



Mechinagar Municipality,

Office of the Municipal Executive

Ittabhatta, Jhapa, Koshi Province, Nepal

Request for proposal

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Term of reference for

Update of Initial Environmental Examination (IEE)

for

Sustainable extraction/collection of sand, stone & gravel

from Mechi, Ninda, Timai and Hadiya River

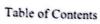
Implementing Agency: Mechinagar Municipality
Ittabhatta, Jhapa

Name of the Proponent: Mechinagar Municipality ,Koshi Pradesh ,Nepal

2082

X: 950







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Section 1. Letter of Invitation

Mechinagar Municipality Office of Municipal Executive

Name of Contract: IEE Updating work of Mechi, Ninda, Timai and Hadiya River for Fiscal year 2082/083

- 1. The Mechinagar Municipality, Ittabhatta, Jhapa invites proposals to provide the following consulting services: The objectives and scope of the assignment is provided in the attached Terms of Reference (TOR).
- 2. The consultant shall be selected and engaged on the basis of required experience and qualifications specified in the TOR and the consultants Financial Proposal.
- 3. You are invited to submit a Proposal for the services under the TOR to: Mechinagar Municipality, Ittabhatta, Jhapa.
- 4. Proposals must be submitted by 12:00 PM on 11th Bhadra, 2082.
- 5. Sealed proposals will be opened starting at 1:00 PM on 11th Bhadra, 2082.
- 6. Clarification on the RFP may be obtained from: Mechinagar Municipality, Ittabhatta, Jhapa, Miss. Aakriti Prasai, 9867990583.
- 7. Your Proposal must remain valid 90 days after the submission date.
- 8. The assignment is expected to commence on 15th Bhadra 2082 within Mechinagar Municipality.
- 9. The RFP includes the following documents:
 - Section 1 Letter of Invitation
 - Section 2 Format of Curriculum Vitae (CV) for Proposed Professional Staff
 - Section 3 Financial Proposal Standard Forms
 - Section 4 Terms of Reference
 - Section 5 Standard Form of Contract.
- 10. Please inform us, upon receipt:
 - (a) that you received the letter of invitation; and
 - (b) whether you will submit a proposal

Yours sincerely,

Chief Administrative officer, Mechinagar

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Section 2. Format of Curriculum Vitae

Key Qualifications:

	n relevant previous
Education:	
[Summarize college/university and other specialized education of your / st names of schools, dates attended, and degrees obtained. Use about one q page.]	aff member, giving uarter of a printed
Employment Record:	
[Starting with present position, list in reverse order every employment held held by staff member since graduation, giving dates, names and add organizations, titles of positions held, and locations of assignments. For exyears, also give types of activities performed and client references, where approximately pages.]	ress of employing perience in last ten
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[For each language indicate proficiency: excellent, good, fair, or poor in spewriting.] Certification: I, the undersigned, certify that to the best of my knowledge and belief, the second se	these data correctly
[For each language indicate proficiency: excellent, good, fair, or poor in spewriting.] Certification: I, the undersigned, certify that to the best of my knowledge and belief, and describe me, my qualifications, and my experience.	these data correctly
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[For each language indicate proficiency: excellent, good, fair, or poor in spewriting.] Certification: I, the undersigned, certify that to the best of my knowledge and belief, edescribe me, my qualifications, and my experience. [Signature of staff member and authorized representative of the consultant]	these data correctly

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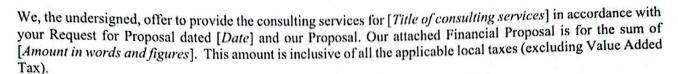
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Section 3. Financial Proposal Submission Form

[Letterhead of Consultant in case of a Firm]

To: [Name and address of Client]



Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e., [Date].

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature: Name and Title of Signatory: Name of Consultant: Address:

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SECTION 3: Financial Proposal Submission BOQ

MECHINAGAR MUNICIPALITY

Office of Municipal Executive

Mechinagar-07, Jhapa

Koshi Province No, Nepal

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S.N. Description S.N. Description S.N. Description IEE Updating work of Mechi, N and Hadiya River for Fiscal yea along with supplying and Instal small R.C.C poles of Size and n mentioned in the TOR	M 1	ocation :- Mechinagar Municipality	Description	IEE Updating work of Mechi, Ninda, Timai and Hadiya River for Fiscal year 2082/083 A. along with supplying and Installation of small R.C.C poles of Size and numbers mentioned in the TOR			

Grand Total (NPR)IN Words :-

Name of firms:

Authorized Signature:

Section 4. Term of Reference



X:







Mechinagar Municipality,

Office of the Municipal Executive

Ittabhatta, Jhapa, Koshi Province, Nepal

Terms of Reference (TOR)

for

Update of Initial Environmental Examination (IEE)

for

Sustainable extraction/collection of sand, stone & gravel

from Mechi, Ninda, Timai and Hadiya River







ABBREVIATION AND ACRONYMS



CBS Central Bureau of Statistics

CF Community Forest

CFUG Community Forest Users Group

CITES Convention on International Trade of Endangered Species of Wild Flora and

Fauna

EIA Environmental Impact Assessment **EMP** Environmental Management Plan **EPA Environmental Protection Act EPR**

Environmental Protection Regulation

GoN Government of Nepal

HH House Hold HIA High Impact Area

IEE Initial Environmental Examination

km Kilometer

LIA Low Impact Area

m Meter m^2 square meter

 m^3/s Cubic meter per second masl Meter above sea level **NTFPs** Non-Timber Forest Products

Rapid Appraisal RA Terms of Reference ToR







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1. Name and Address of the individual preparing the report



1.1 Proposal Proponent

Mechinagar Municipality is the proponent of proposal for sand/gravel collection from Mechi, Ninda, Timai and Hadiya River River/quarry site. The Name and Contact Address of the proponent is as follows.

