



Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
Bridge Branch

Notice No. BBPCU/5/021-22

REQUEST FOR EXPRESSION OF INTEREST (REOI)

Date of first publication: 30 June 2021 AD (2078/03/16 BS)

Name of project: Second Bridges Improvement and Maintenance Program (BIMP II)
IDA Credit No.: 6317-NP
Assignment Title: Consulting Service for Baseline and Endline Survey for BIMP II Impact Evaluation (IE)

Reference No. (as per procurement Plan): NP-DOR 193085-CS-QCBS-IE-01

The Government of Nepal has received financing from the World Bank toward the cost of the *Second Bridges Improvement and Maintenance Program (BIMP II)* and intends to apply part of the proceeds for consulting services. The main objective of the consulting service is to conduct Baseline and Endline Survey for BIMP II Impact Evaluation.

The specific objectives of Baseline and End line Survey are

- to collect baseline and endline data, both qualitative and quantitative, with periodic monitoring of indicators to assess the impact of the roads and bridges built
- to measure progress towards the realisation of the project set targets over the course of project implementation period

Terms of Reference (ToR) is available in the website of the Department of Roads: www.dor.gov.np/notice.

Anticipated date for commencement of the services is November 2021 and the tentative duration of the assignment is about **18 months**.

Second Bridges Improvement and Maintenance Program (BIMP II), Bridge Branch, Department of Roads under the Ministry of Physical Infrastructure and Transport now invites eligible Consulting firms ("Consultants") to indicate their interest in providing the services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the services. The short listing criteria are:

- Business objective and years in business (minimum 5 years)
- Organizational capability of the firm for the assignment
- General Experience of the Firm
- Specific Experience relevant to the assignment.

The attention of interested Consultants is drawn to paragraphs 3.14, 3.16, 3.17 of the World Bank's Procurement Regulations for IPF Borrowers, dated July 2016, revised November 2020 ("Procurement Regulations") setting forth the World Bank's policy on conflict of interest.

A consultant will be selected in accordance with the Quality and Cost Based Selection (QCBS) method set out in the Procurement Regulations. It is intended that short listed consultants will be invited to submit their technical and financial proposal as per the Request for Proposal document to be issued to them.

Consultants may associate with other firms in the form of a joint venture or a sub-consultancy to enhance their qualification. Consultant shall clearly state their association if any whether in the form of joint venture or sub consultancy in the Expression.

Interested Consultant may obtain further information about the service from the address given below during office hour.

Expression of interest must be delivered in written form to the address below (in person, or by mail, or by e-mail) by **16 July 2021 AD (2078/04/1 BS)** within office working hour.

Second Bridges Improvement and Maintenance Program (BIMP II), Bridge Branch, Department of Roads, Chakupat, Lalitpur, Nepal, Tel: +977-1-5528771; Email: infobbpcu@gmail.com



TERMS OF REFERENCE

Baseline and End line Survey—Bridges for Social and Economic Transformation Project, Nepal [P161929]

1 Background

Nepal's physical and economic integration depends on bridges along the Strategic Roads Network (SRN) that enable year-round connectivity between the federal provinces despite geographical challenges. The Second Bridges Improvement and Maintenance Program (BIMP-II) aims at supporting the efforts of the Government of Nepal (GON) in providing safe, reliable and cost-effective bridges on Nepal's SRN. This is one of the main objectives of the GON's Bridge Policy and Strategy. The SRN roads and bridges are critical to ensure connectivity, social and economic inclusion and thus economic growth in Nepal. The current remaining gaps (around 400) on the SRN required for providing year-round access along existing roads isolate communities mainly during Nepal's annual rainy season. This impact evaluation targets new bridge construction in Nepal, approximately 130 bridges. The randomization of the bridges will be based on a scoring system that ranks bridges by perceived need, thus remaining consistent with Department of Roads' (DoR) priorities while still providing an opportunity to identify the impact of bridge construction.

In this impact evaluation, it is expected to collect data on local market conditions, market prices, as well as connectivity to health institutions, labor markets, and education facilities. The data collected through this impact evaluation will be used to improve the Bridge Branch's Bridge Management System (BMS) and selection criteria for bridge construction and rehabilitation (identifying and planning future priority bridge works). The BIMP-II Program will support new construction, rehabilitation, or replacement of approximately 125 new 2 lane bridges (about 4,000 m). Specifically, it will support the construction of approximately 5 number of new 4 lane bridges (about 600 m). The expected beneficiaries from reduced transportation costs are agricultural producers, motorized road users, pedestrians, cyclists, and local communities.

The terms of reference illustrate all the tasks to be undertaken by the consulting firm to conduct the required surveys for this project, beginning with the baseline survey to collect data from households, market price and market listing surveys, monitoring and evaluation of the project activities, and an endline survey with the assistance of Development Impact Evaluation (DIME), a research group within the World Bank, that supports in evaluating the impact of select World Bank projects and those of other Multilateral Development Banks (MDBs) to help transform development policy, reduce extreme poverty and secure shared prosperity.

2 Objectives of the Assignment

The main objective of the consulting service is to collect baseline and end line data, both qualitative and quantitative, with periodic monitoring of indicators to assess the impact of the roads and bridges built. The study findings will be used to measure progress towards the realisation of the project set targets over the course of project implementation period.

