BRSP
بلوچستان رورل سپورٹ پروگرام
BALOCHISTAN RURAL SUPPORT PROGRAMME

Perception of Communities about the Functionality and Impact of PPAF Funded Community Infrastructure Projects Implemented by

B R S P

BALOCHISTAN RURAL SUPPORT PROGRAMME

BRSP
بلوچستان رورل سپورٹ پروگرام

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This report presents findings of the study "Perception of Communities about the Functionality and Impact of PPAF Funded Community Infrastructure Projects Implemented by BRSP" during the period 2001 to 2011. Findings are based on household surveys and meetings with representatives of community institutions. The study was conducted from December 2013 to March 2014 by Punar-7.

Punar-7 gratefully acknowledges the guidance and logistical support afforded by Balochistan Rural Support Programme (BRSP) for accomplishing this assignment. In particular, acknowledges the assistance given by Mr. Akmal Jamali - Manager PITD and Mr. Mohammad Ibrahim Alvi Manager MER, BRSP.

We also acknowledge that the study could not be completed successfully without the active participation of targeted community institutions; and candid inputs provided by beneficiary households.

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TABLE OF ACRONYMS

BRSP	Balochistan Rural Support Programme
GTZ	Germany Agency for Technical Co-operation
COs	Community Organizations
PPAF	Pakistan Poverty Alleviation Fund
DWSS	Drinking Water Supply Sachems
IWRM	Integrated Water Resource Management
RSP	Rural Support Programme
O&M	Operations and Maintenance
IMR	Infant Mortality Rate
MMR	Maternal Mortality Rate
IRR	Internal Rate of Return
CPI	Community Physical Infrastructure
PVC	Plasticized Polyvinyl Chloride

1. EXECUTIVE SUMMARY

This report discusses objectives, methodology, and findings of the study "Perception of Communities about the Functionality and Impact of PPAF Funded Community Physical Infrastructure Projects Implemented by BRSP, during the period May 2001 and September 2011". The main objective of the study was to assess the impact of physical infrastructure projects implemented by BRSP to improve rural livelihoods and reduce poverty. For this purpose, 22% of the total schemes were randomly selected for this survey and interviews were held with representatives of community organisations in the respective villages. To achieve 95% confidence level with a confidence error of ±4%, survey was conducted in 590 households form the selected schemes.

Findings of this survey are based on perceptions of the community members from the villages where these projects have been implemented. Physical verifications including assessment of documents to confirm increase in income, inferences based on analysis of records in health, education and other relevant departments and technical assessment of project sites was not a part of this study. Moreover, this is not a detailed sub-sector specific study measuring impact on sector specific indicators e.g. IMR, MMR, enrollment rate, per capita income.

During the period under consideration, PPAF provided funds for 819 projects (715 schemes under Community Physical Infrastructure Unit, and 104 schemes under Disaster Management and Preparedness Unit). Total cost of these projects was Rs. 461.20 million. Out of this amount, Rs. 353.5 million was contributed by PPAF; while remaining amount (Rs. 107.69million) was contributed by the communities. According to BRSP sources, around 300, 000 individuals directly benefitted from these projects. Main types of schemes completed during this period include drinking water supply systems, flood protection works, irrigation schemes, integrated water resource management schemes, roads and bridges, sanitation schemes, land reclamation schemes and Karez rehabilitation and technologically innovative projects.

As a whole, community expressed satisfaction with the current functionality of the PPAF funded schemes. Beneficiaries of village electrification project (where solar panels were provided to beneficiary households) were particularly satisfied with the work. Other type of projects, about which communities expressed high level of satisfaction includes; flood protection works, DWSS, IWRM and irrigation. CO office bearers expressed their satisfaction with current functionality of 88% of the projects 31% of these schemes were reported as highly satisfactory. However, 13% schemes were considered prone to risk of closure in the coming five years. Furthermore, 68% of the O&M Committees are functional and only 7% of the O&M committees collect funds on regular basis.

According to household survey, PPAF funded projects contributed towards an increase of Rs.631 per person per month (= Rs. 60,556 per household per year) in

farm income. Major schemes that contributed towards increased income include IWRM, Karez rehabilitation projects and flood works. Out of total surveyed household, 36% believed that PPAF funded projects resulted in greater availability of food for domestic consumption. A large proportion of households benefiting from land reclamation and irrigation schemes reported that the project helped them in bringing additional land under irrigation. On average surveyed households saved 119 minutes per day (90 working hours per year) as a result of drinking water supply schemes..Household believe that these projects also contributed towards improvement in health and education.

Survey reveals that agriculture related infrastructure projects have significant potential to improve the livelihoods of the poor. Such projects are playing pivotal role in improving health and education, as the people use a part of income they earned on health and education related activities. Therefore, it is recommended that physical infrastructure projects that can improve income from on-farm and off-farm activities should particularly be encouraged. Technologically innovative projects collectively managed by the communities have comparatively been less successful than others. A large number of such projects are dysfunctional. Rate of failure of such projects further increased in far-flung areas where spare parts are not easily available. However, interestingly, solar panels owned by individual households are amongst the most successful projects in terms of their utilization and satisfaction level expressed by the communities. Therefore, keeping in view the decline in water table during the last few decades, it is recommended that BRSP should discourage projects that can further worsen the situation and should encourage projects that can contribute towards efficient use of available water. It should also encourage household solar electrification schemes, where equipment will be provided to individual households. BRSP also needs to explore options to further improve the effectiveness of the operations and maintenance committees. Another important area that can contribute towards the effectiveness and sustainability of the projects is development of a system for social audit as well as a mechanism for documenting and discrimination of best practices within the organization.

2. BACKGROUND & OBJECTIVES

2.1 - Balochistan Rural Support Program (BRSP)

"Balochistan Rural Support Programme is the largest autonomous not-for-profit organization of Balochistan. It is registered under the Companies Ordinance 1984. BRSP's history goes back to the project "Pak-German self help initiative" that was initiated in 1983 in collaboration with Government of Germany and Pakistan. The project was implemented by the Local Government Department of Balochistan in collaboration with GTZ (German Agency for Technical Co-operation) advisory group. BRSP was registered in 1991, under Section 42 of the Companies Ordinance of 1984 as a non-profit organization dedicated to the cause of rural development in the province.

The overall mission of BRSP is to facilitate improvement in livelihoods of the rural poor in poorest province of the country. This is accomplished through the mobilization of poor communities to help them plan and implement their own development agenda. The rural development programs of BRSP have helped communities to form community organizations for women empowerment, natural resource management, physical infrastructure development, human resource development, enterprise promotion, and credit and savings projects. In order to harness this potential, BRSP programs organize communities into multi-sector Community Organizations (COs), which are used as a platform for planning and implementing various developmental activities by the community members themselves.

2.2 - PPAF Funded Community Physical Infrastructure Projects

PPAF (Pakistan Poverty Alleviation Fund) started supporting BRSP's physical infrastructure projects in 2001. During the period between May 2001 and September 2011, BRSP completed 819 projects costing Rs. 461.20 million. Out of this amount, Rs. 353.50 million was contributed by PPAF; while remaining amount (Rs. 107.69-million) was contribute by the communities, mainly in the form of skilled labour, local material and cash contribution for operations and maintenance. These projects were planned for around 300, 000 individuals (34,248 households) as direct beneficiaries.

Most of these schemes (715) were community infrastructure schemes, while 104 schemes were implemented under disaster management and preparedness component. Total cost of CPI projects was Rs. 404.30million, while the cost of physical infrastructure projects focusing on disaster management and protection schemes was Rs. 56.89 million.

Table 1: PPAF Funding for Physical Infrastructure Projects During 2001 & 2011

Row Labels	No of Projects	Beneficiary Households	Sum of TOTAL COST	Sum of PPAF SHARE (Rs)	Sum of CO SHARE (Rs)
DWSS	238	10,792	94,282,644	76,960,679	17,321,965
Flood Protection Works	23	1,101	13,657,897	10,573,759	3,084,138
Irrigation	386	12,002	197,263,361	151,999,600	45,262,761
IWRM	84	7,323	107,298,767	77,133,083	30,165,684
Road & Bridges	6	597	4,905,569	3,917,188	988,381
Sanitation	29	1,410	14,522,029	11,418,979	3,103,050
Village Electrification	4	68	1,562,000	1,405,800	156,200
Land Project	49	975	27,709,951	20,093,388	7,616,590
Total	**819**	**34,248**	**461,202,218**	**353,502,476**	**107,698,769**

2.3 - Overall Objectives & Scope of Study

Overall Objective

Objective of the study is to understand the community's perception about impact of PPAF funded physical infrastructure projects implemented by BRSP to improve rural livelihoods and reduce poverty in selected villages of 7 districts of Balochistan.

Specific objectives include:

- To understand the perception of communities about economic benefits of the schemes.
- To understand the impact of the infrastructure projects on the society (on life style, gender equity, etc).
- To analyze the current functionality and utilization of the schemes.

The study focused on the projects completed during the period 2001 to 2011 in 7 districts of Balochistan.

3. METHODOLOGY

Study primarily focused on understanding perspective of the target communities about impact of PPAF funded CPI schemes on social and economic aspects of their lives as well as their perception about current functionality of the schemes.

3.1.1 Material Review and Development of Survey Tools

In order to understand the nature, type, value and other important aspects of the schemes funded by PPAF, CPI database of BRSP was studied and analyzed. Other important documents including the "An immediate impact assessment study of RSP Physical Infrastructure Projects" was also reviewed. Survey tools including questionnaire for participatory impact assessment through CO office bearers and household survey was developed keeping in the objectives of the study and socio cultural realities of Balochistan.

3.1.2 Sampling

Survey households were selected using the following process:

- Out of 819 schemes completed during the given period, 180 schemes (22%) were selected from seven districts: Bolan, Kharan, Khuzdar, Mastung, Pishin, Sherani, and Zhob. In order to ensure efficiency, union councils were selected on the basis of the total number of completed schemes in a given union council. Hence, union councils with greater number of schemes had a greater probability of being selected.

- Schemes within the union council were selected randomly. The following is a summary of the schemes selected for the study.

	Total Schemes	Sample Size	Sample as % of Population
Grand Total	**819**	**180**	**22%**

- Group interviews were held with at least one office bearer from each selected scheme.

- From the randomly selected schemes, 590 households were selected for household survey to achieve a confidence level of 95% with confidence error of ±4%. Please note that the confidence level and confidence error above are relevant for the overall findings. Standard Error will increase for specific results explaining the different category of projects.

Details of the sample selected for household survey are given in the following:

Table 3: Summary of households selected for the household survey

	No. of Selected Schemes	Total Beneficiary Households in Selected Schemes	Beneficiary Households Selected for Household Survey in the Selected Schemes
Total	**819**	**34,248**	**590**

3.2 Interviews with CO Office Bearers

Group interview were conducted with office bearers/members of COs to understand their perception about current functionality and utilization of the projects/schemes. 1106 male and 341 female office bearers/CO members from 180 schemes (on average 8 office bearers/member from one CO/VO) participated in these interviews. Information about the following indicators was collected through Group Interviews:

- Risk of closure in coming 5 years.
- Utilization (refers to the percentage of targeted households using a scheme).
- Current functionality of the project.
- Functionality of O&M Committee.

3.3 Household survey

As already mentioned, household survey, aimed at understanding perception of beneficiary households about the impact of the selected schemes on their socio economic functionality was conducted in 591 households.

Relevant professional/field staff of BRSP was interviewed to understand their perspective about the impact and effectiveness of the schemes.

3.4 Limitations of the study

- Survey findings are based on perceptions of the community members. Physical verifications including verification of receipts to verify increase income, cross verification with records in health, education and other relevant departments, technical assessment of project sites, etc. was not a part of this study.

- It was not a detailed sector specific study. Analyzing the impact of the project on sector specific indicators e.g. IMR, MMR, enrollment rate, per capita income of the inhabitants of the Union Council etc. was also not a part of the study.