Mechinagar Municipality
Office of the Municipal Executive
E-mail: mechinagarmun@gmail.com

1.2 Organization responsible for preparing the report

Mechinagar Municipality is responsible for overseeing the update of the Initial Environmental Examination (IEE) for the proposed proposal. The municipality will engage a qualified environmental consultant to update the IEE in accordance with applicable regulations and guidelines.

2. General Introduction of the Proposal

2.1 Introduction

Nepal is known as a mountainous country, more than 80% mountainous of which is covered by mountainous and hilly region. The region has huge potential for the non-forest products like boulder, gravel sand etc. Similarly, several rivers, streams and rivulets in the country are the tremendous sources of these materials. Utilization of these resources on sustainable manner undoubtedly helps to improve the livelihood of rural people and assists in the conservation of forest as this brings changes on forest-based livelihood mechanism and thus assists on overall economic development of the country. These non-forest products (boulder, gravel, sand etc.) are basic construction materials which can be used within the country or be exported outside the country. Nepal has not been able to take advantage of these natural resources in a sustainable manner.

The proponent, Mechinagar Municipality, Office of Municipal Executive, Ittabhatta, Jhapa is planning to mobilize these resources on sustainable and environmentally sound way so that use and processing of these materials in crusher industries could be also more systematic and environmental friendly. At present, these crusher industries are not only quarrying the earth materials, but are also collecting boulders, gravels, pebbles and other construction materials from various area of Mechi, Ninda, Timai and Hadiya River river channels.

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2.2 Proposal description

Location, accessibility of the project site, activities to be carried out (collection, extraction, excavation, river/stream diversion, site clearance, washing, processing, storage, transportation, use of machineries, no. of laborers, machines and its type) collection/extraction site/area, type of materials to be collected, quantity, collection/extraction period, operation of crusher industries (proposed or existing), licensing procedure for collection/extraction of construction materials.

2.3 Sailent features of the Proposal

Salient features of the proposal are presented below.

Proposal Name: Updating IEE report for the collection and extraction of sand, stone and gravel deposition from Mechi, Ninda, Timai and Hadiya River.

1.Proposal Location

District: Jhapa District

Municipality: Mechinagar Municipality, Jhapa

2. Geographical features

Terrain:

Altitude:

Climate:

Soil:

Nearby water sources:

3. Collection site, materials and methods

Collection/Quarry

Site

Geographical Coordinates

Latitude

Longitude

Access road

Type of materials to be collected

Quantity of collected/extracted materials per day

Annual quantity of collected/extracted materials

Operation month/period (year)

Collection/ extraction method

Type of machineries used (including transportation vehicles)

No. Of machineries used

No of proposed/existing crushers

Affected municipality/Wards

Affected Settlements

No. of employment generation

Skilled

Unskilled

Tentative Income generated

Tentative revenue generated

Tentative revenue generated





2.4 Proposal Area Delineation

Based on expert judgement and consensus among specialists involved, the proposal area is divided into three categories:

High Impact Area (HIA): This is the area where the collection/extraction activities of sand/gravel/boulder occupy. Some 50 to 150m immediate vicinity around the proposal site and access way is also included, considering the place needed for extraction/collection of materials, construction material pile, camp facilities, muck disposal site, site clearance activities etc. Similarly, some 50 to 150m of direct adjoining area to the proposal site is also covered, envisioning the fact of mobility of people and vehicles/equipment etc.

Medium Impact Area (MIA): Within the physical coverage of about 150 to 500m.

Low Impact Area (LIA): Low Impact Area is generally considered from socio-economic point of view. Socio-economic information will be collected and analyzed for 5km or 1.5 hour walking distance (depending upon the settlement pattern) from the boundary of the Proposal area on all sides (immediate influence area as Low Impact Area). Municipality falls under this category.

The IEE update study shall make every effort to review, quantify and evaluate site-specific impacts to the extent applicable in all resources within the High Impact Area.

2.5 Collection/extraction of sand, gravel, boulder etc.

The total quantity of the sand gravel and boulder that can be extracted from the viable of study areas shall be presented in tabular from with the dimension of possible quarry site with coordinates of those points. The updated IEE report shall review and revise the quantities and coordinates based on recent field assessment and environmental considerations.

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2.6 **Operation Planning**

Proposal operation planning schedule is as given in table below.