3 Scope of Services

This assignment will be performed in following stages:

- a) **Stage One:** This stage will entail clarifying objectives of the baseline and monitoring and evaluation survey, designing the baseline study and collecting baseline data under the technical assistance of DIME. This will also involve framing the sample size, revisiting the data collection instruments developed by DIME and developing new ones, where not available; conducting the training of field personnel; pilot testing; data collection as well as data management and access. All data is to be disaggregated by sex. Considering signing of contract date as T, the proposed indicators includes, but may not be limited to these, following as presented in Table 1 below:

Table 1: Proposed Indicator List

No	Outcome Name	Outcome Description	Source of data	Timeframe
Primary Data				
1	Commodities market prices	Change in commodities market prices	Market listing and market price data	T+18 months
2	Household agricultural profit	Change in agricultural profit	Household survey	T+18 months
3	Household agricultural productivity	Change in agricultural production and productivity	Household survey	T+18 months
4	Income	Change in income	Household survey	T+18 months
5	Consumption	Change in household consumption	Household survey	T+18 months
6	Household's access to health, education and financial services	Change in household's access to and use of services	Household survey	T+18 months
Secondary Data				
7	Travel cost and time	Change in travel cost and time	Travel time and travel cost	T+18 months
8	Improved market valuation	Number of land transactions, value of transactions	Village data	T+18 months
9	Regional development (migrations)	Population increases/decreases at localities level	Village data	T+18 months
10	Enterprise development	Number of new firms and new jobs	Village data	T+18 months

11	Regional market integration	Availability and prices at local markets	Market/village data	T+18 months
12	Transport costs (including logistics)	Average expenditures from point-to-point for users	Market/village data	T+18 months

- b) **Stage Two:** During the construction of the bridges, periodic monitoring of the indicators needs to be undertaken with regard to the following key aspects:
- What needs to be measured?
 - What is the most appropriate source of information that needs to be collected?
 - How to collect the information and how often?
 - How to ensure the quality of data?
 - How to store and analyse data?
- c) **Stage Three:** After the completion of the project implementation, end line surveys will be carried out to facilitate impact evaluation and analysis which will be used in preparation of the project implementation completion report (ICR). The indicators developed in **Stage One** above for monitoring in the project zone of influence will be applied in determination of what has changed in the area following the road infrastructure development project.

It is against this background that the Bridge Branch, at the DoR, intends to recruit a qualified consulting firm to conduct baseline survey, analysis as well as support in monitoring and evaluation for the project. The consulting firm shall communicate and coordinate with the DIME team, on behalf of the Bridge Branch to ensure the objectives of the assignment are achieved.

4 Activities


The main activities to be undertaken by the consulting firm are, not limited to, presented as per following:

1. The consulting firm is recommended to study the relevant project documents, review and suggest in updating the project results monitoring framework presented in the Project Appraisal Document and suggest revision of the indicators where necessary.
2. Review the plans of the project and liaise with the DIME team, on behalf of the Bridge Branch, to extract relevant indicators to monitor the project outputs.

4.1 General Activities for Survey

4.1.1 Acquisition of permission, or clearance for the survey etc. (for example use of proprietary materials where applicable)

- Adhere to local formalities and obtain any required permits necessary for conducting each survey, including relevant permissions from provincial and/or local authorities as needed, as well as consulting team health and accident insurance, salary, taxes, and others as necessary.

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- Open a "Survey CTO" account to allow saving of the data on a daily basis; the client and the DIME team shall have full access to "Survey CTO" account for a proper monitoring.

4.1.2 Recruit, train and contract experienced field staff to conduct the data collection exercises

The recruitment team should aim to achieve a 50:50 gender ratio for this project.

1. Recruit a roster of enumerators with experience conducting similar Bridge/Travel/Household or market surveys
2. Train in both classroom and field, on tools and data collection protocol
3. Develop an enumerator manual, training agenda and assessment tests. Share all training materials with DIME team prior to training
4. Train more number of enumerators, supervisors and managers than required for the final data collection exercise. A minimum of 20% more enumerators should always be trained (e.g. for a survey that requires 25 enumerators, 5 extra enumerators would be trained). Selection to the final team will be done in a competitive and transparent manner.
5. Develop training materials in English and Nepali, where not available
6. Implement sampling methodology and substitution protocol with the approval of the DIME team

The following aspects must be included in the training:

- a) Theoretical:* Training should include a review of the questionnaire and each question shall be familiarised to each trainee to fully understand the objective of each question. Standard quantitative interviewing techniques and field protocols should also be covered.
- b) Classroom practice:* Training should include individual and group exercises for trainees to become familiar with the practice of asking questions and filling questionnaires. This part of the training may include in-class demonstrations, where the questionnaire is projected, and one interviewer completes the questionnaire in front of the classroom.
- c) Field practice:* After the theoretical and classroom practice, the interviewers should go to the field to administer the full questionnaire to a small number of households and markets (outside the study sample). The pre-test should not focus on major adjustments to the questionnaire, but rather simulate the administration of the questionnaire under normal circumstances. All field team members must demonstrate that they clearly understand their roles and are correctly following the survey protocols.

- d) Evaluation:* Following the training, all field staff should be evaluated based on their understanding of the questionnaire and their ability to correctly record data using the same test scenarios as used in the classroom practice. The training period should conclude only when the field teams have demonstrated mastery of the designated tasks. Decisions as to which field staff will take part in the data collection must be made on the basis of this evaluation.

4.1.3 Plan and manage field work

The Field Procedure Plans must detail the following:

1. Protocols for ensuring full adherence to the sample frame and high-quality data, including rules for re-visits and substitutions;
2. To review and adopt a programmed electronic data collection questionnaire developed by the DIME team;
3. Ensuring the data are maintained and stored well in a manner that is fully confidential so that no external individual or institution can identify any specific individual in the data. Names and address information should only be made available to the evaluation team;
4. Travel and lodging logistics;
5. Management information/reporting tools to track interviews;
6. Procedures for field data backup and weekly submission to the DIME team;
7. Supervision and spot check plans to ensure adherence to data collection protocols and confirm quality of data collection including a 5% of re-visits to a random sample of the evaluation sample to confirm the validity of the data;
8. The Field Procedure Plans must be submitted for comment and review to the DIME team, before the start of field work and revised if necessary, according to any team comments. The consulting firm must adhere as closely to the plan as conditions allow during survey implementation. If field conditions dictate significant changes to these plans, the consulting firm's Field Supervisors are obliged to inform the DIME team, via the consulting firm's management, in the form of a written report or progress report;
9. Prepare all necessary logistics (transportation, communications, internet, field offices, etc.) to support the data collection activities;
10. Hold all necessary equipment in electronic data collection as Tablets (with their chargers), Power banks, GPS, Power extensions, raincoats, pens, notebooks, umbrellas, etc.
11. Field Testing, and formatting of data collection tools

Any deviations from the field plan must be reported to the DIME team in writing at the time that they occur.



