EFFECTIVENESS OF COMMUNITY INVOLVEMENT IN DEVELOPMENT PROJECTS IN SRI LANKA

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Degree of Master of Science

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EFFECTIVENESS OF COMMUNITY INVOLVEMENT IN DEVELOPMENT PROJECTS IN SRI LANKA

A study has been carried out to assess the Effectiveness of Community Involvement in Integrated Road Investment Programme (i Road) Implemented by the Road Development Authority in Southern Province.

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Thesis/ Dissertation submitted in partial fulfilment of the requirements for the degree Master of Science

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August 2019

DECLARATION

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Date: 05 August 2019

The above candidate has carried out research for the Masters dissertation under my supervision.

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Research Supervisor

Prof. Chintha Jayasinghe

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ABSTRACT

Various agencies have been involved in multitude of programmes on road construction projects in Sri Lanka. Road Development Authority (RDA) is the main state agency which has constructed and improved the lion portion of the road network in the country. Almost all such programs have been implemented in the nature of supply driven system in which the beneficiaries were not involved in any stage of the implementation of road development programs. Subsequently, through some studies, it was revealed that the users were not satisfied with the roads that have been constructed without their involvement and also found those roads are not sustainable too. Having considered above situation, Road Development Authority has decided to change their supply driven approach in the implementation of road development programs and introduced community based, participatory development approach as an alternative approach, especially to deliver user friendly roads through beneficiary involvement.

The problem identified is that there had not been conducted adequate researches/studies to understand the effectiveness of applying community based, participatory development approach as an alternative strategy to achieve the anticipated targets, in the road development projects implemented in the country. If this situation is pursued, without ascertaining the effectiveness of adopting participatory development approach for road development programmes, that would perhaps, negatively affect to the successfulness of the road network in the country.

Objective of this project is to identify the effectiveness of adopting community based, participatory development approach as an alternative strategy to achieve the anticipated targets, in development projects implemented in the country. Also, the Researcher intends to identify the critical factors for community involvement in road development projects.

Several methods have been used to collect data for research including, literature review, administering a structured questionnaire, Focal Group Discussions with selected community leaders in the project area.

The Sample for the research has been selected using random sampling theory together with stratified sampling theory. The sample size is 10% of 180 number of roads undertaken to improve/ develop by the iRoad project. Accordingly, 18 numbers of roads have been selected from iRoad project and another 18 roads which were constructed without community participation have also been selected for the sample. The data collected have been analyzed and used tables, graphs and figures to present the findings of the survey.

The research has been conducted in the selected sample area to ascertain the effectiveness of adopting community based, participatory development approach in the implementation of road development projects. It was revealed through the analysis of collected data that the project was able to implement with much success with applying participatory development approach to deliver user friendly roads, in particular. (97.2% respondents disclosed that they are satisfied with the project). It is suggested to apply participatory development approach for forthcoming similar projects to ensure the long term sustainability together with beneficiary satisfaction.

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M.P Palihawadana

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LIST OF ABBREVIATIONS

Abbreviation	Description
CBRP	Community Based Road Project
NCBRP	Non Community Based Road Project
iRoad	Integrated Road Investment Programme
ADB	Asian Development Bank
GRC	Grievances Redressing Committee
RDA	Road Development Authority
GOSL	Government of Sri Lanka
INGO	International Non-Governmental Organization
NGO	Non-Governmental Organization
CBO	Community Based Organizations
EA	Executive Agency
IA	Implementing Agency
MOHRDPRD	Ministry of Highways & Road Development and Petroleum Resources Development

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CHAPTER 1: INTRODUCTION

1.1 Introduction/Background

After the independence of Sri Lanka, every successive government has made attempts to develop the country with investing a substantial amount of money in the infrastructure. Almost all such programmes have been implemented in the nature of the supply-driven process in which the traditional top-down approach has been practiced. The top-down approach in relation to the construction sector, decisions are being taken by the higher level authorities. According to this approach, the construction of infrastructure is done by the engineers only on the basis of their own data analysis and referring to designs & drawings. In this process, the prospective beneficiaries were set aside and were not consulted or involved though they become end users after completion of the construction. It was also revealed through several studies, on many occasions, beneficiaries were not satisfied with the ultimate benefits of such projects. Having understood the weaknesses of the top-down approach, international and national developers, political leaders, economists and other development practitioners have made an attempt to find an alternative successful approach in place of the top-down traditional approach.

1.2 Global trends towards participatory development approach

The notion participatory development approach has become increasingly popularized and drawn global attention under the sustainable development scenario.

This concept has been identified as an alternative approach to manage development programmes in a sustainable nature than the traditional “top-down”, State or Agency centred management system.

Participation is concerned with all issues pertaining to responsibility (ownership), decision – making, authority and control over the project development and systems operation.

The participatory development concept has not been emerged abruptly but evolves since last few decades with the requirements of limiting the use of resources and assuring the sustainability of development programs. This situation shows us that there may be a considerable relationship between the participatory development approach and the sustainable development. Therefore, it is useful to understand the genesis of modern development trend which has been based for the emergence of participatory development approach.

1.3 Local trends in participatory development approach

1.3.1 Country Profile

Sri Lanka is approximately 65610sq. k.m. in the area including about 2905 sq. k.m. of inland waters. It is an island situated in the Indian Ocean and its proximity to the Indian sub-continent is a significant factor determining the variations in climatologically conditions as well as the different situations prevailing in the country today.

The population of the country is 20,359,439 and the population density is 325 persons per sq. K.m as per to the census, 2012.

The society of Sri Lanka based on the family and the village is considered to be the focal point for economic and other socio-cultural activities. The country is predominantly rural as more than 70% of its population lived in a rural area. There are 331 Divisional Secretary Divisions and 14022 Grama Niladhari Divisions in Sri Lanka and the traditional sector around villages (Ministry of Finance and Planning, 2012).

1.3.2 Participatory development trends in Sri Lanka

During the immediate past, a number of agencies have implemented a multitude of programs to provide road facilities to the citizen of Sri Lanka. Road Development Authority (RDA) is the main state agency which has constructed and improved the lion share of the road network in the country. Almost all such programs have been implemented in the nature of “supply driven” system which is also popularly known as ‘Top down” approach in which the beneficiaries were not involved in any stage of the implementation of road development programs. In, top-down approach all the

decisions at planning, designing, implementation and maintenance of road constructions have been taken by the higher level technical authorities. Implementation of such programs solely done by the technical staff and the prospective beneficiaries were not involved at any stage.

However, these programs have been implemented under the conventional type of state administrative system which has been introduced during the Colonial Era. The significant feature of this nature of the administrative system was more bureaucratic. This approach has been popularly known as "Top-down" strategy in which decisions on development programs were solely made by the top authorities without consulting the beneficiary communities effectively.

In lapse of time, it has been found that the "top-down" strategy did not help to address the issues pertaining to the country's development goal of the country. The state Goal has been then identified as social and economic wellbeing of the citizen of the country including disadvantaged groups. It was, however, revealed that the benefits of growth have not been reached to the needy people but favoured by the middle and upper-income groups. Considering the above fact, the Government of Sri Lanka (GOSL) has introduced modern participatory development approach as an alternative strategy for development programmes to mitigate the issue.

In addition to the change in the development strategy of GOSL, it has also been introduced a new institutional arrangement. Some of the changes made in the institutional arrangement were reorganizing of multi-purpose co-operatives, setting up of District Planning Units at, then Kachcheri (District Secretariat) Levels, Introducing Divisional Political Authorities, Decentralized Budget System etc.

Further to the changes made in the development strategy, GOSL has also tried-out to implement its development programs in the form of projects through Government initiated and voluntary initiated organizations more often assisted by INGOs, NGOs, Rural Development Societies, Cultivation Committees, Farmer Organizations, Community Based Organizations, etc.

1.4 Concept of participatory development approach

The modern participatory development approach aims to address development issues and challenges faced by rural and urban communities, giving special consideration to the disfranchised marginalized groups in the developing as well as in the developed countries. This approach places the beneficiaries at the centre of development and primarily concerned with human dignity and potential. Participatory development approach also designed to improve the social and economic condition of the target communities emphasizing the significance of community management, need orientation, self-reliance, consciousness raising and empowering the communities at all level through social mobilization process.

Community participation in development activities is also defined as the process by which individuals, families or communities assume responsibility for their own welfare and develop a capacity to contribute to their own and the community development; it is an active process whereby beneficiaries influence the direction and execution of development (Oakley & Marsden, 1987). (Marsland, 2006), community participation in international development discourse is commonly used to refer to the involvement of local people in decision-making process and evaluation of development projects and is associated with empowerment and the respect for also the use of local knowledge.

During the last two decades, the concept of participation has been widely used in the discourse of development. For much of this period, the concept has referred to participation in the social arena, in the community or in development projects. Increasingly, however, the concept of participation is being related to rights of citizenship and to democratic governance. Nowhere is the intersection of concepts of community participation seen more clearly than in the multitude of programmes for decentralized governance. Linking citizen participation to the state at this local or grassroots level raises fundamental and normative questions about the nature of democracy and about the skills and strategies for achieving it.

It was the belief that local governments, community organizations and public agencies make better decisions and have a greater positive impact on their communities when they increase the regularity, variety, and level of engagement of community residents. In many local communities, most citizens do not participate in decisions that affect their daily lives, and there is often a lack of trust between citizens and local officials. A crucial bridge over this gap is the use of suitable strategies and tools to encourage citizens and local officials to work together regularly, increase their knowledge of each other, and develop trust (Bray, 1996).

However, the participatory development approach has no fixed formula. This is an approach seeking to make the optimum use of resources available within the community with the assistance of State agencies, INGOs, NGOs, the private sector and other stakeholders. The relationship among the partners may change and evolve communities become better able to manage their own affairs.

The modern participatory development approach is based on the assumption that development starts at the grass–root level and the initiative, creativity and energies of the people can be utilized to improve their own lives using democratic processes and voluntary efforts. In an ideal situation, the members of the society organize themselves in a democratic manner to;

a) Define their needs, problems and issues
b) Develop plans and strategies to meet these needs
c) Implement such plans with maximum community involvement to acquire the benefits, and
d) Manage their own programs to secure sustainability.

1.5 Problem statement

Since, independence of Sri Lanka, every successive government have made attempts to develop the country with investing a substantial amount of money in the infrastructure. Almost all such programmes have been implemented in the nature of supply driven in which the traditional top-down approach has been practised. However, it was subsequently revealed that the expected Goal could not be achieved

as expected. Therefore the results were not reached to the needy beneficiaries and were not sustainable. In the meantime, Policymakers and developers have looked for methods and strategies to apply for development projects to ensure the beneficiary satisfaction and sustainability of developments programmes. During last few decades, the government of Sri Lanka has adopted participatory development approach, in which the expected beneficiaries involved in the implementation of development activities, with the assistance of national and international agencies to implement development programmes. Even at present, the government is implementing many development programmes adopting participatory development strategy in, infrastructure development. Integrated Road Investment Programme (iRoad) implemented in the Southern Province is one such programme.

A problem statement consists of inadequate research conducted to understand the effectiveness of applying community based, participatory development approach as an alternative strategy to achieve the anticipated targets, in development projects implemented in the country. If this situation is pursued, without knowing the effectiveness of adopted strategy for development programmes, that would perhaps, badly affect to the success of the development of the country, in broader context.

This study, therefore, was aimed at assessing the effectiveness of community involvement in development projects in Sri Lanka based on Integrated Road Investment Programme (iRoad) implemented in Southern Province by Road Development Authority (RDA).

1.6 Research Objectives

The research objectives are illustrated here under General objective and specifics objectives.

1.6.1 General Objective

The objective of this Research is to identify the effectiveness of adopting community-based, participatory development approach as an alternative strategy to achieve the anticipated targets, in development projects implemented in the country based on the

study carried out in the Integrated Road Investment Programme (iRoad) implemented in the Southern Province.

