



PREFEASIBILITY STUDY OF BAMYAN CARPET VALUE CHAIN

**Asian Development Bank
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ROOTS OF PEACE

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CURRENCY EQUIVALENTS

(as of 30 January 2008)

Currency Unit	–	Afghani (Afs), Rupee (R)
Afs1.00	=	\$.05
\$1.00	=	50Afs
\$1.00	=	62R

ABBREVIATIONS

ADB	-	Asian Development Bank
AKDN	-	Aga Khan Development Network
AISA	-	Afghanistan Investment Support Agency
AREDP	-	Afghanistan Rural Enterprise Development Program
ARMP	-	Afghanistan Rural Microcredit Program
ASAP	-	Accelerating Sustainable Agriculture Program
ASMED	-	Afghanistan Small and Medium Enterprise Development
AWBF	-	Afghan Women's Business Association
DAIL	-	Department of Agriculture, Irrigation, and Livestock
HLP	-	Horticulture and Livestock Program
MAIL	-	Ministry of Agriculture, Irrigation, and Livestock
M&E	-	Monitoring and Evaluation
MISFA	-	Microfinance Investment Support Facility for Afghanistan
MRRD	-	Ministry for Rural Rehabilitation and Development
NGO	-	Non-Governmental Organization
PFI	-	Participating Financial Institution
PHDP	-	Perennial Horticulture Development Project
RBSP	-	Rural Business Support Project
ROP	-	Roots of Peace
SSPSRL	-	Support to Strategic Planning for Sustainable Rural Livelihoods
TOT	-	Training of Trainers
USAID	-	United States Agency for International Development

{WEIGHTS AND MEASURES}

kg	–	Kilogram or kilograms
ser	–	7 kilograms

NOTE{S}

- (i) In this report, "\$" refers to US dollars, "Afs" refers to Afghanis, the currency of Afghanistan and "R" refers to Rupees, the currency of Pakistan.

CONTENTS

EXECUTIVE SUMMARY

1. Introduction	4
2. Value Chain Description	4
3. Market Assessment	5
a. Demand and Supply	5
b. Production Costs	8
c. Processing Costs	9
d. Marketing Costs	10
e. Price Trends	Error! Bookmark not defined.
f. Prices and Value Added Along the Value Chain	10
g. Estimated Increase in Revenue	12
4. Key Constraints/Gaps	12
a. Raw Wool	Error! Bookmark not defined.
b. Wool Scouring	Error! Bookmark not defined.
c. Spinning	Error! Bookmark not defined.
d. Dying	Error! Bookmark not defined.
e. Design	Error! Bookmark not defined.
f. Weaving	Error! Bookmark not defined.
g. Finishing: Cut and Wash	Error! Bookmark not defined.
h. Marketing	Error! Bookmark not defined.
i. Organization	Error! Bookmark not defined.
j. Credit	Error! Bookmark not defined.
k. Subsidies	
5. Opportunities	14
6. Review Of Interventions Being Provided By Other DONOR PROJECTS	16
a. Carpet Sector Development	Error! Bookmark not defined.
b. Training/Capacity Development	17
c. Existing Institutional Capacity Building	18
d. Existing Groups/Associations	18
7. Credit Mapping	Error! Bookmark not defined.
8. Proposed Interventions	20
a. Description	20
b. Strategic Links to Existing Programs	21
9. Stakeholders Interest in Value Chain Improvement	22
10. Indicative Number of Potential Beneficiaries	22
11. Recommendations	22
d. Feasibility	22
b. Cost effectiveness	Error! Bookmark not defined.
c. Risk manageability	23
d. Financial viability	23
e. Environmental Issues	23

Annex 1. Credit Map: Bamyan

Annex 2. Value Chain: Bamyan Carpet

EXECUTIVE SUMMARY

Although the Afghan hand-made carpets are the prize export of Afghanistan, much of the value added is lost to Pakistan. Although Bamyan province, one of the poorest and most mountainous in the country, does not have as long a history of carpet weaving as do other provinces in Afghanistan, carpet weaving is becoming increasingly important in Bamyan with growing numbers of weavers involved. There are approximately 4000 households involved in weaving in Bamyan province. Although the Afghan hand-made carpets are the prize export of Afghanistan, much of the value added is lost to Pakistan.

Most of the Afghan carpets produced in Bamyan and a significant portion of the value-added in the Afghan carpet are sent to Pakistan. Carpets are then finished and re-exported as Pakistani carpets. Pakistan brands Afghan carpets and exports onwards, primarily to Europe and the USA. The reason why the great majority of Afghan hand-made carpets go through Pakistan is due: (i) to the lack of sufficient cut and wash facilities in Afghanistan, (ii) to the long-term relationships Pakistanis have established with their Afghan partners and with their international trading partners, (iii) to limited trading relationships between Afghans and international partners, (iv) to relatively low cost of shipping from Afghanistan to Pakistan versus high cost of shipping from Afghanistan to international markets, and (v) Pakistan's advantage in that the Pakistan Government subsidizes Pakistan's carpet industry.

The carpet industry in Bamyan has an opportunity, if it gets better organized, to capture more of the value of its prized carpets by adding value to the wool that is used for its carpets and by establishing its own proper cut and wash facilities and direct marketing capability. Afghan traders are quite opportunistic when they are buying wool in Pakistan or in Iran. The wool traders are not necessarily looking for the same wool that would give the weaver the "best bang for the buck". Afghan wool cleaners, spinners, dyers, and weavers all have a stake in the carpet industry. The wool and carpet value chain in Afghanistan requires the quality and the demand-driven incentives to be captured by the Afghan producers. The feasibility of cut and wash facilities has been investigated and the results indicate a very high return. The direct marketing of carpets branded by Afghan exporters also has tremendous potential as long as the shipping costs can be managed.

In addition, the weavers of Bamyan need a chance to access their own inputs independently, own their own looms, learn about the designs in greatest demand, establish cut and wash facilities, and send their carpets through Afghan exporters with direct linkages to lucrative markets. These value-added activities are feasible and if implemented could lead to very significant increases in income to stakeholders working within the value chain in Bamyan.

PRE-FEASIBILITY STUDY OF BAMYAN CARPET VALUE CHAIN

1. INTRODUCTION

Afghanistan has had a long tradition in, and is one of few countries, producing hand-woven carpets made from wool, cotton, and/or silk. Prior to the 1990's, Afghanistan was a very important player in the global carpet market. Over the period 1990 – 2002, due to the war and civil strife, Afghanistan was not able to export regionally nor internationally and lost its share of the market, largely to Pakistan. The revival of the carpet industry in Afghanistan began in 2002. The Afghanistan Carpet Exporters Guild estimates there are over one million Afghans working in the production of carpets with additional millions involved in supporting activities such as wool production, cut and wash operations, and design development.¹ While figures vary widely, information from the Ministry of Commerce, International Trade Department, based on CSO data indicate Afghanistan annually exported, through formal market channels, an average of \$176 million worth of carpets over the period 2003-2006. Of this, annual exports estimated at \$164 million went to Pakistan through formal market channels. This official estimate underestimates the actual carpet exports. If the informal trade of carpets is included, it has been estimated that Afghanistan produces annually about 6.6 million square meters of hand-made carpets, most of which are exported.² The value of 6.6 million square meters of carpets is at least twice the official data.

The carpets in Afghanistan are globally acknowledged as one of Afghanistan's most viable and visible products and have become a major development focus for both Afghanistan's government and private sector support organizations.³ Although Bamyan province, one of the poorest and most mountainous in the country, does not have as long a history of carpet weaving as do other provinces in Afghanistan, carpet weaving is becoming increasingly important in Bamyan with growing numbers of weavers involved. There are approximately 4000 households involved in weaving in Bamyan province. The average weaver in Afghanistan produces about 18 square meters of carpet per year. The weaving is done mostly by women in their homes. Because so many women are involved in weaving, the economic impact of the income these women bring to their households is strongly felt.

This document presents the information collected from field trips in Bamyan province, donor project documents and discussions in Kabul, and the prefeasibility results on the development of the Bamyan carpet value chain. The schematic presented in Annex 2 provides a summary of the findings of the field work leading to the development of this study. At the top of the schematic is a brief outline of the value chain. The horizontal sections below the outlined value chain set out the constraints/gaps, opportunities for value chain improvement and suggested strategic interventions for the RBSP program. The remainder of this study provides the information and prefeasibility analysis of interventions in the carpet value chain.

