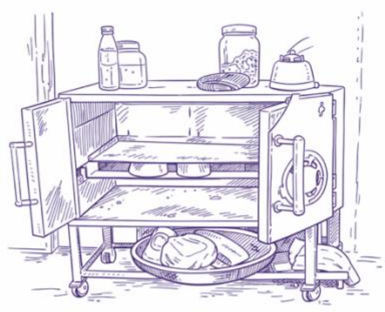
Women-led associations were consistently described as the core entry point for women participation because they provide safe and women-only spaces for learning and engagement. Nashmiat Umm Al-Dami Charitable Association described operating as a women-only salon and a space for awareness sessions and trainings (soap-making, sewing, pastries, home gardening) and applying needs-based inclusion that prioritizes women most in need when external initiatives request beneficiary names. Another association, Wadi Rum Ladies Association, described its role as creating space for movement, so women can gradually get used to going out and participating, alongside awareness and social mobilization sessions (including health-focused sessions).

Beyond association-based programming, survey responses indicated that women's participation is sustained through informal and family-based learning, not only through formal training, for instance, most respondents described acquiring skills through experience and self-learning, and through intergenerational transfer, especially learning from mothers and female relatives, in addition, some responses described production as a continuation of family tradition across generations.

Home-based models were described as well, for instance Burda cooperative described training women then delivering weaving and spinning materials to homes so women can work at suitable times and return finished pieces for payment. Additionally, individual producers reflected home-based participation realities, where one woman highlighted that husband support is a key enabler for women's ability to work,[38] while others described working alone without support as physically exhausting and limiting capacity.[39]

It is worth mentioning that workshop-based production was described as well by Rum Art Shop, noting that displayed products are made by women working in an affiliated workshop, without detailing additional gender-specific barriers from the shop side.

[38] KII with Zarefa Al-Mazneh, woman producer, Wadi Rum, 10 February 2026.
[39] KII with Khadra Eid, woman producer, Wadi Rum, 10 February 2026.



5.3.2. Social Acceptance and Women-Only Conditions Shape Inclusion

Across KIIs, the most frequently mentioned inclusion constraint is social acceptance, particularly for direct interaction with visitors and mixed environments. For instance, ASEZA described limited women's participation as primarily tied to social acceptance, with noting that direct work with visitors is not broadly accepted; it also described women's integration as mainly occurring through crafts and productive projects, with additional opportunities possible through indirect work (e.g., managing bookings and replying to camp emails if language/education skills exist). Also, a local member reinforced that women's work is more acceptable when it happens in women-only settings rather than mixed spaces. Moreover, producers and associations referenced social perception/shame as a constraint on women going out frequently or working in certain activities, including cooking and selling. Similarly, tour guides reinforced this, by describing shame norms and gender-mixing sensitivities as a key barrier to women selling, and noting that women may face greater difficulty due to the social context and exposure to disrespectful/offensive tourist behaviors.

5.3.3. Mobility, Distance, and the Structure of Selling Locations

Transportation was repeatedly described as one of the biggest constraints, particularly because distances are far, public transport is limited, and costs are high, for instance, Nashmiat Umm Al-Dami Association described the village distance as a major barrier, noting that transport can cost around 20 JOD for a round trip and that women with children also face time/childcare limitations on when they can attend trainings or work. This was confirmed by Burda Cooperative, with stating transport as a major challenge, noting that many women cannot attend meetings/awareness sessions without transport and that walking in summer is difficult. In addition, tour guides explained that women are largely absent from desert-route bazaars, which are dominated by men, and linked this to distance/access (e.g., Khazali, 12 km into the desert) combined with the fact that selling points are licensed and not open access. The same interviews suggested that women's participation is more feasible in fixed points such as the Visitors' Center shop and the handicrafts place, where trust with foreigners is strengthened through visible handmade production by local women.

Survey findings showed where women are currently able to sell; 58% reported selling inside/near tourism sites, 50% through local city markets, 33% via hotels/camps, and 25% through bazaars, while only 8% reported social media as a selling channel. A further 50% referred to selling through mini markets and/or through the association, or selling only when tourists come to the village (sometimes mediated by shops or the association).

5.3.4. Enabling Environment and Continuity Gaps

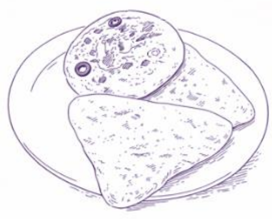
Several KIIs emphasized that constraints are often related to lack of enabling infrastructure and support, which limits participation and scale, for instance a local member described the absence of a sewing center or sewing jobs as a major gap, suggested that if a sewing center existed many women would join. Likewise, a producer highlighted capacity limits caused by working alone and lacking labor or support for production and input sourcing, as well as the absence of an appropriate production space such as an organized cooking room/production kitchen.

Market-facing capacity was also described as a barrier, especially marketing and continuity of selling opportunities, this was emphasized by a tour guide, where lack of professional marketing and the absence of a permanent/continuous bazaar or display space; associations may have occasional events but continuity is missing, while permits were not viewed as the main barrier compared to the lack of organized mechanisms and tools.[40] Also, camp perspective aligned with this by stating that women can produce and have products, but the main constraint is weak marketing and sales rather than inability to produce.[41]

5.3.5. Private-Sector Engagement: Opportunities and Limits for Women's Linkages with Camps

Camps expressed openness to sourcing from women and hosting women-led heritage experiences, but noted practical constraints around reliable supply. For instance, one camp stated openness to sourcing from any local women-led association and described willingness to host live heritage experiences (women

[40] KII with Obada Al-Zawaydeh, tour guide, Wadi Rum, 17 February 2026.
[41] KII with Abu Marwan Al-Zalabiah, camp, Wadi Rum, 17 February 2026.



producing in front of guests) if scheduled, as it increases visitor engagement and buying.[42] As well, ASEZA suggested that stronger inclusion could come from routing tourists to women's associations for live production viewing because it increases buying likelihood. However, the other camp described the main barrier to regular supply as limited financial and practical support that would enable stable quantities and consistent supply, and expressed a preference to work with individuals rather than associations due to the stability and clarity of dealing with one person versus changing association management.[43]

Moreover, survey respondents reported that the main factors preventing sales to hotels, shops, and camps are transport and delivery constraints (58%) and lack of contacts/networks (50%), followed by insufficient quantities (33%) and registration requirements (17%), with smaller shares cited packaging/labels (8%) and payment terms (8%), while quality consistency was not reported as a constraint. Additionally, responses pointed to practical market-access frictions, such as market points already being committed to other suppliers and difficulties locating suitable selling points.

When asked what would help increase sales, women producers most frequently selected selling through camps (92%), followed by participation in exhibitions (83%) and stronger linkages with tour operators/guides (75%). Half also prioritized selling through hotels (50%), while fewer selected dedicated market space (33%) and online sales platform support (17%).

5.4. Product Development, Quality, and Market Readiness

Product development is largely market-driven and tourism-shaped, where producers adapt designs and materials to what tourists can carry and what sells quickly. Also, the main readiness gap was described as inconsistent finishing and quality standards, weak differentiation of Rum-specific identity products, packaging/labeling gaps, and limited ability to scale handmade production.

5.4.1. Demand-Led Product Development and Travel-Friendly Design

Across women-led associations and camps, interviewees described product decisions as guided by what is requested and what sells in bazaars, with a preference for small travel-friendly items. For example, best sellers were described as small accessories (e.g., bracelets, belts, small bags), while large rugs and bulky items sell least because tourists cannot carry them easily; several producers explained adapting by downsizing larger products into smaller formats and developing gift-style combinations that are easier to buy and transport. As a reinforcement by Rum Art Shop, tourists often want the same motifs in smaller sizes and in lighter and non-breakable formats.

Survey findings aligned with this and clarified what tourists are perceived to value and what producers prioritize for improvement, for instance, producers most frequently reported that buyers value quality (100%), followed by price (58%) and an authentic heritage link (58%), with smaller shares pointing to unique design (25%) and easy-to-carry products (17%); one additional response emphasized cleanliness an healthiness as part of value. In terms of readiness gaps, respondents most frequently prioritized improving packaging appearance (75%), with smaller shares selecting design uniqueness (25%), storytelling (25%), quality consistency (17%), and pricing (17%); a small share highlighted the need for eco-friendly, named bags and packaging.

