









Building and Construction Improvement Programme (BACIP) Entrepreneur Training & Employment Generation (ONG-PVD/2003/064-439)

End of the Project Evaluation

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TABLE OF CONTENTS

Abbreviations	4
1 - Executive Summary	5
2 - Introduction	8
2.1 Background	8
2.2 Evaluation Objectives	9
2.3 Project Objectives	9
2.4 Project Activities	10
2.5 Target Group	10
2.6 Evaluation Approach And Methodology	
2.7 Limitations Of The Evaluation	12
3 - Evaluation	14
3.1 Brief Project Synopsis	14
3.2 Project Success In Meeting Objectives	16
3.2.1 Specific Objective 1	16
3.2.2 Specific Objective 2	
3.2.3 Specific Objective 3	19
3.2.4 Specific Objective 4	20
3.3 Accomplishment Of Project Activities	20
3.3.1 Activity 1	
3.3.2 Activity 2	
3.3.3 Activity 3	
3.3.4 Activity 4	
3.3.5 Activity 5	
3.6 Overall Impact Of Project Activities	
3.6.1 Skills And Entrepreneurial Capacity Of Youth	
3.6.2 Income Generation And Employment Opportunities	31
3.6.3 Availability Of Trained Manpower	
3.6.4 Savings On Fuel	
3.6.5 Cost Reduction Of House Construction	
3.6.6 Reducing Workload For Women	
3.6.7 Women Empowerment	37
4 - Conclusion & Recommendations	
4.1 Conclusion	
4.2 - Recommendations	
4.1.1 – Support To Entrepreneurs	39
4.1.2 Product Promotion	
4.1.3 – Involvement Of Women	44

References	45
Annexes	46
1- Terms Of Reference (Tors)	47
2 - Design And Implementation Of Evaluations	50
3 Assessment Methodology	52
4 National Workshop	
5 Brief Field Itinerary For End Of Project Evaluation	61
6 List Of People Met	62
7 Villages From Which Individuals Were Trained	
8 Selection Criteria For Craftsmen/Entrepreneurs	65
9 List Of Demonstration Products Installed (Sep. 2004 To Feb. 2007)	
10 Quality Control Check List For Wwf	

Abbreviations

AIOU: Allama Iqbal Open University

AKF: Aga Khan Foundation

AKPBS-P: Aga Khan Planning and Building Services – Pakistan

ADA: Austrian Development Agency

BACIP: Building and Construction Improvement Program

BDS: Business Development Services

EC: European Commission

FWO: Frontier Works Organization

FMFB: First Micro Finance Bank

GTVCP: Government Technical and Vocational Centre Peshawar GTVCP

HOPE'87: Hundreds of Original Projects for Employment

M&E: Monitoring and Evaluation

MTC: Mobile Training Course

PWD: Public Works Department

RHW: Roof Hatch Window

WWF: Water Warming Facility

1 - Executive Summary

'Entrepreneurs Training and Employment Generation', a 30-month project, was implemented by the HOPE'87 (Hundreds of Original Projects for Employment) in partnership with Aga Khan Foundation (Pakistan) and Aga Khan Planning and Building Services, Pakistan (AKPBS, P). This project was co-funded by The European Commission (EC), Austrian Development Agency (ADA) and HOPE'87, with a total budget of € 423, 055.21. The project was implemented in the Garam Chashma valley of Chitral, Chepursan and Ishkoman Valleys of Northern Areas, and was to cover 15 villages through direct interventions and approximately 150 villages through indirect intervention.

The overall objective of the project was to 'improve the quality of life of people (especially unemployed youth and young adults) through housing sector related enterprise development & promotion, and skills enhancement and training of youth in the target valleys. Specific project objectives revolved around training of unemployed youth, establishment of entrepreneurs, and promotion of improved products developed by BACIP.

The purpose of the final evaluation is to review the project progress towards achieving its targets and objectives, outcome, and impact. The evaluation assessed that the project has been successful in achieving its overall objective.

Through the project 545 versus a goal of 540 entrepreneurs, artisans, and handy men were trained in the three target valleys. Trainings were conducted in carpentry, masonry, electrical wiring, stove making/tinsmith, plumbing, and painting. Additionally, community volunteers were trained in general house maintenance and repair skills. Also, 33 community nominated men and women resource persons and salespersons were hired to act as BACIP agents and played a key role in promoting BACIP products.

The project also achieved its target of supporting 60 selected trainees including three women in setting up their enterprises by providing them start up capital of Rs. 15,000 towards the purchase of tools and necessary materials to develop their business. Through the establishment of these entrepreneurs, the project was successful in the provision of community based skilled labour in communities where such labour was not available earlier and had to be brought from outside the village at double or triple the regular cost since, besides paying labour charges, transportation, lodging, and meals also had to be arranged by the community. Similarly, access to locally trained labour resulted in drastically lower construction, repair, and maintenance costs; in some cases leading to a 75% reduced charges to the household.

The project also had a visible impact on increasing the skills of youth and gave them access to better employment opportunities. As its main target group, youth of ages 16-35 was trained as skilled labourers through Mobile Training Courses in the community, and certified trainings outsourced to government institutions, including 20 electricians from the Allama Iqbal Open University (AIOU) and 18 youth from the Government Technical

5/67 HOPF '87 and Vocational Centre in Peshawar (GTVCP). Youth trained through the project were able to find lucrative employment opportunities in the private and public sectors within their communities, in the region, and abroad. According to an internal evaluation conducted by the project more than 58% trainees are now getting paid for Rs.3000 and plus, while 56% of these were without any job prior to the training. More than 15 people have moved abroad while around 50 have moved out of their villages to Kashmir or towns for better job opportunities.

Through its promotional and awareness raising strategy, the project was able to achieve replication of 10890 versus a goal of 10,000 improved products. Of these the most replicated products included Water Warming Facility, Cooking Stove, Floor Insulation, Roof Hatch Window, and Roof Water Proofing. BACIP's promotional strategy included the installation of 201 units versus a target of 200 in households and training sheds, 11 workshops, 7 community meetings, 17 road shows, and 36 radio programs.

The project had significant contribution to reducing usage of fire wood by households. Families reported to have decreased their fire wood usage by 40-60% after installing BACIP products.

The impact on woman's lives was also pronounced in houses using BACIP products. This included reducing time in collecting fire wood, heating water separately for washing needs during the winters, improved hygiene, and clean homes. The project also contributed to women's empowerment by training 27 women, including 18 women resource persons, 8 women sales persons; and 7 painters. Additionally, three women were beneficiaries of the start up capital. The project also trained 6 women interns in various skills. However, the number of women trained was less than the total target of 40 women.

Recommendations for future interventions are based on field visits and discussions with project management and beneficiaries and focus on three areas, namely Support to Entrepreneurs, Product Promotion, and Involvement of Women.

Support to entrepreneurs such as marketing through various channels including radio programs, etc. and provision of start up capital have been effective in sustaining enterprises and seen as critical support by entrepreneurs. Hence, BACIP should continue these activities in future projects. Similarly, many entrepreneurs interviewed cited lack of money as the primary reason for their inability to procure raw material to meet demand. Therefore, it is suggested that such provisions be made for working capital in the program's future intervention.

Moreover, BACIP can benefit from business synergies if it facilitates operational linkages between its various components, e.g. salesperson and entrepreneurs. Additionally, as volunteer resource persons are key to the project's success, providing them formal training will help them leverage the project's activities. Finally, since most trainees are starting entrepreneurial ventures for the first time, they are inexperienced in managing a successful business. This leads to the need for establishing a monitoring

6/67 HOPF '87 mechanism with the purpose of providing organizational backstopping to newly established enterprises.

In order to aid product replication, it is suggested that product quality and price be balanced with the elastic demand for products. This can be done by manufacturing products of different qualities and varying prices. Moreover, as many poor households aware of the products' impact cannot afford to make a one time payment, the option of supporting instalment based payments may be explored.

Additionally, BACIP products have been successfully replicated by large buildings such as schools. Building on this success, BACIP can tap into the large scale commercial construction market.

Demonstration models placed in community households were instrumental in raising awareness about these products. However, as the program has matured and products are widely recognized, in existing project communities, demonstration models may not be as helpful in promoting replication during future interventions in these communities as it used to be in the initial stages of the programme.

Finally, in the future, involvement of women as project participants can be increased by responding to their expressed interest in getting trained in various skills such as electrical winding, repairing sewing machines, and painting.

2 - Introduction

The Building and Construction Improvement Programme (BACIP) is a project of the Aga Khan Planning and Building Service, Pakistan (AKPBS, P) and is coordinated by Aga Khan Foundation - Pakistan (AKF-P). AKPBSP has more than twenty years experience in the built environment sector in Northern Areas and Sindh in Pakistan and is the only project in the Northern Areas to address built environment and infrastructure based issues which are directly related to local skills development and other socio-economic factors. BACIP innovative house improvement products have proved to be a significant need and use to the communities and the training modules that have been developed and applied by BACIP have provided local sustainability and replication in the private sector. BACIP has led the training of large number of entrepreneurs in the private sector and has developed and provided a market base for their service and delivery particular to the built environment.

From 1997 till year 2000, BACIP was funded by the CIDA for applied research and development on house improvement products and technologies. The project was later funded by the USAID from 2001 to 2002 for consolidation, evaluation and extension of the project activities. Subsequently, the UNDP under its Global Environment Facility Small Grants Programme (GEF-SGP) provided funding till March 2003 for Entrepreneur Training and Development in Nathia Gali region for the promotion and replication of fuel efficient housing technologies.

BACIP in the past has initiated 3-dimension training workshops to train tradesmen, Engineers and Social scientists on one platform so as to learn the tangible benefits of its products and their cost effectiveness in terms of manufacturing and delivery. This effort bridged a number of other institutions as working project partners. The institutions collaborated with are World Wildlife Fund (WWF), IUCN 'The World Conservation Union' (IUCN), Aga Khan Culture Services Pakistan (AKCSP), Natural Resource Conservation Project (NRCP), United Nations Development Programme in Pakistan (UNDP), Aga Khan Education Services Pakistan (AKESP) and a number of Community Based Organisations (CBO's) in order to promote and develop a mutually benefiting market base.

2.1 Background:

'Entrepreneurs Training and Employment Generation', a 30-month project, was implemented by the HOPE'87 (Hundreds of Original Projects for Employment) in partnership with Aga Khan Foundation (Pakistan) and Aga Khan Planning and Building Services, Pakistan (AKPBS, P). This project was co-funded by The European Commission (EC), Austrian Development Agency (ADA) and HOPE'87, with a total budget of € 423, 055.21. The project was implemented in the Garam Chashma valley of Chitral, Chepursan and Ishkoman Valleys of Northern Areas, and was to cover 15 villages through direct interventions and approximately 150 villages through indirect intervention.

8/67 HOPE '87 Initial project duration was set to be September 2004 to August 2006. However, at a later stage, a no cost extension of six months was granted and the project was finalized in February 2007.

The rationale for selecting the valleys was that they are amongst the most remote, unattended and poor in the region. Living conditions are harsh, with an average household income of EUR 0.46 per capita per day and the unemployment rate of the area is 70 percent (including 85 percent unemployment in 16-30 years age bracket). Approximately 4.5 percent of the housing stock in the area (about 1,000 housing units per year) needs to be constructed/refurnished annually for the basic shelter need. With the non-availability of trained skilled technicians and craftsmen, professionals are imported from other regions to undertake construction in the valleys at exorbitant costs borne by poor communities and households. In other instances work is done by semi-skilled people resulting in poor quality of construction.

As outlined in the project document, an end of project evaluation was conducted by a consultant engaged by the Aga Khan Foundation and the EC Delegation.

2.2 Evaluation Objectives:

The purpose of the final evaluation is to review the progress towards achieving the project's targets and objectives, outcome, and efficiency.

Specific objectives of the evaluation are to assess:

- The extent to which project **objectives** have been met?
- The extent to which the project **activities** have been accomplished?
- The overall **impact** of project activities in the following areas:
 - Increasing the skills and entrepreneurial capacity especially of youth and young adults
 - o Cost reduction of the house construction and savings on fuel
 - o Increasing income generation and employment opportunities for youth
 - Availability of trained manpower for construction
 - o Reducing workload for women and women empowerment

2.3 Project Objectives:

Based on the demand determinants, constraints and impact evaluation studies of BACIP products, the three target remote valleys indicate a genuine need for skill enhancement and entrepreneurial development for the remedy of built environment issues and housing problems in a self sustainable manner in the future.

