

***The Jordan Bedouin Handicraft Weaving Company:
A Feasibility Assessment of Job Creation
for Jordanian Women***

**Jordan Component of the Sustainable Development of Drylands Project
Report # 9**

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and

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THE JORDAN BEDOUIN HANDICRAFT WEAVING COMPANY

THE CONCEPT

This feasibility assessment is intended to evaluate the profit potential of a company set up to produce high quality fiber art products primarily for sale in the international market using wool from local sheep and employing Bedouin women. For communication purposes, the authors have adopted the *Jordan Bedouin Handicraft Weaving Company* as the name of the business. The business model assumes that the company would be organized as a cooperative. It is recognized that such a company would have to have initial investment funds for equipment, startup operating capital, and technical business, and marketing training before becoming a financially self-sustaining business. It is assumed that these startup funds would come from a government or NGO donor agency as grants rather than loans.

It is assumed that this company will be a regional cooperative; the stakeholders will be the co-op members from the six villages in the proposed production area. The company would be a community-managed business under the supervision of the Hashemite Fund during its development stage. Excess revenues from the production and sale of products, if any could be returned to the participating artists based on the value of their sales or used to expand the business. The project will provide training for approximately 30 women in the initial years, creating job opportunities and income for their families and providing a local market for their wool. If the market allows, additional women would be trained as the business expands.

MISSION STATEMENT

Manufacture and sell high quality handmade fiber handicrafts items produced by Bedouin artisans primarily in export markets using mostly native products and carry the fair trade logo.

LOCATION OF THE COMPANY

The administrative office and shipping facilities would be located in Amman, Jordan where the functions of general management, quality control, marketing and distribution would be performed. The products would be manufactured in the local villages by Bedouin women in the southern part of the Badia of Jordan. The feasibility study was based on having the initial production and training site located at the Jordanian Women's Qualifying and Training Society in Udreh. This site was selected because they currently have facilities to house a weaving enterprise; they have a large number of sewing machines needed for finishing many of the woven products; they have more than 20 women with some training and experience in weaving; and they currently have some of the needed weaving and spinning equipment.

INDUSTRY ANALYSIS

Handicrafts represent local traditions by indigenous populations. Selling handicrafts can play a major role in reducing poverty rates among indigenous populations in Jordan. Most handicraft production uses simple technology and locally available raw materials. Handicraft production requires a small amount of capital investment compared to industrial products, and new producers face few barriers to entry. Moreover, handicraft production can be done in homes or at regional centers located in rural areas and does not require individuals supplying the labor to move to larger urban areas.

Weaving is part of the cultural heritage in Jordan. Bedouin weavings, particularly rugs, table runners and pillowcases are found in souvenir shops throughout Jordan. However; while Jordan does have a heritage of producing traditional weaving, it is not something that Jordan is uniquely recognized for internationally.

There is no one official body that is responsible for developing handcraft businesses in Jordan. This has left this sector on the margin and without vision and coordination. This sector has received some funding and support from several Jordanian ministries and from other international funding agencies, such as EU, and the USAID, but there has not been a unified effort to promote products in international markets.

Some of the reasons handicrafts produced in Jordan have not been highly successful in international markets include: 1) lack of clarity on target markets and recognition of what is needed to compete in specific targets markets, 2) lack of business and marketing skills, 3) lack sufficient funds for starting for-profit businesses, 4) lack of creativity and innovation in product development beyond the local tourist market, and 5) competition from other imported handicrafts which are mainly imported souvenir products from China and India using very low labor wages and, to lesser extent, Syria, Egypt and Turkey.

The major players in handicraft development in Jordan have been the following:

1. **Royal Society for the Conservation of Nature:** The Royal Society for the Conservation of Nature (RSCN) is an NGO whose mandate is conserve wildlife and natural habitats while at the same time integrating conservation with economic development.
2. **Noor Al Hussein Foundation:** The Noor al Hussein Foundation (NHF) is an NGO that works on a variety of different programs, one of which has been handicraft development.
3. **Jordan River Foundation:** The Jordan River Foundation (JRF) was established in 1995 as an NGO to initiate socioeconomic projects for women and to provide employment opportunities by developing their knowledge and skills in handicraft production and entrepreneurship.
4. **Jordan Hashemite Fund for Development:** The Jordan Hashemite Fund for Development (JOHUD) has a network of more than 50 Community Development Centers that are providing a mixture of services to entrepreneurs in design, business training, and credit access.

IDENTIFICATION OF POTENTIAL COMPETITIVE ADVANTAGES: SWOT ANALYSIS

Evaluating the potential strengths, weaknesses, opportunities, and threats (SWOT) is a useful tool in analyzing the potential financial success of a handcraft and weaving company in Jordan. A SWOT analysis provides information on potential competitive advantages and disadvantages and allows for incorporating strategies to build on the advantages and minimize the impact of most weaknesses and threats.

