TERMS OF REFERENCE OF THE EVALUATION OF THE SOCIO-ECONOMIC IMPACT ON RURAL PEOPLE BY IMPROVEMENT OF ROADS UNDER NABARD UNDERTAKEN BY PANCHAYATH RAJ ENGINEERING DEPARTMENT FROM 2012-13 TO 2014-15

1. Study Title:

Title of the study is "Evaluation of Socio-Economic impact on rural people by improvement of roads under NABARD undertaken by Panchayath Raj Engineering Department of Karnataka from 2012-13 to 2014-15".

2. **Department implementing the scheme:**

The Panchayath Raj Engineering Department of Rural Development and Panchayath Raj Department of Government of Karnataka is the line and implementing department.

3. Background Information:

Rural connectivity is one of the key factors for the socio-economic development of the State. This is achieved through rural roads which connect rural areas with urban marketing, National Highways (NH), State Highways (SH), Major District Roads (MDR) and Other District Roads (ODR). These also provide links between two or more rural locations/ growth centers. Good all weather roads help rural people in commuting and transportation of their agricultural products to markets. It helps in providing timely and best education and health facilities and services. This helps in up keeping vibrant economic activities in rural areas.

One of the major activities of the Rural Development Department is the construction and improvement of rural roads. Karnataka State has a network of 156000 Kms of rural roads. Out of this, 75866 Km are earthen roads, 21495 Km are metalled and 58184 kms are with bituminous surface. As per Economic Survey 2014-

15 Report of Karnataka, up to end of 2013-14, 1771 habitations with a population between 250-499 have been identified as unconnected and 10269 habitations are having less than a population of 250 are unconnected.

SOURCE OF FUNDING AND REPAYMENT:

Rural roads are improved under Rural Infrastructure Development Fund (RIDF) which is instituted by National Bank for Agriculture and Rural Development (NABARD). For each year NABARD sanctions the normative allocation to all the States for 34 activities, inclusive of roads. NABARD sanctions loans of 80% to 95% of the project cost at the prevailing rate of interest at the time of sanction. For Rural connectivity, the loan portion is 80% and the remaining 20% is met from the State budget. The loan portion is to be repaid in equal annual installments within 7 years from the date of drawing the loan, including a grace period of 2 years. The interest is to be paid at the end of every quarter of a financial year.

APPROVAL PROCEDURE:

The total normative annual allocation of RIDF is further distributed by the Cabinet sub-Committee to all the departments based on the number of projects on hand and the projects pending with the departments. This distribution is based on the decision taken in the High Power Committee (HPC) constituted vide Government of Karnataka order number IFS 34 CIF 96 dated: 06.02.1997 under the Chairmanship of the Development Commissioner with Secretary (B&R) Finance Department as Member-Secretary. The list of proposed works by departments is submitted to the Government. The Government approves the list of projects, and then instructions are given to the departments for preparation of Detailed Project Reports (DPRs). These DPRs are submitted to NABARD for approval. After approval of NABARD, the State Government accords Administrative Approval to the projects sanctioned.

WORK SELECTION CRITERIA:

- Road proposed for improvement shall from District Rural Road Plan (DRRP).
- It shall connect multiple villages and/or markets of agro products.
- Length of road shall be a minimum of 1.00 Km.

DPR PREPARATION:

DPR's are prepared as per guidelines of Indian Road Congress (IRC) standards duly considering necessary items as per site requirement based on California Bearing Ratio (CBR) values of the soil known through laboratory tests. Special Publication-72 (SP-72) is followed for preparation of DPRs.

TENDER PROCEDURE:

Karnataka Transparency in Public Procurement Act and Rules are followed for implementation of projects. According to the delegation of powers issued by Finance Department, technical sanction is given to the approved projects.

MAINTENANCE:

Defect Liability Period is 2 years, and for maintenance it is 3 years for NABARD projects after completion. The State Government provides funds for maintenance of rural roads under CMGSY every year which is directly released to all Zilla Panchayats. Emergent repair works to roads list are prepared and recommended by a Task Force Committee headed by Taluka MLA. Accordingly, the State Government provides grants for these works which are released directly to concerned Zilla Panchayats.

