

Community Participation in Sustainability of Development Projects: A Case Study of National Solidarity Program Afghanistan

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Abstract

Community Participation Approach is seen as one solution to overcome the problem of sustainability of development projects. This paper tries to find out the best participatory approaches which can influence the sustainability of development projects. National solidarity program Afghanistan is selected as a case study. In this research, researcher primarily used evaluation method. A mixed methodology approach, including qualitative and quantitative approaches are employed in filed to collect and analysis the data. In qualitative approach data are gathered through qualitative sources such as interviews, observations, reports and archived documents. Quantitative approach using self-administrated questionnaire was applied to collect quantitative data from respondents on the study model a sample size of 250 respondents was obtained through proportional random sampling and 10 interviews was conducted with FPs. The result obtained from the study shows that participatory planning and Design Beta value is .358, participatory implementation Beta value is .273, participatory monitoring and evaluation Beta value is .232 and Beta value for participatory Need assessment is .213 and all the variables are significant ($p\text{-value } 0.000 < 0.05$).

Keywords: Participatory Need Assessment, Participatory Planning and Design, Participatory Implementation, Participatory Monitoring and Evaluation, Project sustainability

1. Introduction and Research Background

Success of Marshall Plan in 1950s for the recovery of Europe lead to perception that well designed development activities could incite quick result if it is logically visualized and systematically managed (Brohman, 1996). Interest in this study was developed when the researcher started reading about development studies and about different aid paradigms. The researcher found out that donor countries and agencies are enquiring the impact of foreign assistances provided to the third world countries. This seems reasonable because if the assistance delivered does not result in enhancement in the livelihood of communities, then that assistance would be regarded as a wasted resource. Consequently, there is a necessity to make sure that assistance distributed to the developing country benefits communities in the long term. Consequently, donor countries, multilateral donor agencies are raising concern about the impact and sustainability of development programs and projects, meaning that the benefits and services which projects and programs provided after the departure of projects or programs must be maintained. Generally, countless development projects failed to succeed to achieve their planned objectives (Bishop et al., 2001). Many reasons are responsible for this phenomenon. One of the most crucial reason is the technique in which projects or programs are planned and executed (Bishop, 2001). In 1990s international agencies such as World Bank (WB) and Australian Agency for International Development (AusAID) applied community participation as an approach to overcome the failure of development projects.

This study is built upon the researcher's interest over how various donor projects and programs are executed, especially in Afghanistan. Based on research and reports of donor agencies and the government of Afghanistan, there have been instances of many programs and projects being executed without any remarkable positive impact on the targeted beneficiaries (Lutz and Desai, 2014) especially those living in rural community who are the economy base of Afghanistan. 80% Population of Afghanistan are living in rural area (World Bank, 2014). Most program and projects just give assistance in shape of cash money or some agricultural materials to community without actually knowing if it would be valuable for target participants or not. The gap was identified that program and projects were centrally planned (top-down approach) without any involvement of communities, targeted communities are only involved in some execution activities of the Program and Projects. Some primary evidence found that when the program and projects ended the communities commonly did not want to maintain or to continue the presented projects activities and did not want to show any sense of ownership for the maintaining of the services provided by the program and projects. It frequently resulted that at the end of the day there were no significant long-term result or influence to the community. To find answer to this curiosity about this study, researcher choose National Solidarity Program Afghanistan (NSP) Phase three as a case study for this research because National Solidarity Program Afghanistan is the largest Development Program in the history of Afghanistan which is implemented by Ministry of Rural Rehabilitation and Development (MRRD) of Afghanistan and it is supported by World Bank (WB) and a consortium of various donors. NSP is a community-driven development program. Thousands of Community-Driven Development initiatives have been under taken