5.4.2. Differentiation and Identity: The Need for a Rum-Specific Signature

Interviewees linked this to a broader gap; Wadi Rum needs specialization and a distinctive local product identity that cannot be easily replaced by generic souvenirs available elsewhere. In addition, associations described differentiation approaches grounded in innovation and heritage, for instance Wadi Rum Ladies Association highlighted a recycling-driven approach that expands beyond wool and natural dyes to include denim and similar materials turned into thread, with also noted plans to develop heritage-inspired motifs/patterns as a next step. Moreover, Burda Cooperative described transforming traditional heritage items into lighter and more marketable forms. Additionally, ASEZA pointed to distinctive women-led ideas

[42] Ibid.
[43] KII with Mohammad Mutleq Al-Zalabiah, camp, Wadi Rum, 17 February 2026.

that could fit the area's identity, including locally relevant soap production and short "Arab sitting experience" tourism products linked to hospitality and traditional food (e.g., *Shrak* bread).

Survey findings underlined a key challenge to make this differentiation visible in the market; most respondents in reported having no clear brand identity (name/logo) (83%), while 8% reported having one partly, and only 8% reported having a clear brand identity.

5.4.3. Quality Standards, Finishing, and Authenticity as Trust Factors

Across KIIs, quality was described as a combination of finishing, consistency, and authenticity, where poor finishing directly reduces sell-ability, for instance, camp perspectives emphasized that items will not sell if not well-finished and that quality varies across producers, which creates a need for capacity raising and clearer standards, in addition, camps referred to readiness in terms of consistency, which means maintaining nearly the same form and quality across items, in addition to emphasized eco-friendly gift-ready perception.

Moreover, Wadi Rum Ladies Association described internal quality control and consistent improvement systems; examples included coaching women on stitching, finishing, and measurements when mistakes occur, with applying factory-like standards (straight stitching, neat finishing, strong construction), and rejecting early pieces until standards improved. For soap, Um Al-Dami Association emphasized safety and the use of approved/natural inputs, with also noting ongoing improvements through better labeling and written information and the need to upgrade finishing/packaging for older product styles. In addition, the Burda Cooperative Association linked quality to authenticity and natural raw materials (e.g., sheep wool), with mentioning that uneven or impure wool requires washing and rework to meet standards.

Guides and community interviews reinforced that trust depends on authenticity and truthful product claims, where they described stronger trust in items known to be handmade by local women, while products sourced from outside the area are less trusted; some also noted visible differences in quality across price points and stressed that clean packaging and orderly presentation increase perceived quality.

Survey findings aligned with this emphasis on quality and highlighted where quality can be pressured in practice, where most respondents rated their product quality as very high (92%), with 8% rating it high (and none reporting medium/uncertain). When asked what affects quality, respondents most frequently pointed to storage life/shelf-life constraints (42%) and materials quality (17%), while 42% reported no major issues, in addition to a response highlighted supply-related risks (e.g., availability and type/quality of flour), which suggested that even when producers perceive their products as high quality, maintaining that standards depends on reliable inputs and safe storage, especially for food and natural products.

5.4.4. Packaging, Labeling, and Product Information as Market Readiness Requirements

Packaging and labeling emerged as determinants of readiness, especially for tourist purchases that are gift- or travel-oriented; an association described improving written information and labeling for soap,[44] while a local community member emphasized that clean and authentic packaging and orderly presentation can increase perceived quality and trust. Similar to this, a camp interview emphasized travel-ready and eco-friendly packaging as part of the product attractiveness and marketability.[45]

For food products, producers described quality in terms of cleanliness and taste suitable for Arab and foreign tourists, with efforts to improve presentation (serving, plating with side items), with also noting constraints such as vegetable availability. Also, packaging for meals was described as functional and meal-dependent (foil and appropriate covers), with no logos or labels yet but an intention to develop them later.

Survey findings confirmed that packaging and labeling remain a clear gap, where most respondents described their current packaging as basic packaging only (58%) or no packaging (17%), while only 8% reported having market-ready (branded) packaging (17% said packaging is not applicable). Similar to this, labeling is limited, where 83% reported that their products do not have labels, compared to 8% who reported having labels (and 8%, sometimes). When asked what would improve packaging, respondents

[44] KII with Amal Al-Huwaitat, Nashmiat Umm Al-Dami Charitable Association, Wadi Rum, 10 February 2026.
[45] KII with Mohammad Mutleq Al-Zalabiah, camp, Wadi Rum, 17 February 2026.

prioritized branding/visual identity on packaging (75%) and eco-friendly packaging (50%), followed by better protection for travel/transport (25%), and 25% reported no improvements needed.

5.4.5. Scaling Constraints and Readiness Gaps for Consistent Supply

Across KIIs, interviewees described a key readiness limitation, for instance, ASEZA summarized that producing 100 pieces can take 1-2 months when work is home-distributed and labor is limited and noted that transport and storage limitations affect how some handmade items can be showcased and sold. Also, camps reinforced that market access depends on the ability to maintain consistent quality and supply, and described constraints linked to limited tools and capacity, such as the need for weaving machines, sewing machines, and improved implementation methods to move from ideas to reliable production. Moreover, Burda Cooperative Association described managing this through a market-testing approach, producing samples first and scaling only if items sell, with also adapting to customer requested sizes.

Survey findings suggested that many women producers perceive themselves as able to respond to larger demand, but with clear operational barriers that limit consistent supply. While 75% reported they can meet large orders (and 17% said capacity depends on season/materials), readiness is uneven across the practical requirements of scaling; 83% reported sufficient raw material availability, but only 33% reported sufficient storage for raw materials and 33% sufficient production space; only 8% reported an ability to hire staff. Respondents further clarified the vulnerability behind scaling capacity, where the most mentioned limitations related to tools and equipment (e.g., small or insufficient machines), raw material availability tied to financial capacity (e.g., flour and other inputs), energy inputs (gas and firewood), lack of refrigeration/storage (e.g., no fridge, buying inputs day-by-day), labor shortages for bulk orders, and time constraints for meeting orders.

5.4.6. Price and Quality Perceptions and Acceptable Ranges

While most interviews referred to quality as generally acceptable, a tour guide perspective suggested that complaints are more often tied to inflated pricing than to product defects, and emphasized that authenticity and accurate claims matter because misinformation harms trust and destination image.[46] Camp perspectives described a broad price range for products and noted that a mid-range band is often most acceptable (approximately 20-50 JOD, item-dependent), in addition to giving an example of differentiation where locally hand-fringed shemagh can command a higher price than cheaper imported versions.

5.4.6.1. Product Readiness Status and Product-Focused Support Needs

Survey results suggested that women producers perceive their products as partly market-ready but they still require targeted upgrades to meet tourist expectations consistently. While 42% rated their products as very ready for tourist sales, the majority (58%) described them as only somewhat ready, which indicated that readiness gaps remain concentrated in practical presentation and delivery aspects rather than willingness to sell. When asked why products are not fully ready for the tourist market, responses clustered around packaging and branding needs, including the external packaging design, adding a logo, and writing a clear product description or details. Several respondents linked readiness to finishing quality, eco-friendly packaging, and transport/logistics constraints, while a few described being "still at the beginning" and needing further development.

Many respondents prioritized tools and equipment, and financial support, alongside practical assistance in packaging and finishing, logo or cover design, and writing product details. Food producers additionally requested support related to recipes and dough preparation and tools that protect product quality (e.g., a refrigerator). When asked who should provide this support, respondents most often pointed to local associations, ASEZA, with some also referencing camps, Jordan River Foundation, and NGOs; a minority indicated uncertainty or no clear provider.