4. Scope and Objective of the Evaluation:

- A. The scope of the evaluation is all the 30 districts of the State. The objective of the study is to assess the overall socio-economic impact on the lives of the rural people by promotion of economic development and provision of access to basic services at the house hold and village level as a result of enhanced connectivity (Roads and Bridges) provided by Panchayath Raj Engineering Department of RDPR with the assistance of NABARD.
- B. The process of selection of works and quality/standards of these roads and bridges and its sustainability.
- C. More specifically impact evaluation will assess the following.
 - 1. Change in the number of people/farmers living below poverty line.
 - 2. Change in the proportion of students completing Primary Education, ratio of girls to boys in primary, secondary and higher education.
 - 3. Changes in the MMR and IMR.
 - 4. Wage rate and employment pattern for male and female workers.
 - 5. Changes in mobility pattern of targeted population and changes in the availability of basic economic and social infrastructure and services (schools, hospitals, market, financial centers, Government and Non-Government institutions, etc).
 - The focus of the study is on the following sectors.
 Agriculture and Allied sector, Industry, Employment, Education, Health,
 Transport, Social Aspects, Poverty alleviation and Urbanization.
- D. To find out the constraints in implementation of the scheme and suggest modifications if any.

5. **Monitoring Mechanism:**

The financial and physical progress of the roads and bridges works under NABARD is reviewed monthly by Principal Secretary to Government, RDPR

Department in the MPIC review meeting. Further, as per Government of Karnataka order number IFS/38CIF/98 dated: 27.08.1998, the Empowered Committee headed by Additional Chief Secretary and Development Commissioner with concerned Secretaries to Government and the CGM NABARD review the progress of NABARD roads once in a quarter.

6. Abstract of the Progress achieved so far:

DETAILS OF NABARD WORKS DURING PREVIOUS 3 YEARS

Year	Allocation		Expenditure	Physical	Physical	Physical	
	(Target)	Release	(Achievement)	Target	(Achievement)	Percenta	
			(Acmevement)	(KM)	(KM)	ge	
2012-13	156.90	118.16	118.16	470.00	424.00	90.21	
2013-14	72.91	72.91	71.19	300.00	238.00	79.33	
2014-15	133.17	133.16	130.29	440.00	431.60	98.09	

7. Evaluation questions (Inclusive not exhaustive)

- 1. Is there any codified criteria followed for the selection of works under this scheme? If yes, is it transparent, judicious and fair? Is it need based or resource based selection after the normative allocation is fixed by NABARD? If not what should be the criteria for selection of works to be followed?
- 2. Are there any problems encountered in/during the acquisition of land for road formation under this scheme at the village/Gram Panchayath levels? Do the local Governments help in the acquisition of land?

- 3. What is the total length of roads to be tackled and what is the extent of length constructed by NABARD assistance since inception and length constructed from 2012-13 to 2014-15?
- 4. What is the average time taken in the construction of roads/per km from the date of issuance of Administrative approval to the date of completion of the work? What is the cost incurred under this scheme per km of roads and average cost of a bridge and foot bridge? How does it compare with permitted/actual cost for similar items in PMGSY?
- 5. Are there instances of change of works after approval of NABARD? If yes, where have they happened and what are the reasons for doing so? Has the approval of NABARD obtain for such works?
- 6. Are the DPRs prepared as per the Indian Road Congress (IRC) standards and is the California Bearing Ratio (CBR) values of the soil arrived from laboratory tests is adhered to? If not, why not?
- 7. Are there any instances of a road/stretch of a road length done under this scheme being shown to have completed under various other schemes which are implemented by Government/PRIs or *vice versa?* If so, which are these roads and what action is taken on such deviations/aberrations?
- 8. Are there cases where sanction of road lengths less than 1 Km have been given under this scheme in violation of guidelines? If yes, which are those cases? Was the sanction given with good and due reasons recorded or was it without any such thing?
- 9. How many road works taken up under this scheme gave complete connectivity from-