9/67 HOPE '87

The **overall objective** of the project was to 'improve the quality of life of people (especially unemployed youth and young adults) through housing sector related enterprise development & promotion, and skills enhancement and training of youth in Ishkoman and Chepursan valleys of Northern Areas and Garam Chasma Valley of Chitral region, Pakistan'.

The **specific objectives** of the project were:

- Training and establishment of unemployed /semi skilled youth and young adults to manufacture, sell, and install BACIP home improvement products, and marketing support;
- Training and establishment of entrepreneurs to construct/ repair more safer and durable housing units;
- Improved products promoted through awareness raising and information dissemination protocols
- Home improvement products and techniques developed, documented, and field tested for entrepreneurs' business enhancement

2.4 Project Activities:

Following are the major activities undertaken to achieve project objectives:

- Activity 1. Entrepreneur & Artisan training, and supporting entrepreneur establishment
- Activity 2. Awareness raising and demand generation
- *Activity 3.* Support to entrepreneur in establishing new businesses
- Activity 4. Refinement of locally relevant and adaptable BACIP house construction and home improvement technologies for entrepreneurial business enhancement.
- Activity 5. Monitoring and Evaluation

2.5 Target Group:

The project was designed with the aim to benefit two target groups, direct and indirect beneficiaries.

Direct Beneficiaries: Skilled, semi skilled and unskilled persons of Selected villages Garam Chasma Valley (Chitral region), Iskoman & Chepursan valleys (Northern areas), Pakistan with marginal literacy rate and in the age bracket of 16-35, including women were project participants and direct beneficiaries.

10/67 HOPE '87 The anticipated number of direct beneficiaries for the project was up to 240 trainees to be trained in five different skill programs including plumbing, electrician, masonry, tinsmith, and carpentry.

Also approximately 300 employed and semi-employed youth (handy men/generally semi skilled artisan) were to be trained on voluntary basis for general construction skills enhancement related to built environment related.

Indirect Beneficiaries: Overall communities of the target areas including women, children, and elderly, local Community based organisations (CBO's), other institutions, ongoing or planned development projects of the government, and other development sector organisations working in the target area were targeted to be indirect beneficiaries.

2.6 Evaluation Approach and Methodology:

As set out in the project document, a consultant, Ms. Umm e Zia, was assigned by the Aga Khan Foundation-Pakistan and the EC-Delegation to carry out a final evaluation of the project. A copy of the detailed TORs for the assignment is attached in Annex 1.

The **approach** adopted by the consultant was based on the following guiding principles:

- Detailed Consultation with Project Staff
- Consultation with Direct Beneficiaries, including artisans, entrepreneurs, and salespersons trained through the project
- Consultation with Indirect Beneficiaries, including beneficiary households and local community organizations
- Review of earlier studies and evaluations conducted for BACIP

The Principles for Evaluation of Development Assistance devised by the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development were used as a general guideline to conduct this evaluation¹. An outline of the 'Design and Implementation of Evaluations' as laid out in the Principles can be found in Annex 2.

The **methodology** undertaken by the consultant was based on the following activities:

- 1. <u>Literature Review</u>: A review of key literature was conducted including:
 - Project Document
 - Monitoring and Progress Reports
 - Baseline Study Report
 - Previous Research Conducted by BACIP
- 2. <u>Development of Assessment Methodology</u>: An assessment methodology was developed and included the:

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¹ OECD, 1998

- Action Plan
- Outline of Questionnaires to be Administered in Field

A copy of the proposed methodology can be found in Annex 3.

- 3. <u>Sharing Methodology</u>: The proposed Action Plan and Methodology were finalized after discussions with Country Representative of HOPE '87 and Project Manager BACIP.
- 4. <u>National Dissemination Workshop</u>: The National Dissemination Workshop held by the project on February 22, 2007 with participation of project staff, beneficiaries, donor representatives, and other stakeholders, was attended by the consultant². An agenda of the workshop is attached in Annex 4
- 5. <u>Discussion with Project Staff</u>: To prepare for the field visits and clarify findings from literature review, discussions were held with the project staff at various levels. These included:
 - Project Staff in Islamabad
 - Project Staff (for Ishkoman and Chepursan) in Gilgit and Gakuch
 - Project Staff (for Garam Chashma) in Gilgit
- 6. <u>Field Visits:</u> A five day visit between March 27- March 31 was undertaken to review project activities and impact. The following was part of the field visit:
 - Discussion With Project Staff
 - Interviews at Entrepreneur Workshops
 - Interviews with Artisans
 - Interviews with Beneficiary Families (Men, Women, Children, and Youth)
 - Visits to local schools where BACIP technology has been utilized

A brief itinerary of the field visit is attached in Annex 5. List of people with whom discussions were held is listed in Annex 6.

2.7 Limitations of the Evaluation:

While reviewing this evaluation report, certain limiting factors faced during the process must be kept in mind.

1. Based on the guidelines set out in the scope of the assignment, this evaluation was undertaken in a relatively short period of time, covering three distinct geographical locations. Therefore, gathering detailed quantitative information was not possible. To overcome this hurdle, the evaluation was conducted by accessing a variety of sources to get a clear understanding of the project's accomplishments

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² Initially, this evaluation was planned to be carried out in February 2007 and the consultant was scheduled to present initial findings in the workshop. However, due to unfavorable weather conditions, travel to project areas was postponed until March/April.

and impacts. These sources included detailed interviews and literature review as set out in the methodology.

- 2. Second, it is difficult to assess the impact of project on beneficiaries, both in terms of employment generation and household beneficiary, in two years. For example, a start up entrepreneur may need longer (3-5 years) to establish a business and there is a general understanding that not all newly established enterprises are profitable. Similarly, the marketing efforts may take some time for the community at large to replicate BACIP project, this would be especially true for low income communities. Hence, a detailed follow up evaluation may reveal a more pronounced impact of the project.
- 3. The time frame assigned for the evaluation coincided with the time of the year in which both air and road travel to the project locations is particularly difficult. Travel to Northern Areas and Chitral from January to April is hampered by heavy rains and snow causing avalanches and land sliding in the general project area. Therefore, despite repeated attempts, field visits were postponed several times. In the end, only Chepursan and Ishkoman Valleys in the Northern Areas could be visited, whereas the consultant could not visit Garam Chashma in Chitral as the region was severely affected by natural disasters and the land link with Garam Chashma was disrupted³. This hurdle was somewhat compensated by holding detailed discussions with project staff and reviewing project reports.

However, the benefit of undertaking the visit at a time when it was still cold in Ishkoman and Chepursan was that it gave the consultant an opportunity observe first hand the utility and benefits of many BACIP energy efficient products.

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³ Dawn, 2007

3 - Evaluation

Before delving into the evaluation, it would be helpful to have a brief synopsis of the project and its functionalities.

3.1 Brief Project Synopsis:

The following paragraphs give a brief explanation of each project agent⁴ and their role within the project.

Trainees: The project has trained entrepreneurs, skilled labourers, and handymen from 39 different villages among the three target valleys. The list of villages to which these trainees belong is attached in Annex 7.

Trainings were imparted in various trades including Carpentry, Plumbing, Electrician, Masonry, Stove Making/ Tin Smithing, Wire Making, Painting. Additionally, handy men were trained for house repairs. Most of the trainees had little or no prior experience in the trade learnt.

- **Entrepreneurs:** Entrepreneurs are associated with the project in two ways.
- o Firstly, there is a cadre of existing entrepreneurs trained by BACIP through earlier projects. These are enterprising individuals running their own businesses with experience ranging between 5 and 25 years. They are considered experts in their trade as carpenters, tinsmiths, etc. Under the current project, these entrepreneurs were engaged as Master Trainers and they conducted trainings of less experienced or newly inducted artisans or labourers. They are also engaged in delivering on orders placed by BACIP for manufacturing various products.
- The second cadre of entrepreneurs is comprised of the newly trained individuals who have been able to set up a business through the start up capital of Rs.15000 provided by the project. They are situated in smaller towns or villages and deliver on orders for BACIP products placed by the community.

Craftsmen/Entrepreneurs/Handymen:

Craftsmen are skilled/semi-skilled labourers who do not have a workshop or work base and work on daily wages at client site.

Entrepreneurs are skilled labourers who own a business and run their own workshop. They usually employ craftsmen and apprentices as their assistants.

⁴ Here, Project Agent refers to any individual associated with the project, including project staff and direct and indirect beneficiaries.

Handymen can be semi-skilled persons having informal knowledge about construction related skills. Under the project, handymen were trained through short hands-on trainings or through trainings on the software aspects of the program/techniques.

- Resource Persons: are community selected volunteer men and women. Their major role is to promote BACIP products by interacting with the community and households. They also generate orders in the community and place orders directly through BACIP. BACIP in turn orders the product to be manufactured by one of its assigned entrepreneurs and delivers it directly. The resource persons are also responsible for facilitating BACIP in their communities.
- Salespersons: are men and women selected by the community. Their role is similar to the resource persons. The major difference between the two roles is that salespersons work as commission agents of BACIP and receive 10% commission for every product sold. They also have a shop or sales point in the community where supply for some of the high demand products is kept. The salespersons get their supply mostly from BACIP. In some cases, they also obtain products from centralized BACIP sales centres in Gakuch, Sost, or Garam Chashma.
- Beneficiary Households: Models of each BACIP products have been placed in households in each community. These models are placed at cost sharing basis⁵. Also, individual households purchase one or more BACIP products. These products can be bought through the various channels mentioned above, including village based entrepreneurs, sales persons, resource persons, or BACIP stores.
- Role of BACIP: In the project, BACIP staff plays a facilitative role to promote improved products. This includes trainings of individuals in various skills; marketing products and entrepreneurs through various channels including radio talk shows and community activities; provision of start up capital to entrepreneurs; and receiving orders from salespersons and resource persons, placing orders with entrepreneurs, and delivering the products. Another important function of BACIP is to carry out regular monitoring of the project activities.

⁵ Cost Sharing means that if a house gets wall insulation as model, then the owner has to bear the cost of the local materials such as timber, sand, straw, unskilled labour etc. And if s/he gets a finished product like RHW then s/he will have to purchase an additional product.

Evaluation:

The following sections elaborate the evaluation outcomes against each project objective.

3.2 Project Success in Meeting Objectives

The overall objective of the project is to 'improve the quality of life of people (especially unemployed youth and young adults) through housing sector related enterprise development & promotion, and skills enhancement and training of youth in Ishkoman and Chepursan valleys of Northern Areas and Garam Chasma Valley of Chitral region, Pakistan'. Table 1 below outlines a summary of major project achievements.

Tab	Table 1 - Summary of Major Project Achievements				
	Goal	Target	Achievement		
1	Individuals Trained	540	545		
4	Number of Products	10,000	10,890		
	Demand Generated For				
5	Number of Entrepreneurs	60	60		
	Receiving Start Up				
	Capital				
6	Number of Models	200	201		
	Placed				

The following sections reviews project achievements towards each objective set out in the project document.

3.2.1 Specific Objective 1: Training and establishment of unemployed /semi skilled youth and young adults to manufacture, sell, and install BACIP home improvement products, and marketing support

Various trainings were conducted for youth in the target valleys. Elaborate selection criteria were set out to identify individuals between the ages of 16 and 35 to be trained. Annex 8 outlines the selection criteria.

Entrepreneurs and artisans were trained in various trades as Carpenters, Masons, Electricians, Wire Makers, Plumbers, Painters, and Stove Makers / Tin Smiths. Handymen were also trained in house repair techniques. Additionally, men and women were selected by the community to be trained as sales persons and resource persons. The project trained 545 individuals in the above categories, versus a total goal of 540. However, a larger number of entrepreneurs and crafts persons were trained than planned earlier (303 vs. 240). Whereas, the number of individuals trained in the handy man category was lesser than planned (242 vs. 300). The number of trainees was based on community interest and more community members showed interest in being trained in the earlier category.