4.2 Specific Activities for surveys

1. **Household survey:** To measure the change in household's income, consumption, and other indicators, data collection will be undertaken in households living in the vicinity of the selected bridges. The questionnaire developed will be soft version (around 5 pages maximum). The targeted sample is approximately 3,000 households living in settlements located within 10 km distance from the approximately 130 bridge sites.
2. **Market data collection using high frequency price survey:** To measure the regional market integration through data collection on number of agricultural market beneficiaries, availability and prices of goods and number of females working in markets along the road. Two data collection activities will inform the market-level indicators. First, a market listing to capture the overall composition of the market and types of traders, to be collected biannually. Second, price and availability data for a basket of approximately 50 goods, to be collected monthly.

The consulting firm will be provided with the survey questionnaire programmed in "Survey CTO" for Market data collection and trader surveys and the sampled markets (to be determined from the market listing survey) on which data collection will be operated in where applicable. Both sample markets and questionnaires will be prepared and shared by DIME team prior to the data collection. The consulting firm will have room to provide comments and will present it during inception reporting for discussion and approval by the client and the DIME team. The data collections will be conducted on monthly basis.

3. Social Monitoring and Evaluation Surveys

- To understand feedback from project recipients on their expectations, experience and lessons learnt should be captured to enable a more results-focused preparation of new projects. The information shall be disaggregated by sex.

Data collection will be done before the bridge construction and at the end of project implementation. The consulting firm shall develop questionnaires to be used and this shall be presented to the DIME team for review and approval. The consulting firm will ensure that the report presents the key findings in a detailed and accurate manner. A comparison will be made at the end line to the initial findings at baseline.

4. **Prospective Border Agencies survey:** The DIME team will be exploring trade dimensions with the neighbouring countries, India and China. The consulting firm shall develop a questionnaire to measure indicators of regional trade facilitation initiatives. These surveys must be presented to the DIME team for review and approval, culminating in a report presenting key findings along with a comparison made at the end line to the initial findings at baseline.

5 Team Composition and Qualification Requirement for Key Experts

The firm with experience in the followings are encouraged to participate and extend the service:

- Obtaining clearance from Nepal Central Bureau of Statistics authorizing the firm to undertake a survey.
- expertise in fieldwork required for large scale economic surveys.
- Demonstrated experience in organizing surveys on the scale of this project over the past five years.
- Experience in data collection in rural Nepal with experience in transport sector socio-economic studies
- experience in planning and organizing survey logistics, including the design and implementation of protocols to ensure high quality data.
- experience in interviewing businesses of all sizes including micro-enterprises.
- skills in project management
- experience in impact evaluation
- background in microeconomics, statistics and econometrics.
- access to a good network of experienced local enumerators, supervisors and data managers.
- capacity for implementing manual and electronic data collection using a "Survey CTO" template. This includes capacity to adapt an already developed "Survey CTO" template from English to the local language, capacity to troubleshoot problems as necessary, and capacity to manage data collected from the field using server subscribed from the "Survey CTO" company.
- capacity in database design, data management, statistics and strong knowledge of the "SurveyCTO" application, ODK (the language behind Survey CTO) and Stata
- Ability to report to the evaluation team effectively on progress of the work, including the submission of interim entered data and the identification of noticeable difficulties.
- Capacity to store and maintain data in a manner that protects respondents' identities.
- capacity to provide android tablets that can effectively support the "Survey CTO" application along with any required accessories such as chargers.
- availability of system for data quality control checks that can be accessible by the DIME team without any restriction.

For each survey, the Consulting firm will be composed of data manager based in Kathmandu; field manager/supervisor responsible for coordinating the field staffs, and the enumerator teams in charge of data collection within each the half should at least be women. The team must also have back checkers who will work independently to ensure a high level of data quality. Their number may vary from one survey to another.

**Table 2: Staff Inputs (Tentative)**

Position	Quantity	No. of person months	Total Person Months	Remarks
Socio-Economist/Transport Economist (Team Leader)	1	8	8	Key Personnel
Data Manager	1	8	8	Key Personnel
Computer Programmer Lead	1	5	5	Key Personnel
Computer Programmer/Data Analyst	1	4	4	
Field Manager	1	6	6	Key Personnel
Survey Supervisors	8	6	48	
Enumerators	40	8	320	
Data Quality Checkers/Back-checkers	10	6	6	
Sub Total			405	

The above key staff composition and estimated total key staff person-month is Client's estimate. The consultants are advised to assess their own requirement and propose their own staff composition and staff input requirement for efficient performance of their job as per the Terms of Reference. If the proposed consultant's team is found inadequate or not sufficient during the performance of the services then additional staff shall be provided by the consultant at their own cost.

A. Socio-economist /Transport Economist (Team Leader):

The Socio-economist/Transport Economist will be responsible for overall management of the assignment, data analysis and production of the reports.