- As already mentioned, confidence level (95%) and Standard Error (±4%) is relevant for accumulative findings related to household survey. Standard Error increases for specific results explaining the different category of projects.

Perception of the Communities about Functionality and the Impact of PPAF funded CPI Projects

Findings of the Study

4. Overall Impact & Current Functionality of PPAF Funded Projects (CPI)

4.1 Is Community Satisfied with the Scheme?

Responding to the question: "Are you satisfied with the scheme (and the way it has been implemented)", 90% respondents (from beneficiary households) answered affirmatively. This includes 27% respondents who said that they are highly satisfied with the schemes. 10% found the schemes to be unsatisfactory. 100% of the households who had benefitted from solar panels found these schemes to be highly satisfactory. This was followed by beneficiaries of flood protection work (highly satisfactory: 57%), DWSS and IWRM (highly satisfactory: 37%) and Irrigation (highly satisfactory: 27%).

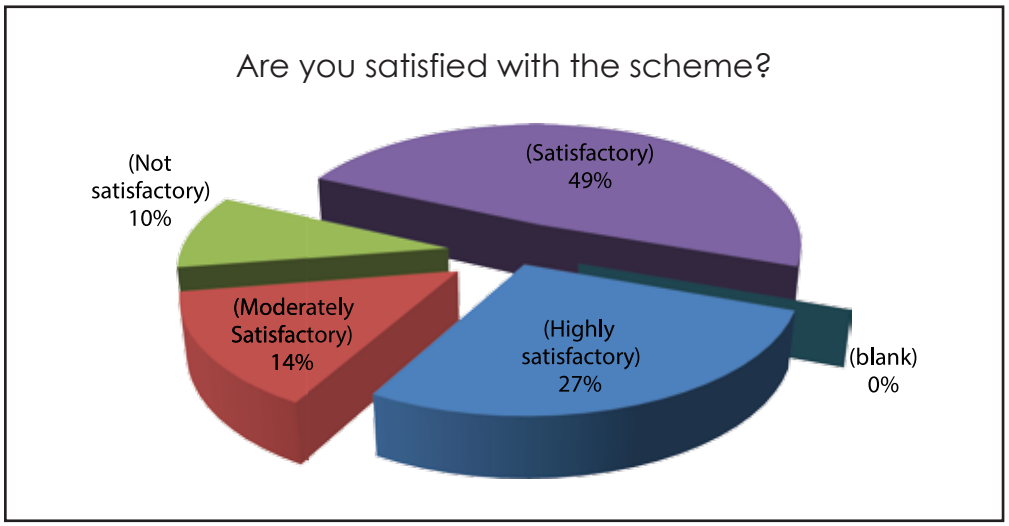


Figure 4.1 Graph representing the community satisfaction with the PPF –funded CPI projects

4.2 Sustainability

COs believe that 87% of the projects are safe from risk of closure in coming 5 year. Drought, declining water table and poor maintenance are amongst the major possibilities that make the remaining projects prone to risk of closure. When this period was extended to 10 years, number of schemes prone to risk increased from 13% to 26%.

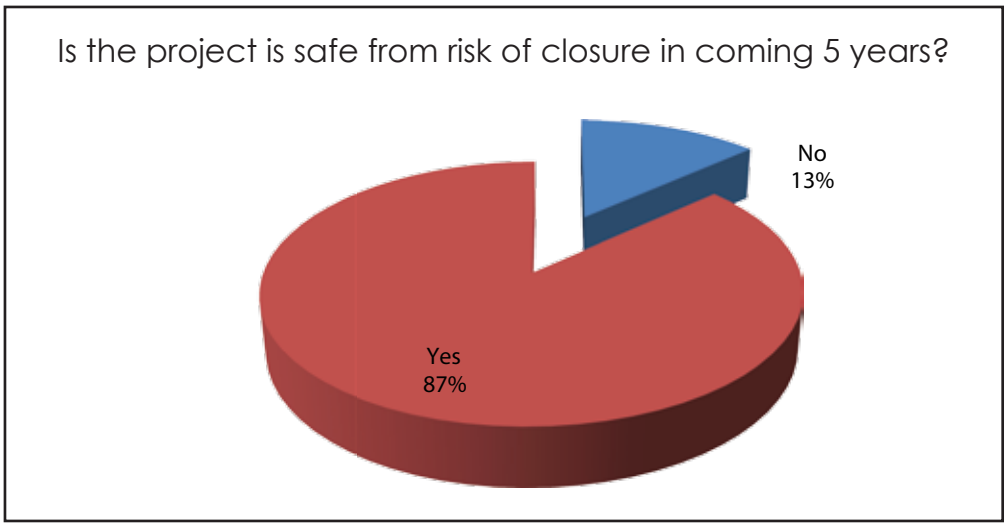


Figure 4.2 Graph showing the sustainability of the CPI project in the coming five years

68% of the O&M Committees are functional, while one third of the committees or either dysfunctional or in a state of hibernation. Only 7% of the O&M committees collect funds on regular basis, while 87% of the committees collect funds on need basis. 7% of the committees do not collect funds at all.

4.3 Impact on Health and Education

94% female respondents of the household survey believe that these projects left a positive impact on health of women in the targeted families. (Please note that this does not mean 94% improvement in health functionality s, it rather tells us that these schemes positively impacted the health functionality s in the target households. Detailed analysis of impact on important education and health indicators e.g. IMR, MMR, etc does not fall in the scope of this study.) 84% respondents reported positive impact on men's health.

59% of the respondents feel that the survey resulted in positive impact on female education while 41% did not agree with this statement. 71% of the respondents said that the projects are positively impacting boys' education.

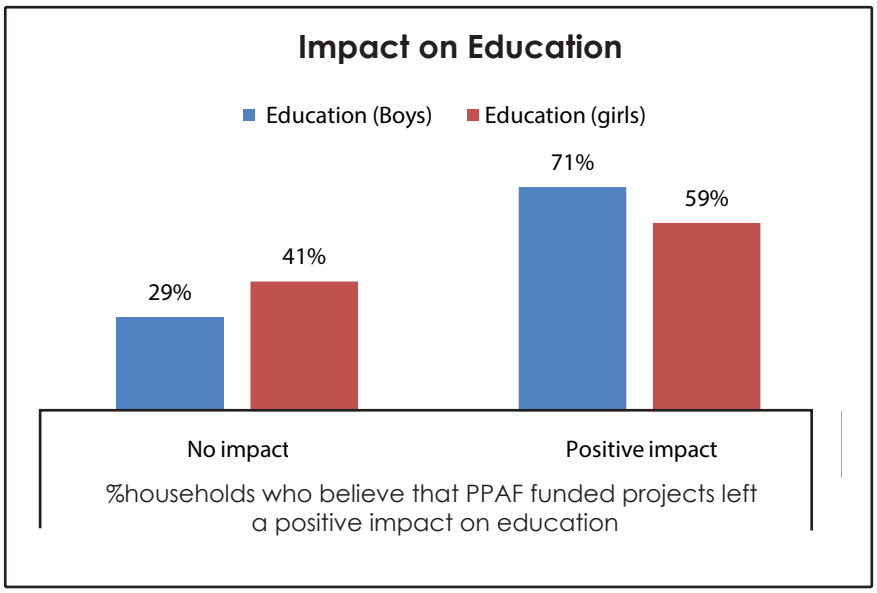


Figure 4.3 Graph depicticng the impact of the PPAF-funded CPI projects on education.

4.4 Impact on Women's Leisure

87% of the women respondents believe that the projects positively affected women's leisure. 46% of the respondents believe that these projects resulted in large benefit in terms of improvement in women's leisure. Only 13% of the respondents believe that the project did not result in any improvement in women's leisure. Availability of additional time due to reduced time in fetching water and increase in household income are the major factors contributing to this improvement.

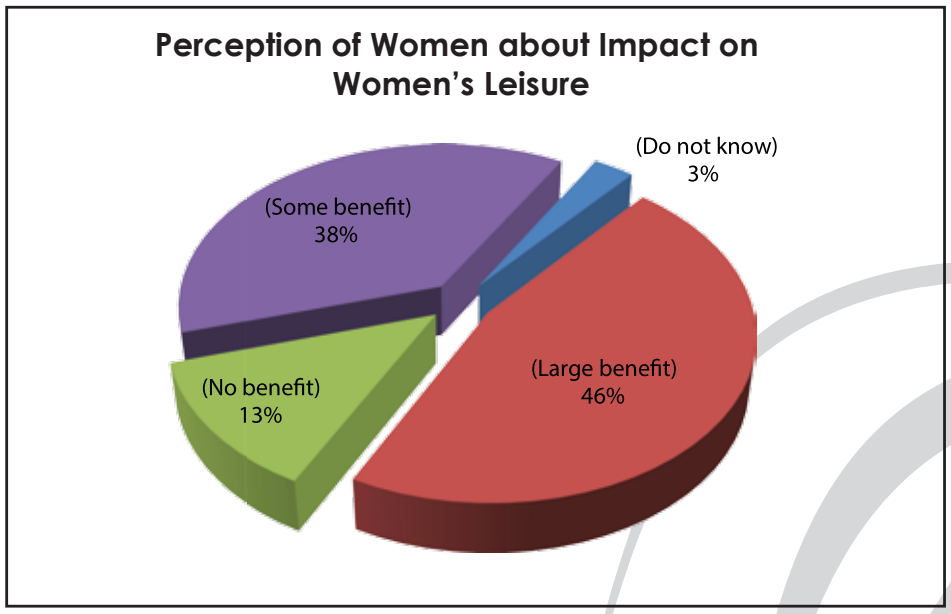


Figure 4.4 Graph depicting the perception of women about the impact of PPF-funded CPI projects on women's leisure.

4.5 Impact on Economy

Over an average period of five years, PPAF funded agriculture related physical infrastructure projects and other related activities contributed towards an increase of Rs.631 per person per month (= Rs. 60,556 per household per year) in farm income Major schemes that contribute towards this increase in income include: land reclamation, irrigation channels, IWRM, Karez rehabilitation projects and flood works. 36% of the surveyed household believe that PPAF funded projects resulted in greater availability of food for domestic consumption.

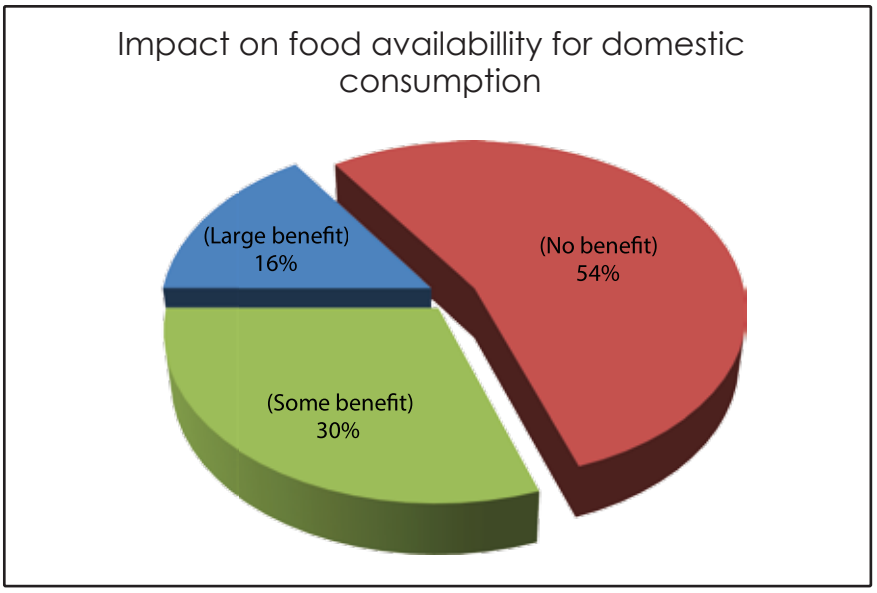


Figure 4.5 Graph demonstrating impact of PPF-funded CPI projects on food availability for domestic consumption.