STRENGTHS

- Strong cultural heritage and traditions to draw upon for developing unique designs and enhancing product differentiation.
- Growth in tourism in Jordan which will increase the opportunity for sales in the local tourist markets and enhance the reputation and promotion of Jordanian products around the world.
- Availability of natural raw materials and unemployed and underemployed women interested in training and production.
- Growing international interest in handicraft products, particularly handmade items by local women using local natural products and paid fair wages.
- Low capital investment to get started, few barriers for market entry, and high ratio of value added to the local economy per unit of investment capital.

WEAKNESSES

- Lack of weaving, spinning, dyeing, and product design skills, thus requiring extensive training.
- Most craft products produced to date have been supply rather than demand driven.

- New company with no experience in operating a for-profit business and in selling in international markets, thus requiring substantial training and technical assistance in business and marketing skills.
- Extremely limited capital available for purchasing equipment, training expenses, setting up a business, and developing markets, thus requiring substantial financial and technical assistance from outside the company in order to start the business and bring it to a profitable stage.

OPPORTUNITY

There is a growing interest in many of the western countries including the United States, Canada and Western Europe by higher income women purchasing high quality unique products and designs, handmade using local natural products produced under fair-trade labor standards. This niche market is not being adequately developed and supplied by any group or organization at the current time within Jordan. This niche market provides an opportunity for Jordanian artists to earn a decent wage for their efforts and not try to compete in markets dominated by low cost products from countries paying poverty level wages.

THREATS

If the Jordan Bedouin Handicraft Weaving Company becomes financially successful, it will likely encourage others to try to copy their business practices and attempt to compete in the same niche market. The company can at least partially protect their market niche by developing a strong brand and protect the brand through international copyright laws. Successful copying would increase competition for the Jordan Bedouin Handicraft Weaving Company but would be a positive effect on the economy of Jordan.

TARGET MARKET

The primary target market is the segment consisting of middle to high income women in the U.S and Europe, those with household incomes exceeding \$80,000 annually that purchase “green”, handmade, Fair-Trade products. The secondary target market is the tourist coming to Jordan. Jordan has experienced a substantial increase in the number of tourists during the last five years. This trend is expected to be maintained and further expanded in the future.

STRATEGIC POSITIONING

The products will be premium priced handmade by Bedouin women, by using primarily local products and pay fair wages and carry the Fair Trade logo.

RISK ASSESSMENT

The major risk areas have been identified.

1. Quality control.
2. Ability of artist to meet specified time standards for making each product.
3. Difficulty in estimating the market size.

The following strategies are suggested as means to partially mitigate these risks:

- Provide extensive training and start with simple designs in the initial (startup) year.
- Provide training on the most efficient methods of organizing the tasks for producing each product and make changes in the specified production times and product prices as needed.
- Maintain low inventories of completed products and produce primarily based orders received.

- Select a brand name and copyright it in Jordan, United States and Europe. . This will assist in keep other organizations from selling products using the company brand name.
- Produce a limited number of products during the startup year for use in test marketing to provide information for use in subsequent years on which products are most likely to sell in sufficient volumes.
- Have an outside organization audit the production practice to insure that the products are handmade mostly from local natural products and comply with fair trade standards.

MARKETING PLAN AND SALES STRATEGY

MARKET OUTLETS

The company is expected to be fully operational in all target markets by the beginning of the second operating year. Plans call for no sales during a pre-operating period of one year. This year is reserved for: 1) extensive training to acquire the skills needed for designing and producing high quality products 2) develop prototypes of products, 3) marketing research, 4) setup the input supply chain and 5) complete development of the company's webpage.

The operating plan is to sell internationally during year one (first operating year) mostly through the Internet and in local tourist outlets in Jordan. The plan also, calls for setting up a few test markets with selected retailers in the United States. By the start of the second operating year the company is expected to have sufficient capacity of trained artists to allow greater expansion into the U. S. wholesale market.

Table 1. Products and Prices

Selected Products to Manufacture	Internet Retail Price	Wholesale Price
<u>Purses/Bags</u>		
Large, cloth handles	\$ 95.00	\$ 62.00
Large, leather handles	\$ 110.00	\$ 72.00
Small/medium sizes	\$ 75.00	\$ 50.00
<u>Computer Bags</u>		
Standard size with leather straps	\$ 55.00	\$ 36.00
Mini size, fold over closing	\$ 45.00	\$ 30.00
<u>Weekend Bags</u>		
Large round duffel with leather handles	\$ 220.00	\$ 150.00
Doctor's style with rigid bottom, leather handles	\$ 195.00	\$ 132.00
<u>Bedouin Bedding Bag</u>		
One standard size with side handles	\$ 375.00	\$ 262.00
<u>Stylish Tote Bags</u>		
Style 1 -- shorter oval shape, fabric handles, buckles	\$ 60.00	\$ 40.00
style 2 -- tall narrow bag from one piece of cloth	\$ 48.00	\$ 32.00
Style 3 --Mary Popins carpet bag	\$ 95.00	\$ 60.00
Total		

The products selected to be made and offered for sale have been carefully selected by Kimberly Shifflett, a commercial artist from Cincinnati Ohio. Kimberly has over 25 years experience in designing and selling fiber art products in the U. S. market.