- i) Farm/Agricultural fields to market.
- ii) Village to all weather roads.
- iii) Village to MDR.
- iv) Village to State Highway.
- v) Village to another village.
- 8. Is there any online Management and Monitoring System incorporating both intranet and internet based system of obtaining update the quality and cost norms of these roads constructed? If so, give details.
- 9. Is traffic volume study conducted before/after implementation of these roads? If yes, what does the study reveal? If not, why not.
- 10. What have been the savings/expenditure over and above the estimates for completion of roads? Are these excessive?
- 11. Is there a prescribed/designed system of funding arrangements made for maintenance of these roads? If not, are these roads being maintained? If yes, from where do the funds come?
- 12. Are there shelves of projects to be taken for unconnected villages kept ready in advance for speedier completion of the roads? If not, why not?
- 13. Are there any vigilance committees constituted at PRIs level for monitoring the quality of roads and for maintenance etc?
- 14. Has convergence of MGNREGA funds been made and utilization local labour done while constructing these roads? If not, why not? If yes, what are the man days generated under the scheme for the evaluation period? Please elaborate.
- 15. Should the scheme be continued? If not, why not? If yes, with what modifications?

8 Sampling and Evaluation Methodology:

From the information provided by PRED in the table below, the number of roads, bridges and foot bridges completed during 2012-14, 2013-14 and 2014-15 have been clubbed(totaled) together district wise. From these totals, two districts from each circle have been selected at the first stage of purposive Cluster sampling in with the basis that the districts having highest total number of completed works and lowest total number of works. From these selected districts/divisions in the circle, 10% of roads and bridges and 5% of foot bridges are to be selected randomly or by systemic random sampling in the second stage from each circle each year (This will be done by the Consultant Evaluation Organization at the Work Plan level. Following this principle, from the population of 1539 road works 158 are to be selected in the sample, of the population of 202 bridges 26 are to be selected in the sample and of the population 2427 foot bridges 124 are to be selected in the sample for the study. The district wise/circle wise sample drawn (only sample size) and their respective populations is given below. The information provided by PRED is for physically completed works, but there are chances that the work with same unique ID number is taken in two years. If that is the case the sample size may change but the sampling intensity will remain unchanged.

The macro level physical and financial progress of the roads, bridges and foot bridges of all the 8 circles to be obtained from the Chief Engineer PRED for the evaluation period. The primary data to be collected from the villages/GP level functionaries and residents benefited by the roads by a structured format about the direct/indirect benefits of roads constructed and the overall Socio-economic Development by bench marking 2010-11 as the base year and the overall benefits of the scheme be assessed in the report.

FGDs to be conducted with all stake holders regarding the selection of works, implementation, maintenance after completion and the direct/indirect benefits of the

roads and the Socio Economic benefits derived. Suggestion for the above process and improvements for effective implementation of the scheme may be detailed in the report.

NABARD Roads, Bridges and Foot Bridges Sampling Sheet

	Circle/Divi sion	2012-13							2013-14							2014-15						
SI. No		Total no of works comple ted	Sample d Works 10% of popln	Total no of Bridg es comp leted	Samp led Bridg es 10% of popIn	Total no of Foot Bridges comple ted	Samp led Foot Bridg es 5% of popIn	Total no of work s com plete d	Samp led Work s 10% of popln	Total no of Bridges comple ted	Samp led Bridg es 10% of popIn	Total no of Foot Bridges comple ted	Sample d Foot Bridges 5% of popIn	Total no of work s com plete d	Samp led Work s 10% of popIn	Total no of Bridg es comp leted	Sampl ed Bridg es 10% of popIn	Total no of Foot Bridg es comp leted	Sampl ed Foot Bridg es 5% of popln			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
	Bangalore Circle																					
1	Bangalore (U)	27	3	0	0	48	2	27	3	0	0	68	2	47	5	0	0	55	3			
	Madhugiri & Tumkur	18	2	0	0	52	2	26	3	0	0	83	4	46	5	2	1	115	6			
2	Mysore Circle																					
	Mandya	7	1	0	0	44	2	23	2	0	0	104	5	26	3	0	0	119	6			
	Hassan & C.N.Patna	7	1	8	1	54	2	10	1	8	1	56	3	40	4	8	1	72	4			
	Davanager e Circle																					
3	Davanagere & Harapanah alli	20	2	0	0	53	2	20	2	0	0	59	3	71	7	0	0	79	4			
	Chitradurga	9	1	0	0	11	1	9	1	0	0	11	1	32	3	0	0	15	1			
4	Mangalore Circle																					
	Udupi	10	1	22	1	45	2	10	1	22	1	45	3	47	5	29	2	59	3			
	Kodagu	14	1	11	1	0	0	13	1	16	1	0	0	21	2	26	2	2	1			