5.5. Market Access, Sales Channels, and Digital Engagement

Market access is influenced by tourism-linked channels (route bazaars, Visitor Center shops, and camps), while digital engagement is uneven and constrained by weak connectivity and limited capacity to sustain

[46] KII with Obada Al-Zawaydeh, tour guide, Wadi Rum, 17 February 2026.

promotion. Moreover, the main constraints are restricted access to camps, limited delivery or transport, competition from imported goods, in addition to gaps in packaging/branding that weaken trust and marketability.

5.5.1. Where Sales Happen

Bazaars were repeatedly described as the most effective sales channel, especially for women-led products that gain visibility through event-based marketing and tourist flow.[47] Meanwhile, Burda Cooperative described relying on direct sales from the association and a dedicated Visitors' Center display point. For home-based producers, access is more limited and demand is mostly local or referral-driven, where one producer described needing stronger marketing support and a transport solution to reach wider customers with food delivered hot;[48] another producer relied mainly on word-of-mouth and direct requests, with the ability to meet larger orders dependent on inputs and labor availability.[49]

5.5.2. Camps as a High-Potential Channel But with Limited Access and Informal Linkages

Across KIIs, camps were described as a high-potential sales points, but access is not open and selling inside camps is often indirect. For instance, Nashmiat Umm Al-Dami Association explained that products cannot be sold directly inside camps; instead, items must be given to the camp owner to display, and some camps may already be committed to one association and do not take products from others. The same interview noted that marketing beyond the village is difficult because placing products for sale is not easy.

Camps confirmed preference for low-risk display models rather than stock purchase, where one camp preferred displaying items without buying inventory, producers bring items, unsold stock is returned so it can be sold elsewhere, while emphasizing that in-person browsing remains more effective because visitors want to see and touch products.[50] Another camp supported the idea of an organized product corner inside camps and indicated willingness to promote women's products through camp social media, including filming and promotion; it was also noted that tourist buying often happens during tours and that visitors prefer items reflecting "the image of Rum/Petra" over generic/Chinese goods.[51]

5.5.3. Packaging, Branding, and Organized Display as Market Readiness Enablers

Several KIIs stressed that marketing cannot scale without stronger packaging, branding, and clear product information, for instance, ASEZA described packaging and branding as a foundational gap, noted that while a brochure exists in the handicrafts workshop linking products to heritage and environmental protection, many products lack clear cards (ingredients, usage, care instructions). ASEZA added that it can support logistics, while technical content requires specialized experts.

Guides and local community interviews reinforced that organized display and Arabic identity signs can improve appeal and trust, including neat arrangement of items and Arabic text (e.g., "Wadi Rum" in Arabic), with also noting that tourists frequently check whether items are travel suitable. From Rum Art Shop perspective, their packaging was described as generally good and informative but needing adaptation to travel constraints (smaller/fitted packaging for glass items).

5.5.4. Digital Marketing Limited by Connectivity and Cost

Digital use is present but constrained; Nashmiat Umm Al-Dami Association described using a social media page for products and activities but noted that paid boosting is not affordable relative to product income, while Rum Ladies Charitable Association reported not using social media yet but viewing it as a needed next phase. In addition, Burda Cooperative noted that its Facebook page is mainly for visibility rather than orders, and emphasized that network connectivity is very weak, limiting digital marketing feasibility.

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[47] KIIs with Amal Al-Huwaitat, Nashmiat Umm Al-Dami Charitable Association, Wadi Rum, 10 February 2026; and Omar Al-Huwaitat local community, Wadi Rum, 17 February 2026.
[48] KII with Zarefa Al-Mazneh, woman producer, Wadi Rum, 10 February 2026.
[49] KII with Khadra Eid, woman producer, Wadi Rum, 10 February 2026.
[50] KII with Mohammad Mutleq Al-Zalabiah, camp, Wadi Rum, 17 February 2026.
[51] KII with Abu Marwan Al-Zalabiah, camp, Wadi Rum, 17 February 2026.

A tour guide highlighted that tourists rarely search online "in the moment" at bazaars because network coverage is weak; however, tourists often verify information before arriving (reviews and what the place offers), meaning that digital reputation matters most pre-visit.[52] Camp interviews aligned with this, noting that many tourists use websites to choose and book trips and that many foreigners research Wadi Rum history before arriving; camp operators also suggested that influencer promotion and promoted heritage workshops could amplify demand.

Survey findings confirmed that marketing is still dominated by offline and relationship-based practices, for instance, most women rely on word-of-mouth (83%), while fewer use partnerships with tourism actors (42%), product display (25%), social media (25%), or exhibitions (25%). Also, social media adoption is particularly limited, where 75% reported not using social media to market or sell, while 17% use it for marketing and selling and 8% for marketing only.

Among those who do not use it (or cannot use it effectively), the most cited constraint is lack of skills/knowledge (75%), followed by lack of time (33%). Wider digital selling is further constrained by practical requirements; difficulty producing good photos/videos (25%), weak internet (25%), no suitable device (25%), difficulty writing content (25%), delivery/shipping challenges (25%), and online payment challenges (17%), with smaller shares citing difficulty managing orders/messages (8%).

Moreover, the survey showed a clear tools gap behind these constraints; only 67% reported having a smartphone, and none reported access to camera/lighting tools or design tools (e.g., Canva); 33% reported having none of the tools needed for digital marketing. Also, their responses reinforced that some of them face literacy barriers, which further limits content creation and online engagement.

5.5.5. Market Access Constraints: Transport, Payments, and Imports

Market access is also limited by transport and delivery, for instance, Nashmiat Umm Al-Dami Association described delivery as feasible within the village through available people, but wider delivery is constrained by transport costs; a producer similarly identified a delivery car as the priority enabler for wider reach.[53]

Payment access exists but is uneven; Rum Art Shop described using cash and Visa, with Visa highly used; however, electricity outages sometimes disrupt card payments, while a camp stated cash is preferred.[54] Finally, competition from imported goods was described as a consistent constraint on market trust and demand, where Rum Ladies Association noted that the growth of commercial and imported items undermines handmade products and can frustrate tourists when they realize the difference between Chinese goods and authentic heritage items.

5.6. Entrepreneurship Practices and Business Capacity

The business capacity levels across women-led associations, individual producers, shops, and tourism operators are uneven, where the common strengths include basic cost-based pricing and some recordkeeping, while gaps relate to formal planning, accurate costing (including full overheads), logistics/delivery, and structured partnership mechanisms.

5.6.1. Planning, Records, and Internal Management Systems

Business planning varies widely across the actors, where Nashmiat Umm Al-Dami Association described that it records transactions and prepares end-of-year reporting finalized through a certified accountant and submitted to the Ministry of Social Development, while Burda Cooperative described internal workflow management across multiple production lines within limited space, with task division among women and a supervisor assigning orders. However, institutional constraints can block formal operations, for instance, Burda Cooperative noted accumulated electricity arrears that prevent grant applications and weaken formal planning and continuity, as for ASEZA, it observed that many associations have weak administrative systems and records, which affects sustainability and decisions on expanding or stopping product lines.

[52] KII with Obada Al-Zawaydeh, tour guide, Wadi Rum, 17 February 2026.
[53] KII with Zarefa Al-Mazneh, woman producer, Wadi Rum, 17 February 2026.
[54] KII with Mohammad Mutleq Al-Zalabiah, camp, Wadi Rum, 17 February 2026.

Survey findings highlighted a planning and recordkeeping gap among women producers, where 42% reported having no business plan for the next six months, another 42% reported having a plan but not written, and 17% were not sure what a business plan is (0% reported a written plan). Despite this, goals are clearly market-oriented, where 100% selected increasing sales to tourists as their main six-month goal, followed by expanding selling channels (50%), launching new products (42%), and improving packaging and labeling (33%), while fewer prioritized improving product quality/consistency (25%) or increasing production capacity (25%). Recordkeeping is also uneven: only 33% reported always recording sales and expenses, while 67% reported they do not.

5.6.2. Costing and Pricing Practices

Pricing is commonly described as cost-based, but precision differs, for instance associations and producers reported calculating raw materials and adding a small margin while keeping prices moderate to sustain sales, while food producers described flexible pricing models: either the customer buys ingredients and pays labor/cooking, or the producer provides ingredients and prices based on cost plus time/effort.