Out of 591 households, 421 households reported that the project helped them in bringing 941 acres of additional land under irrigation. Major land reclamation was reported in flood protection works, irrigation, IWRM, irrigation and Karez rehabilitation and land reclamation projects. Assuming that only 60% of the targeted beneficiaries are accessing the projects, PPAF funded projects helped in bringing more than 30,000 acres of additional land under irrigation.

Table 4: Average Land Reclamation

Row Labels	Total Targeted Households	No. of Respondents (Households)	Average Land Reclamation (Acre) per Household
Flood Protection Works	1,101	3	*[1] Not calculated
Irrigation	11,451	183	4.2
IWRM	7,323	31	2.6
Land Reclamation	49	29	1.7

BRSP team, with the help of an economist having expertise in calculating economic impact of physical infrastructure projects, has calculated the estimated IRR of these projects. According to these calculations, IRR of CPI projects is 26%.

4.6 Time Saved

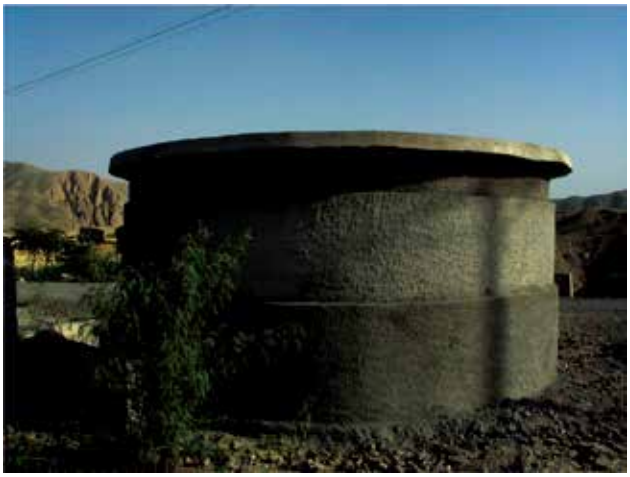
Households saved a significant amount of time as a result of reduced travel time in fetching water, etc. On average surveyed households saved 120 minutes per day (90 working hours per year).

* It was not possible to collect a correct estimate as the size of the sample was not representative.

5. Impact of Different Types of CPI Schemes

5.1 Drinking Water Supply Schemes (DWSS)

212 DWSS schemes targeting around 85,000 individuals (10,080) households were implemented. Most of these schemes were implemented in Kharan, Mastung, Zhob, Pishin, Bolan and Kalat. Despite the geographic and socio cultural challenges, as a whole, impact of DWSS projects remained encouraging.



5.1.1 Current Functionality of DWSS Schemes

Office bearers/community representatives were satisfied with the current functionality of 89% of the surveyed functional projects. Communities ranked more than half of these projects as highly satisfactory. However, current functionality of 11% of the projects (2 out of 18 functional projects) was not up to the mark. Both of these projects were technologically innovative projects, which were a new experience for BRSP at that time.

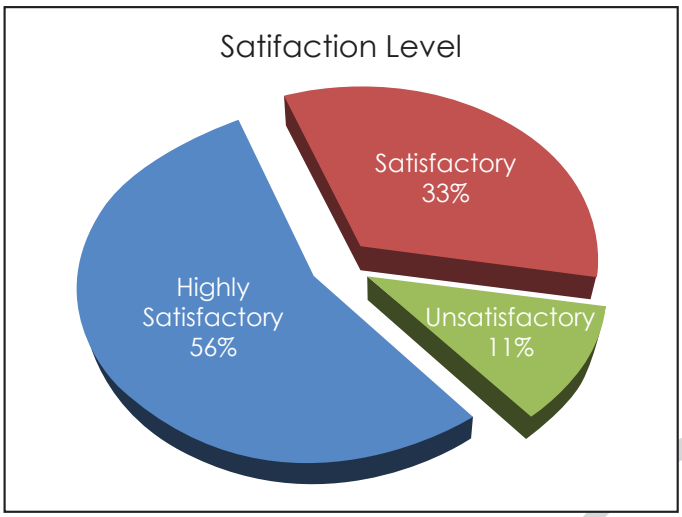


Figure 5. 1 Graph representing the satisfaction level of community bearers about the DWSS schemes.

7 out of 25 DWSS schemes (28%) were reported as non operational. 4 out of 7 non operational projects were technologically innovative projects. This reflects that the chance of failure of technologically innovative projects is much higher. Unavailability of expertise in repair and maintenance of the innovative projects, unavailability of spare parts and communal ownership of these projects are amongst the possible causes of this failure. Further research is required to understand the cause of abnormally high ratio of non operational technologically innovative DWSS projects.

5.1.2 Utilization

40% of the schemes are fully utilized (more than 70% of the beneficiaries are benefitting from the scheme). 34% are partially utilized (40 to 70% of the beneficiaries are benefitting from the scheme). 6% of the schemes are underutilized (10 to 40% of the beneficiaries are benefitting from the scheme) and similar number of schemes were being used/benefitted by less than 10% of the targeted beneficiaries.

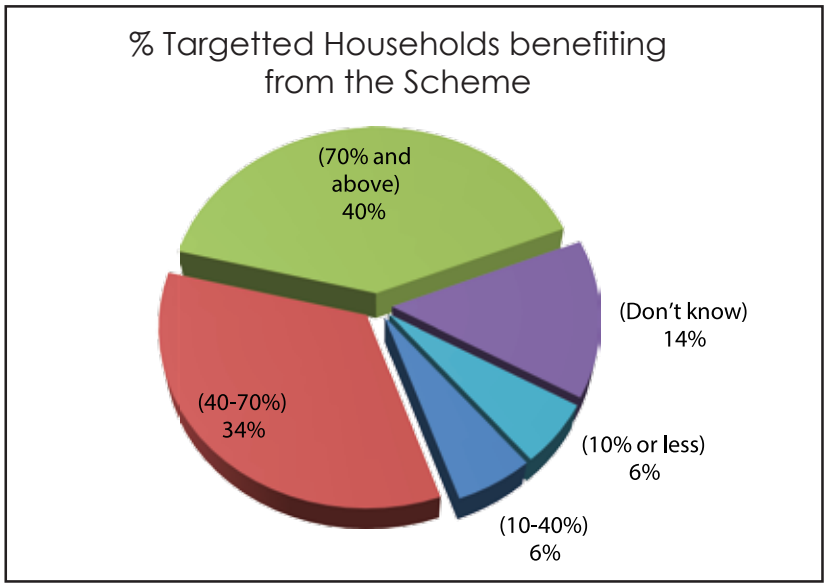


Figure 5. 2 Graph showing percentage targetted households benefitting from the DWSS scheme.

5.1.3 Impact on Health

Around 73% surveyed households believe that DWSS projects have resulted in improvement in women's health. Around two third of the surveyed beneficiaries are of the view that these schemes left a positive impact on men's health as well.

71% of the respondents were satisfied with the impact of DWSS project on the health of children. Availability of comparatively clean water resulted in decrease in water born diseases and improved hygienic functionality s.

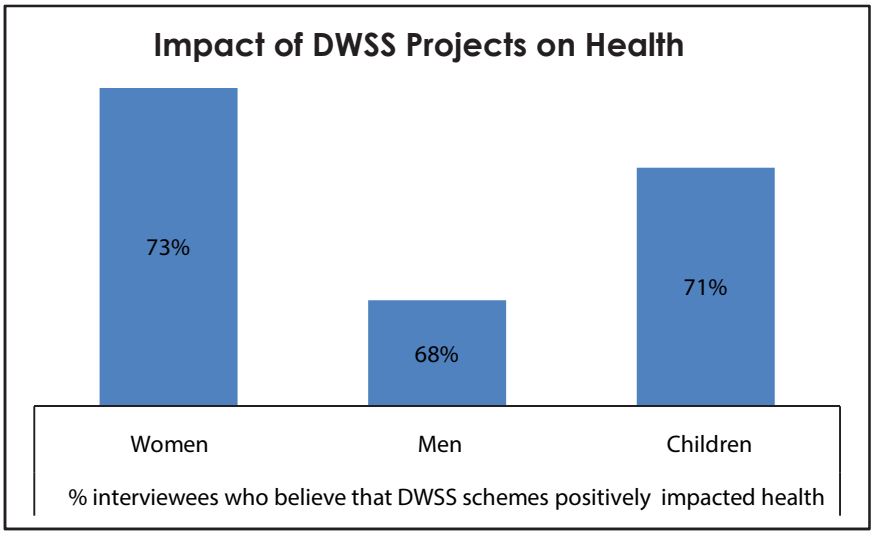


Figure 5.3 Graph representing the impact of DWSS schemes on health.

24% of the respondents reported that the schemes resulted in a large benefit in terms of improvement in the health of children, while 44% believed that the schemes have resulted in some benefit on the health of children in the targeted households. 32% were not able to observe any impact of these projects on children's health.

5.1.4 Impact on education

Impact of the scheme on education is encouraging. 44% of the respondents reported a satisfactory impact on boy's education, while 43% of the respondents said that these projects have positively impacted girls' education. Further calculations show that one of the major reasons for this impact is availability of additional time to both boys and girls due to decrease in the travel time for fetching water.

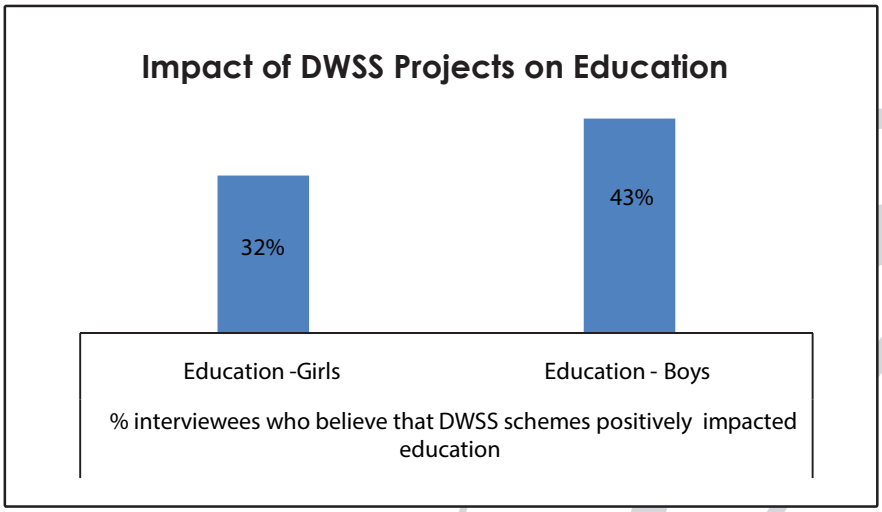


Figure 5. 4 Graph depicting the impact of DWSS Schemes on education

55% of the respondents were of the opinion that improvement in access to water did not result in any improvement in boys' education while 66 % respondents believed that time saved due to the project was not translated in to any kind of improvement in female education. This is mainly due to unavailability of schools, unavailability of basic facilities in the schools as well as the overall trend in education sector in the target areas.

5.1.5 Impact on Women's Leisure and Social Life

Women in the tribal rural settings are often over-burdened with work. They spend major portion of their time fetching water, taking care of children, agricultural related activities and household chores. It is quite encouraging that 62% respondents have noticed positive impact of these schemes on women's leisure. This impact is higher in the area where surface/ overhead/ under-ground tank and distribution systems have been implemented. This shows that the schemes have resulted in peace of mind for a number of the rural women.