Broad Qualifications and Requirements:

1. Education

- Minimum: A Master's degree in Social Sciences
- Preferred: A PhD in a relevant Social Sciences discipline



2. Years of Experience
 - a. General Professional Experience
 - Minimum: 10 years
 - Preferred: 15 years
 - b. Experience in Transport infrastructure projects/socioeconomic surveys
 - Minimum: 5 years
 - Preferable: 8 years
3. Experience and other qualifications
 - Experience of working in the capacity of a team leader in two similar projects, preferably four
 - Knowledge of electronic data collection and data analysis software
4. Language: Fluency in English and Nepali

B. Data manager:

The Data Manager will be responsible for the preparation, organization and supervision of the field campaign as well as the production of the results and reports. S/he will be especially responsible for organizing and coordinating the project, organizing the staff, ensuring good communication between them and ensuring that each team member understands their roles and responsibilities. S/he will also supervise the supervisors, provide information to users and the public, ensuring the cooperation of the authorities at national and local levels and provide training to staffs of the campaign (supervisors, heads of post, and enumerators).

Broad Qualifications and Requirements:

1. Education
 - Minimum: A Master's degree in Applied Statistics or a related discipline
 - Preferred: PhD in Applied Statistics or a related discipline
2. Years of Experience
 - 2.1. General Experience
 - Minimum: 8 years
 - Preferred: 12 years.
 - 2.2. Experience in multi-module socioeconomic survey
 - Minimum: 3 years
 - Preferred: 5 years
3. Experiences and other qualifications
 - Experience working in data management for two socio-economic surveys, preferably four
 - Expertise in programming in electronic data collection software like Survey CTO etc.
 - Knowledge of appropriate data analysis software like STATA, R etc.



4. Language: Fluency in Nepali and English

C. Computer Programmer Lead

The Computer Programmer Lead will be responsible for providing technological support to the team to make sure the project runs successfully.

Broad Qualifications and Requirements:

1. Education
 - Minimum: Master's degree in IT, Computer Science, Data Science etc.
 - Preferred: A PhD in a relevant discipline such as IT, Computer Science, Data Science etc.
2. Years of Experience
 - a. General Professional Experience
 - Minimum: 5 years
 - Preferred: 10 years
 - b. Experience in Computer Programming
 - Minimum: 3 years
 - Preferred: 5 years
3. Experience and other qualifications
 - Experience of computer programming for socio-economic surveys for two projects, preferably four
 - Experience in database design, data management,
 - knowledge of ODK platforms
 - knowledge of statistical software like Stata, R
4. Language: Fluency in English and Nepali

D. Computer Programmer/Data Analyst

The Computer Programmer/Data Analyst will assist the Lead Computer Programmer in their task.

Broad Qualifications and Requirements:

1. Education
 - Minimum: Bachelor's degree in IT, Computer Science, Data Science etc.
2. Years of Experience
 - General Experience
 - Minimum: 5 years
3. Experience and other qualifications
 - Minimum 3 years of experience in Computer programming

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- Knowledge of database design, data management
 - Knowledge of ODK platforms and statistical software like Stata, R
4. Language: Fluency in Nepali and English

E. Field Manager

S/he will be coordinating the field work in general, including reporting on a daily basis to the data manager and ensuring all data collected are sent to the server in a timely manner. S/he will work closely with the Data Manager and Supervisors.

Broad Qualification and Requirements:

1. Education
 - Minimum: Bachelor's degree in a relevant social science discipline
 - Preferred: Master's degree in a relevant social science discipline
2. Years of Experience
 - a. General Professional Experience
 - Minimum: 3 years
 - Preferred: 5 years
 - b. Experience in socio-economic surveys
 - Minimum: 2 years
 - Preferred: 4 years
3. Experience and other qualifications
 - Experience as field supervisor with socio-economic surveys level for 2 projects, preferably four projects
4. Language: Fluency in English and Nepali is required

F. Survey Supervisor:

The Supervisor/Head of posts will be responsible for supervising the survey on site. His/her work includes organizing and ensuring the effective implementation of the survey, verifying the correct filling of the sheets by the enumerators, supervising the enumerators, ensuring timely provision of equipment and sheets on the posts under his/her responsibility. S/he will also provide daily report to the Field Manager and inform the Field Manager of any problem that may arise during the campaign and propose appropriate solutions. The Supervisor, in carrying out these tasks, will work closely with the Field Manager and other Heads of posts.

Broad Qualifications and Requirements:

1. Education



- Minimum: A Bachelor's degree in any discipline
2. Years of Experience
 - a. General Professional Experience
 - Minimum: 4 years
 - b. Experience working in socio-economic surveys
 - Minimum: 2 years
 - Preferred: 3 years
 3. Experience and other qualifications
 - Experience working in socio-economic surveys for minimum 2 years, preferably four years
 4. Language: Fluency in English and Nepali

G. Enumerators:

Enumerators will make sure that they collect the most reliable information relevant to the reality of households in the bridges' catchment areas.

Broad Qualifications and Requirements:

1. Education
Minimum: A High School Diploma
2. Years of Experience
General Experience
 - Minimum: 3 years
3. Experience and other qualifications
 - Experience in conducting field surveys for minimum 2 years
4. Language: Fluency in English and Nepali

H. Data Quality Checkers/Back-checkers:

Enumerators will make sure that they collect the most reliable information relevant to the reality of households in the bridges' catchment areas.