At the same time, several KIIs emphasized pricing discipline as the most critical factor for selling and partnerships, where tour guides repeatedly described inflated pricing as the most common market problem, while lower pricing and a comfortable host/seller were cited as strong drivers of purchases. Moreover, ASEZA warned that weak costing (not accounting for fixed/variable costs, labor, electricity) leads to pricing errors, either above market (reducing sales) or below cost (creating losses), and that unclear or weak incentives reduce women's continuity in production. In contrast, Rum Art Shop described standardized pricing with no discrimination between Arabs and foreigners due to computerized invoicing, with defined price points for items and limited flexibility to discount.

Survey findings indicated that profitability is modest among women producers, with an average reported profit margin of 7.5%, which suggested limited financial buffer and was consistent with a context where many producers rely on simplified and experience-based pricing and may have limited formal business and financial literacy.

5.6.2.1. Cost Structure and Expense Pressures

Survey findings stated that cost structures are highly input-driven and mostly variable, for instance, all respondents (100%) identified raw materials as their largest expense, while transport and delivery was the next most cited cost pressure (17%). Others reported rent and space fees (8%), utilities (8%), labor (8%), equipment/tools maintenance (8%), and other costs such as gas (8%). Consistent with this, most respondents characterized their expenses as mainly variable/production-related (83%), while 17% reported a mix of fixed and variable costs

5.6.3. Operational Capacity Constraints

Operational constraints were most noticeable among home-based food producers, where business continuity depends on inputs and logistics. For example, producers cited high and fluctuated input costs, especially gas, difficulty securing supplies (flour, firewood), and extra transport costs when supplies require travel outside the village. Also, they noted that large orders create labor issues, where workers are difficult to hire quickly, and that continuity requires basic equipment and storage to maintain hygiene. Furthermore, delivery emerged as a cross-cutting constraint, for camps, they described delivery as a challenge in supplier relationships, while producers linked wider reach to having transport capacity.

5.6.4. Partnership Models and Trust Requirements with Camps and Tourism Actors

KIIs indicated that stable market participation depends on partnership terms and trust, where one association, Rum Ladies Association, emphasized fair partnership conditions, including safe storage, documentation to prevent loss, and official agreements, especially for cooperation with camps. Likewise, a local community interview proposed stabilizing sales through bulk or regular supply agreements with camps and companies. Moreover, a camp described preferred commercial arrangements that minimize capital risk, especially commission models rather than purchasing products, with a suggested commission benchmark similar to bazaars (20%) if a display corner exists.[55]

[55] KII with Abu Marwan Al-Zalabiah, camp, Wadi Rum, 17 February 2026.

Across camp interviews, long-term supplier trust was consistently tied to honest dealings and consistent quality over time, while trust-breaking practices included delivery delays, quality drops, inconsistency, and misrepresentation of origin (e.g., imported goods presented as local).[56] One camp stated that if tourists discover imports, the reputational risk falls on the camp owner, which will lead him to stop dealing with suppliers whose goods were imported; another emphasized that cooperation works best with clear pricing, fast responsiveness, and invoices/clear dealings.[57]

5.7. Skills Development, Training Exposure, and Capacity Gaps

Wadi Rum has ongoing training activity, mostly delivered through women's associations and occasional external trainers, but capacity gaps remain in the skills that determine market success. The most repeated needs relate to marketing and product communication, packaging and product information, digital skills and order management, and production organization to scale. It is worth mentioning that training delivery is constrained by distance and cost, in addition to women's ability to attend regularly.

5.7.1. Current Training Exposure and Delivery Constraints

Women's associations and producers reported receiving or hosting varied short trainings, including soap-making, sewing, pastries, home gardening, fertilization, and small art activities, alongside awareness sessions and community initiatives.[58] However, delivering training in Wadi Rum village is costly and logistically difficult, where Nashmiat Umm Al-Dami Association noted that bringing trainers often requires high fees and transport costs and sometimes personal payment by the association head (e.g., 50 JOD for a full-day sewing training and transport), which is not sustainable. Another association, Burda Cooperative emphasized the need for regular ongoing training and transportation allowances to enable attendance.

Survey findings suggested that training reach remains limited, where 75% of women producers reported not attending any training related to entrepreneurship, product development/design, quality enhancement, or marketing, while 25% reported attending at least one training. Among those who attended, the most commonly mentioned trainings were marketing and nati or weaving training delivered in Aqaba. When asked what was missing, responses pointed to the need for more advanced and updated nati training, and that training time and content was too limited, while one reported no major gaps.

5.7.2. Priority Capacity Gaps: Market-facing, Digital, Packaging, and Scaling Skills

Across KIIs, the strongest focus was on market-facing capacity rather than craft skills along, for instance, where Nashmiat Umm Al-Dami Association requested advanced product development (notably for soap), better packaging and labeling, stronger marketing, and administrative/digital training, while Rum Ladies Association specified e-marketing skills needs such as product photography, social marketing, order management, and electronic payment processes.

Guides and camps stressed that women's associations need practical selling and marketing experience, including understanding that selling requires technique, channels, and credible product explanation. Moreover, ASEZA added that producers need production-line organization to scale when demand exists, not only technical craft skills. Moreover, another need mentioned under marketing skills, which is product knowledge and credibility, where tour guides highlighted the need to train sellers on origin, ingredients use and care, and safe processing so storytelling is accurate.

Survey respondents did a self-rating for training topics, which showed that the main gaps are concentrated in packaging, market access, and digital readiness, rather than product quality alone. While quality enhancement and consistency was rated strong (levels 4-5) by 67%, and costing/pricing and profitability by 58%, capabilities were much weaker in market-facing and digital areas: packaging and labelling was rated at level 1 (none) by 50% (only 17% rated it level 5), market access and partnerships was rated level 1 by

[56] Ibid.
[57] KII with Mohammad Mutleq Al-Zalabiah, camp, Wadi Rum, 17 February 2026.
[58] KIIs with Nashmiat Umm Al-Dami Charitable Association, Wadi Rum, 10 February 2026; and Zarefa Al-Mazneh, woman producer, Wadi Rum, 19 February 2026.

50% (only 8% rated it level 4 and 0% level 5), and online selling was rated level 1 by 83% (no respondents rated levels 4-5).

The same pattern appeared for digital marketing, where 83% rated themselves at level 1 and none rated levels 4-5, in addition, business fundamentals remained uneven; entrepreneurship basics and business planning was rated level 1 by 42%, and the planning question confirms that 0% reported a written plan for the next six months (with 42% reporting no plan and 17% unsure what a business plan is).

5.7.3. Craft and Livelihood Skills Priorities, Including Tools and Sector Needs

Several interviewees identified priority technical skills that could expand local production and reduce reliance on imports, for instance, camps emphasized weaving and sewing (including rug weaving and camel-decoration weaving), whereas the local member interview recommended handkerchief production as the most scalable high-selling item and stressed that training should be women only to ensure participation. Also, associations, such as Burda Cooperative, also emphasized training a new generation to revive heritage crafts, and producers expressed interest in heritage craft skills if available.[59]

For food-related livelihoods, one producer requested training to improve *Shrak* production (dough preparation and methods) and noted that productivity would improve with tools (kneading machine, gas or oven upgrades), while still valuing practical training even without equipment support.

5.7.4. From Training to Market Linkage

Furthermore, KIIs emphasized sequencing training toward real market outcomes, where a camp interview proposed a clear process consisting of train women producers → raise quality → build trust and marketability → link through camps for regular access;[60] this aligns with ASEZA's broader stakeholder views that training must be paired with marketing and market selling points to achieve sustained income.

5.8. Institutional, Regulatory, and Policy Environment

The enabling environment in Wadi Rum is influenced and guided by ASEZA mandates and regulated market access points, with mixed perceptions on coordination and the ability of women-led associations to benefit consistently. Moreover, the most repeated issues relate to restricted access to selling spaces (especially camps and desert-route bazaars), slow procedures, limited and unstable support, and governance concerns around how tourism revenues and benefits reach local communities.