The products selected will be made using traditional Bedouin designs but most are vastly different from the rugs and traditional Bedouin clothing usually found in tourist shops in Jordan. All of the products are designed to have an everyday useful function and are in line with what the target consumer is purchasing or believed to be willing to purchase. In addition, the items are unique and highly attractive.

The items listed in Table 1 are expected to comprise the majority of sales for the first few years. However, it will be necessary to add new products all along and particularly in future years to have new items of interest yearly. Also, the basic structure of the items may not change but the design of the weaving will change as the artists develop their own unique styles.

The prices may seem high but the company does not intend to compete with mass made inexpensive products imported from China, India and many South East Asian countries. Consumers expect to pay more for handmade traditional products when the labor is paid a fair wage and those that can afford it will pay more. Also, women in this niche market do not want products that are widely available. They want products that are more exclusive. Prices quoted do not include shipping charges. The customer pays shipping and handling charges.



Representative products that might be produced by Jordanian fiber artists

SELLING STRATEGIES

- **Internet:** An important selling strategy is a well designed webpage with links to other webpage's that the target consumer is likely to visit. The typical customer profile is expected to be women interested in fabric arts, family income above \$80,000 annually, concerned with the environment and purchases green labeled products, appreciates handmade natural products, and is concerned with social justice and is willing to pay more for "Fair Trade", organic and green products. Therefore, it is necessary to stress handmade with natural products by low income Bedouin women receiving a fair wage in labeling the products and in all advertising. Each product will carry a label indicating the above traits, signed by the artist and a short story about the artist. Personal stories by artists are effective methods of adding value.

Orders sold over the Internet will be shipped by FEDEX, UPS, DHL and other companies offering similar services.

- **Webpage:** The webpage must be highly attractive with pictures of some of the most unique and attractive products displayed on the Home page. The Home page should also include a story about the company and stress the features that differentiate the company's products from most competitors including handmade from local or natural products by Bedouins paid living wages. It must also have a link to all of the products. The link should have color photos of each product with descriptions as to size, prices, how it was made and products used in the making and articles about the artists.

The webpage must be user friendly and have of the features that facilitate ordering, shipment and payment by credit card. Wholesale customers can also use the website for ordering by entering a password to access wholesale prices.

- **U.S. Wholesale Distributor/Broker:** Wholesale sales to gift shops, department stores and other retail stores will be serviced by a distributor located in the U. S. The distributor will make sales calls on stores and participate in appropriate trade shows. The distributor will work with the Company and a freight consolidator in Jordan to arrange shipping for large orders. Smaller orders will be shipped by the Amman office via international commercial carriers. The distributor may need to carry some inventory to be able to service wholesale customers wanting the product on short notice. Consolidated shipments by sea will save on shipping charges on containers or partial containers to the U. S. All shipping will be coordinated through the Amman office. The distributor will be paid a commission on sales made, usually around 15% to 25% of the wholesale price.
- **Advertising and Promotions:** Advertising and promotional techniques will focus on using other websites with links to the Company's website to drive traffic for direct consumer sales. Social networking sites such as Facebook and Tweeter will be used to call attention to the unique products. Direct mail flyers will be used for reaching small retail shops. The distributor will make in-person sales calls to larger customers.

Participation at various trade shows and wool festivals by the distributor should be useful in getting the company's name and products out to new customers. There are at least six wool festivals held annually in the U. S. and Canada that feature similar products.

OPERATIONS

The company will purchase specified woven items from the local artists at specified prices based on costs to produce which includes an hourly wage currently set at \$3.00 per hour for their efforts. The labor cost for each item will be based on a standard number of hours typically required for well trained experienced artists to perform the work. If they become proficient they will be able to earn more than \$3.00 per hour. Also,

if the company earns a profit, the artists will receive additional remuneration based on the value of their sales.

The company will provide the workers with training in a variety of areas such as; costing and pricing, product development, marketing, and packaging. Training needs to be done over time and updated every year.

TECHNOLOGY PLAN

Technology is a key element in the workers' productivity, the company will depend on applying simple technological transformation in this project; this type of technology will be simple and easy to use. Spinning wheels, looms, and drum carders are the main equipments needed for this project; most of the equipment has a useful life of at least 20 years. This type of simple technology doesn't need electricity or a large operating space.