1.6.2 Specific objectives

The following are the specific objectives of the study.

- To understand the roles of local community participation in development projects at the local level.
- To find out the extent to which citizens are involved in the decision-making process concerning development projects.
- To identify the Satisfaction of the respondents about the project.
- To identify the benefits of community participation in development projects at the local level.
- To identify the most effective public awareness tools/strategies which can be recommended to use for development projects at the local level
- To analyse the variations of the project cost due to this community participation process.

1.7 Integrated Road Investment Programme (iRoad)

1.7.1 Project Background

In Sri Lanka, about 85% of the population is living in the rural and peri-urban areas. Poverty is concentrated in areas where connectivity to towns and markets, access to electricity and average educational attainment are relatively low and agricultural labor is an important source of employment. Remote areas with lack of all-weather access to the socioeconomic centers have rendered a large portion of the rural population with poor agricultural productivity, limited employment opportunities and slow economic growth.

In order to address this problem and improve transport connectivity between rural communities and socioeconomic centers, the Road Development Authority (RDA) has

implemented Integrated Road Investment Program (iRoad) in Hambantota, Matara and Galle districts of the Southern Province.

Development of the roads to all weather standard status will improve rural access and link rural hubs to the national road network. The program will serve as a tool for poverty alleviation, allowing poor people in the area to directly access other areas of the country to engage in a number of social and economic activities.

The Executing Agency (EA) of the Integrated Road Investment Program (iRoad) is Ministry of Highways & Road Development and Petroleum Resources Development (MOHRDPRD), and the Implementing Agency (IA) is the Road Development Authority (RDA). The project is funded by the Asian Development Bank (ADB).

Having understood the weaknesses of "top-down" approach, RDA has decided to change their "supply driven" approach in the implementation of road development programs and introduced participatory development approach as an alternative approach, especially to deliver user-friendly roads through beneficiary involvement. Integrated Road Investment Programme (iRoad) in Southern Province has been implemented by the RDA as a pilot project in adopting a participatory development approach.

1.7.2 Main participatory strategies introduced by the project

iRoad has introduced following strategies to ensure the community involvement in project activities:

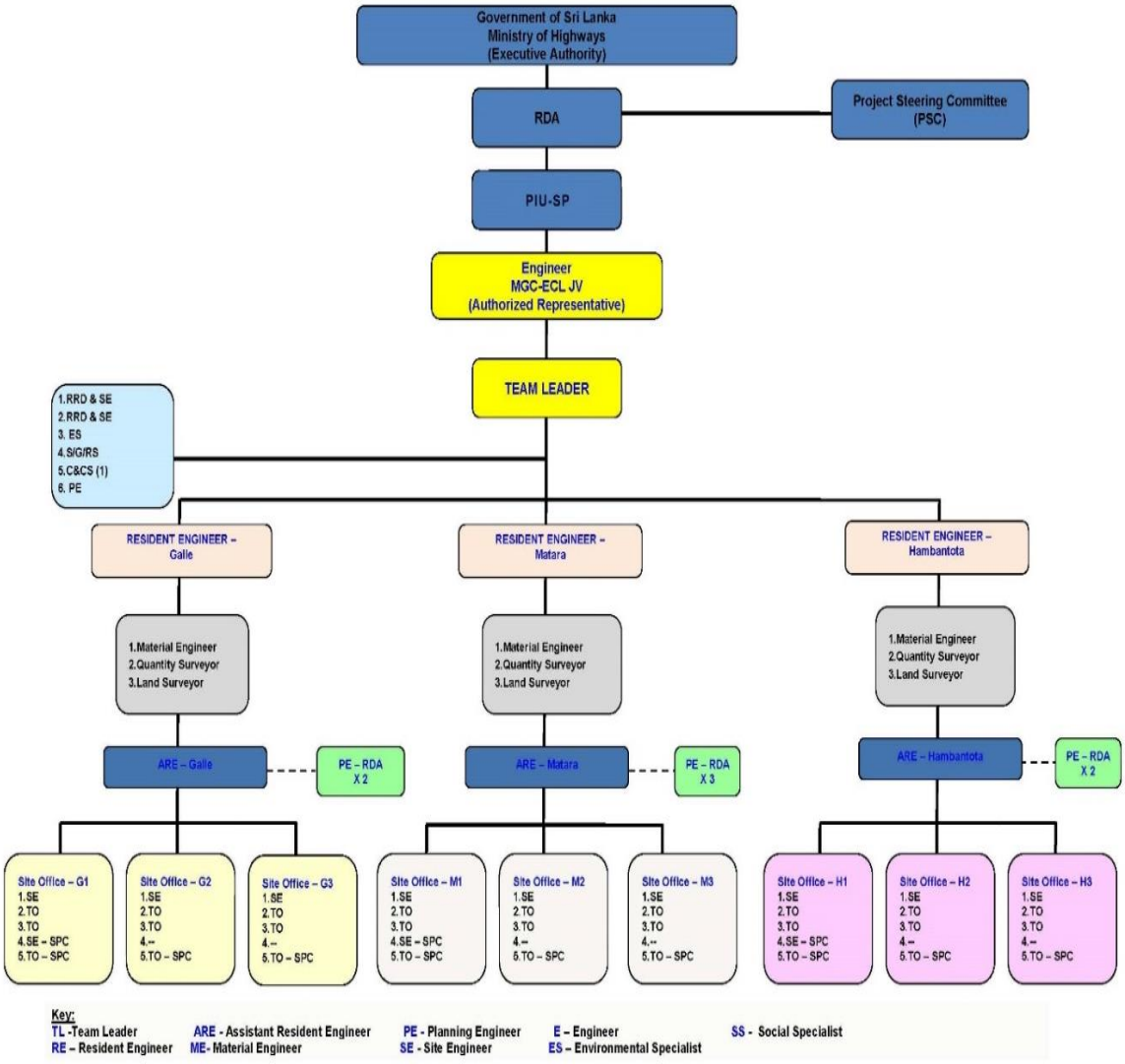
- Conducting comprehensive awareness programmes on the project among the public in the project area.
- Introduced many channels to express public views, grievances, complaints, suggestions, and proposals to the project.
- Make arrangements to accommodate indigenous knowledge of the public in to the final road designs.
- Land donations and other logistics involvement of the public are encouraged by the project.
- Conducting social welfare programmes to establish friendly relationship with

community.

- Establishment of proper stakeholder coordination.
- Establishment of Grievance Redress Mechanism to address public grievances.
- Adoption of concept of Contest Sensitive Design (CSD)

1.7.3 Overview of Institutional Framework of the project

The overall project organization chart is shown below;



1.7.4 Highlights of participatory development component in iRoad project

1.7.4.1 Introduction of concept of Context Sensitive Design (CSD).

As this project is linked with the rural population it is best to develop a system where participation of community is considered at various stages of the project. Such approach enables to ensure the sustainability of the project facilities provided. In considering the fact that the involvement of all relevant stakeholders is of prime necessity, the project has introduced the concept of Context Sensitive Design (CSD) which provides a basis for shared vision and work to achieve early consensus. CSD recognizes that roadways must be carefully engineered to move traffic efficiently and safely; it asserts that these goals can be achieved without sacrificing the unique qualities of the community they intend to serve.

In order to create awareness and to develop required skills among the partners and stakeholders, 12 number of training programmes have been conducted.

Table 1.1 Training workshops conducted on CSD

No. of sessions	Objective	No. of Participants			Percentage %	
		Female	Male	Total	Female	Male
12	To strengthen the capacity of the target groups through improving the Knowledge, Changing attitudes and Practices	148	421	569	26.01	73.99

Figure 1.1 Team Leader-iRoad (SP) addresses the workshop on land donation

1.7.4.2 Grievance Redress Mechanism (GRM)

GRM is an arrangement for receiving, evaluating and facilitating the resolution of affected person's complaints, suggestions, requests and grievances on social and environmental performances of the project. Affected persons need a trusted way to voice and resolve project related concerns and hence the project has established an effective GRM. The main objective of establishment of Grievance Redress Mechanism (GRM) is to support genuine claimants to resolve their problems through mutual understanding and consensus reaching process with relevant parties. This is in addition to the available legal institutions for resolving appeals from public against the disagreeable decisions.

Depending on the nature and significance, the grievances were addressed at three different levels. The first was at the grassroots level where complaints were directly received and addressed by the contractor, PIC or PIU representative on site. Grievances that were simple but could not be resolved at the grassroots level were resolved at the GramaNiladhari (GN) level. More complex grievances that couldn't be resolved at the GND level were addressed at the Divisional Secretariat Division (DSD) level. There were Grievance Redress Committees (GRCs) at the GN and DS levels.

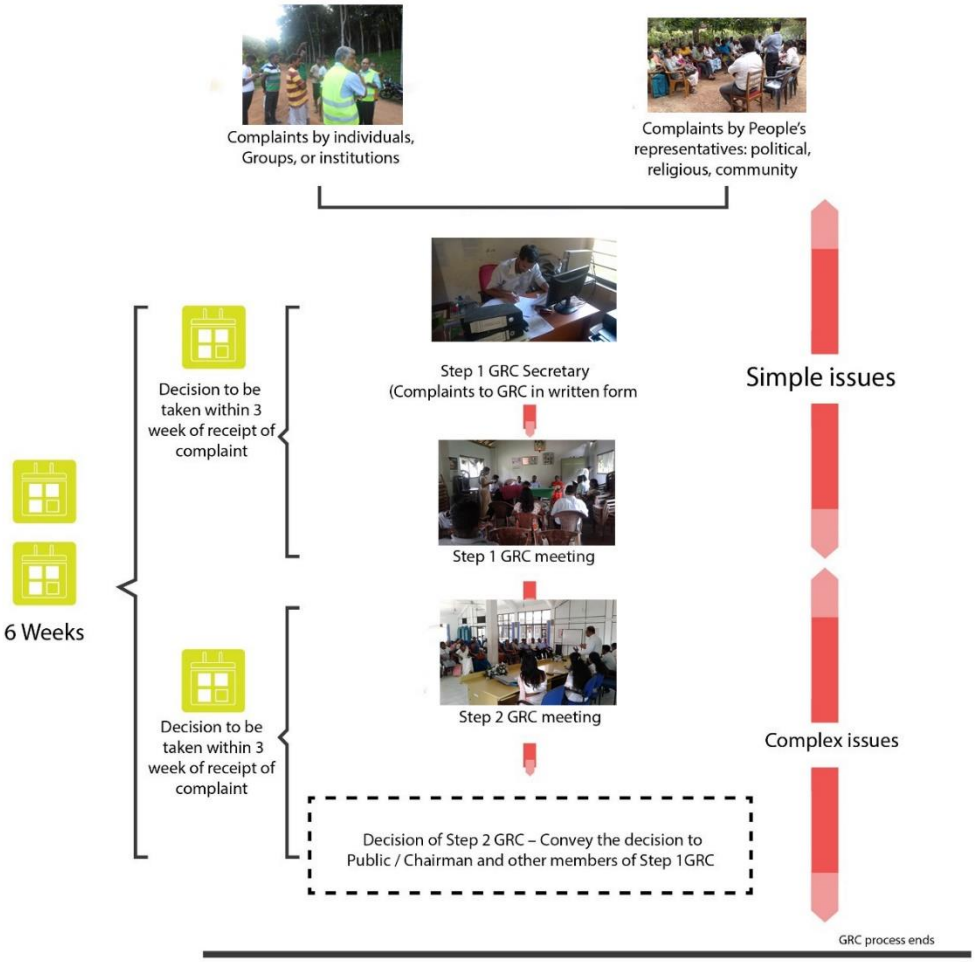


Figure 1.2 GRM process

1.7.4.2.1 Establishment of GRCs at Grama Niladhari Division (GND) Level

GRCs were established at all GNDs in the project area with the objective of finding solutions for the grievances that couldn't be solved at the grassroots level.