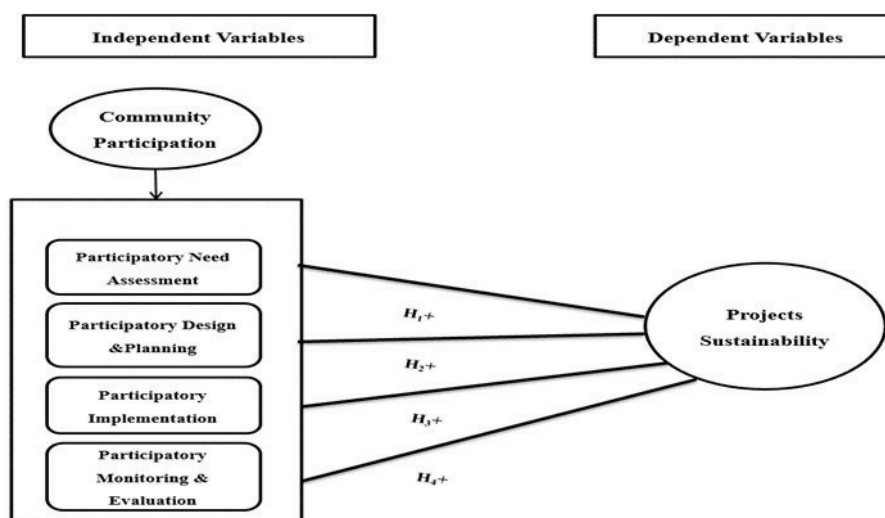
all over the developing countries but some have gotten as much consideration as the National Solidarity Program Afghanistan According to the impact evaluation report of NSP (2013) between 2003 and 2013, over 64000 projects were introduced under the NSP, across 34 provinces with a total budget of 1.01 billion American dollars. Overall the NSP program budget from the beginning 2003 until the end of phase three in mid-2015 is estimated at \$2.7 billion (World Bank, 2013 and Ministry of Rural Rehabilitation report, 2010).

2. Literature review and Research Gap

Community participation and projects sustainability have become important nowadays among development and project management scholars. Community participation and project sustainability are contested concepts which have multidimensional explanation. The definition which is used to measure the sustainability of development project is the capability of a project or program which continuously responds to community problems or concerns (World Bank, 2013 and Mancini and Mark, 2004). In this study, sustainability is defined as “the sustainability of project benefits beyond the project period and is measured by the percentage of goods and services maintained and delivered after 5 years of termination of implementation of the project: the continuation of local action stimulated by the project and generation of successor services and initiatives as a result of project built local capacity” (Rondinelli, 2013)

Many researches have been undertaken in the area of community participation but best of Researcher knowledge no study has been conducted in the context of Afghanistan. Secondly, no research has been undertaken which examines impact of community participation using participatory tools and techniques such as Participatory Need Assessment, Participatory Planning and Design, Participatory Implementation, Participatory Monitoring and Evaluation on project sustainability. There is also a leakage of research on finding the significance of these participatory techniques in each stage of project life cycle.

2.1 Conceptual Framework



Source: Researcher own compilation

2.2 Research Hypothesis

Hypothesis 1: A positive relationship between participatory need assessment and projects sustainability.

Hypothesis 2: A positive relationship exist between participatory design & planning and projects sustainability.

Hypothesis 3: A positive relationship exist between participatory implementation and projects sustainability.

Hypothesis 4: A positive relationship exist between participatory monitoring& evaluation and projects and programs sustainability.

3. Research Objectives

The main Purpose of this research is to examine effect of community participation techniques on the sustainability of development projects or programs in Afghanistan. Specifically:

1. To measure the level of participation of rural community in the need assessment, design and planning, implementation and monitoring and evaluation of development project or program in the NSP phase three.
2. To determine if community participation is effective in sustaining projects or programs benefits.

3. To examine the related impact of individual participatory techniques on projects or programs sustainability.
4. Provide recommendation to the community, policy maker, NGOs and government of Afghanistan in term of community participation and sustainability of development projects.

4. Research Question

A number of development projects or program were implemented by local governments, World Bank and other agencies through the top-down approach however, beneficiaries were not involved in any stage of the program or project life cycle. This resulted in insufficient impact of projects or program on targeted beneficiaries as 40 percent of projects or program intervention are not being sustained for one to two years after the withdrawal of external funds (ADB independent evaluation report of project sustainability, 2010). The following question will be addressed, which will be answered in this study;

1. Whether community participation does or does not influence projects and programs sustainability?
2. How participatory techniques support projects and programs sustainability?

5. Significance of the Study

The result of this research will be important in many dimensions: such as:

- The research finding might provide a base to improve the sustainability and impact of rural development programs or projects in Afghanistan and also in other developing countries.
- Recommendation drawn from this research may provide useful and essential information and knowledge that influences plans, policy and reforms for improving sustainability of development programs or projects and may be utilized by government agencies, communities, policy makers, implementing partners, bilateral and multilateral donor agencies to address the sustainability challenges and plan better methods of executing a sustainable development intervention.
- The lesson which will be drawn from this study is to emphasis on effective community participation on those organizations which do not have the mechanism for involvement of stakeholder in project life cycle.
- The study's finding may be useful for project managers as a guideline to be aware of the importance of community participation throughout project life cycle and for improvement of future project performance.