Equipment shown at a Jordanian Cooperative

MANAGEMENT AND ADMINISTRATIVE EXPENSES

The company will work under the supervision of the Hashemite fund, and will have a general manager assisted by a fiber arts trainer/production manager, two trainers, a marketing director, a shipping assistant and an administrative assistant (Table 2). One of the two trainers is not expected to be needed after the first year of operating. The marketing director will be brought in starting at the beginning of the second year. The marketing duties will be performed by contract personnel as listed under the heading of

Contract Services in Table 2 for the startup and first operating year. The expenses for setting up and operating the Amman office are included in the Other Administrative Expenses category. Total selling, shipping and general administrative expenses are budgeted at \$123,735 in the third year, the time the business is assumed to be well established.

Table 2. Management & Administrative Expenses, Bedouin Handicraft Weaving Company

	Start-up	Year 1	Year 2	Year 3
<u>Salaries</u>				
General Manager	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000
Marketing Director			\$ 15,000	\$ 15,000
Trainer-Production Manager	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000
Trainers	\$ 12,000	\$ 12,000	\$ 6,000	\$ 6,000
Shipping Assistant	\$ -	\$ 3,600	\$ 9,000	\$ 9,000
Administrative Assistant	\$ 3,000	\$ 9,000	\$ 9,000	\$ 9,000
Total Salaries	\$ 48,000	\$ 57,600	\$ 72,000	\$ 72,000
<u>Other Administrative expenses</u>				
Office Rent	\$ 9,000	\$ 9,000	\$ 9,000	\$ 9,000
Office Utilities	\$ 2,400	\$ 3,600	\$ 3,600	\$ 3,600
Cell Telephone	\$ 2,000	\$ 3,000	\$ 3,000	\$ 3,000
Travel	\$ 15,000	\$ 15,000	\$ 18,000	\$ 18,000
Website Hosting & Maintenance	\$ -	\$ 3,500	\$ 3,500	\$ 3,500
Supplies	\$ 1,000	\$ 1,200	\$ 1,200	\$ 1,200
Advertising & Promotion	\$ 2,500	\$ 5,000	\$ 6,500	\$ 7,000
Contract Services	\$ 24,000	\$ 24,000	\$ 8,000	\$ 3,000
Miscellaneous	\$ 1,500	\$ 2,000	\$ 2,200	\$ 2,200
Total Cash Administrative	\$ 57,400	\$ 66,300	\$ 55,000	\$ 50,500
Office Deprecation	\$ 1,425	\$ 1,425	\$ 1,425	\$ 1,425
Total Administrative Expenses	\$ 58,825	\$ 67,725	\$ 56,425	\$ 51,925
Total G & A	\$ 106,825	\$ 125,325	\$ 128,425	\$ 123,925

SALES FORECASTS

As indicated earlier, there will be no official sales by the company during the startup year. Training of the artists will be a major focus during the startup period. As part of the training process, the artists will make samples of all of the proposed products. These samples will be used mostly for test marketing. Any revenue from sales in the startup

year will help offset test marketing expenses and provide some payments for the participating artists. These payments are not recorded on the company books. The objectives of the startup year are; 1) provide training, 2) setup the input supply chain, 3) organize the manufacturing process, 4) setup the marketing distribution system, 5) test market the products and make changes as needed, and 6) set up the business administration. This feasibility assessment assumes these activities are sufficiently accomplished so that the business can begin sales at the start of the first full operating year.

Sales are forecasted to reach slightly more than \$150,000 in the first year, increasing by about 300 percent in the second year and an additional 15 percent in the third year. The expected large increase in sales during the second year is attributed to; 1) sales are budgeted to be modest during the first year to help the company avoid getting over committed while gaining experience in all phases of the business and 2) the market outlets actively pursued were restricted to the Internet, local Jordanian tourist shops, and a few retail shops in the United States, serviced by the wholesale distributor. It was assumed that by the second year, the company would have the capacity to begin fully exploiting all market outlets. A conservative growth in sales of 15 percent was assumed reasonable for the third year to allow the company to focus on increasing efficiency, exploring retail markets in Europe and develop new products.

A decision was made to manufacture and offer for sale all of the proposed products during first year in order to gain experience in making the product and gather sales and profitability information for use in adjusting the product mix is needed.