The composition of membership of GND level GRCs were Grama Niladhari in the Division (Chairman), Project Engineer (Secretary) being the representative of the PIU, Site Engineer (Member) representing the Supervision Consultants, Environment Officer (Member) representing the Contractor, Leader of a Voluntary Organization/

Non-Governmental Organization (Member), Religious Leader of the area (Member) and a woman leader of a women organization functioning in the area. In addition, Grama Niladhari invited any government officer of the division to participate at meetings as and when required.

Figure 1.3 Establishment of GRC at GND level, Mavta, Galle (G1)

1.7.4.2.2 Establishment of GRCs at Divisional Secretariat Division (DSD) level

GRCs were established at all Divisional Secretary Divisions in the project area with the objective of finding solutions for the grievances that couldn't be resolved at GND level.

The composition of membership of DSD level GRCs were Divisional Secretary of the area (Chairman), Project Engineer (Secretary) being the representative of the PIU, Relevant GramaNiladhari, (Member), Site Engineer (Member) representing the Supervision Consultants, Environment Officer (Member) representing the Contractor, Leader of a Voluntary Organization/ Non-Governmental Organization (Member), Religious Leader of the area (Member) and a women leader of a women organization in the area. In addition, Divisional Secretary invited any government officer of the division to participate at meetings as when required.

Figure 1.4 Establishment of GRC at DS office, Akmeemana, Galle (G2)

Public grievances that were received through GND level GRCs were discussed in detail at DSD level GRC presided by the relevant Divisional Secretary and arrived at a decision. If the committee decided to investigate the site before the decision was taken, the DS arranged a joint field visit with Affected Persons (APs) and GRC members to find a better solution.

In order to make the GRM process gender responsive, the GRC comprised a female member to represent the local community women. Further, when grievances or complaints were submitted to the GRC, both women and men complainants were treated equally and necessary measures have been taken to address the grievance in the best possible way.

In addition, a contact person was designated to receive complaints within the PIU to address all the concerns and grievances of the local communities and affected parties. Contact details of this person was appeared in the public notice displayed on the notice board of all GND offices in the project area.

The project was able to establish 45 GRCs at Divisional Secretary (DS) and 228 GRCs at GramaNiladhari level representing all DSDs and GNDs during June 2015 to July 2017 as depicted in the Table 1.2

Table 1.2 Establishment of GRCs at DSD and GND level

District	Contract Package	Total No. of DSDs in the project area	GRCs Established at DSD level	Total No. of GNDs in the project area	GRCs Established at GND level
Matara	M1	02	02	**48**	48
	M2	06	06	**20**	20
	M3	07	07	**25**	25
Sub total		**15**	**15**	**93**	**93**
Galle	G1	04	04	24	24
	G2	06	06	18	18
	G3	08	08	42	42
Sub total		**18**	**18**	**84**	**84**
Hambantota	H1	05	05	**19**	19
	H2	04	04	**18**	18
	H3	03	03	**14**	14
Sub total		**12**	**12**	**51**	**51**
Total		**45**	**45**	**228**	**228**

1.7.4.3 Public Grievances

Public grievances were received from the general public in the form of grievances, requests, suggestions, and complaints by the project during the implementation of project activities.

1.7.4.3.1 Public Awareness

In addition to the community awareness meetings held at the commencement of the project, a public notice developed in local language was displayed at community attracted places including Grama Niladhari (GN) offices and Divisional Secretariats (DS) in the project area. The main purpose of the notice was to create awareness among communities on the project, understand to what extent the community can involve in project activities and how to make complaints, suggestions, grievances and requests to the project. The public notice gave the key information about the project and contact numbers of relevant officers of the project who were to be contacted regarding social and environment issues.

Figure 1.5 Community meeting at Sulthanagoda, Weligama, Matara (M3)

1.7.4.3.2 Channels of Receiving Public Grievances

A system of channels was established to receive public suggestions, requests, complaints and grievances by the project. The public was clearly informed that they could choose any of the following channels in submitting their complaints/ grievances/ suggestions or requests to the project.

- ✓ **Complaint & Suggestion Box**

Availability of Complaint & Suggestion box at the site was identified as one of the effective methods to get views of communities prior to the finalizing of road designs. Complaint & Suggestion boxes were installed at Contractor's site offices in all Contract Packages and the public were expected to tender their written grievances to the Contractors Offices through Complaint &Suggestion box. Complaints/ Suggestions were collected by relevant officer at the end of each day.

- ✓ **Office of Grama Niladhari (GN)**

GramaNiladhari (GN) is the village level government representative of the administrative set up of Sri Lanka. Therefore, the project made arrangements to officially appoint GN as the Chairman of the Grievance Redress Committee (GRC) established under the project at GramaNiladhari Division (GND) level. A public notice was also displayed at each GND offices in the project area and the public could able to submit their written grievances to the GN office.

- ✓ **Office of the Divisional Secretary**

Divisional Secretary (DS) is the divisional level government representative of the administrative set up of Sri Lanka. Therefore, the project made arrangements to officially appoint DS as the Chairman of the Grievance Redress Committee (GRC) established under the project at Divisional Secretary (DS) level. A public notice was also displayed at each DS offices in the project area and the public could be able to submit their written grievances to the DS office.

- ✓ **Field staff**

In addition to the above channels, all the field staff of the project was instructed to accept public grievances and handed them over to the Project Engineer (PE)/ Environment Officer (EO) /Social Safeguard Officer (SSO) on the same day or in failing which the following day for necessary action.

1.7.4.3.3 Maintenance of records for public complaints

Maintenance of relevant records was considered as a prime requirement. All the received grievances were registered at the Project Manager's office of the Contractors. The grievances received by the project were prompt attended to.

1.7.4.3.4 Addressing Grievances;

The below table shows the solutions given for public complaints at different levels. During the period under review, 2850 grievances (In this context grievances denotes: grievances, requests, suggestions, and complaints) received in nine (9) Contract Packages in the three districts out of which all grievances have been completely settled to the satisfaction of the complainers.

Table 1.3 Grievances Addressing Status

District	Contract Package	No. of Grievances	No. of Requests	No. of Suggestions	No. of Complaints	Total	No. Attended	No. Unattended	No. Completely settled
Galle	G1	00	238	32	97	367	367	00	367
	G2	58	182	20	68	328	328	00	328
	G3	01	609	00	58	668	668	00	668
Sub Total		**59**	**1029**	**52**	**223**	**1363**	**1363**	**00**	**1363**
Matara	M1	00	195	44	116	355	355	00	355
	M2	04	84	09	104	201	201	00	201

	M3	00	57	01	75	133	133	00	133
Sub Total		**04**	**336**	**54**	**295**	**689**	**689**	**00**	**486**
Hambantota	H1	00	42	00	76	118	118	00	118
	H2	08	126	03	28	165	165	00	165
	H3	06	478	18	13	515	515	00	515
Sub Total		**14**	**646**	**21**	**117**	**798**	**798**	**00**	**798**
Total		**77**	**2011**	**127**	**635**	**2850**	**2850**	**00**	**2850**

Figure 1.6 Hakmana DS visits D.C.Abeywickrema Road, Matara to address a public complaint

1.7.4.3.5 Design Changes made due to Public Requests;

In establishing the concept of Context Sensitive Design (CSD), the project has responded the public voices and accommodate their requests/grievances in to the road designs within the provisions of Loan Covenant.

Design changes made to the original designs of roads due to public requests are appeared in the table below;

Table 4 Design changes due to public requests

District	Contract Package	No. of Roads	No. of changes made
Galle	G1	05	13
	G2	07	10
	G3	04	11
Matara	M1	06	08
	M2	05	12
	M3	03	03
Hambantota	H1	04	05
	H2	11	16
	H3	04	10
Total		**49**	**88**

- ✓ **Design changes due to public request and land donation**

Mr. Dhamika Kahadoowaarachchi of Hapugala volunteered to donate required land strip to widen the LHS of the road and Mr. S.A.Alwis of Hapugala of Galle district, donated the land strip to widen the RHS of the road with written confirmations. The following photographs show the pre and current condition of the location.

Before condition at 0+500 RHS

Current condition at 0+500RHS

Before condition at 0+550LHS ***Current condition at 0+550 LHS***

1.8 Scope of the study

The Researcher has extended the study in all nine (09) Contract Packages of the iRoad Project implemented in Galle, Matara and Hambantota Districts of Southern Province.

1.9 Limitation of the study

Several difficulties were experienced while conducting the study, such as, some respondents did not adequately cooperative with the encounters in collecting data due to following reasons:

- Suspicions on confidentiality of data,
- Negative attitudes towards research work,
- Unwillingness to disclose their correct views.
- Reluctance to spend time on responding the questioner.

CHAPTER 2 – LITTRETURE REVIEW

Over the past decades, global attention has been drawn to the effects of the deterioration of the environment on the future productivity and liveability of earth. The environmental economists, deviating from conventional economists are now more worried about conservation of global resources and non- renewable natural resources in the process of development, which leads to sustainable development. These economists are also discussing on the trade-off between natural resources and man-made resources. According to Meadows, Meadows, Randers, & Behrens III, (1972), there is a great need of limiting the unlimited use of natural resources for development programs in the future. This was further confirmed by the "Declaration of Club of Rome" in 1972. The special committee appointed by the U.S.A. president Jimmy Carter on the issues pertaining to "Limits to Growth", reported that the global problem of inadequate earth resources has warned the developers that unlimited resources will no longer be available for future generations.

Having understood the gravity of the problem, the suggestions put forward by "limits to growth" was reconfirmed by "Tokyo Declaration in 1947" and the Brundtland Commission's Report published in 1987. According to (Brundtland , 1987), sustainable development as "development which meets the needs of current generations without compromising the ability of future generations to meet their own needs". Furthermore, at the Earth Summit held in Rio-De Janeiro in June 1992 and 2002 in Johannesburg, all states and supportive agencies were urged to implement development activities aiming at universal coverage. The world leaders have strongly believed that sustainable development will not be successful without the active involvement of beneficiary communities in development activities and collectively agreed on Agenda 21 (United Nations, 1992).

The **Agenda 21** encouraged to manage development programs on a participatory approach, involving users, planners and policy makers at all levels. Moreover, the development planners, economists also agreed that the prevailing conventional bureaucratic industrial system should be restructured to enable communities to involve

freely in decision making process effectively in the proposed industrial system, NGOs and Community Organizations may have to play a vital role in the implementation and management of sustainable development programs.

As per to the ADB's Safeguards Policy Statement (SPS 2009), national laws and policies, any development for the country should not leave a set of people negatively affected in economic or physical terms.

2.1 Similar studies carried out elsewhere.

It is needed to consider social, environmental and the economic aspects for a successful project. Many studies have been carried out focusing on environmental aspects and economic aspects. But, there are only a few studies have been carried out addressing the social dimension in development projects implemented in the world (Tsai & Chang, 2012), (Black, Páez, & Suthanaya, 2002), and (Egilmez & Tatari, 2012).

Raheem & Ramsbottom, (2016), has identified ten major core factors which are the principal contributors to social sustainability and recommended for implementation at different stages of highway projects. As the first factor revealed that if the community involve for project planning and design activities and if we respect to their views that will create a sense of ownership of the project and enforce the feeling of respect for the communities.

Another study (Padawangi, 2009) revealed that better oversight and less corruption can arise from community ownership. One of the other similar studies (Polson, Kim, Jang, Johnson, & Smith, 2013) revealed that social connections are theorized to lead community members to work together. However, it was not able to find any research or study carried out addressing the effectiveness of applying community-based, participatory development approach as an alternative strategy to achieve the anticipated targets, in development projects implemented in the country.

Hence, it was made to understand that there is a dearth of information in relation to this research area.