Broad Qualifications and Requirements:

1. Education
Minimum: A High School Diploma
2. Years of Experience
General Experience
 - Minimum: 3 years

3. Experience and other qualifications
 - Experience in conducting field surveys minimum 2 years
4. Language: Fluency in English and Nepali

6 KEY EXPECTED OUTPUTS

Considering signing of contract date as T

Activity	Output	Anticipated Dates
1	Evidence of permits and clearance for implementing survey and other data collection activities and purchase of the Survey CTO subscription	T + 2 weeks
2	Inception report covering the draft field procedure plans for all the surveys to be undertaken at the baseline stage, plans and methodology to be used and respective timelines	T + 2 weeks
2021 and 2022/2023 SURVEYS		
3	Developed/Revised household, village, and market survey questionnaire to be used	T + 3 weeks
4	Developed/Revised for social monitoring and evaluation survey questionnaire to be used	T + 3 weeks
5	Final Field Procedure Plan for household survey, market price survey and market listing survey	T + 3 weeks
7	Approved questionnaires and methodology for all household, market price, and market listing surveys at baseline	T + 4 weeks
8	Final training curriculum and materials	T + 4 weeks
9	Approved Inception Report	T + 5 weeks
10	Roster of recruited field staff with their corresponding qualifications; Dataset from enumerator field practice	T + 6 weeks
11	Bi-Weekly Field Progress Reports and Raw Data Delivery; Bi-Weekly data submissions (interviews & back-checks)	T + 7 weeks - T + 14 weeks
12	Final Dataset and report on all baseline surveys	T + 14 weeks
13	Monthly Progress Report	T+4 to T+17 months
14	Field Procedure Plan for all endline surveys	T+16 months
15	Roster of recruited field staff with their corresponding qualifications; Dataset from enumerator field practice	T + 16 months

16	Bi-Weekly Field Progress Reports & Raw Data Delivery; Bi-Weekly data submissions (interviews & back-checks)	T + 16 - T +18 months
17	Final Dataset and report on all subsequent end line survey	T + 18 months
18	Project Evaluation report on selected indicators	T + 18 months

Note: Since the BIMP II project is still in its preparatory stage for 2/4 lane bridge construction, the exact number of bridges and their locations as well as the timelines are subject to change as per the needs of DoR.

Expected time frame will be adjusted based on the physical progress achieved for the construction of bridges.

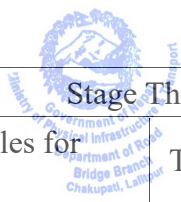
7 SUPPORT TO THE FIRM BY THE CLIENT

The Client will support the assignment to the extent possible, including facilitation to obtain required permits from competent institution and background information on the project area.

8 PAYMENT MODALITIES

The schedule of payment will be as follows:

No	Particulars/Output	Anticipated Dates	Payment %	Cumulative Payment
1	Advanced payment upon contract signature and submission of Advance Payment Guarantee	T	10%	10%
Stage One				
2	Upon approval of deliverables for Activities 1-9	T + 5 weeks	10%	20%
3	Upon approval of deliverables for Activities 10	T + 6 weeks	5%	25%
4	Upon approval of deliverables for Activities 11-12	T + 14 weeks	15%	40%
Stage Two				
5	Upon approval of deliverables for Activity 13	T + 4 months - T+17 months	10%	50%



Stage Three				
6	Upon approval of deliverables for Activities 14-15	T + 16 months	20%	70%
7	Upon approval of deliverables for Activities 16-17	T + 18 months	20%	90%
8	Upon approval of deliverable of Activity 18	T + 18 months	10%	100%

Note: Since the BIMP II project is still in its preparatory stage for 2/4 lane bridge construction, the exact number of bridges and their locations as well as the timelines are subject to change as per the needs of DoR.

The payment to the Consultant will be adjusted on pro rata basis based on the actual number of bridges for which the survey data is acquired for each stages. Expected time frame will be adjusted based on the physical progress achieved for the construction of bridges.



List of Bridges planned to be constructed under second BIMP


A) Bridges already procured for construction

SN	Bridge name	Coordinate	District	Road Name
1	Khahare Khola Bridge Near Mugling	27.850336,84.5584389	Chitwan	Narayanghat Muglin Highway
2	Chisenji Khola Bridge	27.847328,84.5590556	Chitwan	Narayanghat Muglin Highway
3	Twin(Gauri) Khola Bridge	27.843267,84.5583028	Chitwan	Narayanghat Muglin Highway
4	Kali Khola Bridge	27.833678,84.55275	Chitwan	Narayanghat Muglin Highway
5	Tope Khola Bridge	27.831122, 84.5489444	Chitwan	Narayanghat Muglin Highway
6	Nyanci Khola Bridge	27.830792, 84.5469	Chitwan	Narayanghat Muglin Highway
7	Rigdi Khola Bridge	27.819194, 84.4961667	Chitwan	Narayanghat Muglin Highway
8	Simaltal khola Bridge	27.820228, 84.4833917	Chitwan	Narayanghat Muglin Highway
9	Dumre Khola Bridge	27.818933, 84.4665917	Chitwan	Narayanghat Muglin Highway
10	Bhorle Khola Bridge	27.820283, 84.4446556	Chitwan	Narayanghat Muglin Highway
11	Lamobaluwa Khola Bridge	27.798461, 84.4319833	Chitwan	Narayanghat Muglin Highway
12	Khor Khola Bridge	27.779483, 84.4411889	Chitwan	Narayanghat Muglin Highway
13	Khahare Khola Bridge Near Jugedi	27.772592, 84.4643167	Chitwan	Narayanghat Muglin Highway
14	Jugedi Khola Bridge	27.766425, 84.4700722	Chitwan	Narayanghat Muglin Highway