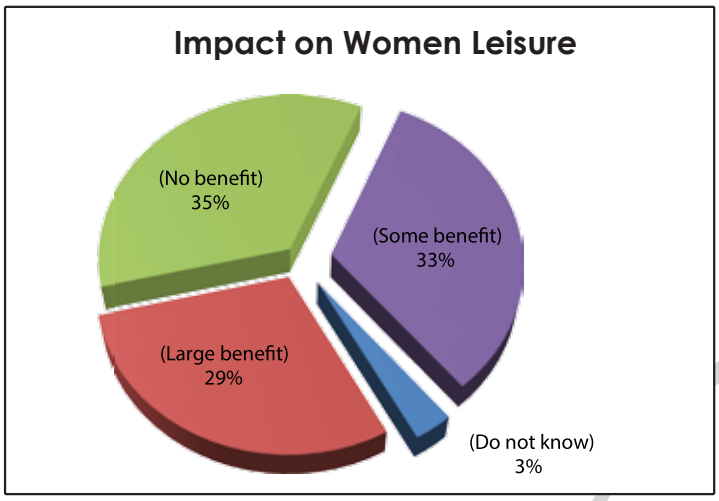


Figure 5.5 Graph demonstrating th impact of DWSS project on women leisure.

5.2 Sanitation and Street Pavement

29 Sanitation and street pavement projects costing 14.52 million and benefitting around 1,410 households were implemented. Major schemes under sanitation and street pavement include brick soling, drainage systems, construction of concrete channels, sewerage systems, street pavements and street lights.

5.2.1 Satisfaction Level

Households are highly satisfied with the way the project has been implemented and managed. No single respondent reported dissatisfaction, 18% respondents termed these projects as highly satisfactory and 58% of the total surveyed households termed them as satisfactory. A quarter of the respondents marked the schemes as moderately satisfactory.

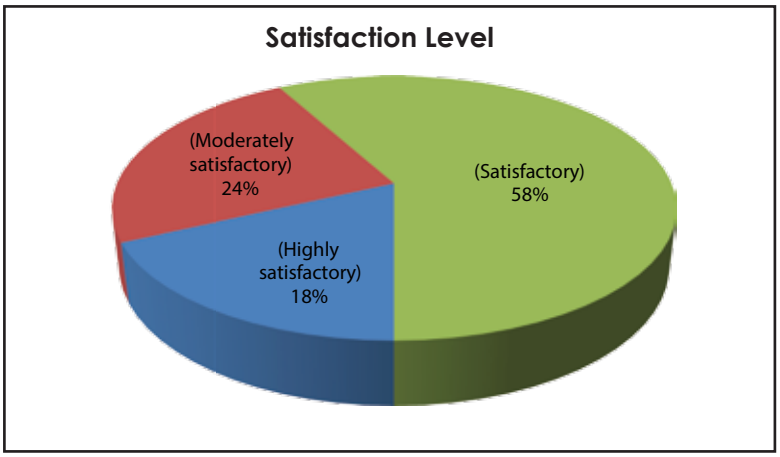


Figure 5. 6 Graph showing the satisfaction level of housholds about the implementation of sanitation and street pavement projects.

5.2.2 Current Functionality

Community representatives are satisfied with the current functionality of 94% of the sanitation schemes. Two third of the total schemes were graded as satisfactory while 19% were graded as highly satisfactory. Current functionality of 6% (one out of 16) of the schemes selected for this survey was graded as unsatisfactory.

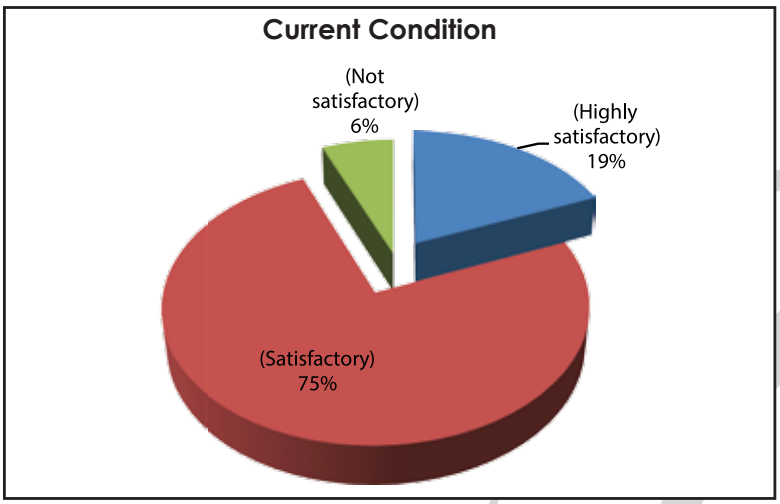


Figure 5. 7 Graph depicting the satisfaction level of the community representatives about the current functionality of the sanitation projects.

5.2.3 Utilization

Two third of the schemes benefitted more than 70% of the targeted beneficiaries, while 25% of them benefitted 40% to 75% of the target beneficiaries. No single project was reported as underutilized or dysfunctional.

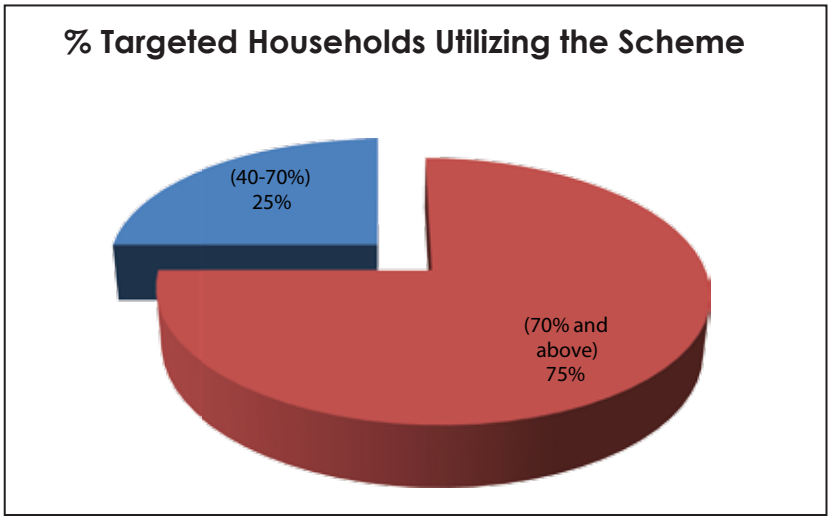


Figure 5.8 Graph representing the percentage of targetted households utilizing the sanitation scheme

5.2.4 Impact on Health and Education

88% of the respondents believe that the sanitation projects have resulted in improvement in health functionality s in the household while 86% percent of the total respondents are sure about the positive impact of the project on the women's health.

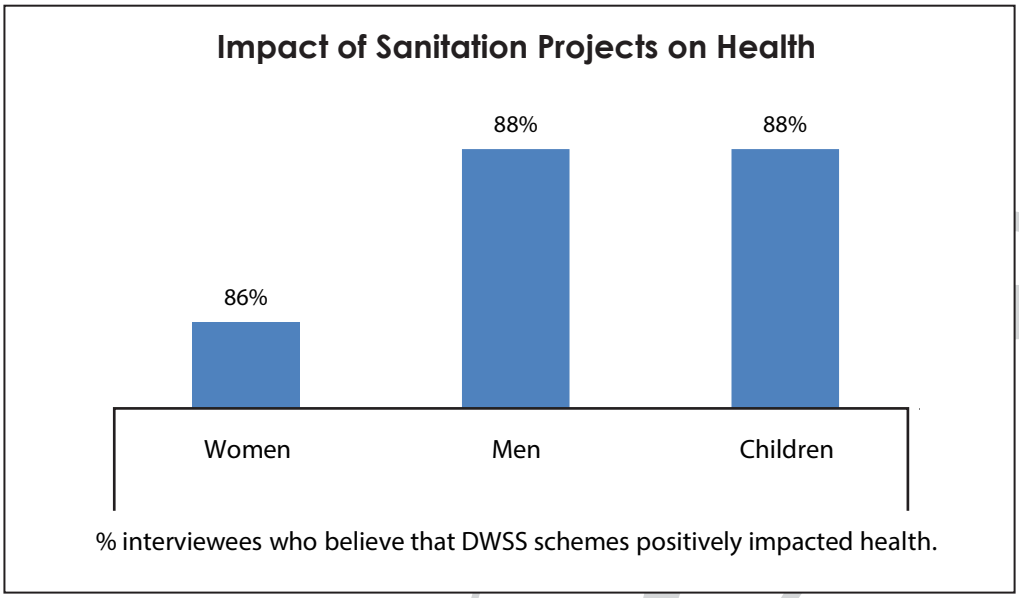


Figure 5.9 Graph demonstrating the impact of sanitation projects on health

Interestingly, perception of the women about the impact of project on their health is a bit different. Analysis of gender segregated data reveals that 92 % of the women respondents believe that PPAF funded sanitation projects have improved their lives.

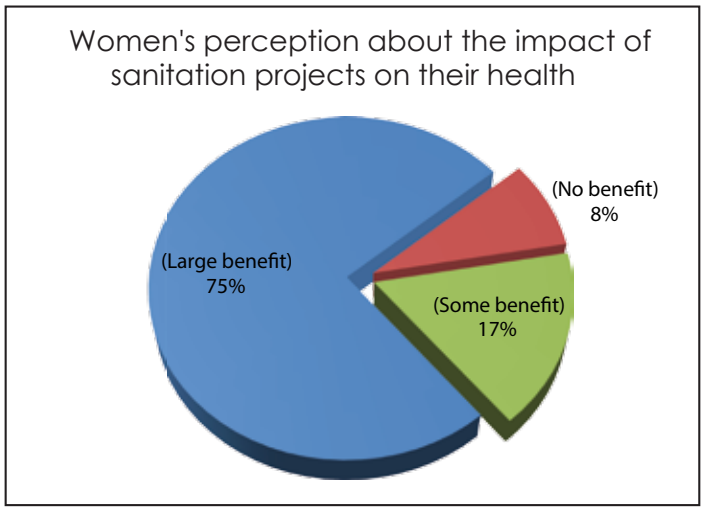
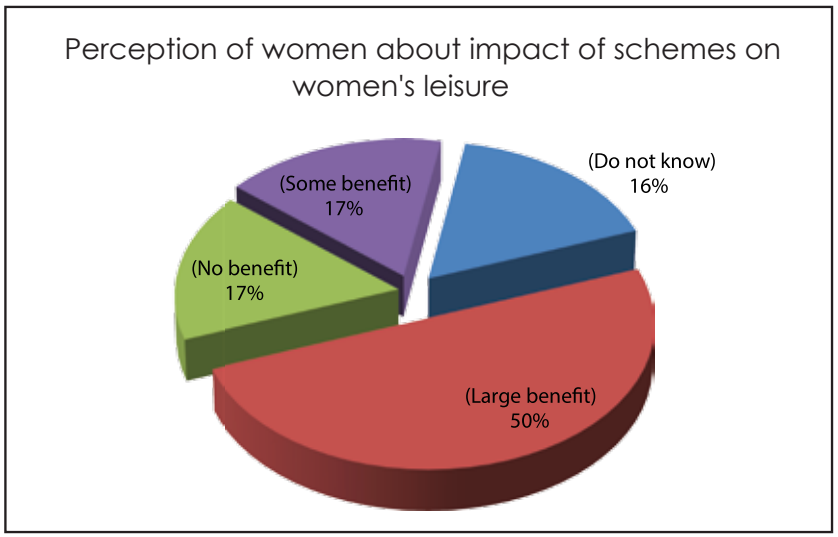


Figure 5.10 Graph depicting the women's perception about the impact of sanitation and street pavement projects on health

More than half of the respondents believe that PPAF funded sanitation projects are living positive effects on education as well. One of the possible reasons for this impact is the fact that improvement in health functionality s of the students and improve hygienic functionality s results in better performance of the children in education.

5.2.5 Impact on Social Life of Women

More than two third of women respondents believe that these projects are living positive impact on women's leisure and their social lives. 17% respondents believe that these schemes have left no impact on the women's leisure.



5.3 Irrigation

206 irrigation schemes including construction of concrete channels, brick masonry of channels, PVC pipe lines, RCC head walls, tube well and water pond were implemented. Communities reported a significant impact of these projects on their economic functionality s. Their impact on the health and education is also encouraging.