16/67

The project also contributed to women's empowerment by training 27 women, including 18 women resource persons, 8 women sales persons; and 7 painters. However, the number of women trained was less than the total target of 40 women.

Table 2 below outlines the number of individuals trained in each Trade.

Table 2 - Tradewise detail of BACIP Trainings (Sep,04 to Feb,07)

	Project Valleys				
Trade	Chipursan	Ishkoman	Chitral	Gilgit	Total
Entrep. and artisan Training					
Carpenter	20	17	27		64
Mason	19	23	22	1	65
Electrician	20	37	19		76
Wire Makers	0	5	0	1	4
Plumber	16	22	13		51
Painters	7	30	0		21
Stove maker/tinsmith	3	10	9		22
Total entrep./Artisans	98	144	90	2	303
Handy men					
House Repairer	26	82	84		192
Distributor/Suppliers	2	2	0	2	6
Sales persons	8	5	1		14
Resource Persons	8	12	10		30
Total Handy men	44	59	95	2	242
Grand Total	142	203	185	4	545

Additionally, 17 interns, against a goal of 10 interns were engaged and trained by the project. The detail can be found in Table 3 below:

Tal	Table 3 - Interns Trained by the Project				
	Skill	Number o	Number of Interns Trained		
		Male	Female		
1	Survey for Project Impact	6			
2	Computer		2		
3	Community Surveys	4	4		
4	Accounting	1			
	Total	11	6		

Depending on the nature of training and skill level of participants, training was conducted for 303 participants in various modes, including Mobile Training Courses held in the village; Host Training Held at BACIP Shed in Gilgit; Hands on Training at Garam

Chashma; Certified Training through Allama Iqbal Open University and Vocational Training through Government Technical and Vocational Centre Peshawar GTVCP; and Handymen Training of Interested community based volunteers. Table 4 below shows the number of individuals trained through each type of training.

Ta	able 4 - Types of Trainings and Number of Individuals Trained					
	Type of Training	Definition	Type of Training	Number of Trainings Held	Number of People Trained	
1	Mobile Training Course (MTC)	20 Day Training Held in the Village (20 individuals in this category received certified training from AIOU)	Masonry, Carpentry, Plumbing, Electrical Wiring, General Community	8	192	
2	Host Training	Held at BACIP Training Sheds in Gilgit & Garam Chashma	Wire Making, Masonry, Tinsmith, Carpentry	3	49	
3	Vocational Training	Through GTVCP	Plumbers, Electricians	1	18	
4	Hands on Training	Training Held at Garam Chashma	Carpentry, Masonry, Tinsmith	3	30	
5	Village Based Training of Painters	Ishkoman and Chepursan	Painters	2	14	
	Total			18	303	

3.2.2 Specific Objective 2: Training and establishment of entrepreneurs to construct/ repair more safer and durable housing units.

Besides training, an additional measure to support entrepreneurs in establishing their businesses is the provision of start up capital. BACIP trained entrepreneurs were selected with the help of the community by using an eligibility criteria.

A total of 60 entrepreneurs (including five women) received start up capital of Rs. 1500 towards establishing themselves as manufacturers, installers, and sellers of BACIP products. The start up capital was spent on purchase of tools and materials and constituted a grant of 50% whereas the other 50% was to be returned by the grantee over a period of time.

Table 5 below shows the list of trades in which entrepreneurs have benefited from the start up capital.

18/67 HOPE '87

Table 5 - Entrepreneurs Availing Start Up		
Capital Trade	Number of Entrepreneurs	
Tinsmith	8	
Carpenter	26	
Wire Knitter	1	
Mason	7	
Plumber	8	
Electrician	5	
Resource Person	4	
Painter	1	
Total	60	

Out of the 60 entrepreneurs availing start up capital, 30% (18) have already returned the repayable portion of Rs. 7500 to BACIP. The reason for this low repayment rate is that due to the law and order situation, inaccessibility due to weather, and slow cash flow to the project, the capital was disbursed to many entrepreneurs at a later stage in the project. For instance, 49 entrepreneurs, almost 82 %, received the start up capital in 2006 and one even in 2007. Out of the entrepreneurs receiving the capital in 2006, as many as 20 beneficiaries were given the capital during the months of November and December, just 2-3 months before the project ended.

3.2.3 Specific Objective 3: Improved products promoted through awareness raising and information dissemination protocols

Various methods of awareness raising about BACIP products were adopted by the project, targeting the community and the public at large. These included workshops, road shows, radio programs, and development of promotional material.

Table 6 below gives detail of the various awareness raising events.

Tabl	Table 6 - Awareness Raising Events				
	Event	Frequency	Participants		
			Men	Women	
1	Workshops for Community, Government Officials, and NGOs	11	340	144	
2	Community Meetings / Briefings	7	55	228	
3	Road Shows	17	681	644	
4	Radio Programs	36			
	Total	71	1076	1016	

Additionally, 33 Resource Persons in the community were selected to promote BACIP products to facilitate replication. Table 7 shows the number of Resource Persons in each valley.

19/67

Table	7- Resource Persons by Valley		
	Valley	Resourc	e Persons
		Male	Female
1	Chepursan	4	4
2	Ishkoman	8	9
3	Garam Chashma	5	5
	Total	17	18

Moreover, for community awareness, 201 demonstration units of improved products were installed in individual houses and BACIP sheds. Also, 1000 leaflets and brochures were developed to aid awareness raising activities.

3.2.4 Specific Objective 4: Home improvement products and techniques developed, documented, and field tested for entrepreneurs' business enhancement.

Four home improvement products, namely Solar Cookers, Solar Geysers, Adobes, and Earthquake Resistant Technology were selected for development, documentation, and field testing.

All four products have been developed and documented. Also, consultants were hired through the project to refine the existing products, e.g. an expatriate consultant was hired to develop a report on 'Refining Existing Adobe for Increased Strength against Earthquakes'. This report reviews the existing adobe fabrication and construction practices in the project area and gives recommendations for amenable and low-cost solutions for seismic improvement.

A similar report on Solar Cookers was documented by a local consultant. Whereas, the report on Solar Geysers is in progress. These reports give recommendations on improved models of existing solar cookers and geysers, respectively.

Additionally, a model house using stabilized mud blocks is under construction at Chatorkhand. The house plan also includes wall reinforcement, wall insulation, and double glazed windows.

3.3 Accomplishment of Project Activities

Activities undertaken through the project have been directly linked to the expected results. The following section gives an overview of the project activities and their accomplishments as they relate to the 'Concrete Results' set out in the project document.

3.3.1 Activity 1: Entrepreneur & Artisan training, and supporting entrepreneur establishment

This includes a variety of trainings including, on job training during the construction of the demonstration model, training of established Artisans (masons) as master-craftsmen, training local material suppliers for storage and supply of required quality materials, skill training of

20/67

artisans and craftsmen, and advance training for experienced masons for further refining of technical and marketing skills, and trade certification through ${\rm AIOU^6}$.

3.3.1.1 Expected Results

- **1.1** 240 crafts persons and entrepreneurs (including 40 women) trained in various trades, i.e. masons, carpenters, stove makers, electricians, plumbers, and village level marketing and sales persons.
- **1.2** 300 handy men and semi skilled community based volunteers trained for improved home construction, repair and maintenance technology as part of Community skills development initiative (@ 100 persons per valley)
- **1.3** 10 interns trained. (Interns will essentially be low cost junior professionals from other NGO's/ CBO's s working within the target region for involvement in project implementation process)

3.3.1.2 Results Accomplished by the Project:

The project conducted a range of trainings to accommodate the needs of various target audiences. The training program was implemented in coordination with the community, e.g. training participants were selected with the help of the community in each target area.

Table 8 shows the number of individuals trained in each trade⁷.

Table 8: Number of Individuals Trained by Trade				
Trade	Number of Individuals			
	Trained			
Entrepreneur and Artisan				
Training				
Carpenter	64			
Mason	65			
Electrician	76			
Wire Makers	4			
Plumber	51			
Painters	21			
Stove Maker / Tinsmith	22			
Total Entrep. / Artisans	303			
Handymen				
House Repairer	192			
Distributor/Suppliers	6			

⁶ AIOU is Allama Iqbal Open University, Islamabad with which AKPBS,P has an active collaboration agreement.

⁷ For a further valley wise breakdown on number of individuals trained in each skill, please refer to Table 2

Salespersons	14
Resource Persons	30
Total Handymen	242
Grand Total	545

As laid out in the expected results, a total of 540 individuals (240 crafts persons & entrepreneurs and 300 handymen) had to be trained by the project. Against this goal, 545 individuals were trained. However, responding to community demand, a larger number of entrepreneurs and crafts men and fewer handymen were trained compared to the expected results. i.e. 303 vs. 240 entrepreneurs and crafts persons; and 242 vs. 300 handymen.

Trainings were conducted through two different modules-Mobile Training (MTC) and Host Trainings for Construction Skills Development.

Host Trainings were conducted as 5-7 days training of Master Trainers with 5-25 years experiences.

In the MTCs, 15-20 day village based skill-enhancement trainings were held for village masons, carpenters, electricians, and plumbers. Additionally, community based trainings for volunteering community members were held in general house repairing skills.

Whereas in the Construction Skills Development module, extended training, along with certifications from Government institutions, were provided to persons who were interested in acquiring skills as masons, electricians, carpenters and plumbers. These included trainings for 18 entrepreneurs as plumbers and electricians outsourced to and conducted by the Government Technical and Vocational Centre Peshawar (GTVCP). Table 9 gives a summary of the individuals trained at GTVCP.

Table 9 - Summary	of Trained Entrep	reneurs Through GTV	CP
Trade	Ishkoman	Chepursan	Total
Plumbers	5	5	10
Electricians	7	1	8
Total	12	6	18

Similarly, 20 electricians were trained through a certification course at the AIOU. Table 10 below shows the number of AIOU certified electricians by location.

Tab	Table 10 - AIOU Certified Electricians Per Village			
	Village Name	Number of Electricians		
		Trained		
1	Chatorkhand	6		
2	Pakora	3		
3	Barjungle	3		
4	Golodaas	5		
5	Hatoon	3		
	Total	20		

Through these trainings, a total of 545 professionals against a total target of 540 were trained to manufacture, install, and sell BACIP products. These include 60 entrepreneurs, 243 artisans, and 242 handy men. Trades in which trainings were conducted include carpenters, electricians, mason, wire makers, tin smiths, plumbers, painters, house repairers, distributors/suppliers, and sales persons.

3.3.2 *Activity 2*: Awareness raising and demand generation

Various activities were undertaken through the project to raise awareness about the utility of BACIP products. These in turn would lead to demand generation. The activities included installation of demo products, holding promotional workshops for community and representatives of local government and NGOs, and the establishment of a sales network.

3.3.2.1 Expected Results

- **2.1** 200 of various BACIP products installed for demonstration purposes. (50 improved housing products as models in each of the three valleys
- 2.2 10 products (demo and instructive) each in two training sheds (i.e. Gilgit and Chitral))
- **2.3** Demand generation for approximately 10,000 BACIP products
- **2.4** One national workshop for project initiation and mandate dissemination
- **2.5** 11 promotional, demonstration workshops (six workshops / conferences for the community members in target area and 5 workshops for local government, other NGO's and stake holders)
- **2.6** Promotional Material (leaflets, posters, brochures, and BACIP product manuals)

3.3.2.2 Results Accomplished by the Project:

Several initiatives were undertaken to reach the diverse audiences towards raising awareness and generating demand.

23/67 HOPE '87

Demand Generation:

To generate demand at the household level the key promotional messages used were based on the socio-economic benefits of BACIP products. Three strategies were used to reach households. These included:

a) Direct Contact:

- i) A total of 35 community identified Resource Persons, including 17 men and 18 women were trained in all three valleys to carry out door-to-door marketing.
- **ii**) With the help of the community organizations in the area, 17 road shows were held throughout the three project valleys. These included awareness raising through discussion and demonstration of mini-models.
- **iii**) Awareness raising workshops were held in schools for teachers and students, and a total of 144 students and 19 teachers participated in the workshops.

b) **Indirect Contact**:

A total of 36 radio talk programs in four local languages were re-broadcast during the life of the project. These promoted BACIP products by emphasizing their advantages and also gave information on sources where the products can be obtained from, e.g. addresses of BACIP trained entrepreneurs.

c) Placement of Demonstration Units:

A total of 201 demonstration units against a target of 200 units were placed in individual households and BACIP training sheds. This includes 185 model products placed in houses within target villages to raise community awareness about the existence and benefits of improved products, and another 17 model products against a target of 20 products placed in BACIP sheds where trainings of entrepreneurs were conducted. Table 11 shows the number of model products installed per valley.