6. Methodology

6.1 Research Design

A mixed methodology approach, including qualitative and quantitative approaches are employed in field to collect and analysis the data. In qualitative approach data are gathered through qualitative sources such as interviews, observations, reports and archived documents. Quantitative approach using self-administrated questionnaire was applied to collect quantitative data form respondents on the study model.

6.2 Sampling Procedure and Sample Size

To identify the sample for this research a multi-stage sampling technique combine of probability and non-probability sampling was applied for this research. A purposive sampling was applied to select the community respondents from the population because of some constraint such as time, cost and security problem researcher only was able to collect data from some provinces such as, Bamyen, Deykondi, Ghazni and Herat. In second stage proportional random sampling was applied to select the community respondents. National Solidarity Program (NSP) has contracted with 29 facilitating partners (8 National and 21 international NGOs) to work directly with targeted communities to implement NSP activities at local level. A convenience sampling was used to select 10 NGOs employee which was working in these provinces.

Table (1) Sampling Methods and Sample Size

No	Respondents	sampling method	Total	sample
1	provinces	purposive sampling	34	4
2	Communities	proportional random sampling	7220	250
	Bameyan	proportional random sampling	705/7220*250	25
	Deykondi	proportional random sampling	750/7220*250	27
	Ghazni	proportional random sampling	3203/7220*250	111
	Herat	proportional random sampling	2562/7220*250	89
3	employee of FPs	convenience sampling		10

Source: Author

6.3 Data Collection Methods

Both primary and secondary data were collected from applicable sources to find accurate answer for the research questions and meet the objective of the research. Primary data was gathered through semi structured interview with employee of facilitating partners who were involved from the community mobilization level till the post monitoring and evaluation of projects. Self-administered questionnaire with closed ended questions was design to collect primary data from the community development councils. Secondary data was collected through reviewing documents of Ministry of Rural Rehabilitation and Development Afghanistan, World Bank Evaluation report and some other reports about the national Solidarity program Afghanistan.

6.4 Research Instrument pilot study

According to Mugenda (2003) conducting a pilot study is very important for validity of any research instrument therefor, Before the Distribution of instrument to the respondents, a pilot study was conducted by researcher to be ensure that the questions are relevant, clearly understandable and made sense.

6.5 Data Analysis Methods

After collecting data from relevant sources next step is to analyze that data. The following methods was used to analysis the raw data.

Table (2): Data Analysis Techniques

Type of analysis	Purpose	Reason of selection
Descriptive analysis	To summarize the data	To find the mean, median, mode, standard deviation and frequencies.
Normality Test	To test the normality of data distribution	Before performing detailed analysis on raw data it is necessary to be ensure that data are normally distributed that is why normality test were applied.
Cronbach Alpha	to find the reliability of the instrument	To produce reliable result.
Correlation analysis	To find the relation among variables	To find the relation among independent and dependents variables correlation analysis were applied.
Simple Linear Regression	To find relationship between independent and dependent variables	To find how strong relationship exists between Independent and dependent variables
Multiple Regression Analysis	Investigate about combine effect	Were used to investigate combine effect of multiple independent variables on dependent variable and to determine how strong combined relationship exists between variables.

7. Data Analysis

7.1 Descriptive statistics

Table (3): Descriptive Statistics

	Mean Statistic	Std. Deviation Statistic
Participatory Need Assessment	3.5700	.54891
Participatory Planning and Design	3.8641	.47325
Participatory Implementation	3.7724	.67591
Participatory Monitoring And Evaluation	3.6665	.48950

Table 3 shows the calculations of mean, mode, median and standard deviation of variables. Researcher perform descriptive statistics to find out the level of participation of rural community in the need assessment,

planning and design, implementations and monitoring and evaluation of development projects in the targeted areas. As the acceptable value for the mean, mode, median is 3. As the table shows that all variables values are well above the standard point and rural communities recorded mean of approximately 3.5 for participatory need assessment it shows respondents are nearly agree on that they were involved in project need assessment. Table shows that respondents recorded mean of approximately 4 “Agree” on that they were involved in project planning and design furthermore they also recoded mean of approximately 3.8 nearly “Agree” That they were involved in project implementation and they recoded mean of approximately 3.7 nearly “Agree” that they were involved in project Monitoring and evaluation. Overall the respondents are agreed that they were involved in need assessment, planning and design, implementation and monitoring and evaluation of their development projects.

7.2 Reliability Analysis of Instrument

To check the internal consistency of instrument adopted from other studies reliability analysis was performed by researcher. According to George and Mallery (2010) if Cronbach’s Alpha value comes 0.9 or above it is considered as very good and if the Cronbach’s Alpha value comes 0.80 or above it is considered as good and if the Cronbach’s Alpha value comes 0.7 or greater it is consider as acceptable in reliability analysis.