5.3.1 Current functionality

89% of the schemes are in satisfactory functionality s, out of which 51% of the schemes were rated as highly satisfactory. 1% of the schemes were not operational while 11% of the schemes are although working, but their functionality is not satisfactory and need major repair and maintenance.

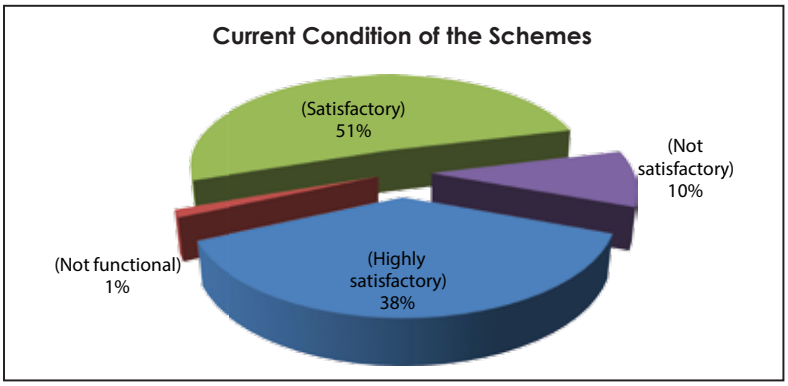


Figure 5.12 Graph demonstrating the satisfaction level of community about current functionality of the irrigation schemes

5.3.2 Utilization

Around two third of the schemes are fully functional and used by more than 70% of the targeted beneficiaries. Only 5 % of the schemes are used by less than 40% of the targeted beneficiaries.

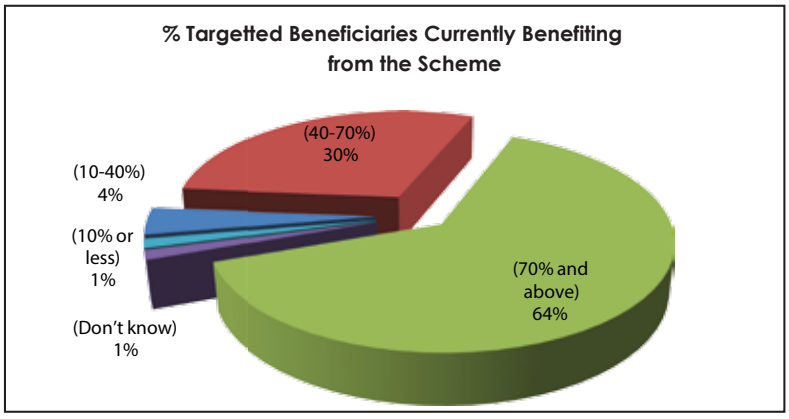


Figure 5.13 Graph representing the percentage of targeted beneficiaries currently benefitting from the irrigation scheme

5.3.3 Impact on Health and Education

Respondent reported that due to increase in income resulting from agriculture schemes funded by PPAF, quality of food, health and hygiene functionality s as well as affordability of health services has improved. More than half of the respondents believe that these projects resulted in larger positive impact on health, while around one third believe that it resulted in some benefit. Only 12% of the respondents believe that it did not result in any benefit on health. Score for impact of agriculture projects on health of women, men and children were more or less the same. Impact on specific health indicators was beyond the scope of this study.

Impact of irrigation projects on boys is much higher than that on girls. Possible reasons for the unequal impact include socio cultural biases about girls' education and unavailability of infrastructure and facilities for female education in the region. 44% of the beneficiaries reported large positive impact irrigation projects on education of boys while 30% of the respondents reported a large positive impact on female education.

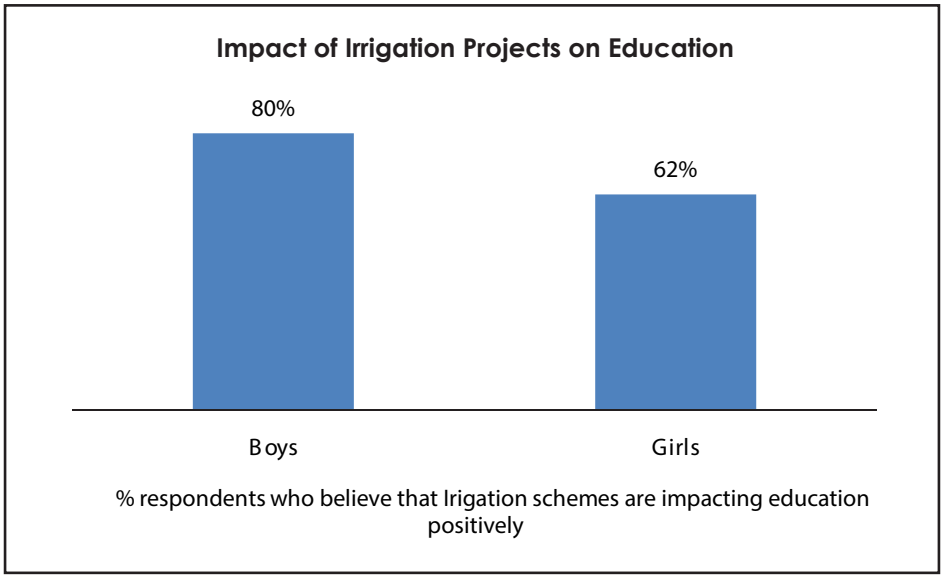


Figure 5.14 Graph showing the impact of irrigation schemes on education

5.3.4 Impact on Women's Social Life and Leisure

86% of the female respondents believe that irrigation project/ schemes left a positive impact on women's leisure. Only 11% female respondents believed that these schemes did not result in any benefit in terms of improvement in women's leisure. More than half of the female respondent reported a high positive impact.

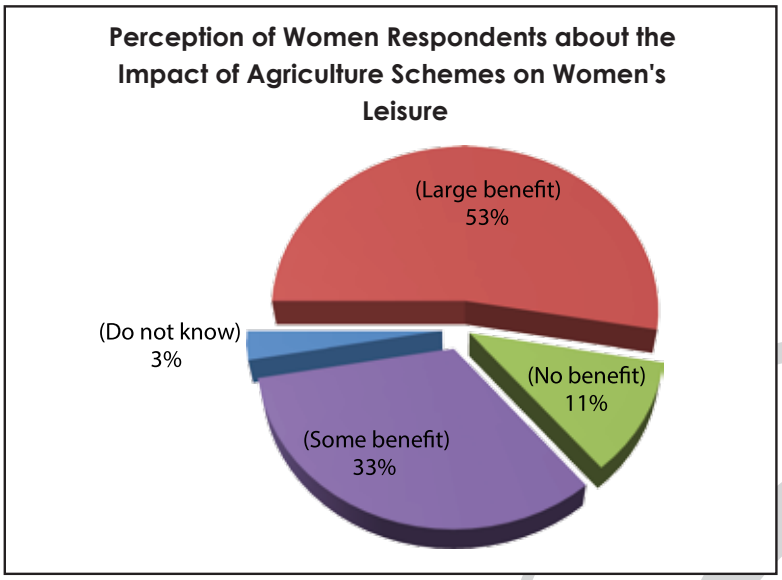


Figure 5.15 Graph demonstrating the perception of women respondents about the impact of irrigation schemes on women leisure

5.3.5 Impact on Economy

357 irrigation schemes were implemented for more than 88,680 persons (11076 households). Total cost of these schemes is 17,484million, out of which 13,498 million was contributed by PPAF. Findings of the survey about the economic benefits of the infrastructure projects are highly encouraging. According to survey results, average per month income of each targeted beneficiary increased by Rs. 1,331 over an average period of 5 years. This means an increase of Rs.127, 734 per household per year. Although other factors including government policies about provision of electricity at fixed rates, rains as well as inflation contributed towards this increase, communities believe that the increase would have never been possible, had PPAF not supported communities in improving their agriculture infrastructure.

84% of the beneficiaries said that the project positively impacted their income. Interestingly 3 households (less than 1% of the total surveyed households) reported that these projects have negatively impacted their income and savings.

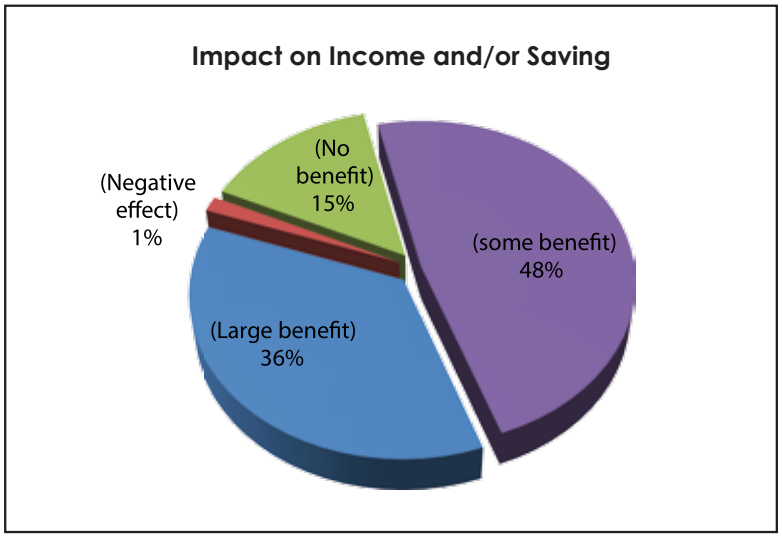


Figure 5.16 Graph showing the impact of irrigation projects on the income

82% of the surveyed households brought additional land under irrigation as a result of these schemes.

5.3.6 Availability of Food for Domestic Use

60% of the households believe that irrigation schemes resulted in increase in availability of food for domestic consumption. 40% believe that they did not improve the availability of food for domestic consumption. This result, when seen with the impact of schemes on saving, gives an impression that in a number of cases additional yield was sold in the market, and hence, it was not easily possible to understand their impact on availability of food for domestic purposes.

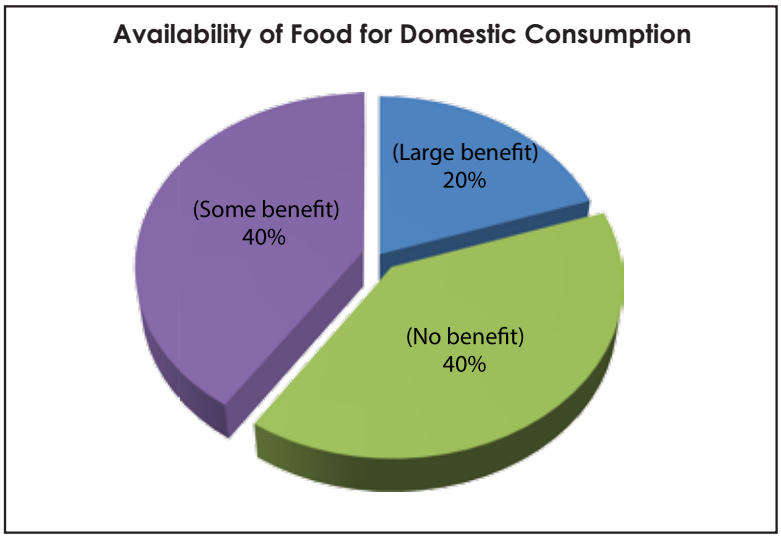


Figure 5.17 Graph demonstrating the impact of irrigation projects on the availability of food for domestic consumption

5.3.7 Overall Satisfaction Level

96% of the respondents expressed their satisfaction on the irrigation schemes. Only 4% of the beneficiaries were not satisfied with overall performance of the schemes.