Table 3. Items Produced, Sales Schedule, and Revenues by Year

Items Produced	Year One			Year Two			Year Three		
	Quantity Sold at Retail	Quantity Sold at Wholesale	Total Revenue Year 2	Quantity Sold at Retail	Quantity Sold at Wholesale	Total Revenue Year 3	Quantity Sold at Retail	Quantity Sold at Wholesale	Total Revenue Year 3
Purses/Bags									
Large, cloth handles	150	10	\$ 14,870	300	300	\$ 47,100	345	345	\$ 54,165
Large, leather handles	125	10	\$ 14,470	250	250	\$ 45,500	288	288	\$ 52,325
Small/medium sizes	125	10	\$ 9,875	250	250	\$ 31,250	288	288	\$ 35,938
Computer Bags									
Standard size with leather straps	200	10	\$ 11,360	350	350	\$ 31,850	403	403	\$ 36,628
Mini size, fold over closing	200	15	\$ 9,450	400	400	\$ 30,000	460	460	\$ 34,500
Weekend Bags									
Large round duffel with leather handles	100	5	\$ 22,750	200	200	\$ 74,000	230	230	\$ 85,100
Doctor's style with rigid bottom, leather handles	60	5	\$ 12,360	120	120	\$ 39,240	138	138	\$ 45,126
Bedouin Bedding Bag									
One standard size with side handles	30	2	\$ 11,774	60	60	\$ 38,220	69	69	\$ 43,953
Stylish Tote Bags									
Style 1 -- shorter oval shape, fabric handles, buckles	200	20	\$ 12,800	400	400	\$ 40,000	460	460	\$ 46,000
style 2 -- tall narrow bag from one piece of cloth	300	20	\$ 15,040	600	600	\$ 48,000	690	690	\$ 55,200
Style 3 --Mary Popins carpet bag	150	20	\$ 15,450	300	300	\$ 46,500	345	345	\$ 53,475
Total	1,640	127	\$150,199	3,230	3,230	\$471,660	3,715	3,715	\$542,409

CAPITAL PURCHASES AND DEPRECIATION SCHEDULES

It was estimated that about \$37,000 of capital items would be sufficient for sales less than \$600,000 annually. These items should be sufficient for the first three years of budgeted sales. The major capital items are looms and spinning wheels accounting for about 75% of the total. Most of the capital items have a useful productive life of at least 20 years resulting in a depreciation charge of slightly less than \$2,000 annually.

The capital purchases to setup the Amman administrative office and shipping center were budgeted at \$13,600. The office includes a small retail show room for the products primarily for wholesale customers, a room for packaging and shipping products with some storage space, and space for two or three small offices. There is no need to have a fancy office and some of the items could be used rather than purchased new.

Table 4. Capital Purchases for Jordan Fiber Arts Project - Product Manufacturing

Item	Unit Cost ¹	Units		Year of Life	Salvage Value	Annual Depreciation
		Purchased	Total Cost			
Spinning Wheel	\$ 689.00	6	\$ 4,134	20	\$ -	\$ 207
Drum Carder	\$ 702.00	2	\$ 1,404	15	\$ -	\$ 94
Hand Cards	\$ 70.85	4	\$ 283	10	\$ -	\$ 28
Kniddy Knoddy (skein winder)	\$ 20.15	2	\$ 40	10	\$ -	\$ 4
Extra Bobbins for Spinning Wheel	\$ 40.30	48	\$ 1,934	20	\$ -	\$ 97
Swift	\$ 71.50	4	\$ 286	10	\$ -	\$ 29
Bobbin Winder	\$ 143.00	4	\$ 572	10	\$ -	\$ 57
Loom 48" wide 4H, (94lb)	\$ 2,340.00	5	\$ 11,700	20	\$ -	\$ 585
Loom 36" wide 8H (71lbs)	\$ 3,113.50	4	\$ 12,454	20	\$ -	\$ 623
Bench kit	\$ 257.40	9	\$ 2,317	20	\$ -	\$ 116
Different size reeds	\$ 70.85	9	\$ 638	10	\$ -	\$ 64
Reed Slay Hook	\$ 13.00	8	\$ 104	20	\$ -	\$ 5
Shuttles	\$ 49.40	9	\$ 445	20	\$ -	\$ 22
Bobbins for shuttles	\$ 1.95	48	\$ 94	20	\$ -	\$ 5
Warping Board	\$ 136.50	2	\$ 273	20	\$ -	\$ 14
Stick Shuttle	\$ 10.40	2	\$ 21	10	\$ -	\$ 1
Total			\$ 36,698		\$ -	\$ 1,949

¹ Includes shipping from US to Jordan

Table 5. Capital Purchases for Jordan Fiber Arts Project - Amman Office

Item	Unit Cost	Units		Year of Life	Salvage Value	Annual Depreciation
		Purchased	Total Cost			
Computers	\$ 900	\$ 4	\$ 3,600	\$ 5	\$ -	\$ 720
Office Desks & Chairs	\$ 1,200	\$ 3	\$ 3,600	\$ 20	\$ -	\$ 180
File Cabinets	\$ 700	\$ 3	\$ 2,100	\$ 20	\$ -	\$ 105
Copy, printer, fax machine	\$ 300	\$ 3	\$ 900	\$ 6	\$ -	\$ 150
Shelving and tables for product display	\$ 1,400	\$ 1	\$ 1,400	\$ 20	\$ -	\$ 70
Miscellaneous items	\$ 2,000	\$ 1	\$ 2,000	\$ 10	\$ -	\$ 200
Total			\$ 13,600			\$ 1,425

PRODUCT SPECIFICATIONS AND COSTS

An engineering cost approach was used to estimate the amounts of materials and labor required to produce each of the specified products. The procedure used was to estimate the cost of all input materials needed to be purchased, and then estimate the amount of labor and materials required to produce each item. This provided an estimate of the cost to produce each item. The labor inputs were classified as weaving, sewing and assembly hours. The time required to perform each of these tasks for each product was estimated by individuals experienced in making these or similar items. The cost of goods manufactured schedule was derived by multiplying the number items manufactured by the cost of the item.