2. VALUE CHAIN DESCRIPTION

There are many steps in the carpet value chain. The initial steps involve obtaining the proper quality and volume of wool, including

- purchasing the wool - the quality and source of raw wool needs to be considered and is contingent on the breed of sheep and availability, respectively. Some of the best

¹ McCord, M. 2007. An Analysis of Business Opportunities with Afghanistan's Carpet Sector. Kabul.

² Landell Mills, Ltd. 2007 Preparing the Commercial Agriculture Development Project, Main Report, Phase 2, Asian Development Bank Project.

³ McCord, M. 2007. An Analysis of Business Opportunities with Afghanistan's Carpet Sector. Kabul.

wool for carpets comes from Afghanistan's Ghazni sheep. The wool is highly-prized for its texture, long length of fibers, and for its high proportion of white wool. Other wool of various quality types originates from the Middle East and is imported from Pakistan or Iran.

- washing the wool - Raw wool requires proper washing, that is, scouring. Wool scouring uses hot water with detergent to remove the oil and non-wool contaminants.
- carding/combing (following the drying, of the wool) by brushing the wool fibers with wire teeth to align the fibers.
- spinning the wool into yarn by hand, by use of spinning wheels, or by machine. Even though hand-spun yarn, which includes yarn spun on hand-spinning wheels, has an uneven structure, this look is frequently desired for high-quality carpets.
- dyeing the wool, an intricate process requiring extensive knowledge and experience (controlling temperature and pH) of dyes and colors. Both chemical and natural dyes are used.

Most carpet weavers obtain their wool and other inputs from carpet traders and, therefore, are not involved in the above steps. The traders also provide carpet designs to the weavers. The traditional designs, as well as the contemporary designs, reflect buyer preference, and are graphed, showing both color and pattern. Graphing is done by hand in Pakistan and Afghanistan by master graphers.

Carpet weavers may have their own loom or they may receive their loom from the carpet trader. Depending on the size of the loom, up to five people can work together on a single carpet. Wooden or steel, horizontal or vertical, looms ranging in size from 2 to 25 meters square are used. An expert weaver can produce around two square meters of carpet per month, although this varies with the density of knots required in the design and with the experience of the weaver. There are three major standard densities, measured as number of knots per 10 cm squared. These are usually 35 knots x 35 knots, 40 x 40, and 50 x 50. The higher the density (number of knots), the higher the quality and price of the carpet.

The cut and wash process following weaving cleans the carpet, restores the original shine of the wool, and brings out the carpet's sheen and luster. There are three types of washing that produce carpets of different degrees and luster. These are:

1. Antique wash gives an old look to the carpet
2. Tea wash gives a shiny look
3. Simple wash gives an original color look

After the carpet is dried the carpet's surface is cut (clipped or shaved) to a uniform level.

Marketing is accomplished largely by traders who have contracted weavers to weave and who then sell the carpets, primarily to Pakistan. Contract weaving is very widespread in Afghanistan and most Bamyan weavers have weaving contracts. Traders contract weavers, providing them with the loom, yarn, and design, and pay them on a per square meter (wage) basis, ranging from \$31-\$50/sq.m., depending on intricacy of design, knot density, quality, and size of carpet. Note that traders also deduct from the rate paid if there are flaws in the carpet that must be repaired. Some weavers are paid up to \$79 per meter for unusually high knot density carpets, but this is very infrequent. Merchants themselves typically have contracts with Pakistan buyers, who are directly linked to end buyers in international markets. Some weavers independently sell their carpets in local markets.

3. MARKET ASSESSMENT

a. Demand and Supply

1. Demand

a. By Product Type

This report focuses on handmade knotted carpets. Demand for the carpets is dictated by make (wool, cotton, and/or silk), design, wash type, quality in terms of number of knots per square inch, etc. The European market prefers carpets that are finished using the Simple wash technique, whereas the American market prefers carpets that have been Tea washed. The Antique wash has a niche in both markets. The OTF study has a detailed description of the demand for hand-made carpets.⁴

b. By Geographical Location

i. Local and Provincial

Bamyan traders, who export carpets to Pakistan, state they currently collectively meet only 40% of demand from their Pakistan buyers. Currently, they sell around 11,100 square meters per month, produced on a contract basis with Bamyan weavers. Traders mentioned that their buyers in Pakistan would purchase another 16,650 square meters per month. For several of the larger merchants, their Pakistani buyers loan them funds so they can purchase inputs to provide to weavers and pay weaver wages. Bamyan merchants say there are not enough good weavers in Bamyan to produce the amount and quality of carpet Pakistan demands.

ii. National

Relative to domestic demand, there is limited domestic demand for carpets at the national-level in Afghanistan. Reports are that around 8% of Afghan carpets are purchased in Afghanistan⁵.

iii. Regional and International

Although not a direct demand, Pakistan receives an estimated 80% to 95% of Afghan carpets. Carpets are then finished and re-exported as Pakistani carpets. Pakistan brands Afghan carpets and exports onwards, primarily to Europe and the USA. This is due: (i) to the lack of sufficient cut and wash facilities in Afghanistan, (ii) to the long-term relationships Pakistanis have established with their Afghan partners and with their international trading partners, (iii) to limited trading relationships between Afghans and international partners, (iv) to relatively low cost of shipping from Afghanistan to Pakistan versus high cost of shipping from Afghanistan to international markets, and (v) Pakistan's advantage in that the Pakistan Government subsidizes Pakistan's carpet industry.

Reports state there are over \$1.4 billion in carpet sales on the world market each year (footnote 1). Around 70% of global demand for carpets is from five countries: United Arab Emirates, Italy, Germany, USA, and UK (footnote 4). The USA and Germany purchased \$531 million and \$300 million worth of carpet in 2004. The US demand grows slightly annually, while the German demand has fallen rapidly over the period 1998 – 2004.

c. For Close Substitutes

⁴ OTF Group. 2006. Afghanistan Competitiveness Project Key Documents Library: Volume 2. Kabul

⁵ Ibid. 2006

Machine-made carpets—from Iran, China, and India—are increasingly becoming more attractive to international buyers. The method of production is reportedly now less important than the way the product is styled and colored.

2. Supply:

a. By Product Type

This study focuses on handmade knotted carpets. The supply of carpets is limited by the time that the weavers have to devote to hand-making the carpets. Some existing weavers would weave more carpets if they had more looms. Potential weavers would weave if they could learn more about good weaving techniques and could afford the loom.

Two other types of floor coverings are produced in Afghanistan—felted wool carpets (namads/lamsai) and flat woven carpets (kilims). However, these represent a small percentage, about five percent, of all floor coverings produced in Afghanistan⁶. Weavers in Bamyan advise they know how to weave kilim but they have stopped weaving, except for their own use in their homes or as presents to family and kin, because there is no market for kilims. Available data that differentiates kilim from carpet export from the Ministry of Commerce, International Trade Department, shows that kilim export over the period 2003-2006 accounted for about \$130,000. This suggests average annual exports of \$32,500.

b. By Geographical Location

i. Local and Provincial

An Afghan carpet woven in the “Bamiyan” style won highest recognition in the Best Modern Design category this year at Domotex, the carpeting world’s premiere Western event in Germany.⁷ This recognition underscores the increasing importance of weaving in Bamyan, even though Bamyan does not have as long a history of weaving as do other areas in Afghanistan. Bamyan traders and weavers report there are between 3,700 and 4,000 weaving families in the Province. Weavers say there are very few other income-generating opportunities for them outside of weaving.

The districts having the highest numbers of weavers are Bamyan District (2,000 families), Yakawlang District (500 families); and Shibar District (300 families). These are all contract weavers. There may well be additional independent weavers. The Bamyan traders and weavers report that over three-fourths of all carpets produced in Bamyan are made by weavers in these three districts.

Reliable data on the supply of carpet provided by Bamyan Province are not available. There are a number of intermediaries operating in Bamyan, that is, they contract weavers and in turn, have a contract with Pakistan. They estimate 11,100 square meters are produced monthly in Bamyan resulting in an annual estimate of 133,200 square meters of production.

ii. National

The Export Promotion Agency of Afghanistan suggests annual production to be in the area of two million carpets with an average size of 3.2 meters square. This results in an annual estimate of around 6.4 million square meters of carpet. Adjusting this figure based on more

⁶ OTF Group. 2006. *Afghanistan Competitiveness Project Key Documents Library: Volume 2*. Kabul.