Table 2 Operation Planning Schedule



S.N.	Details of activities	Time Period				
		2082/83	2082/83			
1.	Access road construction					
2.	Site clearance					
3.	Collection/extraction of materials		and the second second			
4.	Processing/storage of materials					
5.	Transportation of materials	Processing the State of the Sta				

2.6.1 Camp, Spoil Disposal area

Labour force will be supplied from the local market i.e. from Mechinagar Municipality, and it is expected that they will come from their own houses; therefore, construction of campsite is not necessary. However, workshops for construction material storage are necessary to be built at appropriate location within proposal site.

Operation power 2.6.2

Proposal area is electrified with local electricity distribution line. Instead of this, as a back up electricity supply, the proponent will install diesel generator unit.

Manpower Requirement

A reasonable estimate for skilled and semi-skilled manpower requirement during the proposed Proposal implementation is expected to be about 800 per day. Local people will be given employment opportunity on the basis of their skills.





2.7 Objective of ToR

The basic objective of the ToR is to set up a guideline for updating the IEE of the proposed Proposal to fulfil the requirements of EPR, 2076. The objectives of the ToR are as follows:

- To review and update the identification of all adverse and beneficial impacts likely to arise due to implementation of the Proposal.
- To reflect the main issues identified in the form of ToR.
- To provide guidance for the update of the IEE.
- To systematize the working procedure and listing of various activities to be performed.
- To delineate the working procedure and ensure the updated IEE report fits within the policy and legal context.

The ToR for update of the IEE report for the collection and extraction of sand, stone and gravel deposition from right bank of Mechi, Ninda, Timai and Hadiya River. Proposal has been prepared explicitly for collection/extraction of sand/gravel/boulder from these river/quarry site excluding the access road.

2.8 Objective of IEE Update Study

The objectives of the IEE Update study are as follows:

- To review and update the documentation of the existing physical, biological, socioeconomic and cultural environment of the Proposal affected area.
- To review, evaluate and classify the impacts identified in the previous IEE and Identify any new impacts.
- To update mitigation measures to avoid /reduce /mitigate adverse impacts due to implementation of the Proposal.
- To update enhancement measures to enhance the beneficial impacts due to implementation of the Proposal.
- To revise the environmental management plan based on updated findings.
- To advise the decision makers regarding further action on development of Proposal.
- To verify and install small R.C.C. poles on the four/six (as per the dimension of the pocket) on each IEE points for demarcation in the field.
- To reassess and determine the sustainable quantity of riverbed materials to be extracted from the specified IEE points.

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3. Rationality of conducting IEE update study

The update of the IEE report for the collection and extraction of sand, stone and gravel deposition from right bank of Mechi, Ninda, Timai and Hadiya River is necessary due to potential changes in environmental conditions and impacts since the previous IEE. These river carry massive amount of sediment load and deposition occurs along the river channels thus resulting riverbed mounting and flood plain area widening. Due to occurrence of these phenomena, water induced hazards are accelerating every year.

Realizing the need for conservation of the natural environment, an updated environmental assessment is essential to mitigate water-induced disasters like flood, erosion, river cutting etc. in upstream and downstream regions, boost up economic condition of local bodies and people through sustainable and environmental friendly collection, extraction, processing and transportation of river deposits like sand, gravel, stone etc.

To quantify such impacts and formulate updated mitigation measures, guidelines have been established. The Government of Nepal (GoN) has promulgated the Environment Protection Act, 2076 (EPA) and Environmental Protection Rules, 2077 (EPR) as guiding principles for conducting such mandatory studies. Any development activities have some environmental implication, whether beneficial or adverse. Therefore, it is pertinent to reassess the complications/changes in the physical, biological, socio-economic and cultural environmental condition of the project area along with the favourable or adverse impacts resulting from the activities associated with the activity.

Mechinagar Municipality is looking forward to extract river bed materials in the quantity of 100 m³-300 m³ per day from different rivers and streams. According to the statutory requirement of the Government of Nepal, (GoN) defined by Article 3 of Environmental Protection Act (EPA), 2076, Article 3 of Province 1, Province Environmental Protection Act (EPA), 2076, and Schedule 2 (c) refereed by the Rule 5 of Environmental Protection Rule (EPR), 2077 under Mining Sector, it is mandatory to conduct IEE for the extraction and collection of riverbed materials if the extraction of 100 m³-300 m³ per day has to be done. Abide by these provisions, Mechinagar Municipality is looking forward for proposals for update of the IEE for extraction of river bed materials from different rivers and streams. The approval of the updated IEE will be in accordance to the Article 3 (5) of the of Province 1, Province Environmental Protection Act (EPA), 2076.

4. Data requirement and study methodology

The IEE update study will be carried out according to the EPA 1996 and EPR 1997 and with its subsequent amendments. The following procedures will be considered to update the IEE report:

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4.1 Desk study

Secondary information will be reviewed and updated by analyzing relevant documents including previous IEE report. Information related to physical environment such as geographical location and land use patterns, will be obtained by using topographic maps, municipality and district profiles. The biological information of flora and fauna will be updated by reviewing relevant articles published from government and non-government agencies. Information on local community forest will be updated by reviewing operational plan of Community Forests (CF). Additionally, protected species of the Proposal area will be tallied with the protected species' list of GoN and other international conventions to which Nepal is a signatory. The socio-economic information such as demographic pattern, social service centers, religion, occupation, etc. will be updated by reviewing documents published by Central Bureau of Statistics (CBS), district profile, municipality profile and other project related documents.