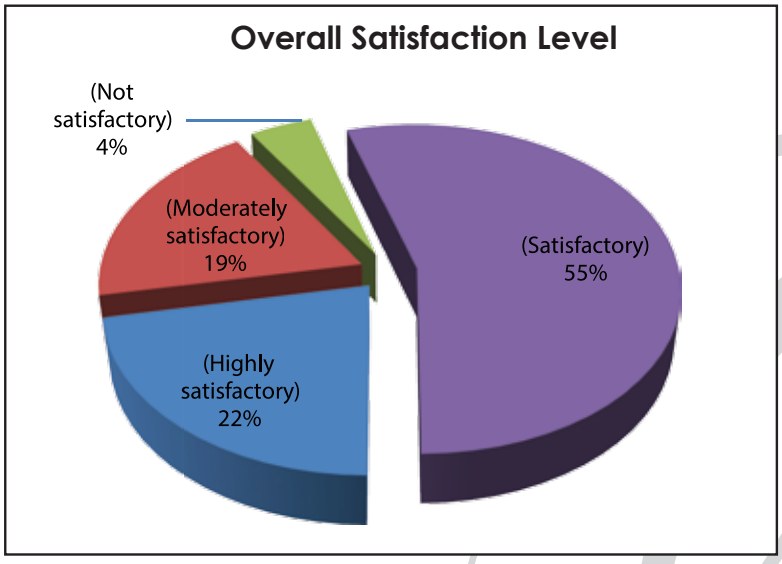


Figure 5.18 Graph representing the satisfaction level of respondents on the irrigation schemes

5.4 IWRM

84 IWRM schemes targeting 58,584 persons (7,323 households) were implemented. Total cost of these schemes was Rs. 107.29 million out of which 77.13 million was contributed by PPAF. The major schemes under IWRM include Karez rehabilitation, extension, cleaning; lining of channels, PVC pipelines, water ponds etc. Benefit of IWRM schemes is two folded. First they result in improved access to water for drinking and sanitation. Secondly they contribute towards increasing the yields from the farm.

5.4.1 Current Functionality

Communities believe that the current functionality of all the surveyed schemes is satisfactory. 39% of the schemes were reported as highly satisfactory. Communities were particularly happy with water ponds with PVC lines and Karez rehabilitation/extension schemes.

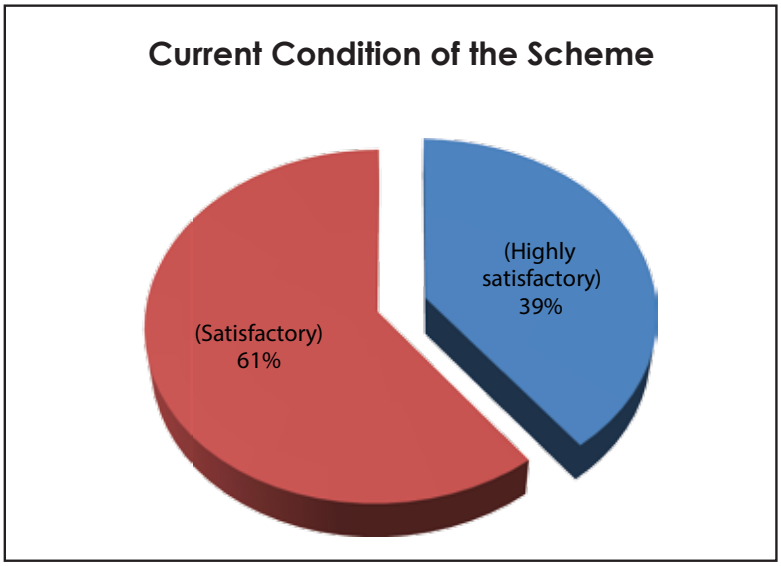


Figure 5.39 Graph showing the current functionality of the IWRM schemes

5.4.2 Utilization

No single IWRM scheme was reported as dysfunctional or underutilized. 70% of the schemes were reported as fully utilized. About 22% of the schemes COs believe that they are utilized by 40 to 70% of the beneficiaries.

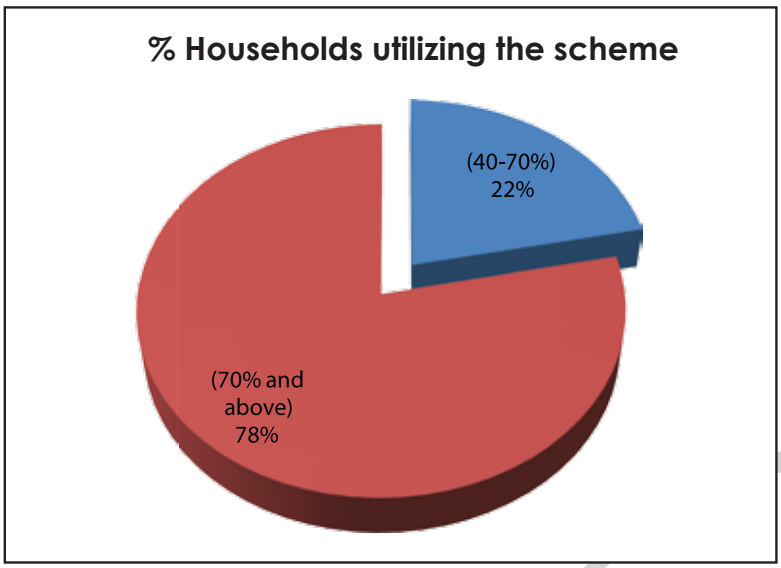


Figure 5.20 Graph showing the percentage of housholds utilizing the IWRM scheme

5.4.3 Impact on Health

Beneficiaries believe that IWRM schemes have left a positive impact on the health of women, children as well as men. Women respondent were particularly confident about the impact on their health.

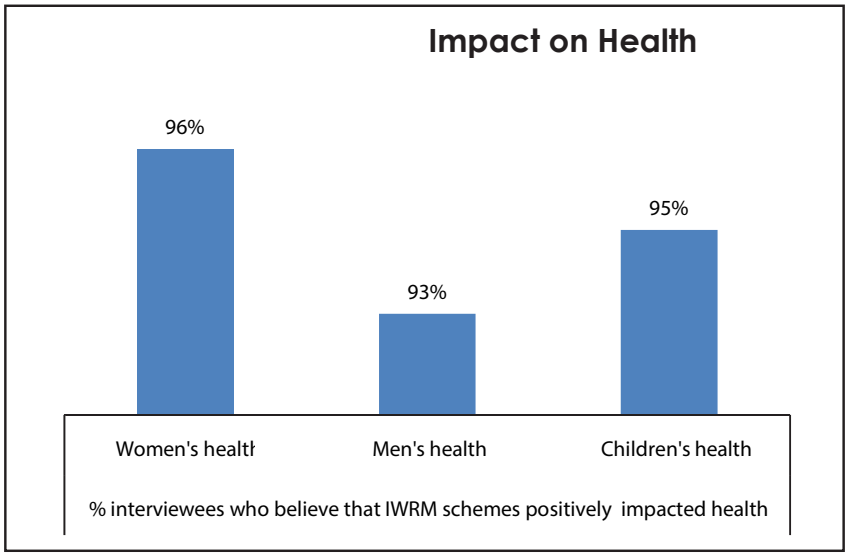


Figure 5.39 Graph showing the current functionality of the IWRM schemes

5.4.4 Impact on Education

More than 90% of the respondents believe that IWRM schemes have left positive impact on male as well as female education.

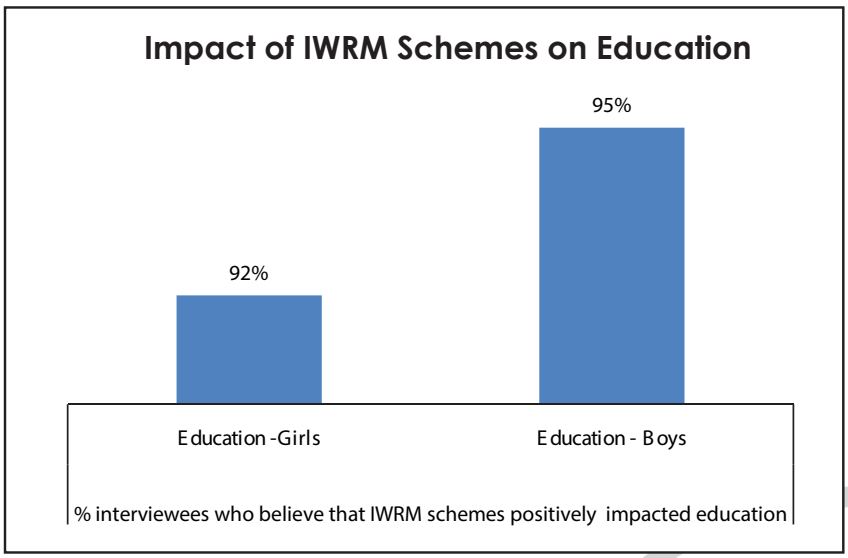


Figure 5.22 Bar graph showing the impact of IWR projects on education

5.4.5 Impact of Scheme on Women's Leisure

Half of the female respondents believe that benefits of IWRM projects have been large in terms of their impact on women's leisure. 17% reported that these projects resulted in some positive impact on women's leisure, while similar proportion said that they did not result in any improvement on their health. 16% of the respondents were not sure about any such impact.

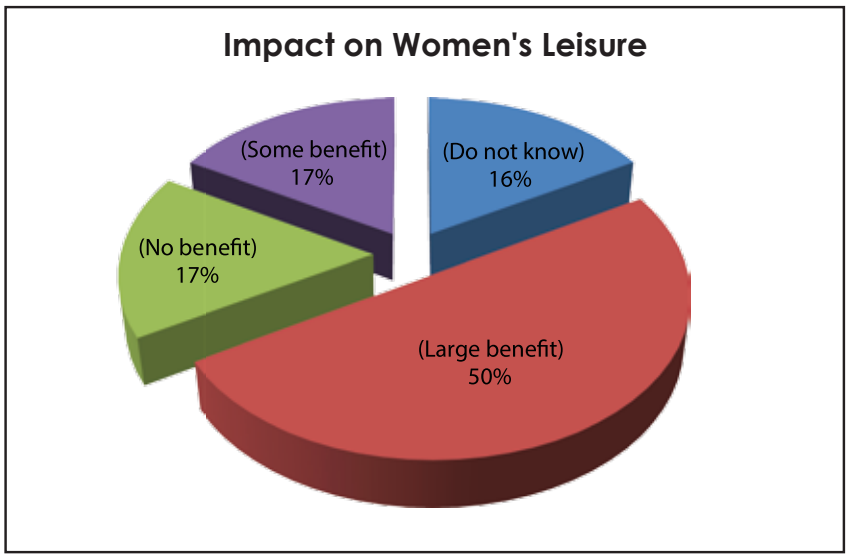


Figure 5.23 Graph representing the impact of IWRM scheme on women's leisure

5.4.6 Economic Impact

56% respondents believe that IWRM projects have resulted improvement in their income and savings. 29% respondents believe that it did not result in any increase in income/savings while, 15% are not sure about any impact of these schemes on their income/savings.