5.8.1. Institutional, Mandates, and Coordination Realities

ASEZA described its role as regulatory and marketing-oriented, with linking visitors to local service providers without competing in service delivery, along with balancing environmental protection and eco-tourism promotion. Also, ASEZA described responsibilities for licensing tourism shops, camp classification, in addition to ensuring product authenticity, alongside broader standards (heritage-linked products, reducing overlap by clarifying production lines, vehicle and equipment standards, and safety rules for adventure tourism).

At the operational level, coordination was described as procedural and sometimes slow, where Rum Art Shop mentioned that coordination with camps or entities cannot happen directly and must go through the Commission's administrative chain, which delays partnerships and makes engagement harder. The same interview also noted that pricing changes and discounts are restricted under officially monitored systems.

5.8.2. Rules Influencing Market Access

KIIs highlight that market access is not open and is shaped by specific rules and social constraints, where Nashmiat Umm Al-Dami Association stated that direct selling inside camps is restricted and requires camp-owner mediation, in addition, engaging with male camp owners can be socially difficult. Also, the same interviews stressed that access to desert-route bazaars is regulated through licensed selling points and is not open to everyone, which limits who can operate at key tourism stops. From camp perspective, it differed

[59] KII with Zarefa Al-Mazneh, woman producer, Wadi Rum, 10 February 2026.
[60] KII with Mohammad Mutleq Al-Zalabiah, camp, Wadi Rum, 19 February 2026.

on the permit issue; one camp stated there are no permits preventing hosting sellers inside camps, which suggested that restrictions may be more about access and relationships than formal approvals.[61] Survey findings reinforced that these rules are not consistently turned into clear guidance for women producers; 92% reported receiving no guidance or training on rules for selling and visitor interaction in or near the site, and only 8% reported receiving such guidance.

5.8.3. Bureaucracy and Delays

Several interviews described delayed procedures and uneven follow-up, for instance, Rum Ladies Association mentioned lengthy government processes through a land allocation example, a long-term contract arrangement (20 years) was delayed for almost a year and included annual rent (600 JOD), which was described as burdensome given the association's unstable income. Moreover, Burda Cooperative described a shift from earlier institutional follow-up and purchasing toward "no real support" in recent years, with stopped activity and no grants. Also, it noted that access to finance is constrained by formal obligations (electricity bills payment delays), and that lack of transport allowances undermined the ability to run continuous awareness and empowerment activities. Furthermore, a woman food producer similarly framed her need in enabling-environment terms, financial support for a proper production space and marketing support, without detailing additional regulatory issues.[62]

5.9. WHS Sustainable Management, Safeguarding, and Conservation Linkages

Awareness of WHS safeguarding is expressed through practical site-protection behaviors, environmental sustainability practices linked to tourism and women's production, and heritage interpretation and storytelling that reinforce respect for the site and motivate responsible purchasing.

5.9.1. Site Protection Awareness and Visitor Guidance

Interviewees referenced a shared understanding that Wadi Rum is a protected area where access and behavior are regulated to reduce harm to natural and cultural values; examples included discouraging removal of plants and respecting restricted desert access.[63] Also, guides described active visitor guidance around safeguarding inscriptions, especially at Khazali, with emphasizing that repeated touching can gradually erase inscriptions over time. Moreover, ASEZA linked the WH inscription to increased focus on balancing conservation with eco-tourism, and mentioned that site protection guidelines are documented and distributed to all service providers. Survey findings showed mixed awareness among women producers on sustainable development and WHS safeguarding in tourism-related activities, where 42% are not familiar, 17% are somewhat familiar, and 42% are very familiar.

5.9.2. Sustainability Practices Connected to Women's Production

KIIs described several sustainability practices that are related to tourism operations and women's livelihoods, for instance camp interviews highlighted waste management and reduction measures (e.g., waste containment and transport to landfill, placing bins, and reducing disposable cups) as part of protecting the surrounding environment. Also, a woman producer described household-level environmental practices, including managing food waste by drying leftovers and using them as livestock feed, and reducing negative impacts such as plastic waste associated with camps.[64]

Women-led associations interviews linked sustainability to production choices, where they Association described soap as environmentally safer through use of natural inputs, while another, Burda Cooperative, described weaving initiatives tied to recycling and intentions to expand recycling as a major branch; a third association, Rum Ladies Association, noted that recycling work is not yet active but is of interest.

Survey findings showed partial uptake of sustainability practices among women producers, where 50% reported reducing waste and 50% reported using eco-friendly materials where possible, while 25% reported responsible sourcing and 25% reported following site rules related to selling and visitor interaction; 33%

[61] KII with Abu Marwan Al-Zalabiah, camp, Wadi Rum, 17 February 2026.
[62] KII with Zarefa Al-Mazneh, woman producer, Wadi Rum, 10 February 2026.
[63] KII with Amal Al-Huwaitat, Nashmiat Umm Al-Dami Charitable Association, Wadi Rum, 10 February 2026.
[64] KII with Zarefa Al-Mazneh, woman producer, Wadi Rum, 10 February 2026.

reported no specific practices. Moreover, willingness to shift toward more eco-friendly packaging and materials is mixed; 50% would shift if costs increase slightly, 17% said maybe, and 33% said no, which indicated that greener adoption is feasible for some producers but it is cost-sensitive for others.

5.9.3. Heritage Interpretation and Authenticity

KIIs showed that safeguarding is reinforced when products and experiences strengthen heritage understanding and discourage harmful practices. Moreover, Rum Art Shop described heritage interpretation as integral to product presentation, where sellers explain materials and heritage meanings linked to local inscriptions and practices; it also noted that visitors often ask whether items are recycled, and that explaining recycling methods increases interest and reinforces an eco-friendly narrative aligned with protected-area values.

ASEZA described conservation-linked product messaging that frames souvenirs as alternatives to damaging the site (e.g., turning rock carvings into souvenirs to avoid tampering with the original), along with narratives linked to local resources and native plants. Additionally, camp interviews emphasized that linking local products to Wadi Rum's significance and registration can strengthen visitor interest and responsible appreciation, and that products can carry sustainable tourism messaging when marketing connects them to protecting the place.

Furthermore, women-led heritage demonstrations were described as a safeguarding mechanism for intangible heritage, where Burda Cooperative referenced live demonstrations (traditional spinning, camel hair work) as a way to preserve and have knowledge learned from elders, in addition, a camp interview proposed that taking visitors to a village workshop to observe production can stimulate purchases and deepen heritage understanding.[65]

5.9.4. Sustainability Support Needs and Responsible Actors

Survey responses indicated that strengthening sustainability and WHS safeguarding in women's production and selling activities is an awareness and skills gap, rather than a lack of interest. The most frequently mentioned needs were greater safeguarding awareness (75%) and practical training on how to apply sustainable practices (75%). Half of respondents also requested clearer guidance/rules for selling and visitor interaction (50%), which reflected uncertainty about what is allowed and what good practice looks like in a protected-site tourism setting. A smaller share emphasized the need for materials or tools to apply sustainability measures (33%), while 25% stated that safeguarding is not currently a priority for their business.

On whom should provide support, respondents most commonly pointed to the ASEZA, alongside local women's associations (including Umm Al-Dami Association) and civil society and NGOs. Also, several responses mentioned JRF as a potential support actor, while a minority of respondents indicated no specific entity.

[65] KII with Mohammad Mutleq Al-Zalabiah, camp, Wadi Rum, 17 February 2026.

5. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS (FCR)

5.1. Petra FCR Matrix

In conclusion, the Petra's findings focused on seasonality and income volatility, market access and selling-point constraints, market readiness (branding, labeling, packaging, storytelling, design, and quality), production and scaling constraints, and business management capacities (planning, costing, recordkeeping, readiness). Moreover, the recommendations combined the core trainings, such as marketing and e-commerce, identity management & development, and product design, with complementary entrepreneurship and production and quality trainings, alongside non-training actions that remove barriers and improve women producers' ability to access markets.