Furthermore, the collected data will be re-categorized in terms of physical, biological, socio-economic and cultural environment. Existing acts, rule, policies, legislation and guidelines related to sand/gravel/boulder collection/extraction will be reviewed and documented for the preparation of updated IEE report.

4.2 Field Survey and Site Investigation

To meet the objectives, methods such as walk-through surveys, inventory surveys, sampling, focused group discussions, and household surveys may be used to validate and update existing data.

The secondary information through published and unpublished reports, and maps and photographs interpretation may also be used.

The Proponent shall reassess and update bio-physical environmental information in the Proposal area (High Impact Area) within physical coverage of 50 to 150m and Medium Impact Area within the physical coverage of about 150 to 500m. Socio-economic information will be updated and analyzed for 5km or 1.5 hour walking distance (depending upon the settlement pattern) from the boundary of the Proposal area on all sides (immediate influence area as Low Impact Area). Mechinagar Municipality fall under this category. The IEE update study shall make every effort to review and quantify site-specific impacts to the extent applicable in all resources within the High Impact Area.

A census shall be carried to update data regarding households whose land or houses will be located within the Proposal area and those that are to be acquired.

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4.2.1 Physical Environment

Information on physical environment shall be updated through literatures, maps, and walk through survey. The use of appropriate and calibrated equipment is encouraged to quantify information.

4.2.2 Biological Environment

Information on biological environment such as vegetation shall be updated using standard ecological methodologies to quantify vegetation of the forest of all possible categories such as disturbed, medium disturbed and undisturbed. Number of trees to be cleared for implementation of the Proposal shall be reassessed by counting method or sample plot method.

Wildlife distribution and occurrence in the Proposal area shall be updated through pug marks of the wild animals, jungle trek and observation method including discussion with the local people. Fishery information shall be updated using capture-recapture method, and by asking the local people and site observation. The Proponent may use data sheets to collect the field level information.

4.2.3 Socio-Economic Environment

Socio-economic information shall be updated by using questionnaire, checklists, observation, interviewing with the local people, focus group discussion, Participatory Rural Appraisal (PRA), discussion with district level offices, Municipality and community groups. The Proponent shall update information on possible damage of infrastructures, and community services through checklists and focus group discussion. Information on land acquisition and compensation issues shall be updated through intensive household survey at least in the direct impact zone.

4.3 Public Notice

While updating the IEE report, a fifteen days public notice will be published in national daily newspaper to inform the stakeholders about the Proposal activities. Further, the notice will be affixed in the offices of concerned Municipality, DCC, schools, hospitals, health posts and other public offices located near to the Proposal area requesting them to provide their written opinions, suggestions and comments about the Proposal implementation activities.

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4.4 Public Consultation and Recommendation Letters

During data collection for IEE update study, public consultation will be carried out at appropriate places considering the views, suggestions and comments on the Proposal implementation. Public consultation will also be carried out through focus group discussions with targeted groups such as women, key informants and other groups.

Recommendation of affected Municipality as per EPR will be updated and attached in the IEE report. Also, if the Proposal requires forest land of community forest to be cleared, the recommendations from these affected community forest shall be updated and attached in the IEE report.

If the Proposal requires land from government forest/community forest or trees are needed to be cut down from them, then comments and suggestions from District Forest Office and affected community forests should be updated and attached in the IEE report along with their recommendation letters.

4.5 Data Analysis and Impact Prediction

After reviewing and updating baseline field data from the Proposal area on physical, biological, socioeconomic and cultural environment, these will be analyzed and interpreted as per EPR 1997. The analysis shall be made on the nature, magnitude, duration and extent of the impacts due to construction and operation activities of the Proposal. U p d a t e d Mitigation measures and monitoring plans will be described for each impact.

Data collection for IEE update study will be compiled and classified to relevant components (Physical, Cultural, Socio-Economic and Biological) for convenience and to avoid possible mismatches. Computer software with usage of expert's opinion will be primary tool to process data coming from physical, socio economic and cultural domain.

While categorizing the impacts into significant and insignificant depending on the nature of impact, the following aspects shall be made to each of the impact:

- Nature: Direct or Indirect
- Magnitude: High, Moderate, Low
- Extent: Site specific, Local and National
- Timing: Short term, Medium-term, Long-term
- Duration: Temporary, Permanent
- Impact quality: Beneficial, Negative

5. Existing environmental condition

The environmental study team carried out a field visit to the proposed areas in Mechi, Ninda, Timai, and Hadiya Rivers before the ToR preparation for the IEE update study.

AND FOLLOWING OBSERVATIONS WERE MADE ON THE ENVIRONMENT OF THE PROPOSAL.