Table 11 - Model Products Installed Per Valley				
Name of Valley	Number of Model Products Installed			
Ishkoman	85			
Chepursan	53			
Garam Chashma	47			
Total	185			

The complete list of demonstration units can be found in Annex 9.

The above efforts resulted in demand generation of a total of 10,890 improved products against a goal of 10,000 products. A detailed list on the product replication can be found below in Table 12:

24/67 HOPE '87

Table 12 - Number of Products Replicated				
Tuble	Product	Number Replicated	% Replicated	
1	Roof Hatch Window	305	2.8	
2	Water Warming Facility	4486	41.2	
3	Cooking Stove	3851	35.4	
4	Saw Dust Stove	98	0.9	
5	Wall Insulation	33	0.3	
6	Roof Insulation	15	0.1	
7	Floor Insulation	1523	14.0	
8	Double Glazed Window	10	0.1	
9	Asymmetric Utensil Cabinet	15	0.1	
10	Kitchen Work Top	6	0.1	
11	Dry Pit Latrine	4	0	
12	Roof Water Proofing	108	1.0	
13	Dust Free Ceiling	4	0	
14	H.D.G.I.Wire/Wall Reinforcement	52	0.5	
15	Chimney Pipe	20	0.2	
16	Bedding Rack	12	0.1	
17	House / Site Planning	4	0	
18	BACIP Chair	334	3.1	
19	White Wash	1	0	
20	Iron Mongeries	1	0	
21	Misc.	8	0.1	
	TOTAL	10890		

Awareness Raising

To engage audiences of various backgrounds and promote BACIP products, 11 workshops were organized. These included:

- National level dissemination workshop in Islamabad
- A one day planning work shop for the project stakeholders was at office at Gilgit and was attended by representatives of HOPE 87 Pakistan, AKF-P, AKPBSP, IUNC, WWF,AKRSP, BACIP sales persons (four women), resource persons, suppliers, entrepreneurs and product consumers.

- Two promotional workshops for community members at Chepursan and Mominabad, attended by 34 men and 33 women; and 40 men and 45 women, respectively.
- Two workshops arranged for Government officials and NGOs at Gakuch and Aliabad attended by 47 and 45 individual, respectively, with representation from high level officials.
- Awareness generating lectures to students and teachers at DJ schools in Hatoon and Sost.

3.3.3 Activity 3: Support to entrepreneurs in establishing new business

Financial, technical, and marketing support was provided to entrepreneurs towards establishing new businesses. This included provision of start up capital, development of a sales network, and technical back up.

3.3.3.1 Expected Results

- **3.1** Provision of working grant/credit (for tools, material etc.) for trained crafts persons/ salespersons
- **3.2** Provision of grant /credit (for material only) for trained crafts persons/salespersons
- **3.3** Development of incentive based products sales network
- **3.4** Technical back-up and marketing support for entrepreneurs

3.3.3.2 Results Accomplished by the Project

Provision of Start up Capital:

After being trained by BACIP, a total of 60 entrepreneurs were provided with start up capital of Rs. 15000 towards the purchase of tools and materials/products in order to establish their businesses. Of the amount forwarded, 50% is to be used as a grant and the remaining 50% is to be returned to BACIP over a period of 12 months or before the end of the project life. A summary of these entrepreneurs is provided in Table 13.

26/67

Table 13 - Entrepreneurs Availing Start			
Up Capital			
	Number of		
Trade	Entrepreneurs		
Tinsmith	8		
Carpenter	26		
Wire Knitter	1		
Mason	7		
Plumber	8		
Electrician	5		
Resource Person	4		
Painter	1		
Total	60		

Out of the 60 entrepreneurs availing start up capital, 30% (18) have already returned the repayable portion of Rs. 7500 to BACIP. The reason for this low repayment rate is that 82% of the entrepreneurs received the capital in the last year of the project and it will take some time for them to repay.

Development of a Sales Network:

A sales network was developed to facilitate contact between potential buyers of BACIP product with entrepreneurs. Community nominated village-based salespersons, including women, were nominated. These salespersons worked on commission basis at the rate of 10% commission per product and went door-to-door to generate demand and take orders from the households. The order was then routed through the nearest BACIP sales point or entrepreneur to supply the product.

Technical Support:

Technical support in various areas was provided to the newly established entrepreneurs. An example is the development of quality control check list for each product to be manufactured and installed. These check lists are shared with entrepreneurs and they are instructed to post them at their workshop to ensure user awareness. Other important technical support include the provision of raw material that is difficult to find in the local market, e.g. laminated glass used in Roof Hatch Windows is specially procured from Karachi.

An example of a quality check list can be found in Annex 10.

27/67

3.3.4 Activity 4: Refinement of locally relevant and adaptable BACIP house construction and home improvement technologies for entrepreneurial business enhancement.

Four BACIP products were selected to be refined during the course of the project. These included earthquake house construction technology, solar cookers, solar geysers, and mud-construction technology.

3.3.4.1 Expected Results

- **4.1** Four products (earthquake resistant house construction technology, solar cookers, solar geysers, mud construction techniques) feasibility and marketing plan reports particularly on further improved or refined housing techniques which particularly enhance the skills and delivery capacity of crafts persons and entrepreneurs
- **4.2** Product Reports of the four refined products (including development and publication)
- **4.3** Use of house-planning tools in select communities (on pilot basis)

3.3.4.2 Results Accomplished by the Project

The products chosen for refinement revolved around the two important issues of retrofitting existing houses to achieve better seismic resistance and reducing further the energy requirements of the households by promoting the use of inexpensive renewable energy like solar and wind power. Two expatriate consultants were hired to conduct a study on the Galvanized Wire Technology and Adobe Blocks. Also, a model house is being built in Chatokhand by using stabilized mud blocks, galvanized wire, double glazed windows and wall insulation. Additionally, a study on solar cookers has been completed and another is in progress for solar geysers.

Moreover, on a pilot and limited basis, process improvement focused on meeting future housing needs of the communities, including advice on planning and designing of new houses. At present, there is no mechanism at the village level that provides this advice. The project developed the mechanism on a pilot basis by preparing house plans for nine potential house builders using a specially designed House Planning Tool. The tool can be easily used by the community and can ensure the participation of all household members in designing the house.

3.3.5 Activity 5: Monitoring and Evaluation

The project developed a planning and course correction mechanism and regular monitoring and assessment of performance targets.

3.3.5.1 Expected Results

- **5.1** Baseline / Benchmark study
- **5.2** Project work plan/ Monitoring Plan
- **5.3** Community Managed Quality Assurance Mechanism
- **5.4** Assessment Report / Evaluation reports (including publication of reports)

3.3.5.2 Results Accomplished by the Project

The M&E system at BACIP includes baseline studies and establishment of bench marks, regular participatory monitoring of the project activities of the process and the product, qualitative and quantitative assessments, work plan monitoring, and end-of-project evaluation. Some salient features of the M&E system include:

- A baseline survey conducted by a consultant in twelve villages to set up benchmarks
- Development of Project Logical Framework
- Monitoring tools developed jointly by HOPE 87 and AKPBSP teams to gather trainee
- Excel Sheets to track households with model products
- Routine field visits by BACIP field staff and documenting visit reports
- Visit by EC delegation mission (Pakistan) to Garam Chashma in August 2006
- Development of regular training reports
- Development of Annual Technical Report
- A survey in the field for assessing project replication (ongoing)
- Development of Project Summary reports
- End of Project Evaluation Report Internal
- End of Project External

3.6 Overall Impact of Project Activities

In this section the overall impact of project activities on beneficiaries is reviewed. The analysis was guided by the field visit to Ishkoman and Chepursan Valleys and detailed discussions with project beneficiaries.

3.6.1 Skills and Entrepreneurial Capacity of Youth:

Northern Areas and Chitral region are amongst the most poverty ridden in the country. Approximately 35-40 percent of the total population in the project areas forms the project target group of youth and young adults. An estimated 70 percent of the employable target group (16-35) is unemployed in the target valleys, where the per capita income stands at about PKR 870 per months (about EUR 13.80⁸ month). In these areas, employment generation opportunities, or access to facilities to acquire formal or informal skills development, training, or expertise to help increase individual and household income in the project area are virtually non existent.

⁸ see, "Farm lands economic trends, AKRSP, 2000.

Through provision of skilled training, the project had a significant impact on increasing the skills and entrepreneurial capacity, especially of youth and youth adults. Many employable young men stay unemployed despite being educated. Without having access to gainful employment, these individuals, especially men, feel like an economic burden on the family and community resources.

The project engaged many such youth by imparting skilled trainings in various skills that are in great demand in the local construction and house maintenance industry. Learning a trade brought confidence to these young trainees and they now have the option to be employed independently.

Provision of start up capital of Rs. 15000 to selected BACIP trained entrepreneurs is an innovation introduced by the HOPE'87 projects into the traditional BACIP program. Out of this 50% is a grant towards purchase of tools and other necessary supplies towards promoting the trainees trade, and the remaining 50% is an interest free advance. For returning the 50% advance, flexible and easy options are put in place by the project. For example, the entrepreneur can return the amount either in the form of cash or deliver products for that amount against orders placed by BACIP.

The element of start up capital and the flexibility introduced in returning the advanced money has enormously encouraged trainees and many artisans who earlier worked for daily wages have now turned into entrepreneurs by setting up their own businesses in the respective trade. Moreover, earlier the tools bought with start up capital were rented or shared and this led to lower returns for the entrepreneurs.

After receiving the start up capital, entrepreneurs were able to afford purchasing tools and some have bought better equipment than was earlier available on rent, e.g. power driven drills. This way the newly bought tools have also expanded the range of services the entrepreneurs can offer and has led to an increase in their income.

A case study of a start up capital recipient entrepreneur is documented in Box 1 below:

Box 1 – Case Study Start Up Capital

Tikka Khan and his friend, two tinsmiths in Ishkoman Valley, were business partners. The partnership was based on sharing of resources where one provided the tools and the other provided space for a workshop. After receiving training in tinsmith, from BACIP both friends became eligible for start up capital. The money enabled them to set up their independent businesses and the local demand for improved products has contributed to the sustainability of their individual enterprises. Additionally, at the time Tikka Khan was trained, he was the only tinsmith in his community and utilized the opportunity to make additional earnings through his newly learnt trade.

With the additional earnings through BACIP products, Tikka Khan is encouraged to change the location of his store and plans to rent a shop on the main road where his shop is visible to potential customers.

Moreover, Tikka Khan's brother was also trained as a mason by BACIP and has now been working in the earthquake struck areas of Kashmir where due to large scale reconstruction activity, wages are higher.

End of Project Evaluation

Purchase a product that is being manufactured within his village. This can be a discouraging factor for some local entrepreneurs who have newly established businesses.

In some cases, existing entrepreneurs dealing in BACIP products have been discouraged with the establishment of newly trained entrepreneurs. This is especially true for BACIP Salespersons who have been involved in promoting improved products and sell products as commission agents of BACIP. However, as local entrepreneurs have been established in the area, the residents now directly purchase their products from them instead of ordering through the salespersons. This has resulted in declining commissions for the salespersons.

Additionally, many entrepreneurs cited as lack of capital to procure raw material as one of the limiting factors to deliver on orders and meeting demand. Others felt that there wasn't enough demand for the trade that they had learnt and therefore, wanted to diversify their skill set by learning additional trades through follow up BACIP trainings. Similarly, some newly established entrepreneurs do not possess basic business skills such as marketing and expressed the need for further support.

The above challenges are part of any enterprise where rapid changes take place, in this case the establishment of local entrepreneurs. As elsewhere, to overcome they will need creative action on the part of entrepreneurs and supporting organizations.