The costs of the materials, labor and supplies were specified as variables in the Excel spreadsheet. Equations were developed so that the cost of any item could be changed by entering the new cost within the Variables Table (Table 6) and the impact of this change would automatically be changed in all of the financial tables including the cost of goods schedule, cash flow statement, income statement and balance sheet. The same procedure was used for the investment schedules (Tables 4 and 5), the sales forecast and prices (Table 3), and the administrative cost (Table 2). Any changes in the amount of these items will automatically adjust all financial statements.

Table 6. Unit Costs of Inputs

Item	Unit cost	Unit
Weaving labor wage rate	\$ 3.00	hr
Sewing labor wage rate	\$ 3.00	hr
Assembly labor wage rate	\$ 3.00	hr
Cost of Wool	\$ 9.00	yard
Cost of dyeing	\$ 4.00	once
Cost of silk linings	\$ 6.00	yard
Cost of muslin linings	\$ 1.00	yard
Cost of leather	\$ 27.00	yard
Cost of buckles	\$ 0.82	buckle
Cost of zipper pull or slide	\$ 0.42	each
Cost of zippers	\$ 0.08	in
Cost of rigid bottoms	\$ 1.63	each
Cost of purse feet	\$ 0.68	each
Cost of magnetic snaps	\$ 1.48	set
Cost of iron rivet head	\$ 0.03	each
Cost of iron rivet post	\$ 0.02	each
Cost of metal loops	\$ 0.60	each
Cost of frame top, Mary Poppins	\$ 3.58	each
<u>Packing supplies</u>		
Purses/Bags	\$ 0.25	unit
Computer Bags	\$ 0.30	unit
Weekend Bags	\$ 0.30	unit
Bedouin Bedding Bag	\$ 0.40	unit
Stylish Tote Bags	\$ 0.30	unit

As can be seen in Table 6, all labor for sewing, spinning and assembling was charged at the \$3 per hour rate or about 2JD's per hour. This was judged to be a fair wage for this type of labor in Jordan.

FINANCING ASSUMPTIONS

The members of the cooperative, mostly rural women do not have the necessary capital for needed capital investments and the initial startup operating funds either in the form of cash or other assets that could be used as collateral to finance the startup of the business. Therefore, it was assumed that they would be able to secure grants totaling \$210,000. It was assumed that these funds would be given to the company and would show up as contributed capital on the company balance sheets. Although these funds could probably be repaid to the funding agency over a several year period out of operating profits starting after the third operating year, this approach was not considered in this study.

In addition to the \$210,000 of grant funds shown on the company books, it is estimated that at least another \$100,000 to \$150,000 would be needed for consulting services provided to the company but not paid through the company. These services would be for developing initial product designs, selecting and training the individuals to train the cooperative members, setting up the marketing channels, and assist in selecting and training the office staff. The financing of these activities would have to be provided by governments or donor agencies and are not carried on the company books.

PROFORMA FINANCIAL STATEMENTS

CASH FLOW PROJECTIONS

To avoid running out of cash during the startup year, the company will need a cash infusion of \$160,000 at the start of the year. As indicated earlier, it is assumed these

funds will come as a grant (Table 7). The funds will be used mostly to purchase equipment and operate the Amman office.

Table 7. Cash Flow Projections for the Bedouin Handicraft Weaving Company

	Start-up	Year 1	Year 2	Year 3
Beginning Cash Balance	\$ -	\$ 2,302	\$ 3,580	\$ 92,816
Grants	\$ 160,000	\$ 50,000	\$ -	\$ -
<u>Cash Inflows From Sales</u>				
Purses/Bags		\$ 39,215	\$ 123,850	\$ 142,428
Computer Bags		\$ 20,810	\$ 61,850	\$ 71,128
Weekend Bags		\$ 35,110	\$ 113,240	\$ 130,226
Bedouin Bedding Bags		\$ 11,774	\$ 38,220	\$ 43,953
Stylish Tote Bags		\$ 43,290	\$ 134,500	\$ 154,675
(Less Allowances / Returns)		\$ (751)	\$ (2,358)	\$ (2,712)
Total Inflows	\$ 160,000	\$ 201,750	\$ 472,881	\$ 632,513
<u>Cash Outflows</u>				
Product Mfg Equipment	\$ 36,698			
Amman Office Equipment	\$ 13,600			
Administrative and Marketing Salaries	\$ 48,000	\$ 57,600	\$ 72,000	\$ 72,000
Shipping Expenses (to Amman office)		\$ 5,000	\$ 7,500	\$ 10,000
Amman Office Cash Operating Expenses	\$ 57,400	\$ 66,300	\$ 55,000	\$ 50,500
Fabric		\$ 12,609	\$ 46,305	\$ 53,251
Lining		\$ 7,518	\$ 27,600	\$ 31,740
Leather		\$ 3,804	\$ 13,716	\$ 15,773
Zippers		\$ 5,870	\$ 21,277	\$ 24,469
Buckles		\$ 452	\$ 1,689	\$ 1,943
Loops		\$ 2,496	\$ 8,976	\$ 10,322
Snaps		\$ 992	\$ 3,700	\$ 4,255
Tops		\$ 609	\$ 2,148	\$ 2,470
Feet		\$ 639	\$ 2,285	\$ 2,628
Rivet Heads		\$ 45	\$ 158	\$ 182
Rivet Posts		\$ 30	\$ 106	\$ 121
Rigid Bottom		\$ 435	\$ 1,565	\$ 1,800
Weaving Labor		\$ 18,900	\$ 69,240	\$ 79,626
Sewing Labor		\$ 5,475	\$ 19,980	\$ 22,977
Assembly Labor		\$ 5,885	\$ 21,450	\$ 24,668
Packing Supplies		\$ 512	\$ 1,870	\$ 2,151
Electricity	\$ -	\$ 1,000	\$ 1,500	\$ 1,500
Other Expenses	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
Total Outflows	\$ 157,698	\$ 198,170	\$ 380,065	\$ 414,375
Ending Cash Balance	\$ 2,302	\$ 3,580	\$ 92,816	\$ 218,139