5.1 Physical Environment

- Topography:
- Climate and Hydrology:
- Geology:
- Soil Erosion and Landslide:
- · Land Use:
- Air and Water quality:
- Noise Quality:

5.2 Biological Environment

The Proposal area belongs to free zone. There is no national park, wildlife sanctuary, buffer zone or conservation area in or around the proposal area.

- Forest and Flora:
- Forest type, community forest, plant/tree species:
- Plant Species of Medicinal and Ethno-Botanical Values Fauna:
- Fishes:
- Rare, Endangered and Protected Species of Flora and Fauna:

5.3 Socio-economic and Cultural Environment

- Population:
- Ethnicity and Settlements:
- Occupation:
- Local Economy:
- Literacy:
- Health and sanitation:

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6. Policies, Law and manual to be Undertaken into account while preparing the report

The policy documents, acts, regulations, and guidelines listed below shall be reviewed and updated to ensure compliance with the latest provisions during the IEE update report preparation. A concrete recommendation shall be made in the updated IEE report as to whether the proposal can be implemented after reviewing these acts and regulations. Any legal provisions that conflict with the proposal implementation will be investigated, and recommendations will be made if necessary. The following documents will be considered:

Plans, Policies and Strategies

- Three Years Interim Plan, 2008
- Forestry Sector Master Plan, 1998
- Water Resource Strategy, 2002
- Nepal Biodiversity Strategy, 2002
- Nepal Environment Policy and Action Plan, 1993 and 1998
- Revised Forest Policy, 2000

Acts and Regulations

- Interim Constitution of Nepal, 2007
- Environment Protection Act, 2076
- Environment Protection Rules, 2077
- Plant Protection Act, 1972
- National Parks and Wildlife Conservation Act, 1973
- Soil and Watershed Conservation Act, 1982
- Forest Act, 1993
- Forest Regulation, 1995
- Labour Act, 1991
- Land Acquisition Act, 1977
- Local Self-Governance Act, 1998
- Local Self-Governance Regulation, 1999
- Industrial Enterprises Act, 1993
- Export, Import Act, 1956
- Mines and Minerals Act, 1993
- Aquatic Animals Protection Act, 1993
- Water Resources Act, 1993
- Water Resources Regulations, 1993
- Solid Waste Management and Resource Mobilization Act, 1987 and Regulations, 1989
- Wildlife Reserve Rule, 1977

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Guidelines and Manuals

- National Environmental Impact Assessment Guideline, 1993
- EIA Guideline for Forestry Sector, 1995
- Environmental Management Guidelines (Road), 1997
- Community Forest Guidelines, 2001
- A hand book on Licensing and Environmental Assessment Process for Hydropower process in Nepal, 2006
- Working Procedures of Forest, 2007
- Guidelines on Land-use for Other Purposes, 2063

Conventions

- Convention on Biological Diversity, 1992
- CITES, 1973
- Convention No 169 concerning indigenous and tribal people in Independent Countries

Any significant conflicts and issues related to the environment and others will be identified and recommendations will be based on the above-mentioned policies, rules and regulations. The proponent will describe the pertinent regulations and standards governing environmental quality, health and safety, protection of the sensitive areas, protection of the endangered species, land use control etc. at district, municipality and ward level. The proponent shall also review and update the responsibilities of the local, district, and central level institutions and recommended steps to ensure for necessary coordination during the Proposal implementation.

7. Preparation of the IEE update report

The IEE update report shall be prepared in consonance with the contents given on the Schedule-5 of the EPR 2077. The report shall update and systematically document the baseline data on physical, biological as well as socio-economic and cultural environment.

7.1 Time schedule, Budget and study team

The estimated study time schedule, cost and team composition is as follows.

7.1.1 Time Schedule

The estimated time schedule for completion of the IEE study is 25 Days of Contract Agreement. as given in Table 7.1. Here, time schedule for approval of ToR and IEE report is not included.







Activities/Month	2082 15 th	Bhadra	2082	Asoj	10 th
Data collection, analysis, Literature review and preparation of updated ToR document					Anny Strange
Preparation of updated ToR document and approval	grandy and the control				
Public notice publication, Field visit/study and public consultation meeting		TANKS TO THE STATE OF			
IEE Draft report updating	Anna (Maria		Anna de la la	er top :	
Final IEE report updating with incorporating comments				2000	
Incorporating the comment, finalization of report and marking of the IEE points in the field as per the requirement of the Client.				100 m	
Submission of Final updated IEE report and approval		Marian and a second		and the same of th	

7.1.2 Study Team

The following professionals will carry out the IEE update study:

Minimum Eligibility of Team Members

Environmental Specialist- Team Leader- (Master's degree in Environment science/ Engineering /Environmental Management) and engagement in at least 3 IEE/EIA)

Geologist/Hydrologist- Team Member- (Master's degree in Hydrology/ Geology and engagement in at least 3 IEE/EIA)

Sociologist/Social-economist- Team Member- (Master's degree in sociology/ Anthropology)

Civil Engineer- Team Member- (Bachelor's degree in Civil Engineering)

GIS Expert/Geotechnical/Geomatics Engineer- Team Member (Bachelors' degree in GIS/Geomatics /Geotechnical Engineering)

Biodiversity expert/ Natural Resource Expert/ Forestry Expert -Team Member (Master's Degree in Natural Resource management, Forestry or Botanist and engagement in at least 3 IEE/EIA)

Other Support Staffs - Team Member

Evaluation Criteria:

The firms team member shall possess the minimum eligibility of team members as mentioned in 7.1.2. The firms complying those qualifications requirement is further selected based on Least Cost Method.