⁷ Abbas, Sami. January 2008. *Afghanistan: ‘Bamiyan’ Carpet Looms Large at International Fair*. Radio Free Europe/Radio Liberty.

recent data from Mazar, Herat, Kabul, and Andkhoy, results in an annual estimate of 6.6 million square meters.⁸

c. Regional

Iran is the largest supplier of carpets, followed by Pakistan and Afghanistan. Table 1 shows top suppliers based on value of exports. While Afghanistan appears third, Afghanistan supplies significantly more carpet than the table suggests because much of its production is under-reported while being exported to Pakistan where it is re-exported as Pakistani.

Table 1. International Carpet Market: Top Suppliers

Country	Carpet Exports Million USD
Iran	391
Pakistan	246
Afghanistan	149
India	148
China	121
Nepal	100

Source: OTF Group. 2006. Afghanistan Competitiveness Project Key Documents Library: Volume 2. Kabul.

d. Of Close Substitutes

Afghan handmade carpets compete with machine-made carpets from Iran, China, and India. The supply of machine-made carpets continues to grow and as mentioned above, reports indicate the method of production is less important than how the carpet is styled and colored.

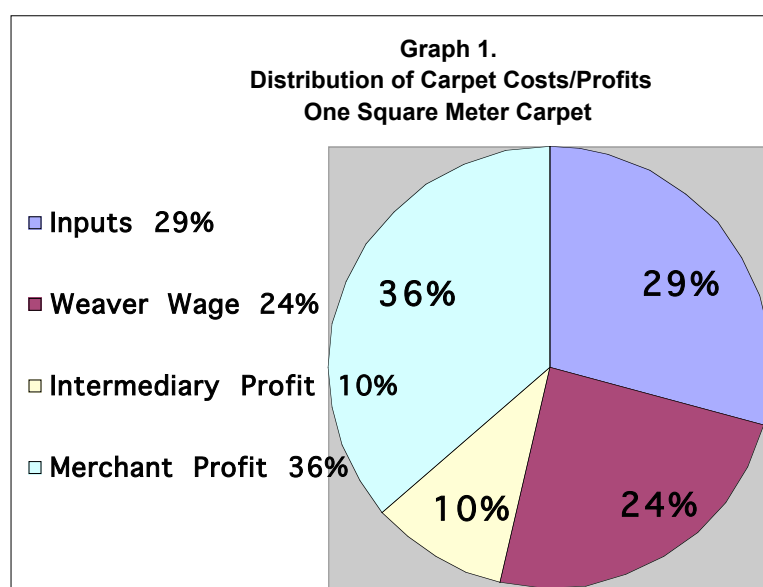
b. Production Costs

The table below is based on data collected in 2008 in Bamyan and Kabul from Bamyan weavers and from Bamyan, Kabul, and Pakistani traders. The table provides information on the scenario where an intermediary (trader), residing in Bamyan or Kabul, contracts with and provides inputs to Bamyan weavers. The intermediary in turn has a contract with a buyer in Pakistan who has buyer clients in the UK.

⁸ Landell Mills, Ltd. 2006. *Preparing the Commercial Agriculture Development Project: Phase 1 Report*. Kabul.

Table 2. Contracted Carpet Costs per Square Meter

Action	Item/Activity	Quantity Needed kg	Meters	Cost of Item/Activity	Total Cost
Paid by Intermediary	Raw Wool from Pakistan	5		\$2.94	\$14.70
	Cotton Warp/Weft from Pakistan	1.5		\$2.38	\$3.57
	Transport of above from Pakistan	6.5		\$0.32	\$2.08
	Washing in Bamyan	5		\$0.16	\$0.80
	Spinning in Bamyan	5		\$0.63	\$3.15
	Dying in Bamyan	5		\$0.48	\$2.40
	Weaver Wage		1	\$38.10	\$38.10
	Transport Carpet to Pakistan		1	\$6.30	\$6.30
	Cut and Wash in Pakistan		1	\$7.90	\$7.90
	Total Cost of Finished Carpet		1		\$79.00
Purchased by Pakistani Merchant	Purchase Price in Pakistan				\$95.20
Paid by Pakistani Merchant	Design				\$2.00
	Transport from Pakistan to UK				\$3.00
Purchased by UK Client	Purchase Price in UK				\$157.00



Based on the above table, the graph shows the distribution of costs/profits for one square meter of carpet. Inputs account for 29% of the total cost of the carpet. In this scenario, weaver costs represent 24% of the total cost. The weaver wage is just over \$38.00. If the weaver is fast, he/she may weave two meters square in a month, making around \$72.00. While the intermediary makes the lowest profit, of 10%, an intermediary will sell from numerous weavers and will thus theoretically be able to

sell far more meters of carpet in a month than a weaver or weaving family can weave in one month. In this scenario, the merchant makes the greatest profit of about \$57.00 representing 36% of the total cost.

c. Processing Costs

As shown in Table 2 and Graph 1 above, the major processing cost is cut and wash at almost \$8.00 per square meter in Pakistan. This does not include the cost of transport which adds considerably to the cost. There are cut and wash facilities in Kabul, Mazar, and Herat. The quality of these facilities varies, but is generally low. One service near the silo in Mazar, run by the Naim Company, reportedly offers high quality services, although at higher prices

than its local competitors.⁹ There are indications that cut and wash in Afghanistan ranges from \$4 - \$7 USD per square meter¹⁰.

d. Marketing Costs

Transport from Kabul to Pakistan and onwards to international destinations is one marketing cost. The table above shows the cost of transport from Kabul to Pakistan is twice as much as the cost of transport from Pakistan to the UK. This is largely because the former is by truck/road and the latter by container/sea. Afghanistan exporters would have an advantage shipping to the US in that carpets may be shipped to the USA duty free.¹¹ Considerable investment is required to develop and expand markets and advertise products internationally. Currently, marketing costs are covered largely by the Pakistani traders but there are reports that the Pakistan Government subsidizes the container shipments of its carpets.

e. Price Trends

International prices for carpets generally follow the growth and inflation rates of the major international economies. Over the period 2002-2004, the carpet market in the US and Germany grew by about 3% and 7%, respectively. In general, international prices for carpets steadily grew with the low inflation rates in these countries.

More specifically, the trends in market prices have followed the quality, styles, and colors demanded by the international market. The best growth in carpets accompanied by higher prices has been in the soft contemporary designs. The market for high quality, traditional carpets is not growing, but slowly losing out to the contemporary style. The market for Chob Rang carpets has become less popular, with a sales decline of 25% having taken place in recent years.

f. Prices and Value Added Along the Value Chain

The price of wool varies - Carpets for the local market at the bottom end of the market use Iranian wool which costs about US\$1.00 per kilo. The finished carpet sells for about \$25/ m₂. On the high end, 'Belgique' wool, imported machine spun wool, retails for US\$6.00 to US\$7.00 per kilo. The finished carpet sells for \$about as much as \$150/ m₂. Part of the difference in the costs is from the price of the wool and the other is from the knot density, which is higher with the imported wool, as the wool is finer and the knot density is 55 x 60 per 10 cm.

In the production of Chob Rang carpets, 30 percent of the wool is of Afghani and Iraqi origin and 20 percent is 'Belgium'. Thirty percent of the wool comes from Karakul sheep and the remainder is from Iran.

Besides the prices of the inputs, the prices of carpets are dictated by the number of knots per 10 cm and by the type of wool. The price paid to the weaver, minus input costs is given in Table 3.

⁹ MRRD. 2007. *Feasibility Study for Carpet Subsector Plan: Operationalizing Cut and Wash Facilities*. Kabul: MRRD.

¹⁰ Landell Mills, Ltd. 2006. *Preparing the Commercial Agriculture Development Project: Phase 1 Report*. Kabul

¹¹ McCord, M. 2007. *An Analysis of Business Opportunities within Afghanistan's Carpet Sector*. Kabul.

Table 3. Cost structure* and Percentage of Carpets Weaved

Item	30-35 double knots per 10 cm (Iranian wool)	35-50 double knots per 10 cm (Iranian wool)	50-60 dbl knots per 10 cm (Belgium wool)
	US\$	US\$	US\$
Cost per m ₂	25-30	40-50	100-120
Percent of total carpets weaved	25 percent	40 percent	35 percent

* Carpet prices are also lower by 10% or more for carpets that have flaws.