The company is projected to have a cash balance of \$2,302 at the end of the startup period. In order to avoid running out of cash during the first operating year, it is projected that another \$50,000 of cash infusion is needed. The company is expected to receive more than sufficient cash from sales in the second and third years to cover cash operating expenses and have cash balances at the end of the year of approximately \$100,000 and \$200,000 respectively. The feasibility assumes the excess cash is left in the company. However, it could be used to supplement the incomes of the cooperative's artists and management staff or used for additional equipment and training to grow the enterprise.

INCOME STATEMENTS

The income statement shows a loss of \$107,400 during the start up period (Table 8). These funds were needed for salaries and cash operating expenses to get the company in a position where it could safely beginning manufacturing and selling. Accrual accounting rules suggest that the startup losses be capitalized as an asset and then amortized as an expense over a period of time, usually ten years. If this approach was followed, the startup income would show no expenses and a zero loss but each year of the next ten years of income statements would have incomes reduced by \$10,740. The authors chose not to amortize startup losses because most non-accountants might not understand the amortization process and fail to realize the large cost of setting up the business.

The company is projected to lose slightly more than \$50,000 during the first operating year. However; the company is projected to be profitable during the second and third years earning \$85,862 and \$121,948 respectively. The nearly three hundred percent growth in sales from the first operating year to the second allowed the company to achieve economies of size by spreading fixed costs (mostly administrative and depreciation) over three times the number of sales. A projected increase in sales of 15 percent in the third year over the second resulted in approximately forty percent increase in profits.

Table 8. Income Statements for the Bedouin Handicraft Weaving Company

	Start-up	Year 1	Year 2	Year 3
Revenue from Sales				
Purses/Bags	\$ -	\$ 39,215	\$ 123,850	\$ 142,428
Computer Bags	\$ -	\$ 20,810	\$ 61,850	\$ 71,128
Weekend Bags	\$ -	\$ 35,110	\$ 113,240	\$ 130,226
Bedouin Bedding Bag	\$ -	\$ 11,774	\$ 38,220	\$ 43,953
Stylish Tote Bags	\$ -	\$ 43,290	\$ 134,500	\$ 154,675
(Less Returns & Allowances)	\$ -	\$ (751)	\$ (2,358)	\$ (2,712)
Net Sales	\$ -	\$ 149,448	\$ 469,302	\$ 539,697
Cost of Goods Manufactured				
Beginning Inventory	\$ -	\$ -	\$ -	\$ -
Fabric	\$ -	\$ 12,609	\$ 46,305	\$ 53,251
Lining	\$ -	\$ 7,518	\$ 27,600	\$ 31,740
Leather	\$ -	\$ 3,804	\$ 13,716	\$ 15,773
Zippers	\$ -	\$ 5,870	\$ 21,277	\$ 24,469
Buckles	\$ -	\$ 452	\$ 1,689	\$ 1,943
Loops	\$ -	\$ 2,496	\$ 8,976	\$ 10,322
Snaps	\$ -	\$ 992	\$ 3,700	\$ 4,255
Tops	\$ -	\$ 609	\$ 2,148	\$ 2,470
Feet	\$ -	\$ 639	\$ 2,285	\$ 2,628
Rivet Heads	\$ -	\$ 45	\$ 158	\$ 182
Rivet Posts	\$ -	\$ 30	\$ 106	\$ 121
Rigid Bottom	\$ -	\$ 435	\$ 1,565	\$ 1,800
Weaving Labor	\$ -	\$ 18,900	\$ 69,240	\$ 79,626
Sewing Labor	\$ -	\$ 5,475	\$ 19,980	\$ 22,977
Assembly Labor	\$ -	\$ 5,885	\$ 21,450	\$ 24,668
Packing Supplies	\$ -	\$ 512	\$ 1,870	\$ 2,151
Shipping Expenses	\$ -	\$ 5,000	\$ 7,500	\$ 10,000
Electricity	\$ -	\$ 1,000	\$ 1,500	\$ 1,500
Other Expenses	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
Depreciation (Product Mfg Equipment)	\$ -	\$ 1,949	\$ 1,949	\$ 1,949
Total additions	\$ 2,000	\$ 76,219	\$ 255,014	\$ 293,824
Ending inventory (finished goods)	\$ -	\$ -	\$ -	\$ -
Total Cost of Goods Manufactured	\$ 2,000	\$ 76,219	\$ 255,014	\$ 293,824
Gross Income	\$ (2,000)	\$ 73,229	\$ 214,287	\$ 245,873
Expenses				
Salaries	\$ 48,000	\$ 57,600	\$ 72,000	\$ 72,000
Amman Office Cash Operating Expenses	\$ 57,400	\$ 66,300	\$ 55,000	\$ 50,500
Depreciation (Amman Office Equipment)		\$ 1,425	\$ 1,425	\$ 1,425
Total Expenses	\$ 105,400	\$ 125,325	\$ 128,425	\$ 123,925
Net Income	\$ (107,400)	\$ (52,096)	\$ 85,862	\$ 121,948