3.6.2 Income Generation and Employment Opportunities:

BACIP trained youth in skills that are in high demand by the local construction and house maintenance industry. This coupled with the fact that increasing population and a social shift from joint family systems to independent houses is fuelling the demand for new construction.

Additionally, training certificates issued by the project have ensured better employment opportunities for the young men trained by BACIP. The consultant came across several examples where youth have acquired better sources of employment after receiving training from BACIP. These include:

- i) Hired by a larger business
- ii) Self employed and running a business
- iii) Hired by local government
- iv) Inducted into the military on basis of the skill learned
- v) Access to better employment opportunities in the region, e.g. in Kashmir where wages are high due to post earthquake reconstruction activity,
- v) Employment in other countries where wages are high e.g. Afghanistan and the Gulf States.

An internal evaluation conducted by BACIP showed that more than 58% trainees are now getting paid Rs.3000 and above, while 56% of these were without any job prior to the training. In addition to this, more than 15 people have moved abroad while around 50 have moved out of their villages to Kashmir or towns for better job opportunities.

For instance, from the trainees in Ishkoman, based on the quality of skills learnt, three men were inducted into the army and another three were hired by the government's PWD. Another two have been employed by larger businesses for decent wages.

Additionally, some of the entrepreneurs established by BACIP have trained apprentices in improved technologies. These apprentices are now running independent businesses in their own area.

With time, the benefits of improved products are becoming more obvious to individuals and organizations in the general region. This has resulted in increased demand for BACIP products. For example, Mr. Sharif, an established tinsmith in Gilgit, who is also now a BACIP master trainer, reported to have sold almost 300 WWF to individuals or organizations that contacted him through sources other than BACIP. He has also delivered on an order of 50 WWFs for a development organization based in Chitral. Other entrepreneurs have also reported a gradual increase in demand for BACIP products over the years.

In fact, in some areas, the increasing demand cannot be met by the existing entrepreneurs and it was recommended by both entrepreneurs and community leaders in the area for more individuals to be trained through BACIP. For example in Shishkut, the existing tinsmith can barely meet the demand for WWF stoves and requested that an additional tinsmith in the area be trained to meet local demand.

Although BACIP products are durable, they require periodical skilled maintenance. Therefore, apart from manufacturing, repair and maintenance is an additional source of income for local entrepreneurs.

Therefore, training by BACIP has contributed to not only enabling access to better and more stable employment opportunities but has also led to increased income for many of the trainees.

3.6.3 Availability of Trained Manpower:

The project has made great contribution to the availability of trained manpower in the community. Before the project trained artisans or entrepreneurs in various trades, in many villages local labour was unavailable and households relied on labour situated in far away towns. This resulted in exorbitant costs of construction, repair, or maintenance.

Numerous such examples were observed in the field. For instance, in a newly electrified village the cost of setting up an electric outlet was between Rs. 150-200 before BACIP

trained a local electrician. After the local electrician was trained, this cost came down to Rs. 35-50, a reduced charge of almost 75% to the household. Similarly, in some villages, the traditional stove which is an essential product in every household had to be taken to larger towns such as Gilgit for repairs. In other cases, labour such as masons, carpenters, or electricians had from far away cities had to be brought to the village and which resulted in the community or household to bear manifold expenses as they were not only paying the labourers daily wages but were also responsible for their food, lodging, and transportation to the village.

Hence, the establishment and training of entrepreneurs has not only resulted in better business and employment opportunities for youth, it has also led to significant savings on the community's part. Additionally, the community has now been saved the hassle of relying on labour from farther areas.

Additionally, the community prefers to use BACIP trained labour as the quality of their work is superior to the other labourers who have learnt their skill informally over time. In this manner, the skill of existing artisans who received BACIP trainings have also been refined leading to an increase in their demand and wages.

3.6.4 Savings on Fuel:

The project had a pronounced effect on savings on fuel for houses or buildings that used improved products.

The target areas face a very long and harsh winter for six to eight months. During this time, wood is the primary source of energy and heat for households. Table 14 shows the relative use of various fuel sources as determined by the baseline survey conducted by the project.

Table 14 - Household Fuel Sources				
C	Ishkoman	Chepursan	Total	
Sources of Fuel	Percent	Percent	Percent	
Wood	100.0	100.0	100.0	
Natural Gas	3.3	25.2	10.9	
Cylinder				
Kerosene Oil	•	3.6	1.2	
Cow Dung	-	15.3	5.3	
Electric Heater	-	14.4	5.0	
Coal	-	8.1	2.8	

In both Ishkoman and Chepursan Valleys, fire wood is used for cooking and heating purposes by all households. Other sources of energy to complement wood are natural gas, kerosene oil, cow dung, coal, and electricity. However, their use is only marginal.

The price of firewood in Ishkoman and Chepursan is directly related to its availability. Firewood is locally available in Ishkoman, whereas in Chepursan wood has to be imported from Chilas and other parts of the region. Resultantly, during the winters the price of wood per maund⁹ Ishkoman is around Rs. 200 whereas, in Chepursan, a maund of wood costs about Rs. 400. Also, many households that collect free wood have to purchase additional wood from the market to meet their winter demand.

Resultantly, Several BACIP EE products such as WWF, RHW, PE Foam, and Roof Water Proofing are in high demand as they reduce the heating expenses of the household. Households interviewed during the evaluation that had installed one or more of the mentioned products reported a drastic decline in fuel wood utilization. More visible savings were seen from the use of WWF as this product had a direct effect in cutting out the expense of wood on warming water for washing, dishes, and laundry, etc.

The other products also had a pronounced effect on keeping the house warm and therefore less fuel is now being used by the households. However, due to their indirect effect of these products the fuel wood savings could not be precisely calculated by the households.

However, through both direct and indirect impacts of energy efficient products, households reported savings of 40-50% across the board¹⁰. This was found true for houses with very little to comparatively much larger fuel needs. The examples of some households are documented in box 2 below:

Box 2 – Fuel Savings by Households

- <u>Ishkoman Kot Cousin of Bakhdur Khan:</u> Due to a large family size, fuel wood consumption is high. Also, as all the young men of the household are employed elsewhere, instead of collecting the wood has to be purchased. Traditionally, almost 60 maunds of wood were purchased every winter. After installing a WWF and PE Foam, the wood consumption is almost 40 maunds. As the price of wood per maund is Rs. 200, this has resulted in a saving of Rs. 4000. The saved money is being used to educate two daughters and a daughter in law.
- Misgar Sultan Hayat: Sultan Hayat is a BACIP trained carpenter and manufactures RHWs. Being a father of seven young children, Sultan is the only earning member of his family. The family uses about 25 maunds of wood in the winters out of which approximately 5 maunds are bought from the market. After installing a RHW in the family room, the amount of fuel wood used by the family has reduced by 3 maunds. As the cost of wood in the area is about Rs. 400 per maund, the family is now savings Rs. 1200 per year. This has encouraged Sultan and his wife to install additional improved products in their house and they are trying to save for purchasing a WWF.
- Jan Mohammad Reshit: Jan Mohammad's family lives in an extremely cold area. In the winters, several houses including his own reported to have icicles form on the inner walls of their traditional houses. After installing Wall Insulation, WWF, and RHW, the house is much warmer and his family has saved 50% on fuel wood by using 30 maunds of wood as compared to 60 maunds before installing BACIP products. With the average price of wood per maund being Rs. 400 in the area this has resulted in a saving of Rs. 12,000

The effect of BACIP products on savings on fuel is evident from the fact that demands for the most popular products peaks in the winters. Table 15 shows the five most demanded BACIP products and the number of these products replicated during the duration of the project.

Table 15 - Top Five Replicated Products			
Product	Number Replicated		
Water Warming Facility	4486		
Cooking Stove	3852		
Floor Insulation	1523		
BACIP Chair	334		
Roof Hatch Window	305		
Roof Water Proofing	104		

Another indicator of efficiency of BACIP products is its use by individuals to who the product has not been directly marketed. For example, Khalid Pervaiz, a BACIP trained tin smith has been selling WWF stoves to nearby stationed workers of the FWO and police men. After using the stoves in Hunza, these customers ordered several stoves to take home to lower altitude areas such as Attock and Gujarat in the Punjab province.

Additionally, two schools visited during the evaluation reported to have used BACIP developed wall insulation techniques and double glazed windows. This resulted in considerable fuel savings for the institutions as the temperature inside the buildings was moderated due to the use of these construction techniques.

3.6.5 Cost Reduction of House Construction:

The impact of project on reducing the cost of house construction needs to be reviewed from two aspects. First, as mentioned above, with the availability of trained manpower at the local level, communities and households have been able to save thousands of rupees on the expense of bringing skilled labour from other areas.

However, the second aspect to house construction is the cost of material used in construction. Since BACIP products are built on proper engineering techniques by specially trained labour, their cost can be much higher than that of any traditional products. For example, the cost of a traditional stove is between Rs. 1000-1200, whereas

a WWF prepared according to BACIP specifications and quality criteria costs Rs. 2500. Similarly, a RHW window also costs Rs. 2500, a product for which no alternative other than a plastic sheet exists.

This is not to negate the tangible and intangible benefits of these products such as their impact on the energy costs and the additional comfort enjoyed by their users. However, as the target villages have low economic profiles, the residents consider the use of BACIP products in house construction a heavy investment.

Additionally, the cost for some products has not become clear to the community. A prime example is wall insulation. Primary reasons behind this are that since constructing insulated walls can be effort intensive on part of the masons, they avoid constructing these walls and misguide their customers by pretending that insulated walls are extremely cost intensive to build. Also, as different materials are combined to build insulated walls, many local masons themselves are not clear about their actual costs.

3.6.6 Reducing Workload for Women:

The project had a positive impact on reducing the workload of women for households where BACIP products are in use. The most replicated products namely, the FES, WWF, RHW, and PE Foam have been beneficial both as energy saving measures and have also eased the work load of women in carrying out their daily chores in the house.

Reduction in the amount of fuel wood has saved women's time in families where most or all of fuel wood is collected. According to the benchmark survey conducted for the project, and as show in figure 4 below, almost 14.5% women in Ishkoman and 39% women in Chepursan collect fuel wood.

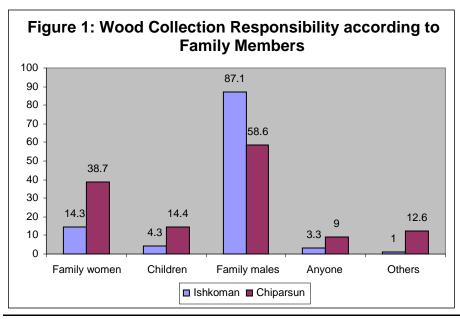


Figure 1

36/67

The survey also showed that a significant amount of time was being spent on wood collection. Table 16 shows that majority of the households spend 3 to 4 hours daily on wood collection in Ishkoman valley (70%), while in Chepursan more than 60 percent respondents said that it takes them between 6 and more hours on wood collection. Others category shown in the table are either those who spent less than three hours for fuel wood collection or those who mostly bought rather than collect themselves.

Table 16 – Average Hours Spent on Wood Collection			
Hours Spent	Ishkoman	Chepursan	Total
3 hours	33.3	7.2	24.3
4 hours	37.6	15.3	29.9
6 plus hours	13.8	49.5	26.2
Others	15.2	24.3	18.4
Not mentioned	-	3.6	1.3
Total	100.0	100.0	100.0

Before installing WWF, women had to make a separate fire to warm up water for dishwashing, laundering, and bathing purposes. Since the fire had to be made outside the house, they had to brave the cold temperatures and wind during the winters. Whereas, after installing WWF, warm water is readily available in the house at all times. This has also led to cleanliness as washing can be done any time.

Also, as women spend most of the time inside the house, they benefit directly from the use of RHW. Major benefits cited by women about having RHWs include lighted, weather proof, smoke and dust free houses.

In some houses, BACIP products are now recognized as essential household items. This can be ascertained from the fact that a man in Ghizer is reported to give his daughter a WWF and RHW as part of her dowry.