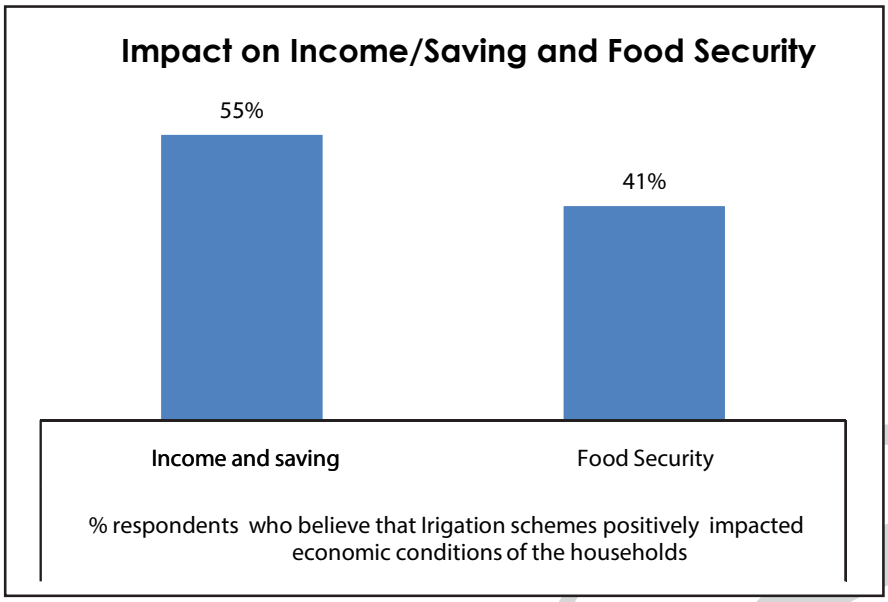


Figure 5.24 Graph representing the impact of IWRM projects on the income and savings

41% respondents believe that IWRM schemes have resulted in availability of food for domestic consumption, 18 % think that this impact is quite significant. On average, these projects brought 1.08 Acres of land per household under irrigation. Total per year increase in household income (recorded after 5 years from the implementation of the project) is Rs. 34,345 (=Rs. 238/person/month).

5.5 Current functionality and Impact of PPAF Funded Infrastructure Projects focusing on Disaster Management and Protection

5.5.1 Current Functionality of the Schemes

CO office bearers/members expressed their satisfaction in 91% of the projects, meaning that these projects are functioning satisfactorily with minor issues. All the unsatisfactory projects were DWSS projects, while no irrigation, Karez rehabilitation and land reclamation project was reported as unsatisfactory. BRSP has also been able to explore other funding opportunities to improve the physical infrastructure facilities in different parts of province. It has worked in partnership with organizations like KFW, EU, UNDP, and GTZ.

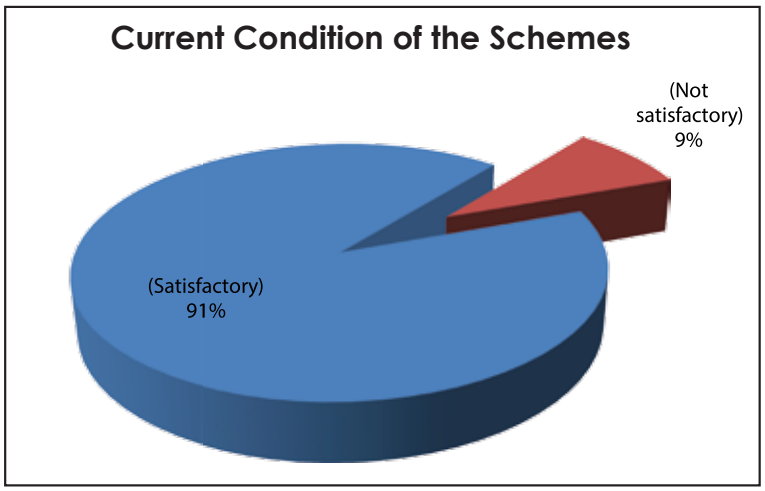
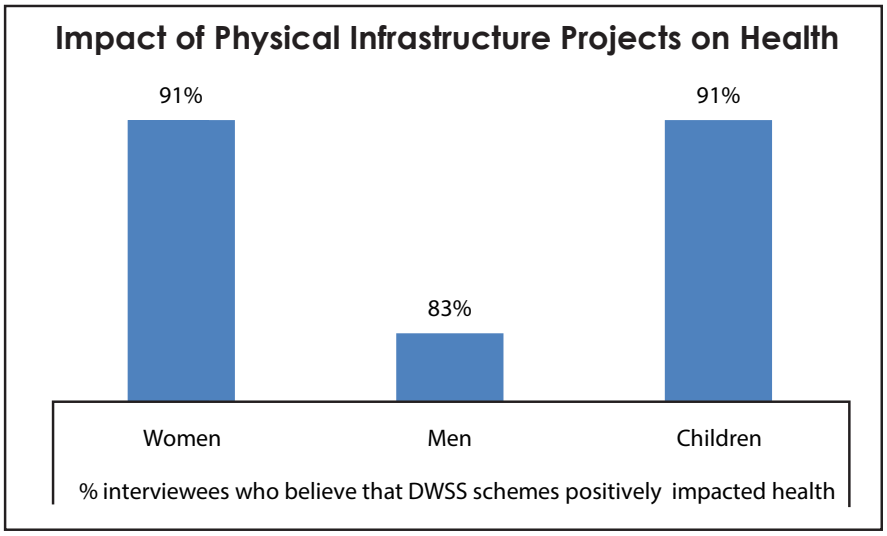


Figure 5.25 Graph showing the current functionality of PPF-funded infrastructure projects focusing on disaster

5.5.2 Utilization

Not a single physical infrastructure project focusing on disaster management and protection was reported as underutilized. 70% of the projects were reported as being fully utilized meaning that more than 70% of the target beneficiaries are benefitting from the scheme.



5.5.3 Impact on Health

Physical infrastructure projects focusing on disaster management and protection have left a positive impact on health of women and children. Beneficiaries particularly appreciate the impact on health of women and children.

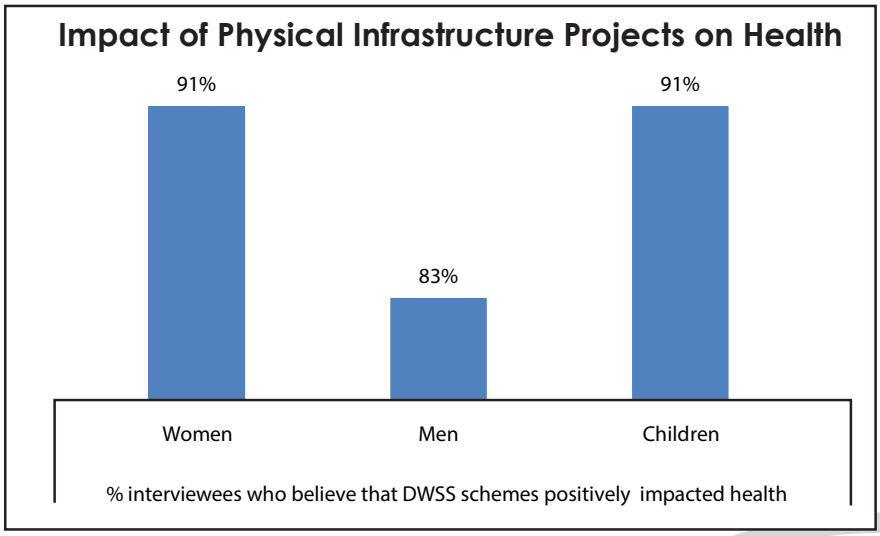
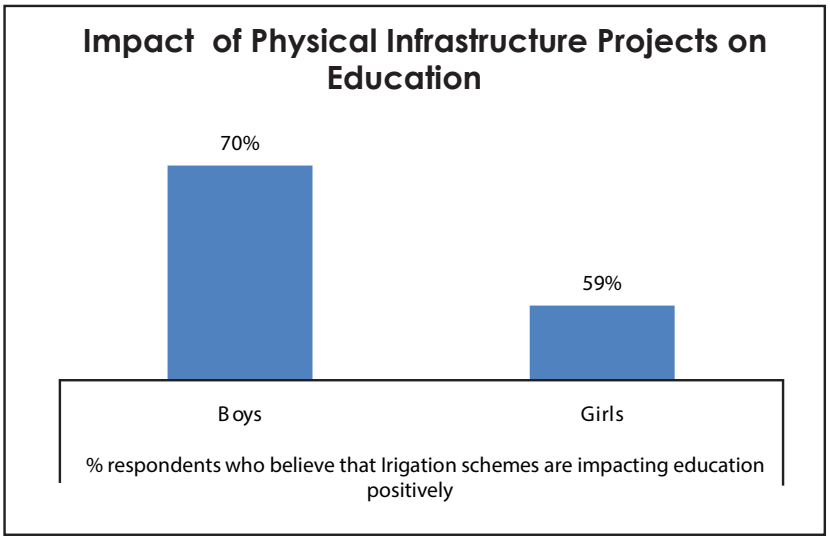


Figure 5.27 Graph representing the impact of PPF-funded infrastructure projects focusing on disaster management and protection on the health.

5.5.4 Impact on Education

Majority of the respondents (households) believe that physical infrastructure projects focusing on disaster management and protection left a positive impact on education. However, impact of the project on girls' education is comparatively lesser than that on boys. (Similar trend was observed in case of projects support under Community Physical Infrastructure Unit). Possible reasons for this inequity in impact include cultural constrains and limited availability of education facilities and infrastructure for girls.



5.5.5 Impact on Economy

Households believe that PPAF funded PVC have positively impacted their income and savings. They also believe that they have resulted in availability of additional food for domestic consumption.

5.5.6 Employment Opportunities to the Community

Important component of cost of these project was labor. Although community provided unskilled labor in a number of . cost of skilled labor is an important component of the project cost. A large number of skilled labor was employed to implement different schemes during the life of the project. In a number of areas a number of community members who could not provide unskilled labor made financial contribution in lieu of unskilled of work. This also resulted in creation of employment opportunities for unskilled labor who generally belong to low income groups of the society. The project also involved purchase of cement and other construction material. The project also involved which enhance the economic activity in a number of local markets.

Major factors that contributed to increased income include: increase in per acre yield due to availability of additional water and increase in yield by bringing additional land under irrigation.

5.5.7 Overall Satisfaction Level

Responding to question: "Are you satisfied with the scheme (and the way it has been implemented)", 81 % respondents (households) said that they are satisfied with the project. This also includes participants who said that the scheme was moderately satisfactory.

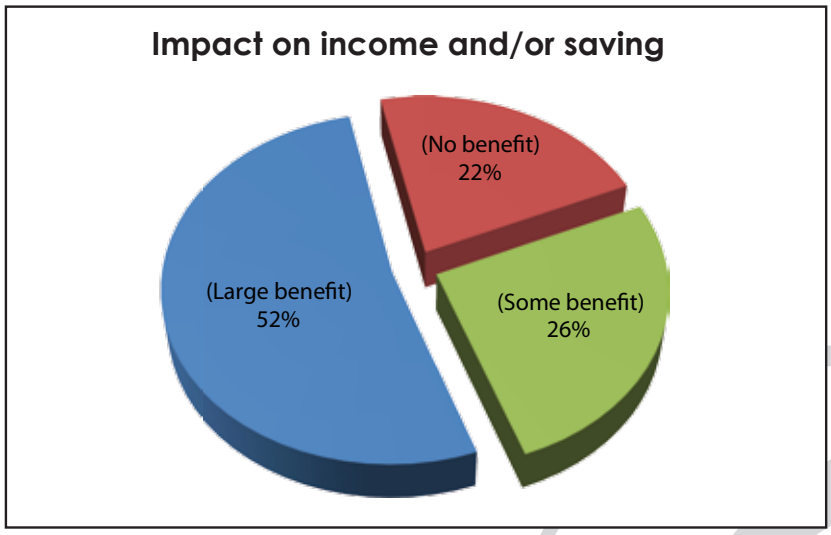


Figure 5.29 Graph demonstrating the impact of PPF-funded infrastructure projects on income and saving

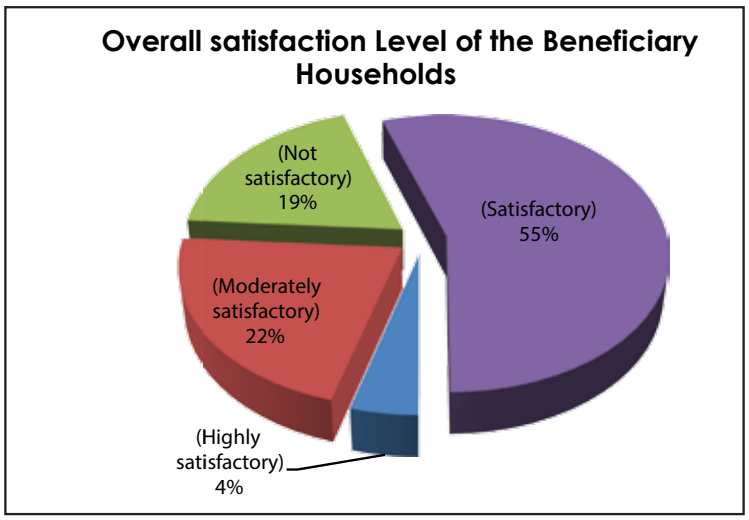


Figure 5.30 Graph demonstrating the satisfaction level of respondents about the PPF-funded infrastructure projects focusing on disaster management and protection

Overall satisfaction level is highest in case of irrigation and Karez rehabilitation projects, where no single respondent said that he/she is not satisfied with the scheme. However, satisfaction level is comparatively low in DWSS projects. The following table summarizes the responses related to different schemes implemented under physical infrastructure projects focusing on disaster management and protection.