Most carpets are exported from Afghanistan after they have been weaved and before they are cut and washed. Most Afghan carpets are cut and washed in Pakistan and then marketed to international markets. The prices for the different quality of carpets in the US are given in Table 4.

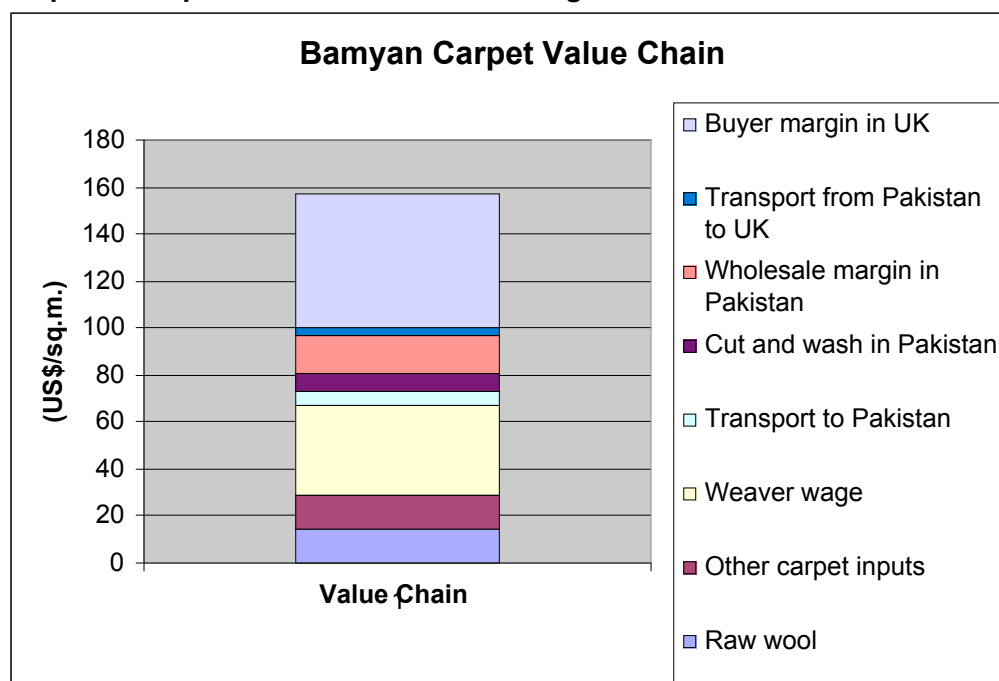
Table 4. Price Structure for Different Grades* of Carpets in US\$¹²

Knot Density	Best	Good	Bad
35x40	90	85	74
40x40	107	98	79
50x50	131	115	82

* where Best represents the top style, excellent quality, and preferred color; Good represents less popular style, good quality, and average color; Bad represents relatively unpopular, fair quality, and poor mix of colors

The value chain for Bamyan carpets is derived from Table 2. The graph of the margins within the value chain for carpets is given in Graph 2.

Graph 2: Carpet & Wool Value Chain Margin in US\$



¹² Landell Mills, Ltd. (2007). Preparing the Commercial Agricultural Development Project, Main Report, Phase 2. Asian Development Bank Project.

g. Estimated Increase in Revenue

The Project will provide technical assistance and training (in accessing quality inputs, in developing demand-driven designs, in correcting all flaws in weaving) to about 300 weaver households over the two year period. Assuming three weavers per loom per household, the number of households assisted by the Project is about 900. The trained weavers will receive \$5/sq.m. more for their carpets because the carpets do not have flaws, the design is more preferred, and the inputs are of higher quality). The estimated increase in revenue for the 300 households is \$81,000.

Many weavers do not own their own looms; instead they pay the traders who rent them looms for \$4/sq.m. of carpet. Through the support of the Project, 150 weavers will purchase steel looms on credit. The average weaver household produces 54 sq. m. of carpet per year. The estimated increase in revenue for the 150 weavers is \$32,400.

Some people who spin wool in the Bamyan districts are hand spinning approximately 0.3 kg of wool per day and receiving about \$0.63 kg. The Project will assist 50 spinners who are interested in spinning wheels in purchasing and using spinning wheels to increase their spinning to 1.2 kg/day. The increase in rate of spinning is 0.9 kg/day. If the 50 spinners use the spinning wheels for 300 days/year, the estimated increase in their revenue is \$8,500.

The Project will assist 1 investor or a group of investors in establishing a cut and wash facility in Bamyan province with a capacity for cutting and washing at least 30,000 sq.m. of carpets per annum. Instead of the Bamyan carpets being sent to Pakistan for cut and wash, it is estimated that approximately 30,000 sq meters will be cut and washed per annum. The estimated increase in revenue at \$5.50/sq.m. is \$165,000.

Once the carpets are cut and washed, the Project will assist the carpet exporters in exporting the 30,000 sq.m. of carpets directly to international markets bypassing Pakistan. By eliminating Pakistan from the value chain, the Pakistan exporters will save at least \$16 of gross revenue. The estimated increase in revenue from marketing the 30,000 sq.m. is about \$480,000.

The total estimated revenue from the Project interventions is \$685,900.

4. KEY CONSTRAINTS/GAPS

While Pakistan represents a prime constraint to the improvement of Afghanistan's position in the global value chain, Pakistan also provides inputs and services currently in short supply in Afghanistan. This is the foremost challenge facing the Afghan carpet industry. Other specific constraints and gaps in the value chain are discussed below.

a. Raw Wool

Local Ghazni wool, considered of very high quality, accounts for about 15% of wool used in Afghanistan. Because demand is greater than supply, Afghanistan imports raw wool, primarily from Pakistan and Iran. The imported wool, originating from, mostly, Middle Eastern countries, is not graded or quality assured.

b. Wool Scouring

A growing concern for the environment has led to increased demands on the scouring process. Improved technologies are available to address environmental concerns related to wool scouring. However, in Afghanistan wool is scoured using traditional processes. There

are currently no improved facilities for wool scouring in Afghanistan. Few merchants have adequate space for drying and storing wool.

c. Spinning

Wool is traditionally hand-spun in Afghanistan. There are few small wooden spinning-wheels in Afghanistan and most weavers have reportedly never used spinning-wheels. There are currently no large-scale spinning machines. Much of the yarn used in Afghanistan is imported, already spun, from either Pakistan or Iran.

d. Dying

There are a number of small-scale facilities in Afghanistan and a few in Bamyan where yarn is dyed using natural dyes. However, this is becoming a lost art and materials required for natural dyes are becoming more difficult to source. There are no medium or large-scale factories in Afghanistan dying wool using natural dyes. There are large-scale factories in Pakistan where chemical dyes are used to produce large quantities of dyed yarn. Afghanistan imports much of its dyed yarn from Pakistan and Iran.

e. Design

Reports are that the time required to hand copy designs is a constraint in the carpet weaving process. As well, designs come to Afghan weavers via Pakistan, again tying Afghan traders and weavers to Pakistani merchants. There is a lack of design expertise within Afghanistan making it difficult for Afghanistan to respond to changes in international market preference and demand.

f. Weaving

Contract weavers often have no alternative to accepting conditions dictated by those with whom they contract and may have less incentive than required to produce high-quality carpet. Reports are that weavers who have their own looms are paid around \$4.00 more per square meter for their work than weavers who are provided looms by their contractor. As well, there are indications weavers who purchase their own inputs can make more money, but this assumes they can sell their carpet at good price and few weavers are directly linked to good markets. Quality is an important issue for weavers and traders alike. Weavers who produce poor quality carpets receive less money (2000 Afs/sq meter) than those who produce high quality carpets (3500 Afs/sq meter). Merchants say there is a lack of well-skilled weavers to produce the quality products the market requires. Weavers say quality is a function of training and experience as well as quality of inputs. The handmade carpet industry is very competitive, with market shares contingent on production of high quality products. Weavers lack negotiating capacity and organization to advocate for better wages, working conditions, and/or initiate direct marketing.

g. Finishing: Cut and Wash

Reports suggest 10% to 20% of Afghan carpets are finished in Afghanistan with the large majority transported to Pakistan for finishing.¹³ There are no cut and wash facilities in Bamyan, although there are a few in Mazar, Herat, and in Kabul. These provide finishing services for Afghan customers. The quality of these operations, with a few exceptions, is

¹³ MRRD. 2007. *Feasibility Study for Carpet Subsector Plan: Operationalizing Cut and Wash Facilities*. Kabul: MRRD. And McCord, M. May 2007. *An Analysis of Business Opportunities within Afghanistan's Carpet Sector*. Kabul.