3.6.7 Women Empowerment:

Besides relieving women's work load, the project has also made a conscious effort to contribute to women's empowerment. This includes retaining of female resource persons and female salespersons in villages. By hiring these women, awareness raising and promotional messages can be directly addressed at female community members.

Also, women resource persons who work voluntarily are recognized in the community for their work. Moreover, for some women salespersons, the money earned from commissions is the first ever opportunity for them to have been engaged in an economically rewarding opportunity. In other cases, women salespersons are now leveraging the experience gained through BACIP sales by diversifying their trades. For example, Razia, a sales person from Hatoon in Ishkoman valley has now started a shop of ready made garments and handicrafts in the village.

Other indirect ways in which the project has led to women's empowerment is incidences where the savings from fuel wood are now being spent by parents on their children's education.

Similarly, the use of House Planning Tools in nine cases has given women a say in the design of their houses.

4 - CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

The project has been successful in achieving its overall objectives and carried out the activities outlined in the project document successfully.

At the organizational level, BACIP skilfully carried out its facilitative role by choosing trainees according to pre-established criteria, conducting trainings, and providing technical support in the form of marketing, awareness raising, start up capital, and coordination, etc.

The project was instrumental in adding to the skill set of skilled and un-skilled youth alike, and enabled them access to broader opportunities of income generation and livelihoods. Several young men who would otherwise have remained unemployed are now gainfully employed either as entrepreneurs or skilled labourers in the area. Some have also moved away to lucrative construction markets to areas such as Kashmir, Afghanistan, and UAE.

It was also observed that through the project, entrepreneurs and artisans trained earlier were used as master trainers. This way the project led to the sustainability of the overall program.

Moreover, the community at large benefited through the training and establishment of trained labourers and entrepreneurs as the cost of house construction and repairs declined through the availability of local manpower. At the same time, local demand contributed to the establishment and sustainability of newly developed entrepreneurs.

The project was also successful in promoting improved products and its awareness raising and demand generation efforts resulted in the replication of over 10,890 products versus a total of 10,000 products. According to some established BACIP entrepreneurs, promotional activities by the project have led to a hike in demand in the past 2 years.

In various areas, the demand for improved products and skills imparted by BACIP is extremely high and the existing entrepreneurs sometimes find it difficult to meet this demand. Hence, various beneficiaries of BACIP trainings suggested that more individuals should be trained in their geographical areas.

In areas with higher incidence of poverty, price elasticity is high and marginal decrease in price can lead to significantly higher demand. This is particularly true for Ishkoman Valley where the economic profile of households is relatively lower than that of Chepursan Valley.

The newly established entrepreneurs are facing problems in some areas which hamper the profitability of their businesses. Many entrepreneurs cited as lack of capital to procure raw material as one of the limiting factors to deliver on orders and meeting demand. Others felt that there wasn't enough demand for the trade in the particular areas they were working in and therefore they wanted the project to help them further in enhancing their skills and with the promotion and marketing of the products.

Finally, when assessing the project's impact, it was realized that the time allotted to the project¹¹ was relatively short and it affected the project activities/impact in two ways. First, due to adverse weather and topographic conditions in the project areas, the communities are not easily reachable for extended periods of time during winters and in rainy seasons. Therefore, activities such as MTC and regular monitoring are hampered.

Second, it is difficult to assess the impact of project on beneficiaries, both in terms of employment generation and household beneficiary, in two years. For example, a start up entrepreneur may need longer (3-5 years) to establish a business and there is a general understanding that not all newly established enterprises are profitable. Similarly, the marketing efforts may take some time for the community at large to replicate BACIP project, this would be especially true for low income communities. Hence, a follow up evaluation may reveal a more pronounced impact of the project.

4.2 - Recommendations

From initial stages of product development and testing to subsequent phases of marketing and enterprise development, BACIP has substantial achievements in the promotion of improved products for improving the quality of life in its target project areas. To ensure sustainability of effort in similar projects or subsequent efforts by BACIP¹², the following recommendations provide alternatives based on the lessons learned from the project.

An important aspect to be kept in mind while reviewing these recommendations is that they are based on the field assessment and mostly derived from the feedback from project participants and beneficiaries (Please refer to section 2.7).

The recommendations are divided into three main categories.

4.1.1 – Support to Entrepreneurs

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¹¹ The initial project was approved for 24 months and later a 6 month no cost extension was granted

¹² These recommendations apply both to future interventions by BACIP and to similar interventions funded by the donors EC/ADA/HOPE'87 and AKF elsewhere

Marketing:

BACIP's mass marketing strategy with components such as radio shows and the development of a sales network has been successful in generating demand. Additionally, many entrepreneurs believe that it will be helpful for them to market their products in a broader area. Therefore, marketing is a function that BACIP will need to continue performing as several entrepreneurs expressed the opinion that marketing support provided by the organization is crucial to the success of their business.

Working Capital:

Many entrepreneurs cited lack of capital to procure raw material for meeting demand as one of the limiting factors. In some such cases, BACIP has a practice of providing interest free advance of up to Rs. 100,000 to well established entrepreneurs through which the organization places orders. It is suggested that BACIP continues to play this supportive role and also extends the practice of advances to smaller, village based entrepreneurs.

Inter Linkages of Project Participants

BACIP salespersons have been instrumental in promoting improved products in their communities. However, they are also heavily reliant on the organization as their supply chain. Similarly, it can be cost intensive for BACIP to support the sales network in such a manner. At the same time, many village based entrepreneurs have been established through the current project and they are a source of competition to the salespersons as villages can now place their orders directly with the entrepreneur instead of waiting for the salesperson to procure items from elsewhere. The presence of these entrepreneurs also makes the link between the organizational supplies to salespersons redundant.

It is therefore suggested that the salespersons are linked directly to entrepreneurs. This can resolve the entrepreneurs' anxiety about marketing and also let the salespersons continue to promote BACIP products in the community in exchange for commission. However, in instances where the product is not locally manufactured, BACIP will need to continue working directly through sales agents. For example, no tinsmith exists in the greater Chepursan area to make stoves and therefore stoves have to be brought from Sost.

Training of Resource Persons:

Resource persons are community based volunteers and have played a great role in promotion of products and services provided by BACIP. However, no formal training other than a one time workshop has been organized for them. Some Resource Persons felt that training in aspects such as communication skills, advanced record keeping, promotion, etc. will leverage their role.

Greater involvement of Resource Persons in the project activities by training them and setting up a formal feedback mechanism between the organization and these Resource Persons can facilitate effective project implementation.

Monitoring of Trainees:

Many BACIP trainees are aspiring entrepreneurs. However, due to lack of experience of running an enterprise or rapid change in exogenous factors, they find it challenging to sustain their newly established business. The example of such an entrepreneur is highlighted in the case study in box 2.

Box 3 – Case Study of Newly Established Entrepreneur

Mahboob Wali, a young entrepreneur from Ishkoman was trained as a plumber through the GTVCP training in Peshawar. He has set up his own shop in the newly developed town of Gakuch by renting a store in the main market for Rs. 1200 per month and also taking a bank loan of Rs. 50,000 towards improving his business. However, there is to low demand for plumbing in traditional houses, business for Mahboob Wali is slow. Also, he has been having problems in meeting demand as due to lack of operational capital he does not always have all the required supplies readily available. But in a newly developed town like Gakuch, with ongoing construction activity, there is a great potential for plumbing. But being an inexperienced businessman, Mahboob has not been able to develop a trading relationship with any such contractor.

Lack of business is not only affecting earnings, Mahboob is also having trouble in repaying his bank loan. Although he intends to work hard to improve his business, as a young and start up entrepreneur, he lacks basic skills such as developing trade relations. With minimal support from the BACIP network in developing entrepreneurial linkages with suppliers and large scale contractors, Mahboob's business can easily improve.

In order to identify the problems of entrepreneurs like Mahboob, a monitoring and feedback mechanism will need to be established. This system should focus on delivering Business Development Services¹³ (BDS) to entrepreneurs established through the program.

The proposed system should track the business performance of entrepreneurs and provide periodical support in areas of business management where gaps exist. Effectively trained

¹³ Business Development Services refer to a wide range of services such as marketing, record keeping, inventorying, etc.

Resource Persons linked to BACIP can play a great role in such monitoring and give expert feedback to individual entrepreneurs after discussions with BACIP.

4.1.2 Product Promotion

Balancing Quality and Price:

BACIP products are manufactured according to uniform quality standards outlined by BACIP. Based on the quality criteria the prices of all products are standard and have been established by the organization.

In areas with higher incidence of poverty, price elasticity is high and marginal decrease in price can lead to significantly higher demand. This is particularly true for Ishkoman Valley where the economic profile of households is relatively lower than that of Chepursan Valley. Hence, in the former, many households expressed their desire for cheaper BACIP products as they are unable to afford the existing prices despite being aware of the benefits.

The price constraint becomes more obvious when comparing traditional products with improved products. For instance, a traditional stove costs between Rs. 1000-1200, whereas the retail price for a WWF stove is Rs. 2500.

At the same time, increasing prices of raw material are resulting in lower profit margins for the manufactures of these products. Whereas BACIP is committed to the provision of high quality products which result in higher production costs.

Many households and entrepreneurs suggest that in order to balance beneficiary need for low cost products with BACIP's commitment to providing high quality products, products of various qualities and prices be produced and the decision to choose between them is left to the consumer. This strategy can lead to benefiting numerous poor households who desire improved products but cannot afford them and are therefore forced to use traditional products which are extremely inefficient.

Instalment Based Payment:

The cost of firewood is exorbitant and depending on the location, can cost a household between Rs. 200 and Rs. 400 per maund. The savings on fuel wood per household from some BACIP products such as WWF and RHW can range from Rs. 1200 to Rs. 12000 and above. Yet, many families are unable to purchase improved products since they cannot make a one time payment.

Thus, many economically disadvantaged households suggested that BACIP products be made available on instalment based payments. Some experienced entrepreneurs also supported the idea of instalment based payments and expected a jump in sales if such a system was to be introduced. However, they expressed their inability to single handedly manage following up on payments and defaulting customers but thought that it could be implemented with organizational support.

Hence, the project should consider the option of instalment based payments in its subsequent programs and pilot the idea in a smaller area to learn key lessons before expanding on it.

It was learned that in some of the other ongoing BACIP projects the community was linked with the FMFB

Institutional Replication:

During the field visit, two schools visited were using BACIP products including wall insulation and double glazed windows. At both places, discussions with teachers and students revealed that the construction techniques had been successful in keeping temperatures considerably warmer inside the buildings. This resulted in low energy costs for the schools and also provided a pleasant learning environment for children.

Based on these positive experiences, BACIP has an opportunity to start promoting its products to be used in larger buildings and commercial enterprises. This will lead to a large scale replication of BACIP products and result in numerous benefits such as lesser use of forest wood and improved businesses for BACIP trained entrepreneurs.

Demonstration Models

Placing demonstration models on a cost share basis in selected households has been part of BACIP's promotional strategy. This approach worked well during the initial phases of the project when new products were still being tested and developed and the community was being introduced to their functionality and utility.

Over time, this strategy has been complimented with other promotional techniques such as road shows, community meetings, resource persons, etc. Combined, these strategies have led to a general understanding of the availability and usefulness of improved products.

It is therefore recommended that the strategy of placing of demonstration models in the community be scaled back.

This is based on various observations in the field where somehow a misunderstanding that the products were given away by the organization free. Consequently, despite

repeated assurances, many households are in a 'wait and see' situation and reluctant to purchase any products while hoping to receive free give aways.

Also, the purpose of placing demonstration models in most instances has not been as successful as anticipated since none of the households with model products where the consultant went to were visited by their neighbours to learn about the utility of improved products.

The recommendations outlined above are expected to increase the program's efficiency while providing maximum benefit to project beneficiaries.

4.1.3 – Involvement of Women

Construction and labour activities traditionally being the realm of male community members, thus far the project activities have focused on women as beneficiary of improved home products. The only exceptions to this are women engaged as salespersons or resource persons.

However, over a period of time, community feedback made it clear that women also wanted to be part of the labour force and wanted to get training in various trades. Some trades that women have shown interest in include electric wiring, painting, and repairing sewing machines.