7.1.3 Budget

The total amount allocated for IEE update study is about Rs 489003.88

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PAYMENT SCHEDULE

If not indicated otherwise in the contract document the consultant shall be paid as per the following schedule: Payment of this task will be as following schedule:

- i) 30% of total payment after submission and acceptance of Inception Report
- 40% of total payment after submission and acceptance of Draft updated IEE Report.
- 30% of total payment after submission and acceptance of Final Updated IEE Report.

Other Requirements

- Final IEE Report Submission: The successful bidder must update and submit the final updated IEE report
 to Mechinagar Municipality within 25 days from the contract signing date, following approval from the
 Office of the Municipal Executive, Ittabhatta, Jhapa. The process may involve updating and presenting
 reports, as well as incorporating any amendments suggested by the IEE approving body established by the
 Office of the Municipal Executive.
- Presentation and Approval Responsibility: The successful bidder is responsible for presenting the
 updated IEE report to the approval agency and obtaining approval.
- Report Submission Requirements: The conditions and requirements outlined in the notice/letter issued
 by Mechinagar Municipality for the proposal invitation form an integral part of this Terms of Reference
 (ToR). The successful bidder must submit two hard copies of the updated IEE report for each of the four
 rivers (Mechi, Ninda, Timai, and Hadiya) separately, along with an e-copy.
- Compliance with Rules and Regulations: Any issues not covered by this ToR will be addressed in accordance with the relevant rules and regulations of the Government of Nepal.
- Supply and Installation of R.C.C Pillars: The successful bidder is responsible for supplying and
 installing small R.C.C pillars (Size: Min 60cm length with min 50mm*50mm cross section) at each
 proposed quarry /IEE points designated for the extraction of riverbed materials (Note: number of pillars
 installation may vary(four-six) on each pockets/IEE points as per their length, also as per the requirement
 of Client.)

8. Specific impacts on the implementation of proposal on the environment

After the field visit, the study team will reassess the environmental impacts to be affected by the implementation of the Proposal. These impacts will be categorized as site specific, local and regional in terms of extent. During the IEE update study, these issues will be thoroughly reviewed and updated. The impacts will be characterized as low, medium, high in terms of magnitude and long term, medium term, and short term in terms of duration.

8.1 Physical Environment

- Impact due to site clearance
- Impact due to access road construction
- Impact due to crusher plant establishment
- Change in Topography, Geomorphology (river bank and embankment stability, disturbance to fragile slope)

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- Collection/quarrying activities
- Change in land use (loss or degradation of productive land)
- Impact due to spoil handling and disposal;
- · Impact on slope stability, sedimentation, soil erosion, bank cutting and flooding;
- Change in River hydrology and morphology (meandering and alteration of river flow, change/deepening in river bed) other natural resources e.g. water spring, well etc.
- · Impact on water quality in downstream and water use system;
- Impact due to noise and vibration
- Impact due to stockpiling of collected/extracted materials;
- Impact on air quality due to dust emission and vehicle movement
- Access road related issues including impact due to heavily loaded vehicles for transportation of construction materials
- Decline in aesthetic value and visual impact
- Any other issues likely to arise during IEE update study

8.2 Biological environment

- Impacts on vegetation due to clearance for the Proposal activities;
- Impacts on protected species of flora and fauna;
- Any other issues likely to arise during IEE update study including biodiversity aspects.
- · Impacts on aquatic habitat;
- Impacts on forest, forest products and vegetation of surrounding area and dependent wildlife due to increased human activities
- Impacts on wildlife and bird due to destruction of its habitat;
- · Impacts on wildlife, bird and its habitat due to illegal hunting, poaching
- Impacts on protected species of flora and fauna;
- Any other issues likely to rise during IEE update study

8.3 Socio-economic and Cultural Environment

- Land acquisition, compensation issues and people's displacement
- Impact on gender and vulnerable groups (including extension/evacuation of squatter settlement)
- Impact on occupational health, safety and sanitation;
- Any other issues likely to arise during IEE update study.
- Impact on access road, people's movement and traffic management due to operation activities
- Loss or damage to private land and properties such as houses, farm sheds, and other structures, crops and fodder/fruit trees
- · Impact on occupational health, safety and sanitation and solid waste management
- Loss or degradation of farm land and impact on agriculture productivity and livestock
- Pressure on existing infrastructure facilities like health post, education, communication, water supply and sanitation facilities, irrigation system, foot trail, trail bridges etc.
- Social conflict
- Change in social structure, traditional and cultural practices, rituals of the rural people due to exposition to outside workforce
- Impact on law and order in the Proposal area due to large work force;
- Impact due to proposal site infrastructure development
- Impact on religious, cultural and historical sites (including cremation site)