CHAPTER 3 – RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this chapter is to explain the research methodology implemented for the study in detail. Chapter firstly explains the research approach and research design. Then it discusses the methods used to collect secondary and primary data such as literature review, structured questionnaires, interviews, observations etc. The chapter further describes the sample selected for the study and the process of collection of data.

3.2 Research approach

The research made use of both qualitative and quantitative research strategy. Two different structured questionnaires have been used for different category of respondents to collect quantitative data. The Questionnaire, Type -02 has been administered with the project engineers and the Questionnaire, Type -01 was used for householders living adjacent to the roads that have been improved by the project. The qualitative data (non- numerical) has been collected through interviews and observations.

3.3 The Sample

The sample has been selected in applying random and stratified sampling theories. The number of roads and the households selected for the sample by applying random sampling theory and the number of interviewers was selected for the interviews conducted in applying stratified sampling theory.

The total number of roads in the iRoad project area is 183 and out of which 10% is equal to 18 roads have been selected for the research. Since the research was aimed at conducting a comparative study, another 18 roads which were constructed without community participation have also been selected for the sample. These 36 roads have been selected in applying the random sampling theory.

Consultations have been made with 10 families living along each road and the total number of families consulted for the study were 360. Those families were selected randomly and the data has been collected through administering a structured questionnaire from each household selected. The Researcher has determined to collect

data only from the respondents who were more than 18 years of age at the time of the survey to ensure the reliability and accuracy of data.

Sample for structured interviews with relevant officials of the project was selected using stratified sampling theory.

Furthermore, Project Engineers were also selected, using a stratified sampling method to collect data through a structured questionnaire.

3.4 Questionnaires

For the purpose of the research, two different questionnaires were designed.

One questionnaire was developed as a data gathering device to collect data from the selected households which has 15 open questions. The first section of the questionnaire consists of general questions such as the name of the road, admin division and the commencing date of the road improvement and the demographic questions related to householders. The core questions in the questionnaire are related to the level of benefits of the project, respondents' perception on addressing their grievances emerged due to road improvements etc. and the strategies used to create awareness among the public about the project.

The second questionnaire was developed to collect data from the project engineers who were directly involved in project activities. This questionnaire contains open questions to ascertain the quality of civil construction works, the strength of monitoring the process, and to find the level of community participation towards project activities.

3.5 Data collection

All the developed questionnaires were pre-tested in the field through a pilot survey before starting the proper implementation of the survey. This pilot survey was carried to find out whether the questions in the structured questionnaire were realistic, acceptable and applicable. Minor changes were made to the original questionnaire following the pilot questionnaire survey.

Subsequently, an orientation programme has been conducted to the enumerators in order to familiarize the questionnaire and to orientate how to administer the questionnaires.

An Action Plan has been developed for data collection and implemented the survey in accordance with the Action Plan. In conducting households survey, data collected only from knowledgeable adults living in the families with the prime intention of assuring the quality and the accuracy of data.

Primary data have been collected by administering questionnaires and holding interviews with the selected officials of the project. These qualitative data have been used as the main tool in this research.

3.6 Ethical consideration

There were several types of ethical issues which were the researcher had to take into consideration for the research. The most important one was related to the informed consent of the respondents. All of the respondents were duly informed in advance about the purpose of the research.

The second was all the information/data collected in the course of this dissertation has been used only for the purpose of the research and will be kept confidential.

3.7 Limitations and constraints

There were several limitations and constraints encountered while conducting the research.

Firstly, the researcher happened to confine the study to a limited sample. Although the iRoad project has improved 183 roads in Galle, Matara and Hambantota, it was compelled to confine the study only for a sample of 18 roads mainly due to time constraint.

A broad study is desirable to study the community participation component adopted by the iRoad project since it appears to be a more complex concept. As the opportunities available for this study was limited and it was only possible to discuss the basic factors related to community participation related road improvement project.

The researcher also happened to face the problem of acquiring new knowledge through adequate literature since the dearth of literature finds in relation to the topic under study.

CHAPTER 4: ANALYSIS OF DATA

4.1 Introduction

The purpose of this chapter is to analyze the data collected for the study in detail. The chapter describes Age composition of respondents, Level of education of respondents, Respondents' Occupation, Number of years living in the area, Distance of the residence from the road, Benefits of the Project, Level of satisfaction on the project, Perception on addressing public grievances, What are the awareness tools/strategies used, Project cost increment in percentage, Quality of Road Construction, Community Participation for the Project,

The analysis of the data collected through questionnaires took place via thematic analysis. Since the sample is small the researcher did not use any of the statistical software packages such as Statistical Package for the Social Sciences (SPSS) to analyze data. The findings of the interviews were also analyzed manually. The results of the data are presented in the formats of tables and charts.

4.2 Analysis of data

4.2.1 Information about the respondent

4.2.1.1 Age composition of respondent

The below Chart 4.1 shows the age composition of both CBRP and NCBRP.

As per the results of the study, it was revealed that the highest percentage of 62 represents in CBRP and 60% from NCBRP in the age group between 36 -61. And also it shows that all the respondents were above 18 years and below 61. It ensures that the researcher would be able to collect data from a knowledgeable adult group which further ensures the credibility of information gathered.

Table 4.4: Age composition of respondent

Project Type	Respondent Age		
	18-35	36-61	Above 61
CBRP	16%	62%	22%
NCBRP	30%	60%	10%

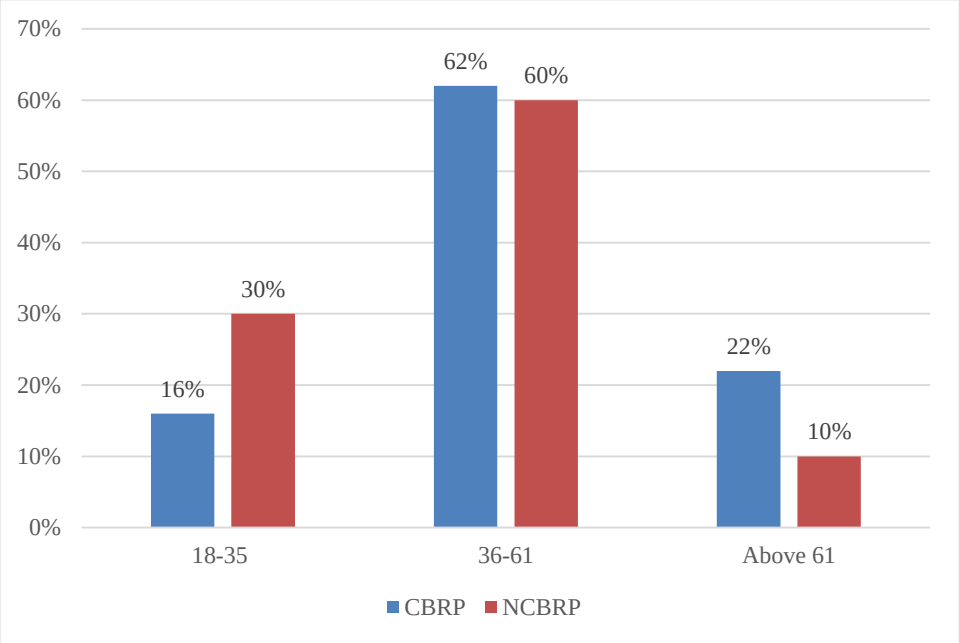


Chart 4.1: Age composition of respondents

4.2.1.2 Level of education of respondents

The below Chart 4.2 depicts the Level of education of respondents of both CBRP and NCBRP.

It was revealed that half of the respondents have less than O/L education in both CBRP and NCBRP while 6% (CBRP) and 7% (NCBRP) of them were graduates. Nevertheless, the researcher observed that the respondents were knowledgeable. It was further revealed that a substantial number of youth have been migrated to urban areas for employment since fewer employment opportunities available in their villages.

Table 4.5: Level of education of respondents

Project Type	Level of Education		
	Less than GCE O/L	Less than GCE A/L	Graduated
CBRP	50%	44%	6%
NCBRP	46%	47%	7%

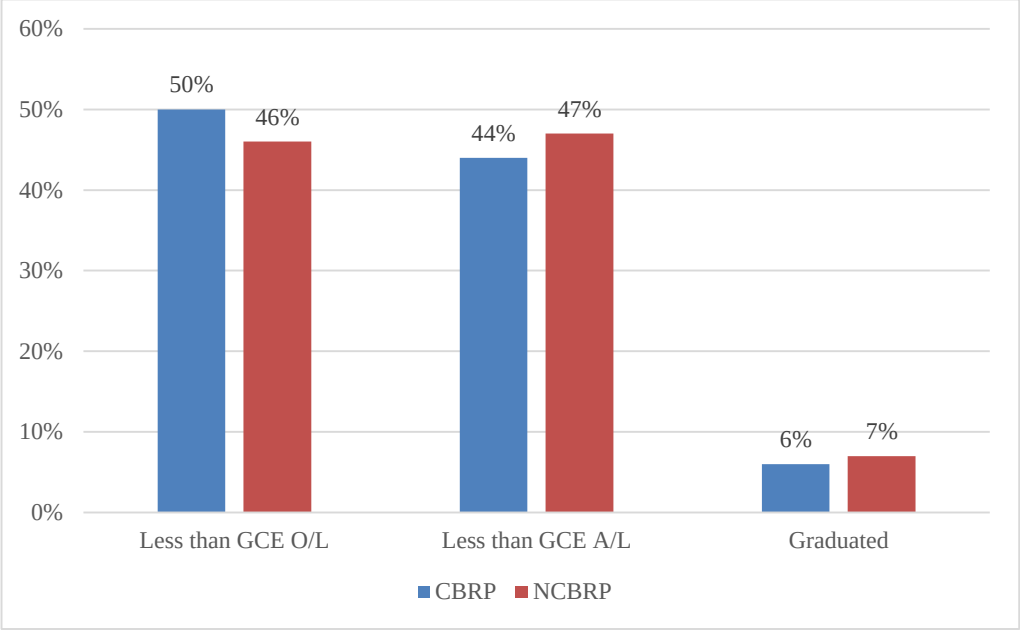


Chart 4.2: Level of education of respondents

4.2.1.3 Respondents' Occupation

As depicted in the chart 4.3 below, the highest percentage of 44 (CBRP) and 41% (NCBRP) are farmers while 29% are businessmen in both types. They are the people who could be considered as direct beneficiaries of the project. This situation was advantageous to collect more accurate data for the research.

Table 4.6: Respondents' Occupation

Project Type	Occupation			
	Farmer	Business	Government Sector Employment	Private Sector Employment
CBRP	44%	29%	16%	11%
NCBRP	41%	29%	18%	12%

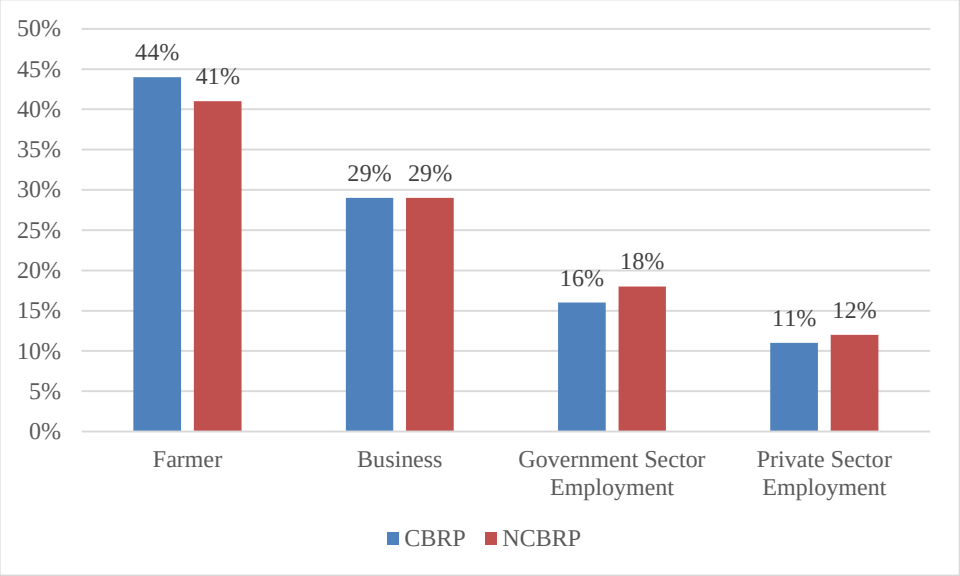


Chart 4.3: Respondents' Occupation

4.2.1.4 Number of years living in the area

As shown in Chart 4.4, below 80% of the respondents are being lived more than 11 years in both types of projects. It ensures that the researcher would have been able to collect data from permanent residents who are knowledgeable about the facility before and after the projects.