During the assessment, this fact was reiterated at the community and individual level. Also it was expressed that besides providing access to employment opportunities for women, there will be added advantage to the community if women were trained in some basic techniques. For example, in many households men go away for work during the day time and in case of even minor breakdowns, the women have to wait until the evening when men return home. Also, in newly electrified villages, numerous household accidents have occurred and at times have resulted in deaths from electric shock as women and girls are not aware of the precautions needed to be taken when using electrical equipment. Training to women in handling basic electrical equipment inside the house can empower them to resolve their problems and also reduce the number of accidents.

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Annexes



1- Terms of Reference (TORs)

End of the Project Evaluation of Building and Construction Improvement Programme (BACIP) – Entrepreneur Training & Employment Generation (ONG-PVD/2003/064-439)

1. Background:

The European Commission (EC), Austrian Development Agency (ADA) and HOPE,87 (an Austrian NGO) funded Building and Construction Improvement Programme (BACIP) in 2004 in three valley in Northern Areas and Chitral, namely, Ishkoman and Chepursan and Garam Chashma. The overall objective of the project is to alleviate poverty and improve the quality of life of people (especially unemployed youth) through housing sector related enterprise development and promotion, skills enhancement and training of youth.

The rationale for selecting these valleys was that these are amongst the most remote, unattended and poor. Living conditions are harsh, with an average household income of EUR 0.46 per capita per day and the unemployment rate of the area is 70 percent (including 85 percent unemployment in 16-30 years age bracket). Approximately 4.5 percent of the housing stock in the area (about 1,000 housing units per year) needs to be constructed/refurnished annually for the basic shelter need. With the non-availability of trained skilled technicians and craftsmen, professionals are imported from other regions to undertake construction in the valleys at the exorbitant costs or the work is done by semi-skilled people resulting in poor quality of construction.

In order to overcome these problems, the project was designed with the following specific objectives:

- Training and establishment of unemployed /semi-skilled youth
- Training of entrepreneurs to enable them to establish their own businesses
- Improved products promoted through awareness raising and information dissemination protocols
- Home improvement products and techniques developed, documented and field tested for entrepreneurs' business enhancement.

Key activities of the project include:

- Entrepreneur & Artisan training and supporting entrepreneur establishment
- Awareness raising and demand generation
- Support to entrepreneurs in establishing new businesses
- Refinement of locally relevant and adaptable BACIP technologies

- Monitoring and evaluation

The project will come to end in February 2007.

2. Purpose and Rationale:

As built in the approved project document: the final evaluation is to review the progress towards achieving the project's targets and objectives, outcome, efficiency and cost-effectiveness. The final evaluation will involve to an appropriate degree all interested parties, and will be undertaken jointly by the local partners and HOPE,87 with a consultant to be assigned by the Aga Khan Foundation – Pakistan and the EC-Delegation.

3. Objectives of the evaluation:

Specific objectives of the evaluation will be to assess:

- To what extent the project objectives have been met?
- To what extent the project activities have been accomplished?
- What has been the overall impact of Project activities:
 - 1. To what extent the project was successful in increasing the skills and entrepreneurial capacity especially of youth and young adults
 - 2. What was project achievement towards cost reduction of the house construction and savings on fuel?
 - 3. How far the project contributed to increasing income generation and employment opportunities for youth?
 - 4. What was project success towards achieving objective of availability of trained manpower for construction?
 - 5. What were project achievements towards reducing workload for women and women empowerment?

4. Methodology:

The HOPE'87 / AKF (P) and AKPBS (P) team of relevant personnel will assist the consultant in the project evaluation. The methodology will be as follows:

- Analysis of project secondary information i.e. project document, progress reports, training reports, etc (3/4 person days)
- Development of detailed checklist for each key evaluation questions (1 person day)
- Meeting with staff/field visit to Gilgit (2 days) and Chitral (2 day). The consultant will meet with stakeholders and visit the project valleys
- Post-evaluation de-briefing to HOPE'87, AKF-P and AKPBS, P in Islamabad/Gilgit (1 person day)

- Development of draft evaluation report against the evaluation objective (3 person days)
- Finalization of report after receiving feedback and comments (1 person day)
- Presentation of the report (1 person day)

Total thirteen person days.

5. Deliverables:

The consultant will submit a precise report in English in a printed and electronic version. The report will include an executive summary and will address all the key questions as identified. The report will include the objectives, methodology, framework, collection of information and analysis, reporting and work schedule. The report will be structured to provide key findings/conclusions for each evaluation questions. The report will be submitted to Aga Khan Foundation and HOPE'87.

6. Working Relationship:

The consultant will report to the Programme Manager (Health) at AKF (P) and all reports have to be submitted to AKF (P). AKF (P) will assist in coordinating the field visit and meetings with stakeholder etc. The work plan will also be shared with HOPE'87/EC representative.

7. Timing:

The evaluation exercise is expected to be completed within the calendar period of January 15 – February 15, 2007 with the draft report to be submitted by the consultant no later than February 5, 2007.

8. Terms of Engagement:

The consultant is expected to be:

- Experienced in conducting evaluations and familiar with EC procedures
- The consultant will be paid _____USD per day. During assignment and visits the stay and travel to be AKF/AKPBS responsibility.

2 - DESIGN AND IMPLEMENTATION OF EVALUATIONS

(DAC Principles for Evaluation of Development Assistance)

Each evaluation must be planned and terms of reference drawn up in order to:

□ □ Define the purpose and scope of the evaluation, including an identification of the recipients
of the findings;
□ □ Describe the methods to be used during the evaluation;
□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
□ □ Determine the resources and time required to complete the evaluation.

The purpose of the evaluation must be explained, e.g., to contribute to improving aid policies, Procedures and techniques or to consider a continuation or discontinuation of specific current activities.

An evaluation must define the activity that is being evaluated, e.g., projects, institutions, sectors, or programmes and contain such information as background, objectives, activities, expenditures, expected impacts and effects.

It is essential to define the questions which will be addressed in the evaluation -- these are often referred to as the "issues" of the evaluation the issues will provide a manageable framework for the evaluation process and the basis for a clear set of conclusions and recommendations. The following are basic groups of evaluation issues:

- -- Rationale. Does the undertaking make sense? Are the objectives relevant and realisable? Should alternative objectives be considered?
- -- Objectives Achievement. Evaluation is very difficult unless the objectives which the evaluated Project/programme were to achieve have been clearly defined and the project agreements and operational plans and arrangements for obtaining relevant baseline data had been made. To what extent were the original objectives achieved? Or are likely to be achieved? What were the major factors influencing the achievement or non-achievement of objectives? Should objectives not have been stated clearly enough to allow for an evaluation of goal achievement, an assessment of impact and effects of the activities undertaken should still be attempted.
- -- Impacts and Effects. What has happened as a result of the project/programme? This involves not only direct outputs but, very importantly, the basic impacts and effects on the social, economic, environmental and other development indicators resulting from the activity. The examination should be concerned with both intended and unintended results and must also explain the positive and negative impact of external factors, such as changes in basic policy environments, general economic and financial conditions.

The aim of asking these questions is to ensure that the evaluator can assess the information and formulate conclusions and recommendations concerning:

- -- The Overall Results. How successful was the undertaking? Why? Do impacts and effects justify costs? Were the objectives achieved within time and within the budget? Were there any major shortcomings? Were there major achievements?
- -- Sustainability. The question of whether achievements are sustainable in the longer run is of critical importance.
- -- Alternatives. Are there better ways of achieving the results?
- -- *Lessons Learned*. What are the general lessons which can be drawn and which should be borne in mind when embarking on future programmes?

51/67

HOPE '87

End of Project Evaluation

3 ASSESSMENT METHODOLOGIES

Project Objectives:

Overall: Poverty Alleviation & Improvement of Quality of Life *Specific:*

- 1. Training and establishment of unemployed/semi-skilled youth to *manufacture*, *sell*, *and install* BACIP home improvement products **and** *marketing* support;
- 2. Training of entrepreneurs to enable them to *establish their own businesses* through construction/repair;
- 3. Improved products *promoted through awareness raising* and information dissemination protocols;
- 4. Home improvement products and *techniques developed*, *documented*, *and field tested* for entrepreneurs' business enhancement.

Assessment Objectives:

- A. To what extent the project objectives have been met?
- B. To what extent the project activities have been accomplished?
- C. Overall impact of project activities:
 - a. Increasing skills & entrepreneurial capacity
 - b. Increasing income generation & employment
 - c. Availability of trained manpower for construction
 - d. Cost reduction of the house construction & savings on fuel
 - e. Reducing workload for women and women empowerment

Overall Methodology:

- 1- Random sampling of interviewees
- 2- Assessment comparison with baseline data
- 3- Use of quantitative tools such as product impact reports
- 4- BDS Performance Measurement Framework

Promoted by ILO & USAID Focuses on:

- i) Outreach
- ii) Sustainability & Cost Effectiveness
- iii) Impact

Activities:

- 1. Literature Review
- 2. Development of Assessment Tools
- 3. Meetings with Project Management
- 4. Meetings with Beneficiaries (Individuals + Groups)
- 5. Household Visits
- 6. Manufacturing Site Visits

ASSESSMENT TOOLS

I- Questionnaire for Project Management:

Objectives:

- A. To what extent the project objectives have been met?
- B. To what extent the project activities have been accomplished?

Note: Most of these questions will be asked in both Gilgit & Chitral

- 1. Summary of Achievements Disaggregated by Valley/Village/Beneficiary Category/Gender
- 2. What were the main BACIP products utilized in the project?
 - a. Products in which trainings were conducted
 - b. Demo Products (at Homes and Training Sheds)
- 3. Brief discussion on each of the four main project objectives:
 - a. Training and establishment of unemployed/semi-skilled youth to *manufacture*, *sell*, *and install* BACIP home improvement products and *marketing* support;
 - b. Training of entrepreneurs to enable them to *establish their own businesses* through construction/repair;
 - c. Improved products *promoted through awareness raising* and information dissemination protocols;

- d. Home improvement products and *techniques developed*, *documented*, *and field tested* for entrepreneurs' business enhancement.
- 4. How many products were ordered by households? Disaggregate information by:
 - a. Valley
 - b. Village
 - c. Product Name / Type
- 5. Certified Training Particulars Name / Location/ Specialty/ Certification
- 6. Experiences of Project Management Team:
- a. What was the main difference between this project and other similar BACIP projects?
- b. What were the main opportunities in implementation?
- c. What were the main obstacles in implementation of each intervention?
 - i. Training
 - ii. Entrepreneurial Development
 - iii. Awareness Raising
 - iv. Product Development
- 7. What were measures for feedback during implementation?
- 8. How was course correction done based on this feedback?
- 9. If a similar project is to be implemented in another area, what improvement measures does the team suggest in:
 - a. Project Design
 - b. Implementation Mechanism
- 10. What sustainability measures are in place as the project phases out?
- 11. What additional support would be helpful for the beneficiaries after the project completion?
- 12. Review of various documents and tools, including:
 - a. Training Modules for BACIP Products
 - b. Dissemination Literature
 - c. Training Reports
 - d. Impact of Product Effects Excel Spreadsheets
 - e. Any other documents suggested by the team
- 13. Share Assessment Methodology and Finalize Visit & Interview Schedule
 - a. Decide villages to be visited in each valley
 - b. Decide number of people to be interviewed in each category per village

II- Questionnaire for Entrepreneurs & Craftsmen:

Objectives:

- a. Increasing skills & entrepreneurial capacity
- b. Increasing income generation & employment
- c. Availability of trained manpower for construction

Name of Entrepreneur:

Location: Village / Valley

- 1. What entrepreneurial category do you belong to?
 - a. Manufacturer
 - b. Sales Person
 - c. Shopkeeper
 - d. Craftsman (Please indicate Craft)
 - e. Other
- 2. Were you an existing entrepreneur or is this your first entrepreneurial experience?
- 3. If you had an existing business please give a brief overview of it? (Nature of Business, Products Dealt in, Location, Scale, etc.)
- 4. What BACIP Products are you dealing in?
- 5. What trainings did you receive under the project? Location, Type of Training
- 6. How did these trainings benefit you in terms of:
 - a. Learning New Skills
 - b. Developing Old Skills
- 7. Please explain in detail the impact on your trade/income level/ opportunities after participation in the project. (e.g. increase in number of clients, business reach outside the village, expansion in shop size, better business management practices, etc. etc.)