Table (4): Reliability Analysis of research Instrument

Variables	Number of Item	Cronbach Alpha
Participatory Need Assessment	6	0.789
Participatory Planning and Design	6	0.806
Participatory Implementation	7	0.786
Participatory Monitoring and Evaluation	9	0.814
Project Sustainability	9	0.793

7.3 Correlation Coefficient Analysis

Correlation analysis is used to measure the strength and direction between variables. In term of strength of relation among variables, the value of correlation coefficient lies between -1 to 1. When the value of correlation is +1 and -1 that is said that there is a perfect relation between two variables and when the value of correlation coefficient goes near zero the relation between variables will be weaker. The direction of relationship between variables is shows by + which specify a positive relationship between variables and – specify negative relationship between variables.

The correlation coefficient analysis is applied to measure and find the strength and direction between variables, for this the most widely used test of Person or person product-moment is performed which is shown in table 3.

As it shown in the below table (3) there is a positive and significant relation among all the dependent variables (Participatory need assessment, Participatory planning and Design, participatory Implementation, Participatory Monitoring and Evaluation) and the dependent variable project sustainability. It was found that a high positive relation exist between participatory planning & design and project sustainability at Pearson correlation of 0.547 and a low positive relation exist between participatory need assessment and project sustainability at Pearson correlation of 0.441.

Base on the table (3) result can be gained that there is a positive relationship between participatory techniques and project sustainability, the result shows that all the independent variables have significant and positive effect to the project sustainability.

Variables		P N A	P P D	P I	PME	PS
Participatory Need Assessment	Pearson	1				
	correlation					
	sig. (2-tailed)	.250				
Participatory planning and Design	N					
	Pearson	.251**	1			
	correlation	.000	.000			
Participatory Implementation	sig. (2-tailed)	.250	.250			
	N					
	Pearson	.260**	.330**	1		
Participatory Monitoring and Evaluation	correlation	.000	.000	.000		
	sig. (2-tailed)	.250	.249	.250		
	N					
Project sustainability	Pearson	.296**	.219**	.355**	1	
	correlation	.000	.000	.000	.000	
	sig. (2-tailed)	.249	.250	.249	.250	
Project sustainability	N					
	Pearson	.441**	.547**	.526**	.468**	1
	correlation	.000	.000	.000	.000	.000
Project sustainability	sig. (2-tailed)	.248	.248	.248	.248	.250
	N					
	Pearson	.441**	.547**	.526**	.468**	1
Project sustainability	correlation	.000	.000	.000	.000	.000
	sig. (2-tailed)	.248	.248	.248	.248	.250
	N					

** . Correlation is significant at the 0.01 level (2-tailed) p Table (3) Correlation coefficient Analysis

7.4 Regression analysis

Table (4) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.733 ^a	0.537	.530	.41974

The above table shows that how the data fits the model and the coefficient of the model is denoted by R². The table 5.9 shows that the value of R² is 0.537 which illustrate that the four independent variables (participatory Need Assessment, Participatory Planning and Design, Participatory Implementation, Participatory Monitoring and Evaluation) are bringing about 53.7 % changes in the dependent variable(Project Sustainability).

Table (5) ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	49.332	4	12.333	70.003	.000 ^b
	Residual	42.459	246	.176		
	Total	91.792	250			

The F statistics is performed by researcher to check the overall significance of the regression model. If the value of significance lie below margin of error .05 then it will be consider that regression model is significant. The table 5.10 shows that the value of significance is 0.000 which indicate that independents variables instead of Joint venture is significant as the value of p-value (0.000 < 0.05) and the value of F(4, 246) = 70.003 which shows a high value against the standard value which is another evidence for significance of regression model.

Table (6) Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.619	.175		3.532	.000
1 Need_Assessment	.161	.036	.213	4.511	.000
Planning_Design	.279	.038	.358	7.382	.000
Implementation	.209	.038	.273	5.559	.000
Monitoring_Evaluation	.203	.042	.232	4.852	.000

The table (6) shows the multiple regression analysis between dependent and independent variables. As SPSS create above table the equation is like this:

$$y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \varepsilon$$

$$Y = .619 + .161 x_1 + .279 x_2 + .209 x_3 + .203 x_4 + \varepsilon$$

The table indicate that participatory Need Assessment Beta Coefficient is significant at P-value 0.000, the value of Beta coefficient is 0.213 with (T) value of 4.511. This shows that keeping remaining 3 variable constant, if we bring one unit change in Participatory Need Assessment, the project sustainability will be change by 21.3%.