Table 4.7: No. of years living in the area

Project Type	No. of years living in the area			
	Less than 1 year	1-5 years	6-10 years	More than 11 years
CBRP	2%	5%	8%	86%
NCBRP	2%	6%	10%	82%

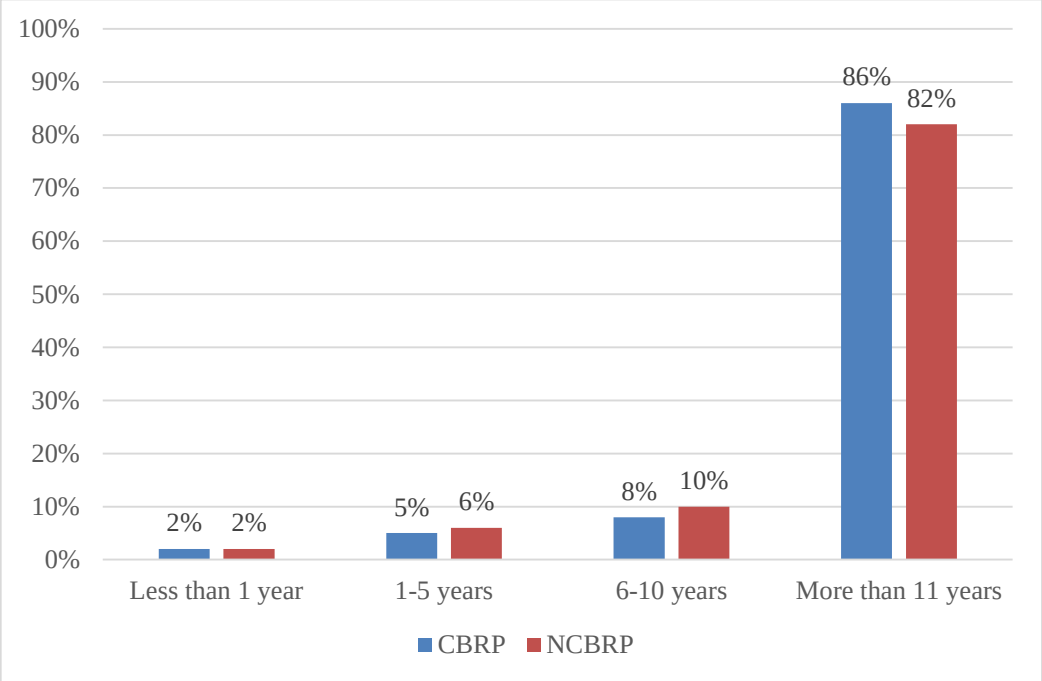


Chart 4.4: Number of years living in the area

4.2.1.5 Distance of the residence from the road

As depicted in the below chart 4.5, more than 60% of the respondents of both CBRP and NCBRP are living adjacent to the road. It indicates that the improvement of roads by both types of projects is much more beneficial to the residents and other commuters too.

Table 4.8: Distance of the residence from the road

Project Type	Distance of the residence from the road		
	Adjacent to the road	less than 100 m	more than 100 m
CBRP	64%	22%	14%
NCBRP	66%	21%	14%

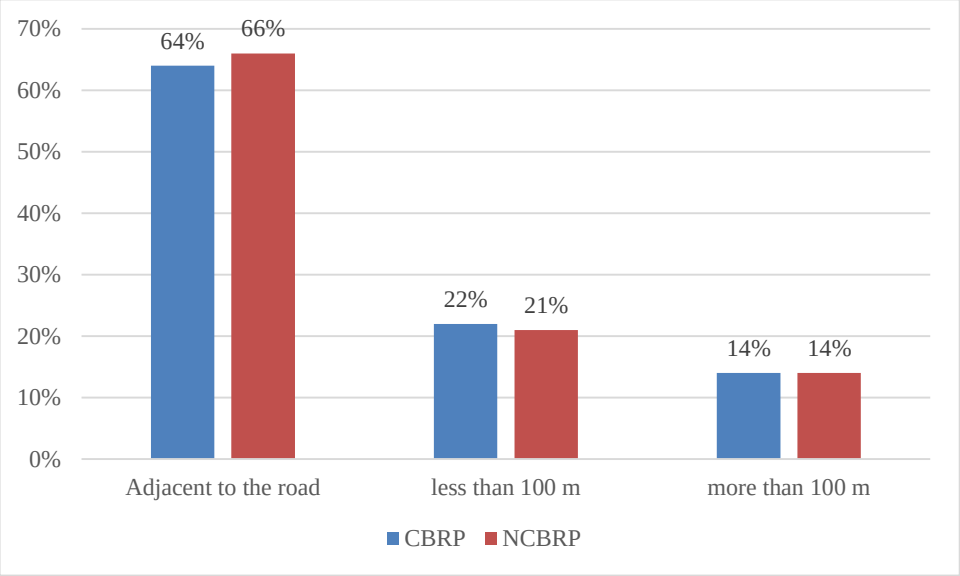


Chart 4.5: Distance of the residence from the road

4.2.2 Benefits of the Project

As shown in the Chart 4.6, results of the survey revealed that the respondents from both types of projects are benefited in terms of better access to transport goods, reducing of hiring charges, driving comfort, rising of land value, increasing the popularity and minimize migration to another area.

Table 4.9: Benefits of the Project

Project Type	Benefits of the project						
	Better access to transport of goods	Reducing hiring charges	Driving comfort	Rising of land value	Increasing the popularity	Minimize migration to other area	Others
CBRP	71%	74%	87%	78%	54%	65%	0%
NCBRP	72%	64%	87%	71%	63%	62%	0%

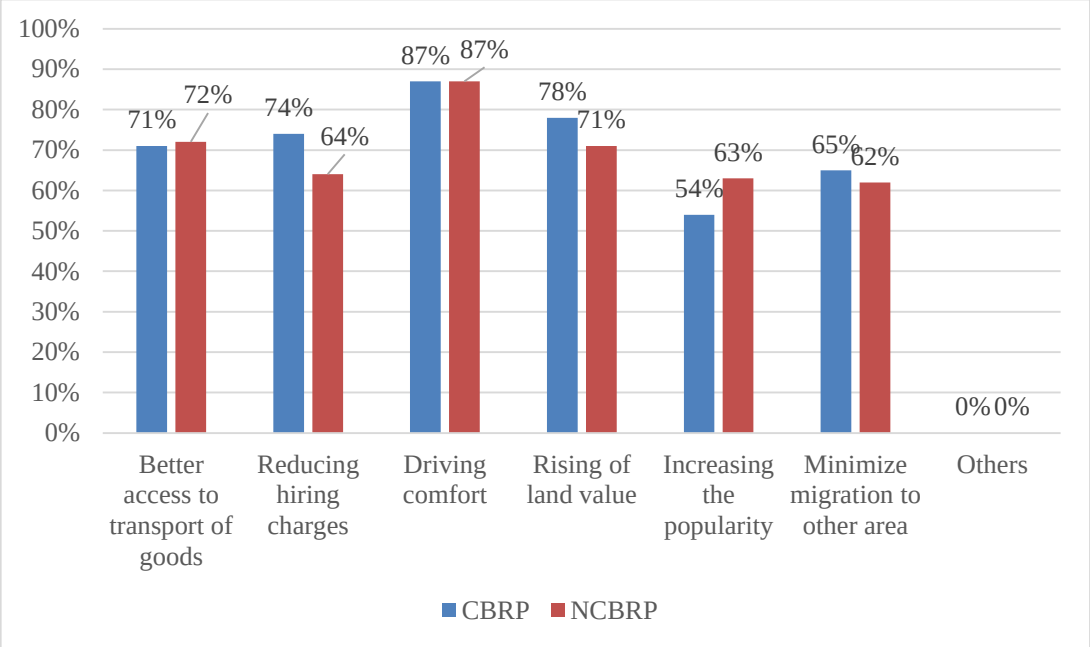


Chart 4.6: Benefits of the Project

4.2.3 Satisfaction of the respondent about the project

4.2.3.1 Level of satisfaction on the project

As shown in the below Chart 4.7, only 2.8% of the respondents were unsatisfied about the CBRP project whereas a notable percentage (39%) of respondents were unsatisfied with NCBRP. It also indicates that a significant percentage (63+34) of respondents are satisfied with the CBRP.

Table 4.10: Level of satisfaction on the project

Project Type	Level of satisfaction on the project		
	Highly Satisfied	Satisfied	Unsatisfied
CBRP	34%	63%	3%
NCBRP	12%	49%	39%

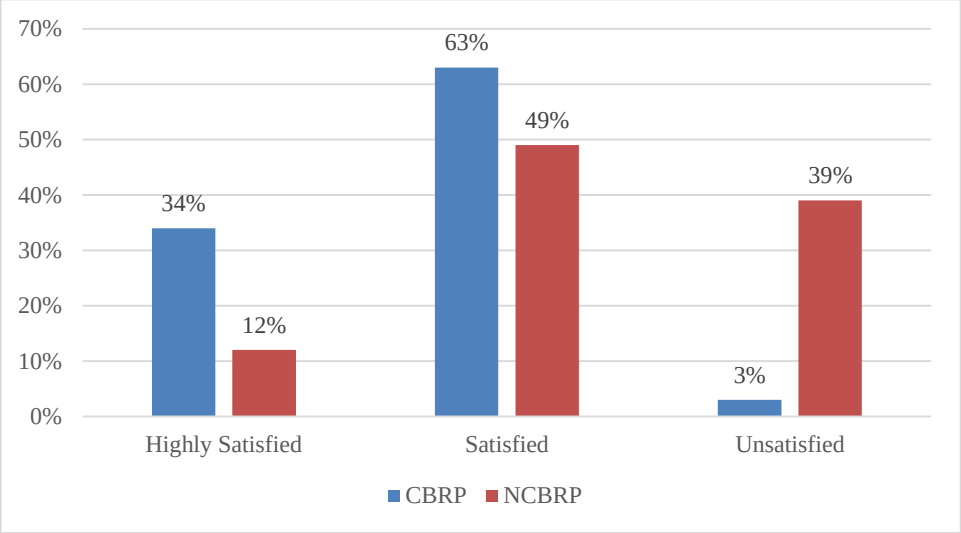


Chart 4.7: Level of satisfaction on the project

4.2.3.2 Perception on addressing public grievances

It was impossible to collect data in respect of addressing public grievances relating to the roads constructed under NCBRP, since there was no such system was adopted by NCBRP.

As depicted in the below Chart 4.8, less than 5% of the respondents were unsatisfied about the addressing of the public complaints, suggestions and requests. It gives an indication that iRoad has introduced a sound Grievance Redress Mechanism to address the public issues and to accommodate their suggestions into the road designs prior to construction is commenced.