Table 3: FCR for Petra Findings

No.	Finding	Conclusion	Training Recommendations	Non-training Recommendation
1	#1: According to PDTRA KII, it estimated 90% of local livelihoods are tourism based. #2: According to the survey, women's product activity is mostly a secondary household income (62%), with 24% reported it as main income and 14% not income-generating yet. #3: Seasonality was reported, with 48% reported year-round production and sales, 38% mainly peak seasons, 14% irregular; peak months reported were June/July/Aug (76% each) and September (57%). #4: Income fluctuations were reported as well, with 52% said income increases a lot in high season and 29% increases a little.	Women's livelihoods and business continuity remained vulnerable because revenue is tied to fluctuating tourist flows and peak-month concentration	**Training on Entrepreneurship & Business Management** Including: seasonal business planning (sales forecasting, cashflow cycles, peak-stock planning, contingency planning), cost control under demand shocks, and diversification planning across months/channels.	Establish off-season sales channels, which can be periodic markets and pre-orders, in addition to facilitate linkages to outlets less dependent on seasonal visitor flow.
2	#1: Semi-formal ecosystem with partial and uneven formalization was highlighted, for instance, association membership was 39%, and those memberships were mostly women-led (92%). #2: For registration and licensing; 67% in Petra reported being fully registered/licensed, while 33% are not registered. #3: Among the reasons of not registering were: complex procedures and lack of information (14% per each)	Formalization is relatively higher in Petra, but market expansion still depends on consistent compliance capacity (documentation, invoicing, contracts) and stronger institutional readiness for partnerships.	**Training on Entrepreneurship** Including: compliance basics for growth (basic contracting, invoicing, documentation, simple governance/role clarity for producer groups).	Set up a local business support for registration steps, documentation checklists, and referral to licensing support; promote standardized procurement templates for hotels/camps/shops.

3	#1: Top barriers to selling more (especially to tourists) were reported; the most cited barrier was seasonality/low visitor flow (67%), followed by limited access to selling points (43%), language barriers (43%), lack of marketing (38%), and competition (33%).	The constraints are not only demand levels, but also market access and communication and marketing capability, which determine whether women can capture tourist spending when visitors are present.	**Training on Sales, Customer Service, Basic Tourism Communication** Including: practical sales pitch, handling objections/price negotiation, basic English selling phrases, confidence in customer interaction. **Training on Marketing & E-Commerce** Including: translating offline selling into simple promotional assets (menus, QR catalogues, WhatsApp Business).	Secure and expand dedicated selling spaces (rotational kiosks/organized displays) and set up guided referral arrangements (clear and ethical) to reduce gatekeeping and improve visitor visits to women-led points.
4	Uneven access to tourism-site selling and weak logistics and payment readiness were reported; ability to sell inside/near sites: 43% regularly, 33% sometimes, 19% no. Delivery and shipping was reported as well; 48% do not offer it; payment: 100% accept cash, 38% can accept Cliq, 29% Visa.	Without reliable access points and having delivery and payment, marketing gains will not consistently convert into sales, especially with short purchasing windows.	**Training on Marketing & E-Commerce** Including: Workflow (direct marketing → invoice → payment → dispatch), customer communication, basic fulfillment SOPs. **Training on Entrepreneurship** Including: simple distribution costing (delivery pricing, minimum order rules).	Facilitate shared delivery solutions and shared payment enablement (onboarding support for Cliq/Visa where feasible); a shared click-and-collect point linked to Visitor Center and/or downtown markets.
5	Demand is driven by quality and authenticity more than price; producers perceived visitors value quality (86%) and authentic heritage link (86%) most, followed by unique design (48%); price (38%) is secondary; eco-friendly aspects (5%) were rarely mentioned.	Petra products can compete on credible authenticity, quality, and design differentiation, not only price, if these attributes are clearly signaled at point of sale.	**Training on Identity Management and Development** Including: value proposition, authenticity cues, product storytelling tied to Petra. **Training on Product Design** Including: design for portability and gifting, collection building around Petra identity motifs.	Develop and apply simple authenticity signaling tools (standard locally made cards, brochures, Petra-linked symbols) across selling points.
6	Authenticity is present but inconsistently packaged into brand assets. For instance, heritage linkage was reported; 52% strongly linked, 29% partial, 10% not linked, 10% unsure. Signaling gaps: only 43% have clear brand identity, 48% none; 43% have labels, 52% no labels. Storytelling: 62% always provide a story, 19% sometimes; 14% do not, 5% unsure how.	The market has heritage content, but lacks consistent brand identity, labeling, and storytelling that protect differentiation and increase trust.	**Training on Identity management** Including: product signature system (name/logo, visual language, "made in Petra" phrasing), labeling basics, authenticity messaging, IP awareness (protecting designs)	Provide ready-to-use bilingual label templates and a small support package for printing (stickers/cards); encourage a shared Petra-origin

				labeling standard for participating producers
7	Market-fit improvements needed are mainly presentation-based; to meet tourist expectations, top improvements cited: storytelling (57%), packaging appearance (48%), design uniqueness (43%) (quality consistency 24%, finishing 14%).	The priority gap is how products are presented and explained, more than fundamental product quality	**Training on Identity management** Including: storytelling frameworks (heritage link, product use, and materials). **Training on Sales and Customer Service** Including: on-the-spot presentation	Deploy point-of-sale support (small story cards, QR to short product stories) and standardize basic display guidance for kiosks/shops
8	#1: Packaging is a recurring readiness constraint, where only 38% reported market-ready (branded) packaging; 24% basic packaging; 24% no packaging. #2: Needed improvements, including: branding/visual identity on packaging (62%), eco-friendly packaging (38%), better protection for travel/transport (14%).	Packaging is a bottleneck for perceived value, trust, and suitability for travel, which directly affected conversion and repeat purchasing.	**Training on Product Design** Including: packaging design basics (structure, durability, portability), low-cost prototyping, material selection. This training can be linked to Training on on-pack identity and label text.	Support shared packaging solutions (standard bag/box options with modular branding), and provide access to local printing (stickers, tags, brochures) through a negotiated vendor rate.
9	Supply chain constraints reduce continuity and resilience, for instance, 57% source raw materials mainly from other cities (e.g., Amman). Also, core constraints were high cost of materials (81%), lack of tools/equipment (67%), limited availability of materials (52%).	Even when demand exists, producers can be constrained by costs, supply interruptions, and equipment gaps, which limits scale and timely fulfillment.	**Training on Entrepreneurship** Including: procurement planning and cost tracking; building supplier options and reorder points. **Training on Production efficiency** Including: basic process efficiency to reduce waste and time/cost per unit.	Facilitate bulk purchasing groups (through associations) and a tools and equipment access scheme (shared equipment, leasing, or small grants tied to output and quality standards).
10	Scaling is limited by production organization, tools, and labor mobilization. For example, order capacity was reported; 67% can meet large orders; but scaling-readiness is uneven; tools/equipment capacity reported sufficient by only 29%, ability to hire/add staff 19%, and manage workflow/process 5%.	Growth is constrained less by willingness to take orders and more by production systems (workflow, staffing, equipment) and management capacity.	**Training on Production Planning & Scaling** Including: workflow mapping, batching, simple standard operating procedures, role assignment, quality checkpoints; basic HR planning for temporary peak labor.	Pilot shared production days and shared workspaces to link producers to youth assistants (paid internships) during peak months to support workflow, packaging, and fulfillment.
11	Access to hotels, shops, and camps is constrained by logistics and networks, where the main barriers are: transport/delivery (38%), lack of contacts (29%), insufficient quantity (24%); readiness factors include packaging/labels (19%), payment terms (14%), and registration (10%).	Sales require a minimum buyer-ready package (quantity, delivery, terms,	**Training on Entrepreneurship** Including: pricing for wholesale, payment terms, simple supply agreements	Run structured matchmaking (producers with hotels/camps/shops) with standard supply agreement templates, and