KARNATAKA EVALUATION AUTHORITY

26TH TECHNICAL COMMITTEE OF KEA MEETING

		2012-13							2013-14-							2014-15						
SI. No	Circle/Divi sion	Total no of works comple ted	Sample d Works 10% of popIn	Total no of Bridg es comp leted	Samp led Bridg es 10% of popIn	Total no of Foot Bridges comple ted	Samp led Foot Bridg es 5% of popIn	Total no of works compl eted	Samp led Work s 10% of popIn	Total no of Bridges comple ted	Samp led Bridg es 10% of popIn	Total no of Foot Bridges comple ted	Sample d Foot Bridges 5% of popIn	Total no of works compl eted	Samp led Work s 10% of popIn	Total no of Bridg es comp leted	Sampl ed Bridg es 10% of popIn	Total no of Foot Bridg es comp leted	Sampl ed Foot Bridg es 5% of popln			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
	Dharwad Circle																					
5	Dharwad	43	4	2	1	59	3	64	6	2	1	101	5	93	9	2	1	107	6			
	Gadag	10	1	0	0	16	1	21	2	0	0	32	2	27	3	0	0	34	1			
	Belgaum Circle																					
6	Belagavi & Chikkodi	87	9	3	1	175	10	99	10	2	1	106	5	152	15	1	1	222	11			
	Bijapur	17	2	0	0	20	1	17	2	0	0	20	1	44	4	2	1	32	1			
	Gulbarga Circle																					
7	Gulbarga	29	3	5	1	23	1	29	3	5	1	23	1	54	5	6	1	41	2			
	Yadgir	15	2	7	1	14	1	18	2	5	1	28	2	26	3	7	1	28	1			
	Bellary Circle								_						_	_						
8	Hadagali & Bellary	11	2	0	0	4	1	11	1	0	0	4	1	40	4	0	0	31	1			
	Koppal	6	1	0	0	9	1	8	1	0	0	9	1	38	4	1	1	40	2			
	Grand Total:	330	36	58	7	627	32	405	41	60	7	749	39	804	81	84	12	1051	53			

9 Deliverables time schedule:

Chief Engineer Panchayath Raj Engineering Department (PRED) will provide the work wise/district wise/taluk wise details of NABARDS Roads and Bridges under taken for the evaluation period which are available in the office. The Chief Engineer to issue necessary instructions to the district/taluk level Engineers and to co-operate and furnish the available data with them related to the study. Instruction also to be given for co-operating with the consultant organization for holding FGDs and personal interviews with road users, traders, farmers and all stake holders by giving their feedback during the course of the evaluation so that the study is completed in the stipulated time. It is expected to complete the study in 6 months' time, excluding the time taken for approvals. The evaluating agency is expected to adhere to the following timelines and deliverables.

a. Work plan submission : One Month after signing the agreement.

b. Field Data Collection : Three Months from date of work plan approval.

c. Draft report Submission: One Month after field data collection.

d. Final Report Submission: One Month from draft report submission.

e. Total duration : 6 Months

10 Minimum Qualifications of Core team members:

The core team should comprise of the following members (the list is inclusive not exhaustive) should have the minimum technical qualifications/experience as stated below-

- i. A Masters in Civil Engineering with minimum 10 years' experience of Rural roads and Highways (Economics and Engineering and Institutional Aspects) (*Principal Investigator*),
- ii. A Social Scientist or Social Development Specialist with expertise of Social Impact and poverty analysis (*Member 1*), and,

iii. A Statistician/Econometrician (Member 2).

or more/better, and in such numbers that the evaluation is completed within the scheduled time prescribed by the ToR.

Consultant Evaluation Organizations who do not meet these criteria will not be considered for doing the evaluation.

11 Agency for evaluation:

The evaluating agency should be finalized as over provision of the Karnataka Transparency in Public Procurement Act and Rules, but without compromising on the quality.