SN	Bridge name	Coordinate	District	Road Name
15	Seti dovan Khola Bridge	27.818780 , 84.4561722	Chitwan	Narayanghat Muglin Highway
16	Peepae Khola	28°42'51.552"N ; 82°14'46.536"E	Jajarkot	Bheri Corridor
17	Chhaare Khola	28°44'6.5040"N ;82°17'28.104"E	Jajarkot	Bheri Corridor
18	Nalgaad Khola	28°47'48.3360"N ; 82°18'16.776"E	Jajarkot	Bheri Corridor
19	Jhimri Khola	28°47'31.74"N ; 82°17'54.276"E	Jajarkot	Bheri Corridor
20	Maide Khola	28°49'11.5920"N ; 82°22'50.52"E	Jajarkot	Bheri Corridor
21	Taarta Khola	28°50'42.4320"N ;82°24'7.8120"E	Jajarkot	Bheri Corridor
22	Taasu Khola	28°52'16.968"N ; 82°26'54.888"E	Jajarkot	Bheri Corridor
23	Beg Khola Bridge	28°25'58.80"N, 83°35'54.48"E	Myagdi	Kaligandaki Corridor
24	Tila Nadi Pul Jumla	29° 6'32.99"N 81°44'10.43"E	Jumla	Karnali Rajmarga
25	Trisuli River Bridge	27°55'16.16"N, 85° 8'52.69"E	Nuwakot	Dhunche-Trishuli
26	Patrange Khola Bridge	27°20'35.93"N, 85°13'13.72"E	Sindhuli/Makwanpur	Madan Bhandari Highway (Sindhulibazaar-Hetauda Section)
27	Bhokteni Khola Bridge	27°21'20.89"N, 85°16'44.65"E	Sindhuli/Makwanpur	Madan Bhandari Highway (Sindhulibazaar-Hetauda Section)
28	Jokhne Khola Bridge	27°18'15.34"N, 85°24'58.02"E	Sindhuli/Makwanpur	Madan Bhandari Highway (Sindhulibazaar-Hetauda Section)



SN	Bridge name	Coordinate	District	Road Name
29	Chaura Khola Bridge	27°20'36.70"N, 85°18'44.36"E	Sindhuli/Makwanpur	Madan Bhandari Highway (Sindhulibazaar-Hetauda Section)
30	Lipe Khola Bridge	27°15'19.84"N, 85°53'9.16"E	Sindhuli/Makwanpur	Madan Bhandari Highway (Sindhulibazaar-Hetauda Section)
31	Bhutaha Khola Bridge	27°15'21.00"N, 85°49'11.20"E	Sindhuli/Makwanpur	Madan Bhandari Highway (Sindhulibazaar-Hetauda Section)
32	Padhera Khola Bridge	27° 4'27.83"N 86°0'19.16"E	Sindhuli/Udayapur	Madan Bhandari Highway (Basaha-Bhiman Section),
33	Sunkhani 2 Khola Bridge	27° 3'53.26"N 86°1'27.73"E	Sindhuli/Udayapur	Madan Bhandari Highway (Basaha-Bhiman Section),
34	Thanaha Khola Bridge	27° 2'2.89"N 86°3'54.09"E	Sindhuli/Udayapur	Madan Bhandari Highway (Basaha-Bhiman Section),
35	Thappar Khola Bridge	26°55'18.76"N 86°26'28.29"E	Sindhuli/Udayapur	Madan Bhandari Highway (Basaha-Bhiman Section),




SN	Bridge name	Coordinate	District	Road Name
36	Ratu Khola Bridge	26°54'23.28"N 86°27'17.87"E	Sindhuli/Udayapur	Madan Bhandari Highway (Basaha-Bhiman Section),
37	Arna Khola Bridge	26°54'14.78"N 86°27'48.15"E	Udayapur	Madan Bhandari Highway (Basaha-Bhiman Section),
38	Mauwase Bridge	26°54'31.28"N 86°29'59.35"E	Udayapur	Madan Bhandari Highway (Basaha-Bhiman Section),
39	Ashari Bridge	26°47'10.59"N 86°44'4.94"E	Udayapur	Madan Bhandari Highway (Basaha-Bhiman Section),
40	Khaira Jhora Bridge	26°47'40.79"N 86°48'8.04"E	Udayapur	Madan Bhandari Highway (Basaha-Bhiman Section),
41	Jyamire Bridge	26°47'26.20"N 86°51'15.71"E	Udayapur	Madan Bhandari Highway (Basaha-Bhiman Section)
42	Lama Khola Bridge	26°47'52.59"N 86°55'13.91"E	Udayapur	Madan Bhandari Highway (Basaha-Bhiman Section)




SN	Bridge name	Coordinate	District	Road Name
43	Sundari Khola Bridge	26°48'5.12"N 86°56'47.76"E	Udayapur	Madan Bhandari Highway (Basaha-Bhiman Section)
44	Daale Khola Bridge	26.761661°N 87.373693°E	Morang	Madan Bhandari Highway (Dharan-Kerabari Section),
45	Mugu Khola Bridge	26.761325N 87.377896E	Morang	Madan Bhandari Highway (Dharan-Kerabari Section),
46	Khadam Khola Bridge	26.764078N, 87.394662E	Morang	Madan Bhandari Highway
47	Hachuwa Khola Bridge	26.754 N 87.427E	Morang	Madan Bhandari Highway (Kerabari-Letang Section),
48	Saune Khola Bridge	26.749991N 87.432366E	Morang	Madan Bhandari Highway (Kerabari-Letang Section),
49	Bhaluwa Khola Bridge	26.744311N 87.441556E	Morang	Madan Bhandari Highway (Kerabari-Letang Section)
50	Sanonete Khola Bridge	26.737829N 87.455529E	Morang	Madan Bhandari Highway (Kerabari-Letang Section)