BALANCE SHEETS

The balance sheets for the end-of-years from startup through the third year are shown in Table 9. The financial analysis for this feasibility assessment assumed that the company would have no inventories, supplies, unpaid expenses, accounts receivables, and accounts payable that carried over from one year to the next. An actual operating company would most likely have balances for all of the above items past the startup year. One would be expected that the company would most likely have inventories of products for sale of at least \$10,000 to \$15,000 at any one time by the third year and some level of accounts payable, accounts receivable, and inventories of supplies. To arrive at accurate estimates of these asset and liability items on the yearend balance sheets would require simulating weekly or monthly cash flow and income statements which in turn would require developing specifications on timing of sales, credit policies, inventory levels of supplies and finish products and when the companies pays its suppliers and the artists making the product. However, it was determined that using annual statements as opposed to weekly or monthly was sufficient to test the level of financial feasibility.

The company assets grew from \$52,600 at the end of the startup period to \$258,314 at the end of the third operating year. Since, the company has no liabilities; its net worth is the same. If one were to assume that the company repaid the \$210,000 in grant funds provided in the startup and first operating year and was not required to pay any interest, the company's assets and net worth would be \$48,314 at the end of the third year.

Table 9. Balance Sheets for the Bedouin Handicraft Weaving Company

	Start-up	Year 1	Year 2	Year 3
Assets				
Cash	\$ 2,302	\$ 3,580	\$ 92,816	\$ 218,139
Accounts Receivables				
Inventory				
Fixed Assets				
Land				
Vehicles				
Buildings				
Product Mfg Equipment	\$ 36,698	\$ 36,698	\$ 36,698	\$ 36,698
(Less Depreciation)		\$ (1,949)	\$ (3,898)	\$ (5,848)
Amman Office Equipment	\$ 13,600	\$ 13,600	\$ 13,600	\$ 13,600
(Less Depreciation)	\$ -	\$ (1,425)	\$ (2,850)	\$ (4,275)
Total Assets	\$ 52,600	\$ 50,504	\$ 136,366	\$ 258,314
Liabilities				
Account Payables				
Wages Payable				
Short-term Loans				
Total Liabilities	\$ -			
Net Worth				
Owner's Equity	\$ -	\$ 52,600	\$ 50,504	\$ 136,366
Grants / Infusions	\$ 160,000	\$ 50,000	\$ -	\$ -
Retained Earnings	\$(107,400)	\$ (52,096)	\$ 85,862	\$ 121,948
Withdrawals / Dividends	\$ -	\$ -	\$ -	\$ -
Total Net Worth	\$ 52,600	\$ 50,504	\$ 136,366	\$ 258,314
Liabilities + Net Worth	\$ 52,600	\$ 50,504	\$ 136,366	\$ 258,314

CONCLUSIONS

The results of this feasibility assessment show that a fiber arts company given the assumptions made in the study has a reasonable chance of becoming a financially self sustaining business by the end of the third year.

The study assumed that \$210,000 in public funds shown on the company books and an additional \$150,000 publically funded technical assistance was invested in the company. The company should create at least 30 direct new jobs. The cost per job in

public funds is estimated at \$12,000. The company is expected to create 25 jobs full time for underemployed Bedouin women paying about \$5,000 annually. If the women choose to work part time, the number of women benefited would increase. If the company is successful and the market will absorb additional supplies, the company could easily expand to where it would provide many additional well paying jobs.

Disclaimer

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