		contacts), not only product quality.	**Trainings on Identity Management and Product Design.**	support a shared catalogue for procurement buyers.
12	#1: Digital engagement exists, but capability and infrastructure gaps limit effectiveness; for promotion channels, survey reported word of mouth 86%, social media 76%, product display 43%, exhibitions 38%; partnerships 19%, paid ads 5%. #2: For social media use; 71% (33% marketing and selling; 38% marketing only); 24% do not use. #3: for constraints: lack of skills (43%), content production difficulty (38%), lack of time (24%), weak internet (14%). #4: For the tools; 95% have smartphones, but only 33% good internet; 14% camera/lighting; 5% Canva/design ability.	Petra has basic digital access, but lacks the practical skills, tools , and connectivity needed for consistent digital marketing.	**Training on Marketing & E-Commerce;** with strong digital focus Including: content planning, product photography/video, Canva basics, reels, page management, WhatsApp Business, customer response scripts, online selling workflow and order management.	Establish a shared digital corner (photo lightbox, backdrop, among others) within an association or Visitor Center partner, and pilot a shared online catalogue or shopfront to aggregate products and simplify fulfillment.
13	Planning is often informal, but growth goals are clear; pricing practices need standardization reinforcement. for instance, 57% have a clear plan but not written; 19% written plan; 19% no plan; 5% don't know what a business plan is. For the reported goals; increase sales to tourists 90%, expand channels 67%, launch new products 52%, improve quality 52%, increase capacity 52%, improve packaging/labeling 43%. As for their prices, it was reported: 100% reported pricing via cost + profit margin.	Producers are motivated to grow but need structured planning, recordkeeping discipline, and standardized costing/pricing practices to scale sustainably.	**Training on Entrepreneurship** Including: business plan (6-month plan), recordkeeping, costing/pricing worksheets, product portfolio decisions, and seasonal KPI tracking.	Provide simple planning and costing templates and ongoing coaching/mentorship.
14	Quality is perceived as strong, but specific risk areas remain (materials and storage/shelf-life). for quality ratings: 71% very high, 19% high; 5% medium, 5% unsure. Also, quality pressure points include materials quality (24%) and storage life (19%). For food/natural products: 40% reported hygiene/shelf-life challenges; main issues storage (40%) and expiry (40%).	Maintaining consistent quality and shelf-life is important for trust, especially as products move into broader markets.	**Training on Quality Enhancement & Consistency** Including: practical QC checkpoints, materials handling, finishing standards; for food/natural products: hygiene, storage, shelf-life, and packaging effects.	Facilitate access to appropriate storage solutions (basic sealed storage, temperature considerations) and recommend packaging that protects freshness; consider small targeted support for storage/packaging upgrades where needed.
15	Women-led associations were repeatedly described as key mechanisms for enabling women's income and visibility, for instance, the two associations reported supporting and empowering women to have a self-reliance (Saydat Al-Anbat Association has supported 400+ through part-	Women-led associations support women producers through part-time engagements and/or through	**N/A**	Support associations in Petra with capacity building trainings, and financial and in-kind support to continue

	time engagement; and Wadi Musa Widows and Family Development Association empowered 80 women to sustain their businesses)	supporting their business.		reaching and supporting women.

5.2. Wadi Rum FCR Matrix

In conclusion, Wadi Rum's findings focused on seasonality-driven income volatility, constrained market access (especially selling points and camp linkages), in addition to major market-readiness gaps in branding, labeling, packaging, and product presentation, alongside production constraints (materials costs, tools/space) and business management weaknesses (planning, recordkeeping, and readiness). Therefore, the recommendations combine the core trainings, such as Marketing and E-Commerce, Identity Management and Development, and Product Design, with complementary entrepreneurship, production, quality, content development, and WHS safeguarding trainings, supported by non-training actions that improve selling access and partnerships with camps.

Table 4: FCR for Wadi Rum Findings

No.	Finding	Conclusion	Training Recommendations	Non-training Recommendation
1	#1: Women's product activity is a core livelihood pillar in Wadi Rum: 67% reported it as the main household income source (33% secondary) #2: Average reported monthly income from the activity in Wadi Rum was 72 JOD. #3: 36% also offer tourism-related services alongside product sales.	Livelihood stability is vulnerable because many households depend on women's product activity as a primary income stream, yet earnings remain low and often need complementary activities.	**Training on Entrepreneurship & Business Management** Including: basic business model clarity (products and services), goal setting, cash planning, and household/business budgeting	Establish linkages that combine product and experience offers (e.g., weaving/food demo and purchase point) through camps/visitor flows; prioritize market channels that raise unit value rather than volume only.
2	#1: Production/sales seasonality is split: 42% year-round, 42% mainly peak tourism seasons, 17% irregular. #2: Peak months reported were March (75%), April (67%), September (58%), and October (50%). #3: #3: Income volatility is high; 75% said income increases a lot in high season (25% increases a little).	Businesses are highly exposed to seasonality; without planning, women producers face unstable cashflow and stop-start production.	**Training on Entrepreneurship** Including: sales forecasting by month, peak-stock planning, cashflow cycles, contingency planning, and cost control under demand shocks	Create off-season market points (periodic markets, pre-orders through camps, aggregation to Aqaba/Amman markets) to smooth sales outside March/April/September peaks.
3	#1: Association/cooperative membership was 39%, mostly in women-led entities (92%). #2: Registration/licensing is very low in Wadi Rum (8% fully registered), and reasons include "not required", costs/fees, complex procedures, and lack of licensing information	Limited formalization constrains eligibility for institutional support and structured supply to tourism buyers, and increases risk in partnerships.	**Training on Entrepreneurship** Including: basic compliance literacy, simple contracting, invoicing/receipts, and group governance basics for producers.	Provide an on-site business support function (checklists and guided steps) to simplify registration, reduce information gaps, and support

				women-led groups with documentation.
4	#1: Main selling points were: inside/near tourism sites (58%), local markets (50%), hotels/camps (33%), bazaars (25%), and social media (8%). #2: Main customers were mostly local residents (58%); Jordanian visitors (25%) and international tourists (25%) were lower.	Most sales are not consistently driven by tourists; producers have limited capture of visitor spending and minimal digital sales.	**Training on Marketing & E-Commerce** Including: simple digital storefront (WhatsApp Business/catalogue), conversion-focused content, and tourist short-window selling tactics	Secure predictable selling points connected to visitor routes (organized displays, rotating spaces), and strengthen direct linkages with camps as the highest-demand channel
5	#1: Top barriers to selling more (especially to tourists) were dominated by limited access to selling points (92%), followed by seasonality (67%), lack of marketing (33%), language barriers (33%), high rent (25%), and competition (17%). #2: Pricing pressure exists: 50% said their price is usually lower than similar local products.	The constraint is not demand alone; it is access/gatekeeping plus weak marketing and communication capacity, which drove to low pricing.	**Trainings on Marketing & E-Commerce and Sales and Customer Service** Including: sales pitch, product explanation, basic English selling phrases, and price communication based on value.	Implement transparent access mechanisms (rotation rules for selling points; clear agreements with guides/camps) to reduce gatekeeping; expand low-cost selling spaces and reduce rent pressure where feasible.
6	#1: What would help increase sales: selling through camps (92%), exhibitions (83%), tour operators/guides (75%), hotels (50%), dedicated market space (33%), online platform support (17%). #2: Camps emphasized trust requirements: consistent quality, honest origin (avoid imports presented as local), fast responsiveness, clear pricing, and invoices/clear dealings.	Camps are the highest-potential route to market, but partnerships require buyer-ready practices (quality consistency, authenticity, responsiveness, and basic documentation).	**Training on Entrepreneurship** Including: supplying camps (pricing, responsiveness, delivery discipline, basic invoicing). **Training on Identity Management & Development** Including: credibility/origin messaging and product information accuracy.	Establish camp-procurement linkages (supplier registry, simple supply terms, standard invoice/receipt templates) and matchmaking sessions between women producers and camps.
7	Barriers to selling to hotels, shops, and camps; transport/delivery (58%), lack of contacts (50%), insufficient quantity (33%), registration requirements (17%), payment terms (17%), and packaging/labels (17%).	Market expansion is blocked mainly by logistics and networks, with secondary buyer-readiness gaps (quantity, terms, packaging, registration).	**Training on Entrepreneurship** Including: delivery pricing, minimum order rules, basic payment terms, and simple supply agreements. **Training on Product Design** Including: protective packaging basics for transport.	Facilitate shared logistics (pooled delivery days), shared buyer catalogue, and guided introductions to hotels, camps, and shops using standard supply agreement templates.
8	Visitors' perceived purchase drivers; quality (100%) is highest; price (58%) and authentic heritage link (58%)	Wadi Rum products can compete on quality and credible heritage/authenticity,	**Training on Identity Management & Development**	Introduce standard locally made cards, origin notes, product info, so it will be used