generally low. Pakistan's weather is a comparative advantage in cut and wash compared to most carpet making locations in Afghanistan. It is difficult to dry carpets in cold weather, a condition in the central and northern parts of Afghanistan which exists anywhere from four to six months of the year. Few Afghans have the technical skills and expertise required to add value via cut and wash processes. Chemicals required for cut and wash are imported from Pakistan and have a short shelf-life, thus increasing the cost of cut and wash operations in Afghanistan. There is little work being done on identifying better sources of chemical or better chemicals for the cut and wash process.

h. Marketing

As earlier mentioned, the handmade carpet industry is highly competitive. Cutting-edge marketing skills, linkages, and technologies are needed to enable Afghan merchants to successfully compete. Few Afghan traders are linked to international markets. Few are able to direct market over the internet. Most are tied to buyers in Pakistan. There is an almost complete lack of branding of Afghan carpets as most are exported as a Pakistani product.

i. Organization

As will be further discussed below, there are a few nascent associations and weaver groups in Bamyan. They tend to send carpets to Pakistan as they have yet to develop direct linkages to international markets, although this is a goal. While these are important groups and important resources for Bamyan traders and weavers, their leadership has had singularly few opportunities to develop the expertise and savvy required to successfully compete in the regional or international market place.

j. Credit

Traders report constraints in their cash flow to keep contract weavers working. Weavers may need credit to purchase new looms and/or other inputs. All advise they lack access to credit. This is not only a function of credit availability, but of their ability or credit worthiness to obtain credit and their concerns over what they consider high interest rates as well as their concerns about loan repayment.

k. Subsidies

The Pakistani government does subsidize its carpet industry.¹⁴ According to the President of the Balkh Carpet Union, the Pakistani Government provides a bonus to its traders of \$5,000 for every 40-foot container of carpets shipped out of Pakistan. Afghan merchants believe these types of subsidies put them at a distinct disadvantage and they frequently request some type of government assistance.

5. OPPORTUNITIES

The Afghan Investment Support Agency (AISA) is a one-stop shop supporting investors. They have studied investment opportunities in the carpet industry advising:

Wide opportunity exists for investors to add value to their products by controlling the highly profitable activities closest to the end customer. It is estimated that the value of Afghanistan's entire carpet industry would increase between two and five times if companies finished goods in country and sold directly to overseas markets, rather than exporting through

¹⁴ Abbas, Sami. January 2008. *Afghanistan: 'Bamiyan' Carpet Looms Large at International Fair*. Radio Free Europe/Radio Liberty

intermediaries. Handling all aspects of production within Afghanistan would allow for enhanced quality and a revitalized, “Made in Afghanistan” brand of carpets marketed for export worldwide. Along the supply chain, investment opportunities include: wool production, dye manufacture, carpet finishing, international marketing services, and transport and logistics.¹⁵

The Afghanistan Small and Medium Enterprise Development (ASMED) project conducted a review of the carpet sector and identified investment opportunities in the sector.¹⁶ The table below draws on ASMED and other sources referenced in this study.

Table 5. Constraints/Gaps and Opportunities in the Carpet Value Chain

Constraint/Gap	Opportunity
<ul style="list-style-type: none"> Limited supply of high-quality Afghan raw wool 	<ul style="list-style-type: none"> Increase flock size Grade and brand Afghan wool
<ul style="list-style-type: none"> Lack of improved scouring facilities 	<ul style="list-style-type: none"> Facilitate establishment of facilities utilizing improved technologies for washing/drying/storing wool
<ul style="list-style-type: none"> Most spun yarn imported from Pakistan 	<ul style="list-style-type: none"> Increase quantity of hand-spun wool in Afghanistan by introducing and testing spinning wheels¹⁷
<ul style="list-style-type: none"> Expertise to use and to source natural dyes is limited Most dyed yarn imported from Pakistan 	<ul style="list-style-type: none"> Institute an apprenticeship program to expand the number of people with expertise in using, sourcing, and marketing natural dyes Facilitate establishment of a medium-size facility to produce naturally-dyed hand-spun yarn
<ul style="list-style-type: none"> Traditional techniques for design development and copy are inefficient Lack of Afghan design capacity decreases opportunity to respond to changing international design preferences 	<ul style="list-style-type: none"> Explore feasibility of Computer Assisted Design technologies to speed-up design drawing and copying process Provide opportunities for several artisans to further develop their design expertise through regionally-based training Develop Afghanistan-based design services to collect market information about designs and colors for Afghan merchants/weavers
<ul style="list-style-type: none"> Too few weavers produce high-quality carpet 	<ul style="list-style-type: none"> Boost motivation for weavers to produce high-quality carpet by facilitating loom ownership, providing targeted training to improve weaving skills, facilitating weaver access to higher-quality inputs, and initiating an association-based quality improvement and control program
<ul style="list-style-type: none"> Limited number of high-quality cut and wash facilities in Afghanistan Most carpets sent to Pakistan for finishing 	<ul style="list-style-type: none"> Facilitate establishment of medium to large-scale facility providing fee-based quality finishing including labeling services to production units, traders, and associations
<ul style="list-style-type: none"> Afghan merchants linked primarily to Pakistan, not directly to international markets Afghan merchants unable to effectively advocate with Government 	<ul style="list-style-type: none"> Assist merchants to initiate/improve direct marketing activities including website development, linkages to international web-based marketing, inventory management, branding, sea and air shipping, and customs clearance procedures Strengthen merchant capacity to articulate market issues and concerns to related national agencies and government Facilitate Afghan participation in international trade shows

¹⁵ Available: http://www.trade.gov/static/afghanistan_carpetstextiles.pdf

¹⁶ ASMED. September 2007. *Presentation: Investment Opportunities in Afghan Carpet Sector*. Kabul.

¹⁷ The Indigo Carpet Association, based in Kabul, produces and promotes and promotes hand woven carpets using hand-spun wool and natural dyes. The Association has experience with spinning wheels, having provided spinning wheels to women with whom they work in Herat. These women were able to increase their production of spun wool by 400%, thereby significantly increasing their incomes. USAID. January 2008. *Accelerating Sustainable Agriculture Program: Annual Report 1, November 22, 2006 – December 31, 2007*. Kabul

<ul style="list-style-type: none"> • Weak unions/ associations of weavers and/or traders 	<ul style="list-style-type: none"> • Assist existing, organize new associations to strengthen trader/weaver capacity to produce, negotiate, and market • Develop associations to empower weavers to advocate for better wages, working conditions, and/or to initiate direct marketing
<ul style="list-style-type: none"> • Lack of capital 	<ul style="list-style-type: none"> • Broker linkages among weavers/merchants and credit suppliers

6. REVIEW OF INTERVENTIONS BEING PROVIDED BY OTHER DONOR PROJECTS

a. Carpet Sector Development: National Level

There are three major projects addressing development of the carpet sector at the national-level. These are the Afghanistan Competitiveness Project, completed in 2006; the Afghanistan Rural Enterprise Development Program (AREDP) planned to begin implementation in 2008; and the Afghanistan Small and Medium Enterprise Development (ASMED) project currently in operation.

The Afghanistan Competitiveness Project, funded by USAID and carried-out by the OTF Group, began in 2004 and was completed in 2006. The project helped develop a national-level strategy for growth of the carpet sector, provided institutional support to the development of the Afghanistan Carpet Committee in the Ministry of Commerce, and supported an outreach effort to address general competitiveness issues.¹⁸ The project was very instrumental in establishing the national framework within which Afghanistan's carpet industry is currently operating.

The Ministry of Rural Rehabilitation and Development (MRRD) is in the process of developing the AREDP which is to be funded by a group of donors. This is a large-scale national program, designed for a 10-year period with a funding base of \$568 million, to facilitate enterprise development in rural communities, to support policy-based lending to communities and enterprises, and to provide a range of business services to enterprises.¹⁹ This national program will reach communities and operate at the community-level. AREDP will focus on products in strategic sub-sectors, among these will be carpets. AREDP intends to develop and test its project methodology through pilot-project efforts, some of which are currently in operation. Details of AREDP activities in the carpet-sector have yet to be determined. Plans are that AREDP will begin implementation in 2008, likely in the fourth quarter. As AREDP begins implementation, RBSP must ensure there is close collaboration between the two projects.