SN	Bridge name	Coordinate	District	Road Name
51	Turke Khola Bridge	26.737081N 87.459592E	Morang	Madan Bhandari Highway (Kerabari-Letang Section)
52	Morangi Khola Bridge	26.742921N 87.526022E	Morang	Madan Bhandari Highway
53	Teli Khola Bridge	26.738821N 87.554863E	Morang	Madan Bhandari Highway
54	Solty 1 Khola Bridge	26.729835N 87.582521E	Morang	Madan Bhandari Highway (Letang-Madhumalla Section),
55	Solty 2 Khola Bridge	26.729314N 87.584107E	Morang	Madan Bhandari Highway (Letang-Madhumalla Section),
56	Mikiku Khola Bridge	26.723240N 87.621800E	Morang	Madan Bhandari Highway (Letang-Madhumalla Section),
57	Nusari Khola Bridge	26.722543N 87.632463E	Morang	Madan Bhandari Highway
58	Sukhani shadat sthal Bridge	26.733666N 87.937491E	Jhapa/Ilam	Madan Bhandari Highway (Sahadatsthal-Jhatare Section),
59	Budi Sukhani Bridge	26.734109N 87.941557E	Jhapa/Ilam	Madan Bhandari Highway (Sahadatsthal-Jhatare Section),



SN	Bridge name	Coordinate	District	Road Name
60	Sukhani Khola Mai Na Pa 1 Bridge	26.734292°N 87.950608°E	Jhapa/Ilam	Madan Bhandari Highway (Sahadatsthal-Jhatare Section),
61	Tanting Khola Bridge	26.746950°N 87.961920°E	Jhapa/Ilam	Madan Bhandari Highway (Sahadatsthal-Jhatare Section),
62	Goyang Khola Gaja Bari Chowk Bridge	26.751849N 87.968458E	Jhapa/Ilam	Madan Bhandari Highway (Sahadatsthal-Jhatare Section),
63	Sano Nete Khola Bridge, Jhatare.	26.758117N 87.997993E	Jhapa/Ilam	Madan Bhandari Highway (Jhatare-Mechidangi Chowk Section
64	Thulo Nete Khola Bridge	26.752768N 88.007429E	Jhapa/Ilam	Madan Bhandari Highway (Jhatare-Mechidangi Chowk Section
65	Biring Khola Bridge	26.750322N 88.022592E	Jhapa/Ilam	Madan Bhandari Highway (Jhatare-Mechidangi Chowk Section
66	Dama Khola Bridge	26.748693N 88.039190E	Jhapa/Ilam	Madan Bhandari Highway (Jhatare-Mechidangi Chowk Section




SN	Bridge name	Coordinate	District	Road Name
67	Hadiya Khola Bridge	26.748564N 88.046891E	Jhapa/Ilam	Madan Bhandari Highway (Jhatare-Mechidangi Chowk Section)
68	Gangate Khola Bridge	26.743339N 88.092163E	Jhapa/Ilam	Madan Bhandari Highway (Jhatare-Mechidangi Chowk Section)
69	Khar Khola Bridge	26.741951N 88.097730E	Jhapa/Ilam	Madan Bhandari Highway (Jhatare-Mechidangi Chowk Section)
70	Ratuwa Khola Bridge	26°43'20.68"N 87°42'9.98"E	Ilam	Madan Bhandari Highway
71	Bukuwa Khola Bridge	26°43'6.89"N 87°42'48.70"E	Ilam	Madan Bhandari Highway
72	Bidhuwa Khola Bridge	26°42'55.18"N 87°43'20.28"E	Ilam	Madan Bhandari Highway
73	Chaju khola Bridge	26°42'1.16"N 87°45'28.22"E	Ilam	Madan Bhandari Highway
74	Bagdwar khola Bridge	26°41'38.74"N 87°46'0.42"E	Ilam	Madan Bhandari Highway
75	Kakarhawa Bridge	27°49'3.84"N 82°30'49.32"E	Dang	Postal Highway


B) 2 lane Bridges planned for procurement for construction

SN	Bridge name	Bridge ID	Coordinate	District	Road Name
1	Mamti River Bridge	29-H006-049	27.444, 85.7826	Kavre	Dhulikhel Sindhuli Bhittamod Highway
2	Bhyakurey River Bridge	29-H006-050	27.4369, 85.8037	Kavre	Dhulikhel Sindhuli Bhittamod Highway
3	Ghaympey River Bridge	29-H006-048	27.4695, 85.7507	Kavre	Dhulikhel Sindhuli Bhittamod Highway
4	Paneshi River Bridge	19-H006-047	27.1128, 85.9616	Sindhuli	Dhulikhel Sindhuli Bhittamod Highway
5	Hanumante River Bridge	27-F091-001	27.6729, 85.3646	Bhaktapur	Kasaultar - Balkot - Sirutar - Biruwa
6	Mahadev River Bridge	27-F099-001-U1	27.6516, 85.4123	Bhaktapur	Trolley Bus - Suryabinayak - Bhujunge
7	Mahadev River Bridge	27-F100-001-U1	27.6603, 85.3964	Bhaktapur	Sallaghari - Katunje - Lubhu
8	Tamor River Bridge	01-H071-023	27.524147, 87.801625	Taplejung	Tamor Corridor
9	Sisawa River Bridge	01-H071-021	27.485242, 87.770983	Taplejung	Tamor Corridor
10	Taakmewa River Bridge	01-H071-022	27.510861, 87.798003	Taplejung	Tamor Corridor
11	Sisne River Bridge	01-H071-024		Taplejung	Tamor Corridor
12	Sobuwa River Bridge	01-NH06-018	27.350041, 87.622846	Taplejung	Tamor Corridor
13	Larichera Khola Bridge	53-F179-014	28.4172, 82.5087	Rolpa	Shahid Road
14	Bijibhi Khola Bridge	53-F179-015	28.4513, 82.5186	Rolpa	Shahid Road