Table 4.11: Perception on addressing public grievances

Road Type	Complaints			Suggestions			Requests		
	Highly Satisfied	Satisfied	Unsatisfied	Highly Satisfied	Satisfied	Unsatisfied	Highly Satisfied	Satisfied	Unsatisfied
CBRP	32%	64%	4%	32%	66%	3%	32%	64%	4%

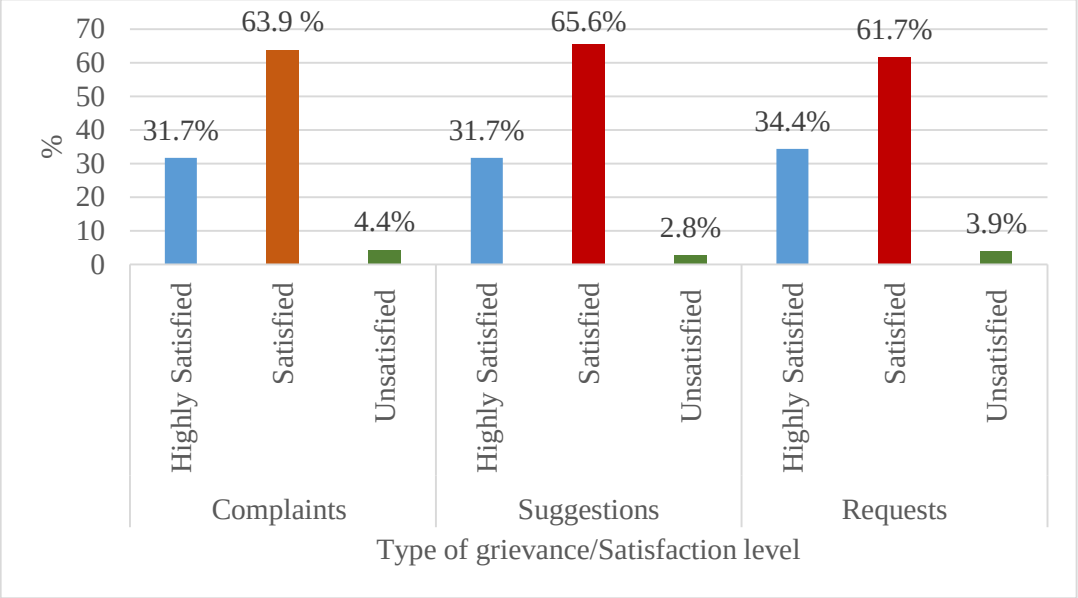


Chart 4.8: Perception on addressing public grievances

4.2.4 Public awareness

4.2.4.1 What are the awareness tools/strategies used?

Below Chart 4.9 shows only the data related to CBRP, as there was no such a strategy introduced by the NCBRP. Results of the survey revealed that the community in the project area was adequately aware of the CBRP even before the implementation. It was also observed that creating awareness among the relevant community was more comfortable to implement the project. According to the data, it was indicated that the community was more attracted to participate at community meetings rather than other strategies applied to create awareness among the public.

Table 4.12: What are the awareness tools/strategies used?

Road Type	What are the awareness tools/strategies used?				
	Public Notices	Community Meetings	Group Discussions	GRC meetings	Private Public Partnership activities
CBRP	36%	74%	46%	56%	30%

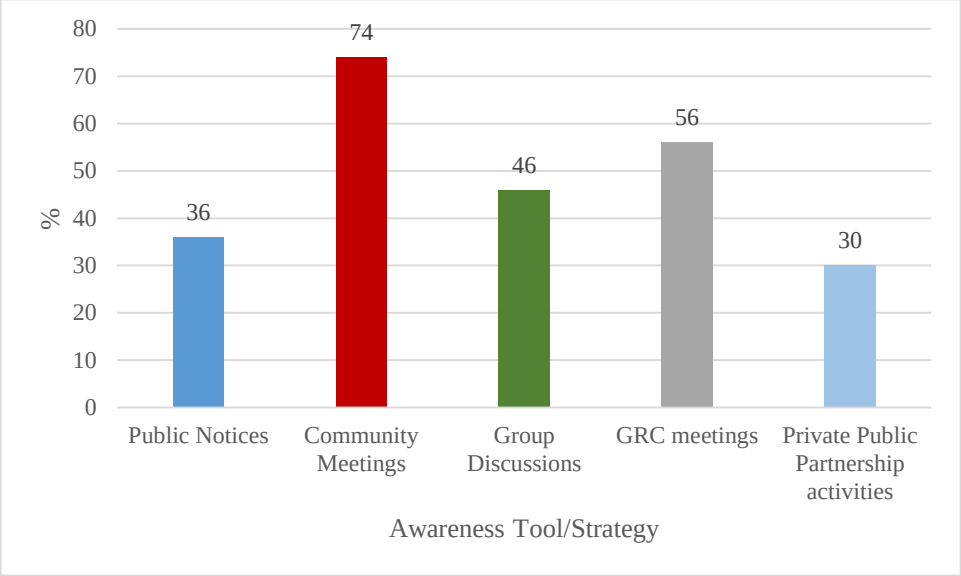


Chart 4.9: What are the awareness tools/strategies used?

4.2.5 Information from the Project Engineer

4.2.5.1 Project cost increment in percentage (As per the engineer's point of view)

As depicted in the Chart 4.10, the results of the survey revealed the actual construction cost of the CBRP was little higher than the estimated cost whereas the actual construction cost of the NCBRP was little less than the estimated cost.

Table 4.13: Project cost increment in percentage

Road Type	Road number																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
CBRP	5%	3%	5%	0%	11%	22%	9%	13%	-3%	-6%	-6%	-13%	3%	4%	13%	20%	10%	7%
NCBRP	-4%	-8%	-14%	-4%	-5%	-10%	-1%	-4%	-16%	-4%	-20%	3%	-1%	-16%	-9%	-10%	8%	-13%

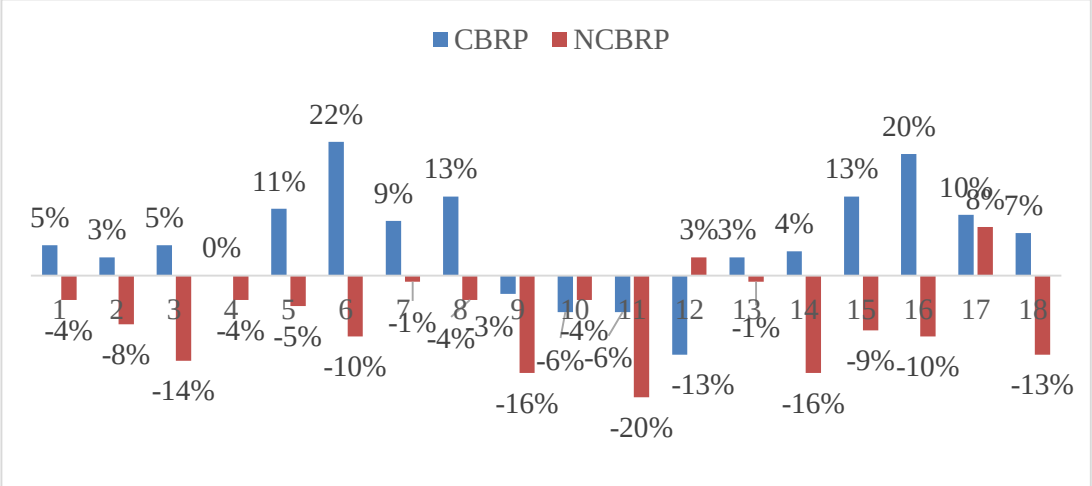


Chart 4.10: Project cost increment in percentage

4.2.5.2 Quality of Road Construction

As shown in the below Chart 4.11, only the CBRP has incorporated indigenous knowledge into their road designs which were resulted to deliver user-friendly roads to the end users.

However, it was also found that all the testing, using quality materials and monitoring of construction have been done according to the RDA specifications by both the projects.

Table 4.14: Quality of Road Construction

Road Type	Quality of road construction													
	All testing were done according to the RDA specification		Incorporated indigenous knowledge in to the design and construction		Quality of material used			Frequency of monitoring						
	Yes	No	Yes	No	High	Normal	Low	Daily	At least 3 days per week	More than 3 days less than 7 days	Weekly	Fortnight	Monthly	Quarterly
CBRP	100%	0%	100%	0%	17%	83%	0%	67%	0%	0%	28%	6%	0%	0%
NCBRP	100%	0%	0%	100%	50%	50%	0%	100%	0%	0%	0%	0%	0%	0%

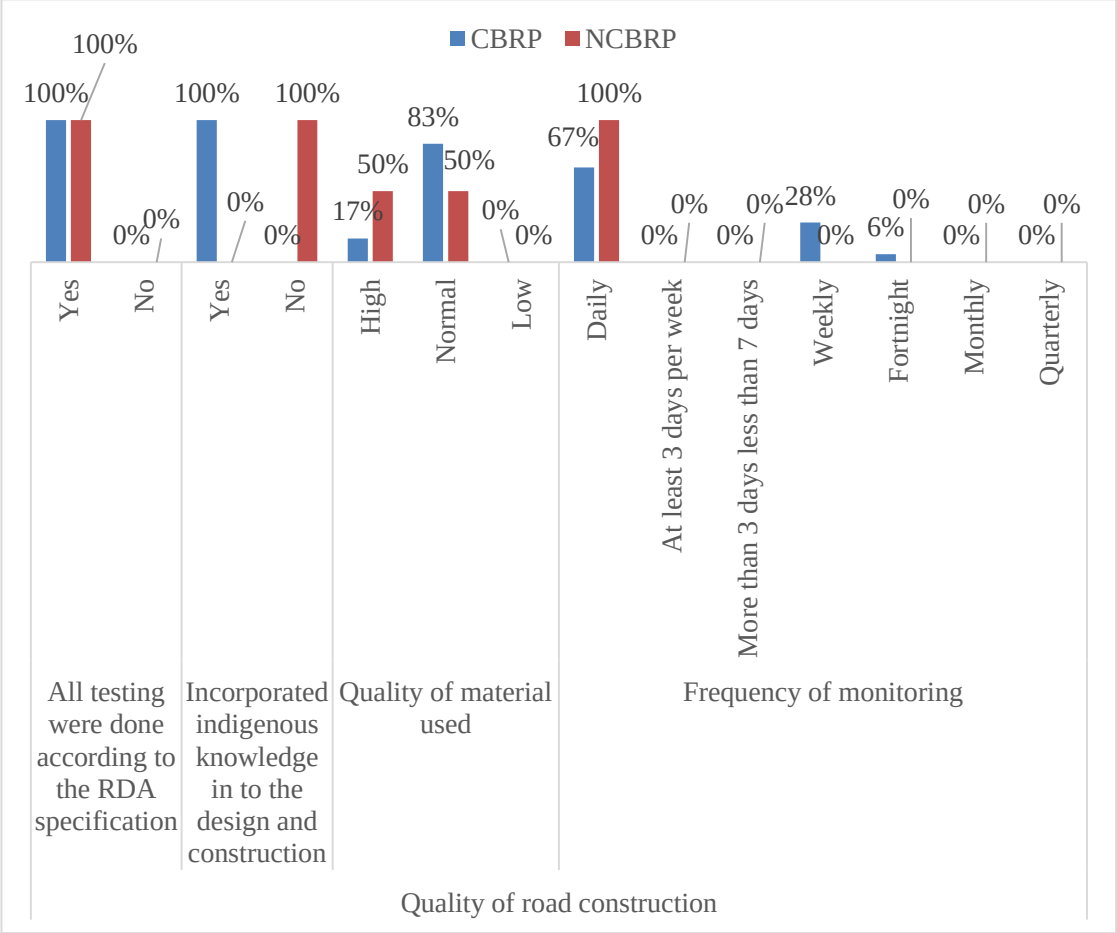


Chart 4.11: Quality of Road Construction

4.2.5.3 Community Participation for the Project

As depicted in the below Chart 4.12, community participation of the CBRP was highly satisfied (56%) whereas for the NCBRP was unsatisfied (78%).