Afghanistan Small and Medium Enterprise Development project (ASMED), a USAID funded project, is an important actor in the carpet value chain, as well as in other value chains in Afghanistan. ASMED focuses on five main economic development activities including: marketing, business service provider development, business association development, public-private sector alliance creation, and private sector workforce capacity development. ASMED has sponsored delegations to international trade fairs and sponsored the first ever Afghanistan International Carpet Fair held in Kabul in 2007. The project assists in the development of national-level business associations such as the Afghan Carpet Exporters Guild, the Kabul Carpet Association, and the Export Promotion Agency of Afghanistan. ASMED does not operate in Bamyan Province, nor do they specifically direct support toward weavers. However, they are interested in a strategic alliance with RBSP in Mazar to support the development of small and medium enterprises related to the carpet sector there. For Bamyan, the two projects will collaborate to support Bamyan merchant participation in national trade fairs.

¹⁸ Available: http://www.trade.gov/static/afghanistan_carpetsummary.pdf

¹⁹ MRRD. No Date. *Draft Program Document. Afghanistan Rural Enterprise Development Program.* Kabul.

As well as these carpet-focused project activities, the ASAP project has a website, AgNet, developed to assist Afghanistan merchants in marketing internationally. The Project will have access to this website.

b. Training/Capacity Development

1. National-Level

Several MAIL-associated training and capacity development programs potentially relevant to RBSP activities operate at the national-level. These are Horticulture and Livestock Program (HLP), Perennial Horticulture Development Project (PHDP), and Support to Strategic Planning for Sustainable Rural Livelihoods (SSPSRL). None have plans to intervene specifically in the carpet sector. However, each has relevance to RBSP training and capacity development as is further explained below.

Both HLP and PHDP advise they have plans to help develop farmer organizations in the districts in which they will be working. Their efforts will focus on utilizing organizations as the mechanisms for delivery of technical training. Should their organization development training be more general in nature, then RBSP is invited to collaborate with them.

SSPSRL has been instrumental in developing a core group of trainers who are currently assigned to different departments within MAIL. The Capacity Development Unit, a planned unit in MAIL's newly-established Human Resources Department, is expected to be the ultimate home-base for these trainers. SSPSRL has initiated a long-term capacity development effort whereby DAIL lead trainers are trained in training of trainers (TOT) in each province. Following TOT training, lead trainers are trained in General Management and Project Management. Two lead trainers have been trained in Bamyan. These trainers are an important resource for RBSP and their involvement in Project supported training should be obtained whenever possible. MAIL has advised SSPSRL they would like two provincial-level M&E staff to be trained. Staff have yet to be posted to the field, but plans are to do so. SSPSRL does not currently have plans to provide M&E training. This is an area where RBSP can assist MAIL and collaborate with SSPSRL by ensuring MAIL staff are included in Project M&E training and M&E implementation.

2. Bamyan: Provincial and District-Level

There are three organizations/projects operating in the carpet sector in Bamyan. These are Agha Khan Development Network (AKDN), Arzu, and Shuhada.

AKDN has a small weaving project, with about 60 new weavers total, in four districts: Shibar, Kahmard, Panjab, and Waras. The elements of the project include: (i) provision of a loom to a new weaver under conditions of a no interest loan, (ii) provision of twice weekly training over a period of about three months to new weavers to train them to produce quality carpets, and (iii) linking weavers to traders who provide weavers with inputs and purchase their carpets. AKDN advises they recoup the cost of the loom after weavers have sold several carpets. Since the first carpet produced is typically of low-quality, weavers are often not paid for this carpet. This project is ongoing and its impact has yet to be determined.

Arzu means "hope" in Dari. This initiative works with about 100 weaving families in Bamyan. The project provides literacy and health education to its weavers. Its unique feature is that the project directly markets to the very high-end market in the US where its headquarters are located. The project began in 2003-2004 and operates not only in Bamyan but also in Kabul and Faryab. According to Arzu, to address issues of quality, weavers are paid a 'bonus', a

higher-than-market price for their carpets, (i) if the carpets are of high-quality and (ii) if women in the family attend project-supported literacy classes and children in the family attend school. Arzu provides looms, inputs, and designs and reportedly closely monitors the weaving process. Weavers give different views of the efficacy of the bonus in that weavers, who did not receive a bonus, suggest it is used to pay lower wages per meter than weaver's expect.

Shuhada. Shuhada is a small national NGO which has been working in Afghanistan for over 20 years. Currently headquartered in Kabul, the NGO began its work in Quetta. Their focus is on health and education. They have constructed a number of schools and health facilities in different communities in Bamyan and they have trained and supported teachers and health workers to work in these facilities. Their funding is from various sources, primarily individual donors. Shuhada has been working with weavers in Bamyan since 2002. They support three cycles of weaving classes per year, each cycle is about six months. To help women complete their studies, they are paid a subsistence allowance of about \$40 per month. Graduates receive a loom gratis. Shuhada seeks to link weavers to the market by identifying Bamyan traders who will give trained weavers contracts after they have finished their training.

c. Existing Institutional Capacity

Neither MAIL nor its Department at the provincial-level have staff trained in weaving. Most women in MAIL and in its provincial-departments are employed in the Department of Home Economics. Building the capacity of women in this department to work with women weavers is an option which merits consideration.

AKDN and Shuhada have the longest history of involvement in Bamyan. AKDN is a large NGO with widespread activities in Bamyan while Shuhada is a far smaller operation. Both have capacity in implementing weaving projects.

Bamyan's two associations, described below, offer a strong alternative for reaching and working with weavers, traders, and potential investors. Developing the capacity of these associations will have lasting impact on the carpet industry in Bamyan.

d. Existing Groups/Associations

There are currently two functioning associations in Bamyan, both located in the City Center. These are (i) the Carpet Weaving and Export Association of Bamyan and (ii) the Bamyan Women's Cultural, Social, and Handicraft Association.

Carpet Weaving and Export Association of Bamyan. The Association, organized in 2007, has just recently registered with the Afghan Chamber of Commerce and Industries. Members of the Association include both weavers and Bamyan-based traders. The Association represents 125 companies, that is, 25 traders who have contracts with weavers in different villages in the Province and in turn, have contracts with traders in Kabul or Pakistan. Association businesses contract weavers in the Project's three target districts. The Association is very weak and has yet to articulate its real purpose and objectives. However, members are keen to strengthen their association and are seeking ways to do so.

Bamyan Women's Cultural, Social, and Handicraft Association. Registered with the Afghan Women's Business Federation (AWBF), this Association was organized in 2007. It represents ten traders who each contract with between 20-50 weaving families. Funding for activities is from the Association members. The Association has several objectives: to improve the quality of carpets produced in Bamyan, to improve working conditions for

Bamyan weavers, and to identify regional markets for the purchase of Bamyan carpets. The Association has provided some training to improve weaving skills. The Association promotes the importance of schooling for weaver family children and a healthy working environment for weavers. They have developed a business plan and have participated in a carpet exhibition supported by AWBF. The Association is hopeful they will be able to expand their activities. They have been self-supporting but are actively seeking assistance to enable them to reach their objectives.

7. CREDIT MAP: BAMYAN ²⁰

The MISFA microfinance organizations working in the province Project provinces have been surveyed to obtain information on their loan products (Tables 7-8). Note that Banke Millie also has a loan product and is operating in Nangarhar. Because the processors and marketers will be seeking loans from organizations providing loans large than MFIs the SME/commercial banks and NBFIs were surveyed to determine their minimum equity. The minimum equity is critical information as these potential clients may require an equity transfer. To justify the equity transfer it is necessary to know the minimum equity required by these organizations.

The MFI reports through MISFA will let the Project know exactly how many Project clients the MFIs provide loans. Based on discussions with MISFA the Project will be able to request and obtain specific information about the number and size of loans in its value chains. This will be an added requirement on the MFIs and a condition of the MISFA contract. Note that since the Project will have no relationship with Banke Millie or any other financial institution outside MISFA or for loans above the MISFA MFI limit no report on their participation in the Project will be available.