SN	Bridge name	Bridge ID	Coordinate	District	Road Name
15	UttarGanga Khola Bridge	52-F179-016	28.5751, 82.8183	Rukum(East)	Shahid Road
16	Ghate Khola Bridge	52-F179-017	28.6303, 82.8043	Rukum(East)	Shahid Road
17	Subhang Khola Bridge	02-NH06-002	27.220344, 87.768506	Pachhthar	Tamor Corridor (Gadesh Chowk Mulghat Road Section)
18	Hewa Khola Bridge	02-NH06-003	27.151861, 87.719383	Pachhthar	Tamor Corridor (Gadesh Chowk Mulghat Road Section)
19	Lopariyaha Khola Bridge	08-NH06-005	27.088442, 87.614408	Dhankuta	Tamor Corridor (Gadesh Chowk Mulghat Road Section)
20	Lakhuwa Khola Bridge	08-NH06-007	27.017333, 87.539586	Dhankuta	Tamor Corridor (Gadesh Chowk Mulghat Road Section)
21	Nawa Khola Bride	08-NH06-017	26.982069, 87.493411	Dhankuta	Tamor Corridor (Gadesh Chowk Mulghat Road Section)
22	Charuwa Khola Bridge	08-NH06-009	26.965214, 87.443694	Dhankuta	Tamor Corridor (Gadesh Chowk Mulghat Road Section)
23	Raghuwa Khola Bridge	08-NH06-010	26.947247, 87.406281	Dhankuta	Tamor Corridor (Gadesh Chowk Mulghat Road Section)
24	Khambuba Khola Bridge	08-NH06-011	26.930836, 87.363444	Dhankuta	Tamor Corridor (Gadesh Chowk Mulghat Road Section)
25	Baghuwa Khola Bridge	08-NH06-004	26.916167, 87.326739	Dhankuta	Tamor Corridor (Gadesh Chowk Mulghat Road Section)
26	Bahune Khola Bridge	10-NH06-014	26.863794, 87.153908	Sunsari	Tamor Corridor (Chatara Mulghat Road Section)



SN	Bridge name	Bridge ID	Coordinate	District	Road Name
27	Dhansar Khola Bridge	10-NH06-015	26.857233, 87.154961	Sunsari	Tamor Corridor (Chatara Mulghat Road Section)
28	Lukuwa Khola Bridge	10-NH06-013	26.876244, 87.171483	Sunsari	Tamor Corridor (Chatara Mulghat Road Section)
29	Kokaha Khola Bridge	10-NH06-012	26.877131, 87.176856	Sunsari	Tamor Corridor (Chatara Mulghat Road Section)
30	Sisneri Khola Bridge			Dhankuta	Tamor Corridor (Chatara Mulghat Road Section)
31	Lyamlyamme Khola Bridge	08-NH06-008	26.896856, 87.208497	Dhankuta	Tamor Corridor (Chatara Mulghat Road Section)
32	Fesuwa Khola Bridge	08-NH06-006	26.905417, 87.246003	Dhankuta	Tamor Corridor (Chatara Mulghat Road Section)
33	Ramguwa Khola Bridge	08-NH06-016	26.911331, 87.276764	Dhankuta	Tamor Corridor (Chatara Mulghat Road Section)
34	Kalagad Bridge	72-H014-029	29° 53'46"N 80°37'02"E	Darchula	Mahakali Highway
35	Kurkure khola Bridge	72-H014-030	29° 54'46"N 80°36'25"E	Darchula	Mahakali Highway
36	Kasani Khola Bridge	73-H014-028	29.5769, 80.4447	Baitadi	Mahakali Highway
37	Nilgad Khola Bridge	73-H014-027	29.5347, 80.398	Baitadi	Mahakali Highway
38	Thuligad Khola Bridge	74-H014-026	29.1119, 80.2341	Dadeldhura	Mahakali Highway
39	Ghatte Khola Bridge	74-H014-025	29.1163, 80.2233	Dadeldhura	Mahakali Highway
40	Saandani Khola Bridge		29°6'52.41"N, 80°14'53.59"E	Dadeldhura	Mahakali Highway



SN	Bridge name	Bridge ID	Coordinate	District	Road Name
41	Chamelia Khola Bridge		29° 37'23"N 80°28'48"E	Dadeldhura	Mahakali Highway
42	Kalikakhetu Khola Bridge	60-F154-001	29.20569676, 81.90844876	Kalikot	Nagma - Gamgadhi
43	Bajaghad Khola Bridge	59-F154-002	29.2589, 81.9503	Jumla	Nagma - Gamgadhi
44	Bistawada Khola bridge	59-F154-004	29.3533, 81.9659	Jumla	Nagma - Gamgadhi
45	Rokayabadha Khola Bridge	59-F154-005	29.3988, 81.9688	Jumla	Nagma - Gamgadhi
46	Gothijhiula Khola Bridge	59-F154-006	29.4128, 82.0035	Jumla	Nagma - Gamgadhi
47	Pina Khola bridge	58-F154-007	29.4967, 81.131	Mugu	Nagma - Gamgadhi
48	Jhyari Khola Bridge	58-F154-008	29.5065, 81.119	Mugu	Nagma - Gamgadhi
49	Simat Khola Bridge	31-F120-002-U1	27.429242, 85.211452	Makawanpur	Hetauda - Tikabhairab
50	Baguwa Khola bridge	31-F120-004-U1	27.47886, 85.247443	Makawanpur	Hetauda - Tikabhairab

C) 4 lane Bridges planned for procurement for construction

SN	Bridge name	Bridge ID	Coordinate	District	Road Name
1	Yamdi Khola	39-F042-002	28.2532,83.9664	Kaski	Pokhara-Baglung Road
2	Hapur	56-F015-010	28.0734,82.3876	Dang	Ghorahi-Tulsipur Road
3	Bhapsi	21-H001-152	26.9935,85.8826	Mahottari	MRM
4	Mahadev Khola	26-F026-002	27.7294,85.4298	Kathmandu	Chabahil-Sankhu Road
5	Manomata	26-F026-003	27.7291,85.4457	kathmandu	Chabahil-Sankhu Road