Table 5: Overall satisfaction on physical infrastructure projects focusing on disaster management and protection schemes

Row Labels	Highly satisfactory	Moderately Satisfactory	Not satisfactory	Satisfactory	Grand Total
DWSS	1	2	6	3	**12**
Irrigation	-	4	2	6	**12**
Karez Rehabilitation	-	2	-	9	**11**
Land Reclamation Project	2	7	4	20	**33**
Farm Rejected	-	-	1	-	**1**
Grand Total	**3**	**15**	**13**	**38**	**69**

5.5.8 Other Aspects of the Project

Role of committees

Committees were involved in identification planning and implementation of the physical infrastructure project. Community organizations informed BRSP about need for a specific infrastructure project through a community resolution signed by two third of the members of the community organization. Communities practically participated in the project implementation process by providing unskilled labor. They participated in the different aspects of project implementation including procurement of material, supervision of labor, and monitoring activities. They also made financial contributions and formed O & M committees to make these projects sustainable. (Details of such committees is given under the heading O & M committees.

6 Recommendation

The project has not only been successful in achievement of its outputs and deliverables but has also been able to make a significant impact on the quality of life of the target communities. Target communities feel that these projects will continue to make a positive impact on their lives. Certain projects like Karez rehabilitation and rural solar electrification projects have been extremely successful. Other projects including, drinking water supply scheme= sanitation and street pavements, integrated water resource management projects and irrigation projects have satisfactorily met community expectations. However, unfortunately, a large proportion of wind power projects are dysfunctional.

PPAF has been proactively involved in project designing and monitoring in the field. CPI team has conducted monitoring visits to remote and far flung project sites. They have reviewed the designs of around 20% of the projects and provided technical input to the project team to enhance their effectiveness. They have also been able to reach some of the areas that are considered to be sensitive in terms of security.

The following are the major recommendations to further enhance the impact of these projects.

- Keeping in view the decline in water table during the last few decades, it is recommended that BRSP should discourage projects that can further worsen the situation. BRSP should encourage projects that can contribute towards efficient and sustainable use of available water. More specifically,

    - BRSP should allow projects involving extraction of water (for irrigation as projects in the long run.

    - BRSP should support projects like small scale check dams, lining of water channels and other project that can contribute towards recharging the water table or can ensure efficient use of the available water (e.g. introducing water efficient plant).

- Survey results reveal that agriculture related infrastructure projects have significant potential to improve the livelihoods of the poor. People reported that such projects are also contributing toward improvement in health and education as households use a part of income from agriculture on health and education. Therefore, it is recommended that physical infrastructure projects having comparatively higher potential to improve the livelihoods of the poor should be identified.

- Technologically innovative projects collectively managed by the communities have comparatively been less successful than others. A large number of such projects are dysfunctional. Rate of failure of such projects further

increase in far-flung areas were spare parts are not easily available. However, interestingly, solar panels, owned by individual households are amongst the most successful schemes in terms of their utilization and satisfaction level expressed by the communities. Therefore, it is recommended that

- Household solar electrification schemes, where equipment is owned by individual household, should be encouraged

- Medium and large scale technologically innovative projects involving joint management of the schemes by more than one household should be implemented after conducting a proper feasibility study. BRSP may also consider other options to enhance the success of such projects: including provision of matching grant to individual entrepreneurs for provision of power and other required facilities through innovative projects. BRSP can also consider signing agreements with the vendors to ensure maintenance of the facility by the vendor for more than five years. This can significantly reduce the risk of closure of such project.

- BRSP should come up with a strategy to enhance the effectiveness of the O&M Committees.

- It is strongly recommended that the concept of social audit should be introduced in the communities. For this purpose proper guidelines should be developed and communities should be given appropriate training.

Annexes

Annex -1: Questionnaire for Household Survey

1. Basic Information

Project No.	UC	Village	Scheme Type

2. Information about the Household

Name of Interviewee	Gender of Interviewee	Name of Person in the Household

3. A) Time saved by the CPI (fill this table for activities saving time on daily basis, fill table B for activities saving time)

Trips/Activities Involving Time Saving	Adult (Age: 18 years or more)				Children (Age: 17 years or less)			
	a) Time saved - Minutes Per Trip/Activity	b) Trips Per Day	c) No. of Adults	Total Time Saved (axbxc)	d) Time saved - Minutes Per Trip/Activity	e) Trips Per Day	f) No. of Adults	Total Time Saved (dxexf)
Fetching Water								
Going to Field								
General Store								
Bus Stop								
Boy's School								
Girls School								
Health Facility								
Tehsil Administration								
Any other Activity Name								
TOTAL								

3. B) Time saved by the CPI (For activities saving time on weekly basis)

Trips/Activities Involving Time Saving	Adult (Age: 18 years or more)				Children (Age: 17 years or less)			
	a) Time saved - Minutes Per Trip/Activity	b) Trips Per Day	c) No. of Adults	Total Time Saved (axbxc)	d) Time saved - Minutes Per Trip/Activity	e) Trips Per Day	f) No. of Adults	Total Time Saved (dxexf)
Fetching Water								
Going to Field								
General Store								
Bus Stop								
Health Facility Any other Activity Name								
TOTAL								

4. Increase in yield as the result of CPI (not applicable for drinking water supply schemes and sanitation and road pavement)

Name of Crop	a) Productivity before CPI	b) Unit of measurement	c) Productivity after CPI	d) Production (2013)	e) Increase in yield because of CPI (d-a)	f) Market Rate of the produce (Rs. per unit of measurement)	g) Value of increased yeild Rs(exf)	h) Increase in operational cost (Rs)as a result of CPI
Onion								
Cotton								
Maize								
Rice								
Potatos								
Sugarcane								
Apple								
_								
_								
Total								

5. Impact on Health (Women)

Large Benefit	Some Benefit	No Benefit	Negative Effect	Do Not Know

6. Impact on Health (Men)

Large Benefit	Some Benefit	No Benefit	Negative Effect	Do Not Know

7. Impact on Health (Children)

Large Benefit	Some Benefit	No Benefit	Negative Effect	Do Not Know

8. Impact on Education (boys) - e.g. time spend on Education Related Activities

Large Benefit	Some Benefit	No Benefit	Negative Effect	Do Not Know

9. Impact on Education (girls) - e.g. time spend on Education Related Activities

Large Benefit	Some Benefit	No Benefit	Negative Effect	Do Not Know

10. Women's Leisure

Large Benefit	Some Benefit	No Benefit	Negative Effect	Do Not Know

11. Impact of Income/Saving on Households

Large Benefit	Some Benefit	No Benefit	Negative Effect	Do Not Know

12. Dis this project result in availability of more food (wheat, rice, vegetable etc. for domestice use

Large Benefit	Some Benefit	No Benefit	Negative Effect	Do Not Know

13. Are you satisfied with the performance of CPI

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Not Satisfactory

14. Additional land brought under irrigation because of water channel, tube well or other agriculture related scheme

Unit	Land
Jirab	
Takhta	
Acre	

15. Interviewer:

Name, designation	Signature

Annex-2: Questionnaire for Meeting with Community Institutions

1. Basic Information

Project No.	District	UC	Village	No. of Households in the Village	Scheme Type

2. CO Related Information

Name of CO	Total Members of CO		FDG Participants	
	Male	Female	Male	Female

3. Beneficiaries

Total Direct/Primary Beneficiaries			Total Indirect Beneficiaries		
Total Households	Female Beneficiaries	Male Beneficiaries	Total Households	Female Beneficiaries	Male Beneficiaries

4. Community Contributions

Skilled Labour	Unskilled Labour	Material	Equipment
Yes - No	Yes - No	Yes - No	Yes - No

5. CPI is safe from the risk of closure in 5 years?

Yes	No

6. CPI is safe from the risk of closure in 10 years?

Yes	No

7. Any other impact (you can write in Urdu)

8. What has been the impact of the project on migration (Tick the relevant box)

1. Some people started migration out of village	
2. No impact	
3. Some peple migrated into village	

9. Utilization refers to the percentage of targeted households using a scheme

Full Utilization Over 70%	Partial Utilization: 40-70%	Limited Utilization: 10-40%	No. Utilization: Unused for 6 months prior to the survey or less than 10%	We do not know

DWSS

10. How many households in the village had/have access of to pipe water/water from tube well/pump within 100 meters from their house

Befor CPI	After CPI

CURRENT CONDITION OF DWSS

Highly Satisfactory (no losses/no physical damage)	Satisfactory (At most 33% water losses)	Un Satisfactory (More than 33% losses)	Not Operational (Not worked for 6 months prior to the survey)

SANITATION AND ROAD PAVEMENT

11. How many households in the village had/have access of to proper sanitation (pit latrine, flush latrine, etc.)

Befor CPI	After CPI

12. How many households in the village had/have access of to paved streets (pit latrine, flush latrine, etc.)

Befor CPI	After CPI

ROAD AND BRIDGES

13. How many households in the village had/have access of to jeepable road at less than 100 meters from their house

Befor CPI	After CPI

14. Current condition

Highly Satisfactory (Paved roads, largely free of defects, requiring only routine maintenance and surface treatment & Unpaved roads which need only routine grading and localized repairs)	**Satisfactory** (Paved roads with defects and weakened structural resistance. They require resurfacing but - without the need to destroy the existing pavement & Unpaved roads, which require grading and additional new gravel, plus drainage repair in some places)	**Un Satisfactory** (Paved or unpaved) Barely functional and un-maintainable without substantial rehabilitation)	**Not Operational** (No operational for last 6 months)

AGRICULTURE/IRRIGATION/INTEGRATED WATER RESOURCE MANAGEMENT

15. Current Condition of Irrigation scheme

Highly Satisfactory (no water losses and no physical damage)	**Satisfactory** (up to 25% water losses and poor physical condition)	**Un Satisfactory** (more than 25% water losses)	**Not Operational** (Not working for last 6 months)

VILLAGE VERIFICATION

16. How many households in the village had/have access electricity

Befor CPI	After CPI

17. Current Condition of Ithe village electrification project

Highly Satisfactory Working at its full capacity	**Satisfactory** (TIP is functioning with minor Problems)	**Un Satisfactory** (working but major problems)	**Not Operational** (Not working for last 6 months)

FLOOD PROTECTION WORKS

18. How many households in the village had/have access electricity

Highly Satisfactory (Intact, apparently in very good condition, largely free of defects)	**Satisfactory** (minor issue)	**Un Satisfactory** (some cracks in the structure, broken in a few places)	**Not Operational** (Not working for last 6 months)

O&M COMMITTEE

19. Functional O&M Committee (A separate committee other than CO/WO

Yes	No

20. Fund collection by Community

Regular	Need Base	None

21. Functional O&M Account

Yes	No

FOR DYTTSFUNCTIONAL PROJECTS

22. For how long the project has been functional in case it is not currently functional

Days	Months	Years

FACILITATOR / INTERVIEWER

23. Name and Signature

Name & Designation