Table 7. MISFA Loan Status

Table x. CONSOLIDATED FOR ALL PROGRAMS

MISFA Consolidated **OUTREACH - Province and District-wise**
As of March, 08

Region/ Province	Districts No	District	Active Clients (total)	Active borrowers (total)	Number of loans disbursed	Amount of loans disbursed, \$	Loans outstandi ng, \$
Bamyan	1		3,622	3,523	18,017	11,741,270	2,243,255
	1	Bamyan Districts	1,522	1,423	8,976	5,148,420	568,718
	2	Yakawlang	516	516	1,733	979,400	349,959
	3	Waras	636	636	1,349	975,950	484,728
	4	Panjab	449	449	1,356	926,850	311,584
	5	Kahmard	-	-	-	-	-
	6	Shibar	499	499	4,603	3,710,650	528,267
	7	Saighan	-	-	-	-	-

²⁰ Where possible the numbers provided by the MFI were checked against those reported to MISFA. Where different the MISFA numbers were used.

At the association formation stage all microfinance financial institutions will be invited to introduce themselves and their products to the producers. It will then be up to the MFIs and the producers to connect and access credit.

It was reported that AMFI has temporarily stopped lending in Bamyan due the poor repayment rate attributed to the cold winter and the lack of potato sales attributed to Afghanistan/Pakistan border closures.

Table 8. Microfinance Institutions Operating in Bamyan

Microfinance	ARMP	AMFI	BRAC
a. MFIs Operating in Area			
Bamyan District	X	X	X
Shebar District	X		
Yakawlang District	X		
b. Types of Lending			
Group	X	X	X
Individual	X	X	X
c. Terms of lending			
Months	4-24	9-15	6-12
Interest ²¹	15.6 F	20 F	17.5 F
Payment Frequency	Monthly	Monthly	Weekly
d. Loan Sizes			
1 st Loan Max.	\$500	\$200	\$20
e. # of Clients			
	2,609	852	62
f. Repayment Rate			
	60%	52%	97%

SME/Commercial Banks and NBFIs	AFC	ARFC	Alfalah	Kabul
Minimum equity required	20%	50%	40%	50%

See Annex 1 for details.

8. PROPOSED INTERVENTIONS

The districts in which RBSP will operate are Bamyan, Yakawlang, and Shibar districts. The districts having the highest numbers of weavers are Bamyan District (2,000 families), Yakawlang District (500 families), and Shibar District (300 families). None of the rural districts in Bamyan have good road access or electricity. Water, electricity, and good road access characterize Bamyan province where the only Project-supported cut and wash facility is proposed.

a. Description

1. Production

The Project will assist weavers to access high-quality carpet inputs such as looms, yarn, and designs. Via the Project, weavers will learn about and test-out new spinning wheels to increase their spinning productivity. Through an extension program, the Project will increase weaver capacity in various wool value-added activities, emphasizing improved dyeing and marketing of dyed and spun wool. To create a core of advanced weavers, selected weavers

²¹ F = Flat, D = Declining

will be trained in carpet weaving Best Practices. A critical component of the extension program will be quality-improvement whereby trained Project and MAIL extension staff will technically backstop the weaving process and assist weavers to improve the quality of their carpets.

2. Processing

To establish the feasibility of wool scouring operations, the Project will support a feasibility study of wool scouring (washing/drying/storing) and will support a wool scouring facility environmental impact assessment. If feasible and if any negative environmental impacts can be appropriately mitigated, the Project will assist investors in establishing facilities in appropriate and strategic locations.

To facilitate the establishment of a cut and wash facility, the Project will support an environmental impact assessment of such facility. If negative environmental impacts can be appropriately mitigated, the Project will assist investors in establishing a cut and wash facility in an appropriate and strategic location.

For both the scouring and finishing facilities, the Project will train facility staff to operate and maintain facilities. Training will consider environmental issues as well as Best Practices.

3. Marketing

The Project will work closely with existing marketing groups and associations and as may be needed, assist in developing additional marketing groups. Carpet traders will be trained in various procedures to improve their value-added activities and volume of sales. Procedures will include, for example, inventory management, branding, customs clearance, and marketing by air and sea. E-commerce direct marketing will be emphasized. Traders will be assisted to develop websites and they will be linked to international markets via AgNet. In collaboration with ASMED, the Project will support Bamyan traders to attend national trade fairs. The Project will help Bamyan traders learn how to engage Government in constructive dialogue and how to articulate their positions and concerns to Government.

4. Association Development

The organization and development of weaver and trader associations, particularly the two existing associations, will be a priority of the Project. By the end of the Project, Associations will be self-sustaining and providing important services to its members.

5. Staff Capacity Development

To implement the Project successfully, training will be provided for various Project staff in selected aspects of the carpet value chain, primarily wool dyeing and spinning and carpet weaving and marketing. The majority of Project staff trained for this value chain will be women as they can work with women weavers more readily than can men. The Project will train DAIL female staff to participate in the Project on a part-time basis. This will help build capacity in the industry in general and in DAIL in specific.

b. Strategic links to existing programs

Consideration should be given to MAIL's participation on the Afghanistan Carpet Committee. As AREDP becomes operational, the strategic linkages between the projects will need to be further discussed and detailed. AREDP proposes to integrate business development services across all its activities. This is an area where RBSP clients may well benefit and

offers one specific area for strategic linkages. Although ASMED is not operating in Bamyan Province, its activities help build and develop the carpet industry nationally. The RBSP will collaborate with ASMED in those activities appropriate to national and Bamyan-level development. The AgNet website, developed by ASAP, will be available for use by RBSP clients.

9. STAKEHOLDERS INTEREST IN VALUE CHAIN IMPROVEMENT

The two existing associations in Bamyan—representing companies, traders, and weavers—have both expressed their keen interest in potential collaboration with RBSP. Within this group are merchants who are eager to build their businesses and learn more about international markets. The Bamyan Women’s Cultural, Social, and Handicraft Association is particularly interested in improving the livelihoods of weavers as well as improving the Association’s business capacity to negotiate contracts, to direct export, and to otherwise promote the business. They have some outreach to the other two target districts. Based on weaver statements that they have singularly few opportunities other than carpet weaving to earn income, and on discussions with local leaders, shura members, and traders, the interest in these other districts in Project participation is also very high.

Several of the carpet traders in Bamyan advise they are interested in establishing better facilities for wool scouring, spinning, dyeing, and storing in Bamyan. There is interest among the merchants in the province in establishing a cut and wash facility in Bamyan.

10. INDICATIVE NUMBER OF POTENTIAL BENEFICIARIES

As noted above, there are an estimated minimum of 2,800 weaving families in the three target districts. The Project plans to involve 300 families through a quality improvement and control focused extension program carried-out largely by female extension workers. On a more intensive level for fewer weavers, the Project intends to support 150 weaver households access to high-quality inputs (looms, spinning wheels, designs); improve 150 weavers’ skills in various value-added activities (wool cleaning, dyeing, spinning, etc.); and train 300 weavers in Best Practices in order to improve weaving quality. To further support weavers, the Project plans to promote the organization of five carpet weaver associations, involving up to 300 weavers.

The Project plans to work with four groups of investors to facilitate the development, if feasible, of a wool scouring facility, of two drying and storage warehouses, and of a cut and wash facility. The number of direct beneficiaries will be dependent on the number of investors in each group. These activities will impact a far larger number of beneficiaries as secondary beneficiaries will be all weavers in Bamyan Province. The Project expects to work intensively with existing trader associations and specifically with ten traders to improve their capacity to direct market as well as negotiate effectively with Pakistani buyers.

11. RECOMMENDATIONS

a. Feasibility

Those weavers who purchase a steel loom for \$300 will need to service their loom loan at 25%. Within two years the weavers are able to pay off and outright own the loom.

The feasibility of establishing cut and wash facilities in Bamyan will be addressed by the Project. Though the feasibility study of cut and wash facilities has been done in Balkh, the conditions in Balkh are much more favorable for drying carpets than in Bamyan. If cut and wash is feasible in Bamyan, the Project will help establish one cut and wash facility for about

\$75,000. The facility is projected to have a capacity of at least 30,000 sq.m. per annum. The cost of cutting and washing 30,000 sq.m. is projected to be \$4/sq.m. of carpet for labor, electricity, and chemicals, water, and various consumables.²² The capital investment includes land, building, drainage, equipment, washing material, cutting machine, power stabilizer, etc. A loan of \$52,500 will cost the investor 25%. At a cut and wash price of \$4.89/sq.m.²³, and operating and interest costs of \$4/sq.m. and \$0.57/sq.m., resp., the return on investment is 42%.

b. Cost effectiveness

The Project's investment cost includes equity transfer or a loan guaranty of about \$29,250 for inputs including looms, \$8,750 for wool cleaning, scouring, wool spinning and dyeing, wool drying and storage, \$15,000 for one carpet cut and wash facilities, \$7,500 for carpet inventory and packing house, \$7,500 for branding and advertising. Total for investment is \$68,000.