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- Impact on gender and vulnerable groups (including extension/evacuation of squatter settlement)
- Migration of labourers
- Impact on livelihood of local people (fisherman etc)
- Impact on nearby human settlements
- Impact on use of other natural resources
- Conflict in revenue/income sharing mechanism
- Other public concern issues

8.4 Beneficial impacts

- Employment opportunity for skilled, semi-skilled and unskilled local people
- Increase in road network
- Employment opportunity for local people and human resource development
- Boost up of local economy
- Impact on gender and vulnerable groups;
- Business opportunity to local people;
- Revenue generation to local bodies;
- Community development and Potential improvement of public facilities
- Benefit to the local people due to the Proposal implementation.

9 Alternatives for the implementation of the proposal on the environment

During IEE update study of the Proposal, an alternative analysis of the Proposal implementation shall be reviewed and updated considering various aspects like proposal site, operation procedure, technology and schedule. Alternative analysis shall be performed on the following aspects:

- No proposal options
- Proposal alternatives
- Alternative Proposal sites
- Alternative technology and operation
- Alternative resources, procedure and schedule

10 Mitigation and enhancement measures

Preventive, corrective and compensatory mitigation measures as identified and anticipated in the study will be included in the updated IEE report. Each of the identified adverse impacts will be re-evaluated in detail and cost-effective mitigation measures will be updated to minimise the adverse impacts. Social enhancement measures shall be updated to enhance beneficial impacts due to implementation of the Proposal. The mitigation measures will be categorized in terms of physical, biological, socio-economic and cultural environment during proposal construction and operation phase. The updated IEE report shall include the following:

- Updated Mitigation and enhancement measures during construction and operation phases for each environment; agencies responsible for implementation and construction
- Updated Mitigation and enhancement cost
- Updated Organizational set up to carry out the mitigation and enhancement measures, and
- Preparation of an Updated Environment Impact Mitigation Matrix.

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The following considerations shall be made while proposing the cost for environment protection measures.

- Appropriate compensation for the loss of assets;
- Appropriate mitigation measures to minimize the adverse impacts on biophysical, socioeconomic and cultural environment;
- Health and sanitation measures;

Summary of the updated Cost Benefit assessment shall be given which shall include the followings:

- Cost for Environment Mitigation Measures
- · Cost for Enhancement Measures,
- · Cost for other Social Support Programs,
- · Cost for Environmental Monitoring,
- · Total Proposal Income and revenue generation, and
- · Percentage of total Environmental Cost to the Total Proposal Income and revenue generation

11 Other necessary matters

Report format and deliverables

References, annexes, maps, photos, tables, charts and questionnaire as relevant and applicable shall be included in the updated IEE report. Chapter plan for IEE report will be as given below.

Abbreviation and Acronyms
Table of Contents

- 1. NAME AND ADDRESS OF THE INDIVIDUAL/INSTITUTION PREPARING THE REPORT.
- 1.1 Proponent
- 1.2 Institution responsible for preparing the Updated IEE Report

2. GENERAL INTRODUCTION OF THE PROPOSAL

- 2.1 Back ground
- 2.2 Objective of IEE update
- 2.3 Proposal description
- 2.4 Proposal location
- 2.5 Proposal component accessibility
- 2.6 Proposal Salient features
- 2.7 Land requirement
- 2.8 Construction Schedule
- 2.9 Construction materials Stock and muck disposal
- 2.10 Camp site, warehouse, and Construction yard
- 2.11 Proposal area delineation

3.0 DATA REQUIREMENT AND STUDY METHODOLOGY

3.1 Physical Environment

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- 3.2 Biological Environment
- 3.3 Socio-economic and Cultural Environment

4.0 IMPACT IDENTIFICATION AND PREDICTION

5.0 REVIEW OF PLANS, POLICIES, LEGISLATIONS, GUIDELINES, STANDARDS AND CONVENTIONS

6.0 DESCRIPTION OF EXISTING ENVIRONMENT

- 6.1 Physical
- 6.2 Biological
- 6.3 Socio-economic and Cultural

7.0 ENIRONMENTAL IMPACT

- 7.1 Physical Environment
- 7.1.1 Construction
- 7.1.2 Operation
- 7.2 Biological Environment
- 7.2.1 Construction
- 7.2.2 Operation
- 7.3 Socio-economic and Cultural Environment
- 7.3.1 Construction
- 7.3.2 Operation

8.0 ALTERNATIVE ANALYSIS

9.0 MITIGATION AND ENHANCEMENT MEASURES

- 9.1 Physical
- 9.1.1 Construction
- 9.1.2 Operation
- 9.2 Biological
- 9.2.1 Construction
- 9.2.2 Operation
- 9.3 Socio-economic
- 9.3.1 Construction
- 9.3.2 Operation

10.0 MITIGATION AND ENHANCEMENT COST

11.0 MONITORING PLANNING
12.0 Conclusion, References, Appendices

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ANNEX - I Proposed Location Map

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Consultants' Services (Direct Purchase)

Title of Consulting Services: Update of IEE for sustainable extraction/collection of sand, stone & gravel from Mechi, Ninda, Timai and Handiya River

Office Name: Mechinagar Municipality

Office Address: Ittabhatta, Jhapa

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Sample Contract for Consulting Services Direct Purchase Assignments Lump-Sum Payments



CONTRACT

THIS CONTRACT ("Contract") is entered into this [insert starting date of assignment], by and between [insert Client's name] ("the Client") having its principal place of business at [insert Client's address], and [insert Consultant's name] ("the Consultant") having its principal office located at [insert Consultant's address].