	follow; unique design (25%) and easy-to-carry (17%) are lower.	rather than on low pricing alone.	Including: value proposition, authenticity cues, and storytelling tied to Wadi Rum heritage **Training on Product Design** Including: portability/gifting adaptations aligned with visitor needs.	consistently across camp corners/markets.
9	Branding and labeling gaps are significant; 83% reported no clear brand identity; 83% reported no labels.	Lack of basic brand assets reduces trust, weakens differentiation, and limits repeat/partner sales.	**Training on Identity Management & Development** Including: product signature system (name/logo/visual cues), labeling essentials, and bilingual product information.	Provide a starter kit for producers such as bilingual label templates and print support for stickers/cards, in addition to promote a shared Wadi Rum-origin labeling approach for participating producers.
10	#1: Packaging readiness is low: only 8% reported market-ready (branded) packaging; 58% basic packaging; 17% no packaging. #2: Priority improvements to meet tourist expectations centered on packaging appearance (75%). #3: Packaging improvements needed included branding on packaging (75%), eco-friendly packaging (50%), and travel protection (25%).	Packaging is a primary market-readiness bottleneck affecting perceived value and conversion, especially for tourists transporting purchases.	**Training on Product Design** Including: low-cost packaging prototyping, durability for travel, and modular packaging options. **Training on on-pack identity branding and essential label information.**	Enable shared packaging solutions (e.g., bags/boxes) and secure discounted local printing options for tags/stickers/cards.
11	Production constraints: high cost of materials (83%), limited availability (50%), lack of tools/equipment (50%), workspace limitations (25%). Also, 83% do not use advanced technologies/equipment to improve efficiency or variety.	Scaling is constrained by input costs, material/tool access, and low production efficiency, which limited ability to meet demand reliably.	**Training on Production Efficiency & Product Development** Including: waste reduction, batch planning, time/cost per unit, and selecting feasible materials. **Training on Entrepreneurship** Including: supplier options and reorder planning.	Support pooled purchasing through women-led groups and implement a tools and equipment access scheme (shared tools, leasing, or targeted grants tied to quality/output).
12	Even when order capacity is reported as high (75% can meet large orders), scaling enablers are weak: storage for raw materials (33%), storage for finished products (33%), production space (33%), and ability to hire staff (8%).	Growth constraints are operational (space, storage, labor), not only demand, which may risk delays and quality inconsistency during peaks.	**Training on Production Planning & Scaling** Including: workflow mapping, simple SOPs, role assignment, quality checkpoints, and peak-labor planning.	Pilot shared production days and shared workspace and link producers with paid assistants during peak periods to support production.

13	#1: Business planning gap; 42% have no plan; 42% have a plan but not written; 17% are not sure what a business plan is (0% written). #2: Goals are market-oriented, where 100% aim to increase sales to tourists; 50% expand channels; 42% launch new products; 33% improve packaging/labeling. #3: Recordkeeping is weak, where 67% do not record sales/expenses. #4: Profitability is modest (average profit margin 7.5%); raw materials are the largest expense for all respondents (100%).	Producers are motivated to grow but have limited management systems and financial buffer, which undermines sustainability and partnership readiness.	**Training on Entrepreneurship** Including: 6-month micro business plan, costing/pricing discipline, and basic bookkeeping.	Provide ongoing coaching and mentorship (monthly follow-up), with practical tools and checks to build consistent recordkeeping.
14	#1: Training reach remains limited, where 75% did not attend any training related to entrepreneurship/product development/design/quality/marketing; 25% attended at least one. #2: Delivery constraints are logistical and cost-related, e.g., 50 JOD was cited as a cost for a full-day sewing training plus transport, and associations noted the need for transport allowances for attendance. #3: Priority gaps repeatedly emphasized by KIIs include marketing/product communication, packaging/product information, digital skills and order management, and production organization for scaling.	Capacity building must be designed for accessibility (cost/distance) and focus on market-facing and operational skills that directly drive sales and partnerships.	Deliver the training package, such as: Marketing & E-commerce, Identity and Branding, Product Design, supported by Entrepreneurship and Content Development modules (e.g., templates).	Use local associations and provide transport and attendance support; adopt combined delivery of trainings (short in-person intensives and follow-up coaching) to reduce drop-off and sustain practice.
15	1: WHS/sustainability awareness is mixed; 42% not familiar, 17% somewhat familiar, 42% very familiar. #2: Sustainability practices are partial; 50% reduce waste; 50% use eco-friendly materials where possible; 25% responsible sourcing; 25% follow site rules; 33% none. #3: Willingness to shift to more eco-friendly packaging/materials is cost-sensitive (50% yes, 17% maybe, 33% no).	Safeguarding-aligned practices exist but are uneven; improving consistency requires practical guidance and affordable options (especially for eco-packaging).	Training on WHS Safeguarding & Sustainable Practices	Disseminate simple and locally relevant safeguarding guidance (do's/don'ts, visitor messaging) and facilitate access to affordable eco-packaging (vendor agreements; shared procurement).

APPENDIX 1: INTERVIEWEES

No.	Date	Location	Category/Entity	Interviewees
1	9 February 2026	Petra	PDTRA	Dr. Fatima Al-Hilalat
2	9 February 2026	Petra	Sayedat Al-Anbat Association	Fawzia Al-Hasanat
3	9 February 2026	Petra	Seller	Amal Al-Samaheen
4	9 February 2026	Petra	Wadi Musa Widows and Family Development Association	Adlah Issa
5	9 February 2026	Petra	Women Producer	Khadija Al-Hasanat
6	10 February 2026	Wadi Rum	ASEZA	Saleh Numait
7	10 February 2026	Wadi Rum	Umm Al-Dami Charitable Association	Amal Al-Huwaitat
8	10 February 2026	Wadi Rum	Women Producer	Zarefa Al-Mazneh
9	10 February 2026	Wadi Rum	Women Producer	Khadra Eid
10	10 February 2026	Wadi Rum	Rum Ladies Charitable Association	Ibtisam Al-Zalabiyeh
11	15 February 2026	Petra	Shop in Visitor Center	Murad Hilalat
12	15 February 2026	Petra	Shop in Visitor Center	Saad Ghinemat
13	15 February 2026	Petra	PAP	Areej Farajat
14	15 February 2026	Petra	Petra Canyon Hotel	Mohammad Emad
15	15 February 2026	Petra	The Jordanian Association for Handicrafts, Tranditional and Folk Industries, and their Traders	Mohammad Khalil
16	16 February 2026	Petra	Local Community	Qusai Amarat
17	16 February 2026	Petra	Local Community	Ibrahim Ayman
18	16 February 2026	Petra	Tour Guide	Tamer Nawafleh
19	16 February 2026	Petra	Tour Guide	Mohammad Hilalat
20	16 February 2026	Petra	Seven Wonders Bedouin Camp	Hashim Khaled
21	17 February 2026	Wadi Rum	Rum Art Shop	Nihad Eid Al-Zawaydeh
22	17 February 2026	Wadi Rum	Tour Guide	Obada Al-Zawaydeh
23	17 February 2026	Wadi Rum	Tour Guide	Salamah Al-Zalabiah
24	17 February 2026	Wadi Rum	Camp (Bedouin style)	Abu Marwan Al-Zalabiah
25	17 February 2026	Wadi Rum	Camp (Bedouin style)	Mohammad Mutleq Al-Zalabiah
26	17 February 2026	Wadi Rum	Local Community	Omar Al-Huwaitat
27	17 February 2026	Wadi Rum	Burda Cooperative Association	Malyha Sabah Al-Zalabiah