If you received any grant or loan to improve your trade, please answer the following:

- a. Amount of Grant
- Amount of Loan
- b. Who gave you the money?
- c. What purpose have you used the money for?
- d. How has this money improved your trading ability?
- 8. How is your business linked to the marketing sales network developed by this project?

- 9. In what ways has this network helped your trade?
- 10. What are the intangible benefits derived by you through participation in this project? (e.g. professional repute in community, better take home income, etc.)
- 11. How can your participation in this project affect your income generation opportunities over the next 3-5 years? (e.g. increased income, motivation to improve trade, upcoming construction opportunities in adjoining areas, etc.)
- 12. How has the project affected availability of trained manpower in the area?
- 13. Do you think more people should be trained in BACIP products to satisfy community demand for construction in your area?
- 14. If yes, what are the skills that further people should be trained in?
- 15. How can other individuals be interested in this trade?
- 16. What were the challenges faced by you when participating in the project? (e.g. difficult to take time out for training, coordination with implementing organization, etc. etc.)
- 17. What trade challenges are you facing now or foresee facing in the future?
- 18. How can the project management improve implementation?
- 19. Review any record keeping forms/registers etc.

III- Salespersons Questionnaire

Objectives:

- a. Increasing skills & entrepreneurial capacity
- b. Increasing income generation & employment

Name of Salesperson: Location: Village / Valley

- 1. What trainings were received by you during the project?
- 2. What were the three most important things that you learnt in the training?
- 3. Has participation in the training network improved your income?
- 4. How are you utilizing this additional income? (family needs, savings, investment, etc.)
- 5. How has participation in this project helped your income generating opportunities for the next 3-5 years? (Goals for future, etc.)
- 6. What other impact has the project had on your lives? (e.g. encouragement to start a business, developed relationship in the community etc.)
- 7. Review any record keeping forms/registers etc.

IV- Household Questionnaire

Objectives:

- a. Cost reduction of the house construction & savings on fuel
- b. Reducing workload for women and women empowerment

Note: The results of this questionnaire will be combined with the data in the 'impact of product spreadsheets' to assess objective as above

- 1. What BACIP products are you using in your house?
- 2. How long have you been using the product for?
- 3. What was your motivation to buy the product?
- 4. How much money was spent on each product?
- 5. Do you think products are affordable?
- 6. Do you have plans to buy other products in the future?
- 7. How did you become aware of the product?
- 8. Who did you buy from?
- 9. How has it improved living conditions in the house (for different family members)?
- 10. How has it affected fuel wood consumption?
- 11. How has it affected women's workload?
- 12. Any other benefits of the product?
- 13. How has the project affected availability of trained manpower to construct in the community?
- 14. What are the advantages of BACIP products over traditional building products?
- 15. Which members of the household decided in installing these products?
- 16. Did any household member receive trainings in product installation or maintenance?

- 17. Do you think that BACIP products have helped you in saving money? If yes, how do you intend to use that money?
- 18. Do you think BACIP products have helped you in saving time? If yes, how do you intend using that time?
- 19. Review any records kept by the household related to impact of the product

V- Focus Group Discussion with Key Informants in the Community

Objective: To understand overall impact of project activities

What was the impact of the project on community in general?

- a. Availability of Products
- b. Availability of Trained Manpower
- c. Improvement in House Quality
- d. Impact on unemployment in the community
- e. Potential hurdles when implementing the project
- f. Future recommendations



4 National Workshop Entrepreneur Training and Employment Generation

Venue: Serena, Islamabad 22 February 2007

Agenda

Registration	0930 – 1000 hrs
Welcome Address (AKF, P)	1000 – 1015 hrs
Presentation of the Project (AKPBS, P)	1015 – 1100 hrs
Tea	1100 – 1130 hrs
Presentation by HOPE, 87	1130 – 1145 hrs
Remarks by Austrian Ambassador	1145 – 1200 hrs
Round Table Discussion	1200 – 1245 hrs
Vote of thanks (AKPBS, P)	1245 – 1300 hrs
Lunch	1300 - 1430 hrs

5 Brief Field Itinerary for End of Project Evaluation

Date	Day	Description		
27-3-2007	1	Arrival in Gilgit		
		Meeting With AKPBS staff		
		Visit BACIP Training Shed		
		Visit Local Entrepreneurs		
28-03-2007	2	Leave for Gakuch		
		Visit Resource Centre		
		Visit Kot, visit HH, Tinsmith, Carpenter		
		Visit Barjungle, meet carpenter		
		Visit Hatoon, meet sales person and Electrician		
29-03-07	3	Visit Chatorkhand – Meet Sales Person, Visit Demo		
		House		
		Meet Electrician, Plumber, Tinsmith, Carpenter		
		Visit Daeen – Meet Resource Person, HH		
30-03-2007	4	Visit Shishkut, meet Tinsmith		
		Visit Gulmit, meet Carpenter		
		Visit BACIP school		
		Visit Misgar – Meet Plumber, Salesperson, and HH		
31-03-2007	5	Visit Chipursan, Meet Carpenter, Electrician, HH,		
		Salesperson		
		Visit Gilgit – Debriefing to Project Staff		
01-04-2007	6	Return Islamabad		

6 - List of People Met

	Individual	Organization / Place / Title
1	Ms. Munazza Naqvi	AKPBS
2	Mr. M. Shoaib Haider	HOPE 87
3	Mr. Khizer Farooq Omer	AKPBS
4	Dr. Qayum Noorani	AKPBS
5	Mr. Qayum Ali Shah	BACIP
6	Mr. Ahmed Abbas	HOPE '87
7	Mr. Karim Ullah Beg	BACIP
8	Mr. Ghulam Saeed	BACIP
9	Mr. Mubarak Ahmed	BACIP
10	Ms. Naheeda	BACIP
11	Mr. Sher Ullah	BACIP
12	Mr. Karim	Carpenter – Gilgit
13	Mr. Jehangir	Tinsmith – Gilgit
14	Mr. Sharif	Tinsmith - Gilgit
15	Mr. Niyyat Iqbal	Electrician – Hatoon
16	Mr. Salamat	HDGI Wire Maker -
		Chatorkhand
17	Mr. Salamat	Resource Center –
		Chatorkhand
18	Mr. Bahadur Khan	Beneficiary Household -
		Ishkoman Kot
19	Ms. Nazira	Beneficiary Household -
		Ishkoman Kot
20	Nazira's Uncle	Beneficiary Household –
		Ishkoman Kot
21	Mr. Tikka Khan	Tinsmith – Ishkoman
22	Mr. Khush Khan	Carpenter – Ishkoman
23	Mr. Afsar Jan	President – Chatokhand
2 1	A. 771 '	Ismaili Local Council
24	Mr. Khizer	President PML (Q) –
25	M. C. LLM	Chatorkhand
25	Mr. Gulab M.	Muki Jamat Khana –
26	Ma Chan Amour	Ishkoman
26	Mr. Sher Azam	Assistant Manager – School
		Management Committee, Ishkoman
27	Mr. Afsar Khan	
21	IVII. AISAI KIIAII	Vice Chairman, UC Chatorkhand
28	Mr. Mahfooz Ali Shah	
40	IVII. IVIAIIIOUZ AII SIIAII	Mukki, Centeral Jamat Khana,

	Individual	Organization / Place / Title	
		Chatorkhand	
29	Ms. Safina Bibi	BACIP Salesperson,	
		Ishkoman	
30	Mr. Syed Akbar Ali Shah	BACIP Salesperson, Daeen	
31	Mr. Sheli Khan	Tinsmith, Ishkoman	
32	Mr. Mahboob Wali	Plumber, Ishkoman	
33	Mr. Mujahid Abbas	Carpenter, Ishkoman	
34	Ms. Razia	BACIP Salesperson,	
		Ishkoman	
35	Mr. Khalid Pervez	Tinsmith, Shishkut	
36	Mr. Aslam	Carpenter, Gulmit	
37	Mr. Azia	Resource Person	
38	Mr. Javed Iqbal	Resource Person, Misgar	
39	Ms. Farid Aziz	Salesperson, Misgar	
40	Family	Carpenter, Misgar	
41	Mr. Maula Jan	Stove Maker, Misgar	
42	Mr. Nazir Ahmed	Carpenter, Chipursan	
43	Mr. Jan Mohammad	Beneficiary Household,	
		Reshit	
44	Mr. Safdar Ali	Plumber, Chipursan	
45	Mr. Abdul Aziz	Electrician, Chipursan	
46	Ms. Hussan Jahan	Resource Person, Chipursan	

7- Villages from Which Individuals Were Trained

Village Name	Village Name
Barjangle	Jalalabad
Beshqir	Khudabad
Bilhanz	Kil
Chatorkhand	Kirmin
Chepursan, Gojal	Kot
Dain	Misgar
Dalti	Mominabad
Faizabad	Moorkhun
Garamchashma	Murdan
Ghahkouch	Nasirabad
Ghalapan	Pakorah
Gilgit	Parabek
Gotolti	Reshet
Gulodas	Sanick
Hasis	Sharesabz
Hatoon	Shatmargh
Imit	Shonus
Ispanj	Silpi
Izh	Sost
	Zoodkhun

8 Selection Criteria for Craftsmen/Entrepreneurs

- 1. Must be willing to get training in their respective trade from BACIP
- 2. Agree to manufacture BACIP housing products on "quality" terms and conditions set by BACIP
- 3. Willing to manage space to manufacture, store and display BACIP Products, and or willing to undertake a skilled trade job elsewhere.
- 4. Have enough manpower (family members / local poor people to assist) available to manufacture products to meet the demands generated in their locality
- 5. Must be honest, reliable and has good social reputation in his area
- 6. Should be literate and be able to keep records. Exception can be made for literacy rate
- 7. Should be able to communicate the benefits and advantages of improved housing products to the community
- 8. Must have a clean financial record and should not have any debts.
- 9. Selection will be made jointly by the community leaders and the BACIP team
- 10. The participant should preferably belong to the BACIP project areas.
- 11. Have prior know-how or basic interest of the specific trade.
- 12. Have at least Matriculation education. Exceptions can be accommodated on keen interest basis.
- 13. Agrees on the terms and conditions of the training module
- 14. Must be between 16 to 35 years of age. Exceptions can be made for benefiting interested trainees.

Exceptions can be made keeping the interest level of the individuals.

PS: Exception can be given for point 4, 12, and 14.

9-	List of Demonstration	Products Installed			
(Se	(Sep. 2004 to Feb. 2007)				
	Product	Units Installed			
1	Wall Insulation	37			
2	Floor Insulation	31			
3	Roof Hatch Window	22			
4	Water Warming Facility	20			
5	Roof Water Proofing	19			
6	Asymetric Utensil Cabinet	13			
7	Solar Cooker	11			
8	Double Glazed Window	9			
9	H.D.G.I.Wire/Wall Reinforcement	8			
10	Bedding Rack	8			
11	Kitchen Work Top	7			
12	Roof Insulation	4			
13	Dry Pit Latrine	4			
14	Dust Free Ceiling	2			
15	Stabilized soil pointings	2			
16	Cooking Stove	1			
17	Saw Dust Stove	1			
18	Solar Fruit Dryer	1			
19	House / Site Planning	1			
	Total	201			

10 Quality Control Check List for WWF

Aga Khan Planning and Building Service, Pakistan.

Building and Construction Improvement Programme.

Quality Control Check List For WWF set.

Ishkoman Design.

S.No	Description	Gauge	Weight	Price
1	32" long 7.5" high and 18" wide stove with bottom.	18	10 Kg	1200
2	32"long7.5"high and16"wide stove without bottom.	18	9Kg	1000
3	Chimney pipe 12' long with 3" diameter.	28	2.5 Kg	200
4	22" high 12" diameter drum & 7' long 3/4"			1200
	Reinforced PVC pipe with complete fitting.			
5	32" long 7.5" high 18" wide WWF set with bottom	18	10Kg	2600
	and complete drum fitting.			
6	32" long 7.5" high 18" wide WWF set without	18	9Kg	2400
	Bottom & complete drum fitting.			