The estimated increase in revenue from the Project interventions in the carpet value chain is \$685,900.

b. Risk manageability

There are various risks involved in filling the gaps within the carpet value chain. The major risks and how these can be managed are given in Table 9.

Table 9. Risks and How Managed

Risks	How Managed
Weavers access their wool and other inputs independently	The Project will assist those weavers in accessing quality inputs and linking the weavers with cut and wash and exporters that market branded Afghan carpets directly to the international buyers
Mobility of women to get to the districts to deliver regular training and technical assistance	The Project will have enough vehicles to allow the women extension staff to deliver regular technical assistance and training
Drying of cut and washed carpets	Specialized drying equipment or methods will be used to make the drying operations during difficult months of the year
Willingness of carpet traders to keep the carpets in Balkh for cutting and washing and marketing versus exporting to Peshawar with existing arrangement	The Project will identify international buyers willing to buy direct from Balkh and assist the cut and wash investors and carpet exporters access necessary inputs and efficient and cost effective international shipping arrangements from Balkh

c. Financial viability

The various value added activities in the wool portion of the carpet value chain are not high return activities. However, spinning wool by use of spinning wheels rather than by hand can

²² MRRD. 2007. Feasibility Study for Carpet Subsector Plan: Operationalizing Cut and Wash Facilities. Subsector Analysis and Business Plan Development/ North and Northeast/Economic Viability and Technical Feasibility

²³ Landell Mills, Ltd. (2007). Preparing the Commercial Agricultural Development Project, Main Report, Phase 2. Asian Development Bank Project.

provide women an opportunity to increase their incomes. Also, helping weavers buy their own looms gives them a chance to build equity in their trade and become more independent and able to buy their own inputs and sell their carpets through the Project assisted, local marketing agents with direct marketing opportunities.

The return on investing in cut and wash facilities is high, assuming the difficulties in drying the carpets does not present a problem in the winter.

The marketing of carpets direct from Bamyan to the international buyer is more expensive than the shipping cost from Peshawar to the international buyer. However, the extra costs incurred by Afghans in shipping containers of Afghan products through the Karachi port are likely to drop as trade barriers are pulled down as Pakistan comes under mounting pressure from the international community. Afghan carpets can enter the US without import duties, making Afghan carpets more competitive.

d. Environmental Issues

An environmental impact assessment will be conducted before the Project supports the establishment of any cut and wash facilities. Mitigation measures will be needed to be put in place along with the investments.

Annex 1. Credit Map: Bamyan²⁴

Financial Institution: ARMP (Afghanistan Rural Microcredit Program)

Provincial level:

of clients: 2,609 - \$2,069,370 outstanding

of clients in target districts

Bamyan City Districts 509 as of March 2008

Shebar District 499 as of March 2008

Yakawlang District 516 as of March 2008

Repayment rate:

Overall: 60%

Average Loan size: about \$670

Type of Lending: Groups of 4-8 people 16%, Individuals 84%

Group Loan Guarantee: Group

Individual Loan Guarantee: Personal guarantee, 3rd party guarantee, reference from Shura with promise to help in recovery.

Collateral: title deed or property: house or shop

Loan size (cycles):

First: \$500 maximum

Second +: up to \$3000

Loan Product Terms:

	Business Loans	Agriculture	Animal Husbandry
Minimum equity	50%	50%	50%
Grace period	1 Month	4-12 Months	4-8 Months
Term	4-12 Months	6-24 Months	6-24 Months
Interest rate: Flat	1.3%	1.3%	1.3%
Payment	Monthly	Monthly	Monthly
# of clients	300	119	2,227
Outstanding value	\$305,360	\$91,496	\$1,704,931

Other information:

The animal husbandry loans for sheep tend to be large.

Loan officers come from district in which they work

SME loan demand low due to small population and majority of businesses are small.

Financial Institution: AMFI (Afghanistan Microfinance Institution)

Provincial level:

of clients: 852 - \$168,465 outstanding

of clients in target districts

Bamyan City Districts 852 as of March 2008

Shebar District 0 as of March 2008

Yakawlang District 0 as of March 2008

Repayment rate:

Overall: 52%

Average Loan size: about \$229

Type of Lending: Groups of 4-10 people, Individuals

Group Loan Guarantee: Group, no physical property

Individual Loan Guarantee: Personal guarantee, 3rd party guarantee, reference from Shura with promise to help in recovery.

Collateral: Personal guarantees with no collateral

Loan size (cycles): Agriculture Livestock Business

²⁴ Where possible the numbers provided by the MFI were checked against those reported to MISFA. Where different the MISFA numbers were used.

First: \$300 \$200 \$300 maximum
 Second +: \$200 increments
 Maximum Loan Size \$900 \$1,000 \$1,500

Loan Product Terms:

	Agriculture	Livestock	Business Loans
Minimum equity	20%	20%	20%
Grace period			4-8 Months
Term	9 Months	9 Months	15 Months
Interest rate: Flat	20%	20%	20%
Payment	Interest only first 6 months then Principal & interest in 3 equal payments	Interest only first 6 months then Principal & interest in 3 equal payments	Monthly
# of clients	401	76	N/A
Outstanding value	\$47,119	\$20,816	N/A

Other information:

Lending has been stopped due to lack of repayment – Potatoes were not selling into Pakistan because of border problems and bad weather. Livestock problems are due to weather.

In the process of developing a hawker's and housing loan product.

Financial Institution: BRAC

Provincial level:

of clients: 62 - \$5,420 outstanding

of clients in target districts

Bamyan City Districts 62 as of March 2008

Shebar District 0 as of March 2008

Yakawlang District 0 as of March 2008

Repayment rate:

Overall: 97%

Average Loan size: about \$188

Type of Lending: Individuals with group guarantee (15-35 with subgroups of 5) and individuals

Individual Loan Guarantee:

Collateral: In some cases land title, shop, license

SME loans require a guarantor

Loan size (cycles):

	Poverty Alleviation	Agriculture	SME
First:	\$20	\$300	\$1,000 maximum
Increments	\$1-200	\$1-200	\$variable
Maximum	Urban \$600 Rural \$500	\$1,000	\$10,000

Loan Product Terms:

	Poverty Alleviation	Agriculture: Crops, Livestock	SME
Minimum equity	5%	24%	
Grace period	0	0	0
Term		6 Months	1 year
1 st	6 Months		
2 nd	9 Months		

Admin: Flat	17.5%	17.5%	17.5%
Payment	47 over 1 year	47 over 1 year	Monthly
# of clients	N/A	N/A	N/A
Value outstanding	N/A	N/A	N/A

Other information:

Branch office organizes 2 village groups of 15-35 members in each village. One group is for poverty alleviation loans and the other for agriculture loans. Each group is broken down into small groups of 5. The group acts as the initial credit committee – two sign as witness to loan contracts. Each small group has a leader. These people manage the small group and make up the management of the village organization.

When a person joins they must commit to save a specified amount weekly. 6% interest is paid on the savings. 5% of the loan size must be in savings. Up to 15% of savings may be withdrawn for emergency purposes.

The agriculture extension side of BRAC provides training to crop and livestock borrowers.

SME/Commercial Banks and NBFIs

Afghanistan Finance Company (AFC)

Minimum equity on leases is 20%

Afghanistan Rural Finance Center (ARFC)

Minimum equity: 50% of total project

Bank Alfalah

Bank Alfalah has a loan guarantee relationship with ARIES and is working with USAID to develop a DCA guarantee mechanism for the bank which they hope to have approved by July 2008. Their major loan product is a working capital overdraft loan that goes up to 3 years in length. The bank is having a hard time finding good borrowers and will likely stay with the working capital loans for the short term. The interest rate is 9.5-12.5%. In addition the legal costs, valuation of property and preparation of audited financial statements are all costs borne by the client. The bank has done a few term loans which have required a minimum equity: 40% on term loans. Will only lend in Bamyan if a group of 5 or more loans considered. Cost of assessment and monitoring too expensive otherwise.

Kabul Bank

Kabul Bank has a centralized lending system. A majority of their loans are overdrafts for working capital and trade finance. When they do make term loans the minimum equity is 30-50% with a 12 month term. The interest rate is 12-18% with the majority at 15%. To obtain a loan the client must have an account with the bank for a minimum of 6 months. Most loans are in the \$20-30,000 range.