The participatory Planning and design Beta Coefficient is significant at P-value 0.000. The value of Beta coefficient is 0.358 with (T) value of 7.382. This shows that keeping remaining 3 variable constant, if we bring one unit change in participatory Planning and Design, the project sustainability will be change about 35.8%.

The participatory implementation Beta Coefficient is significant at P-value 0.000. The value of Beta coefficient is 0.273 with (T) value of 5.559. This shows that keeping remaining 3 variable constant, if we bring one unit change in participatory Implementation, the project sustainability will be change is 27.3%.

The participatory Monitoring and Evaluation Beta Coefficient is significant at P-value 0.000. The value of Beta coefficient is 0.232 with (T) value of 4.852. This shows that keeping remaining 3 variable constant, if we bring one unit change in participatory Implementation, the project sustainability will be change about 23.2%.

8. Conclusion

This research was undertaken in the context of Afghanistan with the purpose of finding a suitable participatory techniques that can increase the sustainable of development projects of national and international NGOs in Afghanistan and the other target of this study was to find a techniques that community should be self-reliant and independent rather the dependent in assistance of forging Assistant. From outcome of this study we can see that Participatory Techniques has Positive impact of project sustainability. Participatory Planning and design influences the project sustainability the most, in second participatory Implementation, in third Participatory Planning and Design and in fourth and Participatory Need Assessment has the least effect on project sustainability. Correlation analysis, linear and multiple regression and interviews result shows that participatory techniques can sustain development projects. This research proved that participatory techniques such as participatory need assessment, participatory planning and design, participatory Implementation and Participatory Monitoring and Evaluation will help NGOs to achieve their development targets and will help rural community to sustain their projects and overcome their problems.

9. Recommendations and Suggestions

The main purpose of this Research was to find the best participatory techniques that promote project and Program sustainability and the result drawn from this may help NGOs, government of Afghanistan specially Ministry of Rural Rehabilitation and development, Policy makers and other stakeholders in Afghanistan and other developing countries. The following points are the recommendations and suggestions which can be drawn for the result of this study.

Firstly, it is recommended to the International and National NGOs in Afghanistan and in other developing countries who are considered as implementers of development project or programs. They should emphasis on creating awareness about the projects or programs and participations among the community members by concentrating on involvement of community members for the initial stage of the projects or programs. The have to create understanding among the community that why they should be involved in all level of projects or programs and mobilize the community at all stages of the project and programs to achieve the project sustainability.

Secondly, it is crucial to involve all community members from the initial stage of projects or program such as project formulation, feasibility study of the projects, planning and design, implementations, monitoring and evaluation and finally till cleanup phase of the projects or programs. Specifically, the 'community need

assessment' need to be conducted to all development projects or programs so it help to determine the needs and expectations of all stakeholders including the villagers. it will help in setting the project standards and clarified project objectives which match with the community need and expectations and therefore after the cleanup phase the project will be handover to the community who already clearly understand the projects or programs benefits, objective and importance of this projects for their community and this process will generate a sense of ownership to the projects or programs consequently this will ensure the project sustainability in long term.

Thirdly, The study finds that there is high positive relationship between participatory techniques and project sustainability, it is recommended from the finding of study that community members should be part of project need assessment, planning and design, implementation and monitoring and evaluation process team. Because it will help NGOs to identify the community need and expectation, available resource and skills the community will be informed whether the projects or programs are within their needs, interests or if the projects are solving their problems. So this process make them to sustain the projects because this project create them benefits.

Fourthly, researcher give suggestion and recommendation to NGOs, government of Afghanistan, that community member as project or program beneficiaries should have consistent training in order to have better or increase their understanding regarding to projects or programs and gaining knowledge and skill about the projects or programs maintenance. Because if the community members are to not well prepared with skills and knowledge of Maintenance and project management it will be challenging to achieve project sustainability.

Fifthly, the result of study shows that participatory techniques have positive impact on project sustainability and the result of this study will help those organizations which do not have the mechanism of stakeholder involvement.

Sixthly, to increase the impact of development projects and to achieve project sustainability, Governmental organizations, National and International NGOs in Afghanistan and other developing countries who are working in development sector need to follow the participatory techniques in the project or program Design.

Lastly, overall researcher wants to remind the government, national and international NGOs, researcher and development professionals that community participation is so crucial to achieve the project sustainability because without their participation projects cannot be maintain for long-term and the objective cannot be achieved, additionally community are the ones who will decide whether or not to maintain the introduce activities or benefits. However it is important to involve community in development projects or programs.

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