12 Contact person to get further details about the study:

13 Sri. B.Guruprasad, KES, Chief Engineer, Panchayath Raj Engineering Department, Gramina Abivrudi Bhavan, 1st Floor, Anand Rao Circle, Bengaluru-560 009. Phone number 080-28015604 and Sri.M.C.Umanath, EE,PRED 9901354842 and Sri Hulimani, AEE, PRED, Phone numbers 9886948065 e-mail ID cepred09@gmail.com will be the contact persons for giving information and details for this study.

14 Qualities Expected from the Evaluation Report:

The following are the points, only inclusive and not exhaustive, which need to be mandatorily followed in the preparation of evaluation report:-

a. By the very look of the evaluation report it should be evident that the study is that of Panchayath Raj Engineering Department, Bengaluru and Karnataka Evaluation Authority (KEA) which has been done by the Consultant. It should not intend to convey that the study was the initiative and work of the Consultant, merely financed by the Karnataka Evaluation Authority (KEA).

- b. The evaluation report should generally conform to the United Nations Evaluation Guidelines (UNEG) "Standards for Evaluation in the UN System" and "Ethical Standards for Evaluations". The report should be complete and logically organized in a clear but simple language. Besides conforming to the qualities covered in the Terms of Reference, it should be arranged in the following order
 - 1. Title and opening page.
 - 2. The Index.
 - 3. List of acronyms and abbreviations.
 - 4. Executive Summary A stand-alone section that describes the program, gives purpose and scope of evaluation, the evaluation methodology, key findings, constraints and recommendations.
 - 5. Sector history A section that briefly covers the history of the sector under which the scheme/program being evaluated falls. It should give recent data taken from reliable and published sources.
 - 6. The objectives and performance of the program being evaluated The section will include the stated objectives of the program and the physical and financial achievements of the program in the period of evaluation. It should cover the description of the target group, the aim of the program and the method of selection of beneficiary (if included in the program).
 - 7. Review of literature / past evaluation reports.
 - 8. Evaluation Methodology This should include the sample size and details of sample.
 - 9. Findings of the evaluation study.
 - 10.Limitations/constraints in the evaluation study.
 - 11.Recommendations that flow from the evaluation.

This should be followed by the following Annexures –

- (A) The sanctioned Terms of Reference of the study.
- (B) The survey tools and questionnaires.
- (C) List of persons with addresses personally interviewed.
- (D)The places, dates, and number of persons covered by Focus Group Discussions (FGD).
- (E) Compilation of case studies / best practices.
- (F)Table showing details of major deviations, nonconformities, Digressions of the program.

15 Cost and Schedule of Budget release

Output based budget release will be as follows-

- a. The First instalment of Consultation fee amounting to 30% of the total fee can be paid as advance to the Consultant Evaluation Organization after the approval of the inception report, but only on execution of a bank guarantee of a scheduled nationalized bank valid for a period of at least 12 months from the date of issuance of advance.
- b. The Second instalment of Consultation fee amounting to 50% of the total fee can be paid to the Consultant Evaluation Organization after the approval of the Draft report.
- c. The Third and final instalment of Consultation fee amounting to 20% of the total fee shall be payable to the Consultant Evaluation Organization after the receipt of the hard and soft copies of the final report in such format and number as prescribed in the agreement, along with all original documents containing primary and secondary data, processed data outputs, study report and soft copies of all literature used to the final report.

Income Tax, in the form of Tax Deducted at Source (TDS) will be deducted from each payment as per rates in force, except where it is explicitly prescribed by

the Income Tax Department under the relevant Act not to do so. In addition, the Consultant Evaluation Organization is expected to pay statutory taxes at their end.

This is intended to be an internal evaluation study, which means that the cost of the study will be borne by the line department. They are expected to allot the work to a competent evaluating agency following the procedure of Karnataka Transparency in Public Procurement Act and Rules and in consultation with the Karnataka Evaluation Authority. This should be done as early as possible, but not later than 30 days from the approval of the ToR. The evaluating agency should present the inception report before the Technical Committee of the KEA within 30 days of the allotment of study to them.

The entire process of evaluation shall be subject to and conform to the letter and spirit of the contents of the government of Karnataka order no. PD/8/EVN (2)/2011 dated 11th July 2011 and orders made there under.

Chief Evaluation Officer
Karnataka Evaluation Authority