Table 4.15: Community Participation for the Project

Type of Road	Community Participation for the Project		
	Highly Satisfied	Satisfied	Unsatisfied
CBRP	56%	28%	17%
NCBRP	6%	17%	78%

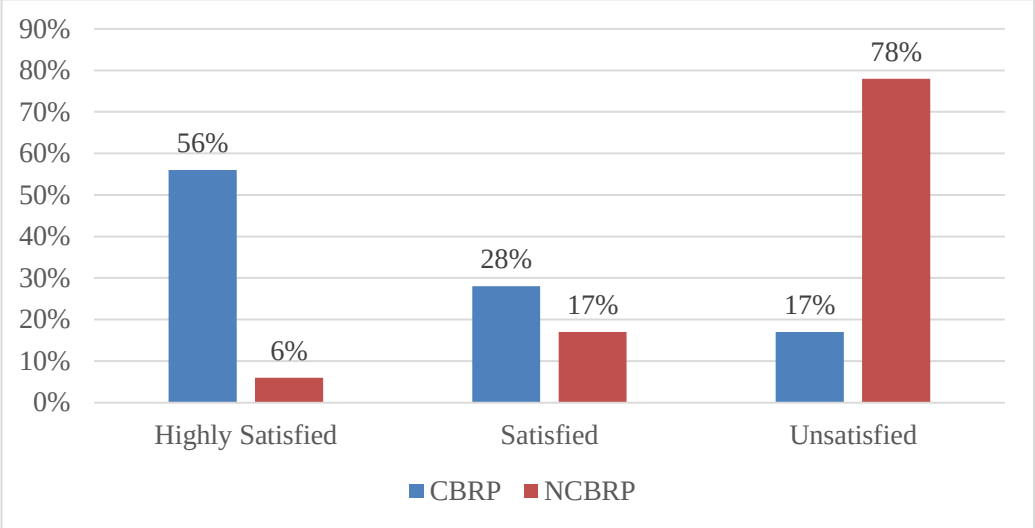


Chart 4.12: Community Participation for the Project

4.3 Comparison between CBRP and NCBRP of the cost variation vs. Satisfaction of the respondent and Community Participation

In compared with the CBRP to the NCBRP, a high majority of beneficiaries of CBRP are highly satisfied (34%) or satisfied (63%) than the beneficiaries of NCBRP. According to the chart above, the percentage (3%) of unsatisfied beneficiaries of CBRP is significantly less than the beneficiaries (39%) of NCBRP. As depicted in the below Chart 4.13, only 5% of the cost overrun has occurred for the CBRP. However, as the main objective of providing road facilities to the general public is to deliver user-friendly roads, the beneficiary satisfaction plays a vital role in this regard. Hence, the minute cost overrun is negligible.

Table 4.16: Comparison between CBRP and NCBRP

Type of Project	Cost Increment (%)	Satisfaction of the respondent about the project (%)			Community Participation for the Project (%)		
		Highly Satisfied	Satisfied	Unsatisfied	Highly Satisfied	Satisfied	Unsatisfied
CBRP	5%	34%	63%	3%	67%	33%	0%
NCBRP	-9%	12%	49%	39%	33%	67%	0%

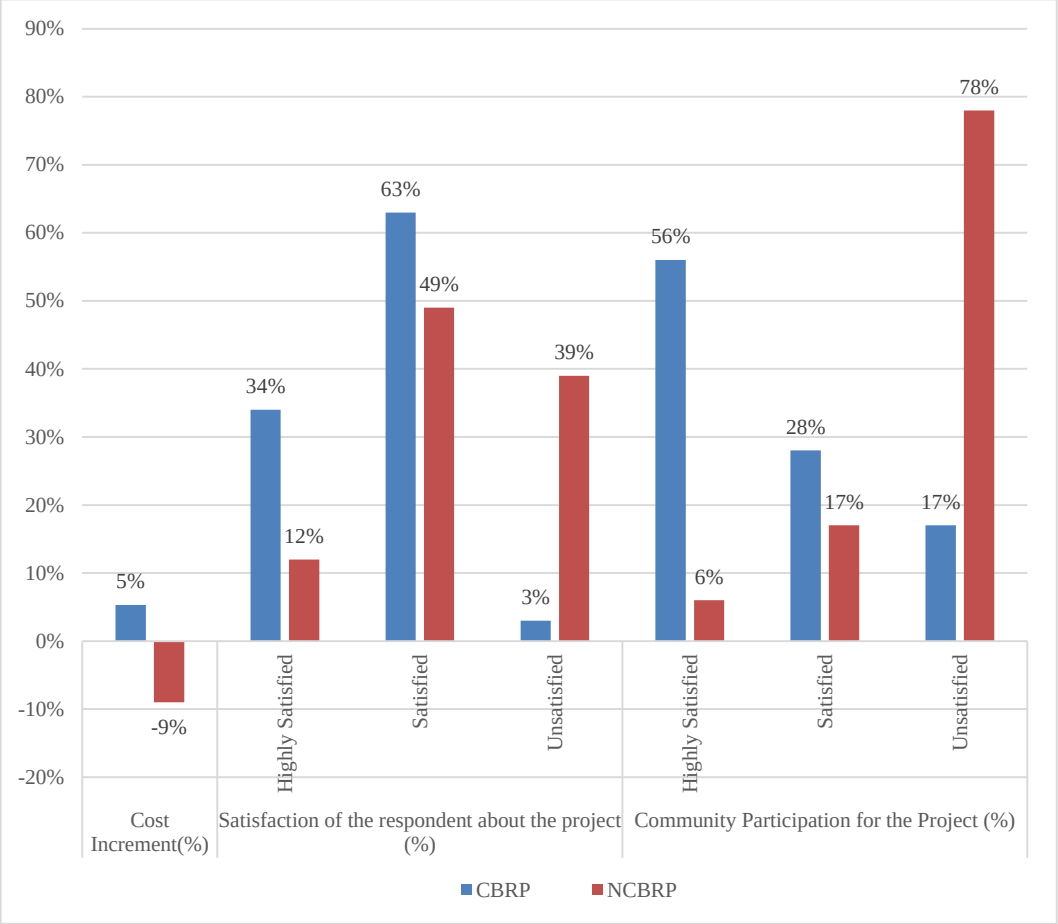


Chart 4.13: Comparison between CBRP and NCBRP

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Integrated Road Investment Programme (iRoad) has been implemented as a pilot project in the southern province in Sri Lanka in adopting community participation strategy (Community Based) as a novel approach. The researcher has intended to carry out a study to assess the effectiveness of community involvement in the implementation of iRoad project. In order to make the study more reliable, it has decided to extend the study to compare the effectiveness of a road project which has been implemented without community participation (Non Community Based).

Results of the study revealed that the respondents from both types of projects are benefited in terms of better access to transport goods, reducing of hiring charges, driving comfort, rising of land value, increasing the popularity and minimize migration to other area. It is remarkable that only 2.8% of the respondents were unsatisfied about the CBRP project whereas 39% of respondents were unsatisfied with NCBRP. Furthermore, a significant percentage (63+34) of respondents are satisfied with the CBRP. Only less than 5% of the respondents of the iRoad were unsatisfied about the addressing of the public complaints, suggestions and requests.

A notable finding of the study was that iRoad has been able to establish a proper Grievance Redress Mechanism to address the public issues and to accommodate their suggestions in to the road designs prior to construction. It was also found that the creating awareness among relevant community has been more comfortable to implement the project in a successful manner.

As per results of the study, it was revealed that the community was more attracted (74%) to participate at community meetings rather than other strategies applied to create awareness among public.

A noticeable findings of the study was that the iRoad project (CBRP) has been able to accommodate indigenous knowledge of the local community in to the final road designs since the project has adopted community participation strategy. That was

resulted to increase the satisfaction of communities (97%) towards the benefits of the iRoad project. Also community participation for the project was increased in CBRP (84%) than NCBRP (23%).

5.2 Recommendations

On the basis of the results of the study, following recommendations are suggested to be considered in implementation of similar community based road projects;

- Conducting of comprehensive public awareness programme would cause to create ownership feeling among users on project benefits.
- Cost overrun shall be minimised by adopting community participation strategy to the pre estimation stage of the project.
- Community participation would help to implement development programs more comfortably.
- Accommodation of indigenous technical knowledge of local community in to the road designs leads to deliver user friendly (more sustainable, environment friendly and socially accepted) roads.

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Appendix A: Summary of CBRP CBRP & NCBRP

Table 4.17: Summary of CBRP

No	Road Name	Cost Increment	Satisfaction of the respondent about the project			Community Participation for the Project		
			Highly Satisfied	Satisfied	Unsatisfied	Highly Satisfied	Satisfied	Unsatisfied
1	Porupitiya-Annasigalawila margaya	5%	0%	100%	0%	100%	0%	0%
2	Bengamuwa-Dabogala-Napath Ella	3%	10%	90%	0%	100%	0%	0%
3	Urubokka Pothdeniya Margaya	5%	70%	30%	0%	100%	0%	0%
4	Thumbe Kongala Margaya	0%	30%	70%	0%	100%	0%	0%
5	Dehigahahena-Udukawa	11%	30%	70%	0%	100%	0%	0%
6	Bandurawila - Udukawa	22%	10%	90%	0%	100%	0%	0%
7	Mawita-Duli Ella	9%	0%	100%	0%	100%	0%	0%
8	Dhanawala- Mawita	13%	0%	100%	0%	100%	0%	0%
9	Hapugala - Eriyagaha Junction	-3%	70%	30%	0%	0%	100%	0%
10	Edirisinghe Mawatha – Navinna	-6%	30%	70%	0%	0%	100%	0%
11	Goluwamulla-Atakohota	-6%	70%	30%	0%	0%	100%	0%
12	Galduwa Para	-13%	80%	20%	0%	0%	100%	0%
13	4 Ela - School Road	3%	90%	10%	0%	100%	0%	0%
14	Godawaya Junction - Temple Road	4%	40%	60%	0%	0%	100%	0%
15	Pattiyapola-Akkarawela-Thalunna	13%	50%	50%	0%	0%	100%	0%
16	Uswewa-Binkama Margaya	20%	0%	90%	10%	100%	0%	0%
17	Ela Banteka Para	10%	20%	80%	0%	100%	0%	0%
18	Thalawa Gonadeniya Margaya	7%	20%	40%	40%	100%	0%	0%
Total		**5%**	**34%**	**63%**	**3%**	**67%**	**33%**	**0%**