WHEREAS, the Client wishes to have the Consultant to perform the services hereinafter referred to, and

WHEREAS, the Consultant is willing to perform these services, NOW THEREFORE THE PARTIES hereby agree as follows:

- 1. Services
- a. The Consultant shall perform the services specified in Annex A, "Terms of Reference and Scope of Services," which is made an integral part of this Contract ("the Services").
- b. The Consultant shall provide the personnel listed in Annex B, "Consultant's Personnel," to perform the Services.
- c. The Consultant shall submit to the Client the reports in the form and within the time periods specified in Annex C, "Consultant's Reporting Obligations."
- 2. Term

The Consultant shall perform the Services during the period commencing *[insert starting date]* and continuing through *[insert completion date]*, or any other period as may be subsequently agreed by the parties in writing.

3. Payment

A. Ceiling

For Services rendered pursuant to Annex A, the Client shall pay the Consultant an amount not to exceed *[insert amount]*. This amount has been established based on the understanding that it includes all of the Consultant's costs and profits as well as any tax obligation that may be imposed on the Consultant.

B. Schedule of Payments

The schedule of payments is specified below:1

finsert amount Nepali Currency] upon the Client's receipt of a copy of this Contract signed by the Consultant;

[insert amount in Nepali currency] upon the Client's receipt of the draft report, acceptable to the Client; and

[insert amount in Nepali currency] upon the Client's receipt of the final report, acceptable to the Client.







Modify, in order to reflect the output required, as described in Annex C.



[insert amount and currency] Total:

C. Payment Conditions

Payment shall be made in Nepali Rupees, no later than 15 days following submission by the Consultant of invoices in duplicate to the coordinator designated in paragraph 4.

4. Project
Administration

Coordinator.

The Client designates Mr. /Ms. [insert name] as Client's Coordinator; the coordinator will be responsible for the coordination of activities under this Contract, for acceptance and approval of the reports and of other deliverables by the Client and for receiving and approving invoices for the payment.

B. Reports.

The reports listed in Annex C, "Consultant's Reporting Obligations," shall be submitted in the course of the assignment, and will constitute the basis for the payments to be made under paragraph 3.

5. Performance Standards

The Consultant undertakes to perform the Services with the highest standards of professional and ethical competence and integrity. The Consultant shall promptly replace any employees assigned under this Contract that the Client considers unsatisfactory.

6. Confidentiality

The Consultants shall not, during the term of this Contract and within two years after its expiration, disclose any proprietary or confidential information relating to the Services, this Contract or the Client's business or operations without the prior written consent of the Client.

7. Ownership of Material

Any studies reports or other material, graphic, software or otherwise, prepared by the Consultant for the Client under the Contract shall belong to and remain the property of the Client. The Consultant may retain a copy of such documents and software.²

8. Consultant
Not to be
Engaged in
Certain
Activities

The Consultant agrees that, during the term of this Contract and after its termination, the Consultant and any entity affiliated with the Consultant, shall be disqualified from providing goods, works or services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

9. Responsibility

The Consultant shall be responsible to fulfil his obligations as per the requirement of the Contract Agreement, RFP documents and Procurement Act and Regulations.

10. Insurance

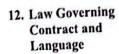
The Consultant will be responsible for taking out any appropriate insurance coverage.

11. Assignment

The Consultant shall not assign this Contract or sub-contract any portion of it without the Client's prior written consent.

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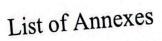
The Contract shall be governed by the laws of Nepal and the language of the Contract shall be English.

12. Dispute Resolution Any dispute arising out of the Contract, which cannot be amicably settled between the parties, shall be referred to adjudication.

FOR THE CLIENT	FOR THE CONSULTANT
Signed by	Signed by
Title:	Title:

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Annex A: Terms of Reference and Scope of Services

Annex B: Consultant's Personnel

Annex C: Consultant's Reporting Obligations

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Annex A - Terms of Reference

[Terms of Reference normally contain the following sections:

- a. Background,
- b. Objectives,
- c. Scope of the Services,
- d. Staff inputs
- e. Training (when appropriate),
- f. Reports and Time Schedule, and
- g.) Data, Local Services, and Facilities to be provided by the Client.]

Annex B - Consultant's Personnel

Titles [and names, if already available], detailed job descriptions and minimum qualifications of Key Personnel to be assigned to work and staff-months for each.

Annex C - Consultant's Reporting Obligation

List format, frequency, and contents of reports; persons to receive them; dates of submission; etc. If no reports are to be submitted, state here "Not applicable."