Summary of NCBRP

Table 4.18: Summary of NCBRP

No	Road Name	Cost Increment	Satisfaction of the respondent about the project (%)			Community Participation for the Project (%)		
			Highly Satisfied	Satisfied	Unsatisfied	Highly Satisfied	Satisfied	Unsatisfied
1	Imp. to Pasgoda-Udapasgoda Road(0+000-2+000Km)	-4%	0%	40%	60%	100%	0%	0%
2	Imp.to Gomila-Galkatikanda Road(0+000-2+300Km)	-8%	0%	50%	50%	100%	0%	0%
3	Imp. to Mulatiyana-Pallawala Road(0+000-0+700KM)	-14%	0%	60%	40%	100%	0%	0%
4	Improvements to Walpita-Kadduwa Road(0+000-1+900Km)	-4%	10%	50%	40%	100%	0%	0%
5	Improvements to Walpita-Kadduwa Road(1+900-3+700Km)	-5%	20%	40%	40%	100%	0%	0%
6	Improvements to Nape Handiya-Usgoda-Akurugoda Road (0+0002+000Km)	-10%	0%	60%	40%	100%	0%	0%
7	Surface Improvements to Galbokka-Batadura-Diyadawa Road (2+000-5+000Km)	-1%	20%	50%	30%	100%	0%	0%
8	Surface Improvements to Galbokka-Batadura-Diyadawa Road (5+000-8+000Km)	-4%	20%	40%	40%	100%	0%	0%
9	Improvements to Weledagoda-Kadduwa Road (0+000-2+000Km)	-16%	10%	50%	40%	0%	100%	0%
10	Beralaliya,Madiriwaththa,Madawala to Munamalpe Road(0+500-1+200Km)-Stage 02	-4%	20%	50%	30%	0%	100%	0%
11	Imrovements to Matara D.D. Dahanayake Mawatha	-20%	30%	60%	10%	0%	100%	0%
12	Improvements to Udara Mawatha,Walgama	3%	0%	40%	60%	0%	100%	0%
13	Improvements Rathmale Devsirigama Ranaviru Krishantha Yapa Mawatha(0+000-0+800)–Stage 11	-1%	20%	50%	30%	100%	0%	0%
14	Improvements to Sulthanagoda-Kuruduwattha Roundabout Road (0+000-1+000Km)	-16%	20%	50%	30%	0%	100%	0%
15	Improvements to Kamburupitiya-Miriswaththa Road-Phase 1	-9%	20%	40%	40%	0%	100%	0%
16	Widening of Denipitiya-Hattiyaduwa-Kotawila Road (0+000-3+200Km)	10%	0%	50%	50%	100%	0%	0%
17	Imp. to Pitiduwa-Kumbalgama-Jinaraja Mawatha at Weligama Urban Council Limit(Stage 11)	8%	0%	50%	50%	100%	0%	0%
18	Improvements to Warakapitiya to Thekkawatta Road(0+000-1+800Km)	-13%	20%	60%	20%	100%	0%	0%
Total		**-9%**	**12%**	**49%**	**39%**	**33%**	**67%**	**0%**

Appendix B: Questionnaire for CBRP

Questionnaire Type 01 (English)

1. General

1.1 Date of commencement:	
1.2 Road:	
1.3 GND:	

2. Information about the respondent

2.1 Name:	
2.2 Occupation:	
2.3 House No:	
2.4 Address:	
2.5 Contact No:	

2.6 Age

18-35 years	36- 61 years	Above 61 years

2.7 Level of Education

Less than GCE O/L	Less than GCE A/L	Graduated

2.8 Occupation

Farmer	Business	Government sector employment	Private Sector employment

2.9 No. of years living in the area

Less than 1 year	1 - 5 years	6 - 10 years	More than 11 years

2.10 Residence from the road

Adjacent to the road	Less than 100m	More than 100m

3. Benefits of the project

Better access to transport of goods	Reducing hiring charges	Driving comfort	Rising of land value	Increasing the popularity	Minimize migration to other area	Others

4. Satisfaction of the respondent about the project

Highly Satisfied	Satisfied	Unsatisfied

If unsatisfied give reasons (List)

……

……

……

……

Grievances	Perception of the respondent in addressing grievances		
	Highly satisfied	Satisfied	Unsatisfied
Complaints			
Suggestions			
Requests			

If unsatisfied give reasons (List)

……

……

……

……

……

5. Public awareness

5.1 Why public awareness and community participation are needed?

……

……

……

……

……....

5.2 What are the awareness tools/strategies used?

Public Notices	Community Meetings	Group Discussions	GRC meetings	Private Public Partnership activities

6. General comments of the project

Questionnaire Type 02 (English) Project Engineer's use only

Name of the Engineer:……

1. Contact Details:

Office Address	
Mobile	
Land Phone	
Email	

2. Cost for the construction

2.1 Estimated cost per km length (LKR):…….

2.2 Actual cost per km length (LKR):……..

3. Quality of road construction

3.1 All testing were done according to the RDA specifications

Yes		No	

3.2 Incorporated indigenous knowledge in to the design and construction

Yes		No	

3.3 Quality of material used

Quality of material	High	Normal	Low

3.4 Frequency of monitoring

Daily	At least 3 days per week	More than 3 days less than 7 days	Weekly	Fortnight	Monthly	Quarterly

4. Community Participation for the project

Highly Satisfied	Satisfied	Unsatisfied

Questionnaire Type 01 (Sinhala)

ප්‍රශ්නාවලිය

1. සාමාන්‍යය විස්තර

1.1 ආරම්භක දිනය	
1.2 මාර්ගය	
1.3 ග්‍රාම නිළධාරී කොට්ඨාශය	

2. තොරතුරු සපයන්නන්ගේ විස්තර

2.1 නම	
2.2 රැකියාව/වෘත්තීය	
2.3 නිවාස අංකය	
2.4 ලිපිනය	
2.5 දුරකථන අංකය	

2.6 වයස

අවුරුදු 18 – 35	අවුරුදු 36 - 60	අවුරුදු 61 ට වැඩි

2.7 අධ්‍යාපන මට්ටම

අ.පො.ස (සා.පෙළ) දක්වා	අ.පො.ස (උ.පෙළ) දක්වා	උපාධිධාරී

2.8 රැකියාව/වෘත්තිය

ගොවිතැන	ව්‍යාපාර	රාජ්‍ය අංශයේ රැකියාව	පෞද්ගලික අංශයේ රැකියාව

2.9 මෙම ප්‍රදේශයේ ජීවත්වන කාලය

වසරකට අඩු	වසර 1 – 5	වසර 6 -10	වසර 11 කට වැඩි

2.10 නිවසේ සිට මාර්ගයට ඇති දුර

මාර්ගයට යාබදව	මාර්ගයේ සිට මීටර 100ක් පමණ දුරින්	මාර්ගයේ සිට මීටර 100කට වැඩි දුරින්

3.0 ව්‍යාපෘතියෙන් ලැබෙන ප්‍රතිලාභ

භාණ්ඩ ප්‍රවාහනය පහසු වීම	ප්‍රවාහන වියදම් අඩු වීම	ධාවනය වඩාත් සුවපහසු වීම	ඉඩම් වල වටිනාකම වැඩි වීම	ප්‍රදේශයට ඇති ජනප්‍රියත්වය වැඩිවීම	ග්‍රාමීය ප්‍රදේශයේ ජීවත්වීමේ පහසුව වැඩිවීම	වෙනත් (සටහන් කරන්න)

4.0 ව්‍යාපෘතිය පිළිබඳව තොරතුරු සපයන්නන්ගේ ආකල්පය

ඉතා සතුටුදායකයි	සතුටුදායකයි	අසතුටුදායකයි

අසතුටුදායකනම් ඊට හේතු දක්වන්න (ලැයිස්තුවක්)

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මැසිවිලි	මැසිවිලි ආමන්ත්‍රණය		
	ඉතා සතුටුදායකයි	සතුටුදායකයි	අසතුටුදායකයි
පැමිණිළි			
යෝජනා			
ඉල්ලීම්			

අසතුටුදායකනම් ඊට හේතු දක්වන්න (ලැයිස්තුවක්)

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5. ප්‍රජාව දැනුවත් කිරීම

5.1 ප්‍රජාව දැනුවත් කිරීම හා ඔවුන් සහභාගීත්වය අවශ්‍ය ඇයි?

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5.2 දැනුවත්කිරීම සඳහා උපයෝගී කරගන්නා ලද මෙවලම් සහ ක්‍රමෝපායන්

ප්‍රචාරක දැන්වීම්	ප්‍රජා රැස්වීම්	කණ්ඩායම් සාකච්ජා	මැසිවිලි සහන කමිටු රැස්වීම්	රාජ්‍යය හා පෞද්ගලික අංශයේ හවුල්කිරීමේ ක්‍රියාමාර්ග

6. ව්‍යාපෘතිය පිලිබඳ පොදු අදහස්

Appendix C: Questionnaire for NCBRP

Questionnaire Type 01 (English)

1. General

1.1 Date of commencement:	
1.2 Road:	
1.3 GND:	

2. Information about the respondent

2.1 Name:	
2.2 Occupation:	
2.3 House No:	
2.4 Address:	
2.6 Contact No:	

2.6 Age

18-35 years	36- 61 years	Above 61 years

2.7 Level of Education

Less than GCE O/L	Less than GCE A/L	Graduated

2.8 Occupation

Farmer	Business	Government sector employment	Private Sector employment

2.9 No. of years living in the area

Less than 1 year	1 - 5 years	6 - 10 years	More than 11 years

2.10 Residence from the road

Adjacent to the road	Less than 100m	More than 100m

3. Benefits of the project

Better access to transport of goods	Reducing hiring charges	Driving comfort	Rising of land value	Increasing the popularity	Minimize migration to other area	Others

4. Satisfaction of the respondent about the project

Highly Satisfied	Satisfied	Unsatisfied

If unsatisfied give reasons (List)

……

……

……

……

5. General comments of the project

Questionnaire Type 02 (English) Project Engineer's use only

Name of the Engineer:……

1. Contact Details:

Office Address	
Mobile	
Land Phone	
Email	

2. Cost for the construction

2.1 Estimated cost per km length (LKR):…….

2.2 Actual cost per km length (LKR):……..

3. Quality of road construction

3.1 All testing were done according to the RDA specifications

Yes		No	

3.2 Incorporated indigenous knowledge in to the design and construction

Yes		No	

3.3 Quality of material used

Quality of material	High	Normal	Low

3.4 Frequency of monitoring

Daily	At least 3 days per week	More than 3 days less than 7 days	Weekly	Fortnight	Monthly	Quarterly

4. Community Participation for the project

Highly Satisfied	Satisfied	Unsatisfied

Questionnaire Type 01 (Sinhala)

ප්‍රශ්නාවලිය

3. සාමාන්‍යය විස්තර

1.1 ආරම්භක දිනය	
1.2 මාර්ගය	
1.3 ග්‍රාම නිළධාරී කොට්ඨාශය	

4. තොරතුරු සපයන්නන්ගේ විස්තර

2.1 නම	
2.2 රැකියාව/වෘත්තීය	
2.3 නිවාස අංකය	
2.4 ලිපිනය	
2.5 දුරකථන අංකය	

2.6 වයස

අවුරුදු 18 – 35	අවුරුදු 36 - 60	අවුරුදු 61 ට වැඩි

2.7 අධ්‍යාපන මට්ටම

අ.පො.ස (සා.පෙළ) දක්වා	අ.පො.ස (උ.පෙළ) දක්වා	උපාධිධාරී

2.8 රැකියාව/වෘත්තිය

ගොවිතැන	ව්‍යාපාර	රාජ්‍ය අංශයේ රැකියාව	පෞද්ගලික අංශයේ රැකියාව

2.9 මෙම ප්‍රදේශයේ ජීවත්වන කාලය

වසරකට අඩු	වසර 1 – 5	වසර 6 -10	වසර 11 කට වැඩි

2.10 නිවසේ සිට මාර්ගයට ඇති දුර

මාර්ගයට යාබදව	මාර්ගයේ සිට මීටර 100ක් පමණ දුරින්	මාර්ගයේ සිට මීටර 100කට වැඩි දුරින්

3.0 ව්‍යාපෘතියෙන් ලැබෙන ප්‍රතිලාභ

භාණ්ඩ ප්‍රවාහනය පහසු වීම	ප්‍රවාහන වියදම් අඩු වීම	ධාවනය වඩාත් සුවපහසු වීම	ඉඩම් වල වටිනාකම වැඩි වීම	ප්‍රදේශයට ඇති ජනප්‍රියත්වය වැඩිවීම	ග්‍රාමීය ප්‍රදේශයේ ජීවත්වීමේ පහසුව වැඩිවීම	වෙනත් (සටහන් කරන්න)

4.0 ව්‍යාපෘතිය පිළිබඳව තොරතුරු සපයන්නන්ගේ ආකල්පය

ඉතා සතුටුදායකයි	සතුටුදායකයි	අසතුටුදායකයි

අසතුටුදායකනම් ඊට හේතු දක්වන්න (ලැයිස්තුවක්)

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6. ව්‍යාපෘතිය පිලිබඳ පොදු අදහස්

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