

## तथ्याङ्कमा आधारित ग्रामीण सशक्तिकरण लागि वृहत प्रदेश प्रोफाइलिङ कार्यविधि, २०८०

लुम्बिनी प्रदेशको सुशासन नियमावली, २०७७ को दफा ९ ले दिएको अधिकार प्रयोग गरी लुम्बिनी प्रदेश अर्थ मन्त्रालयले यो कार्यविधि बनाएको छ ।

परिच्छेद १

प्रारम्भिक

१. संक्षिप्त नाम र प्रारम्भ:- (१) यस कार्यविधिको नाम “तथ्याङ्कमा आधारित ग्रामीण सशक्तिकरण लागि वृहत प्रदेश प्रोफाइलिङ कार्यविधि, २०८०” रहको छ ।

(२) यो कार्यविधि तुरुन्त प्रारम्भ हुनेछ ।

२. परिभाषा र उद्देश्य:- (१) विषय वा प्रसङ्गले अन्य अर्थ नलागेमा यस कार्यविधिमा,-

(क) “प्रोफाइलिङ” भन्नाले यस कार्यविधि बमोजिम गरिने तथ्याङ्कमा आधारित ग्रामीण सशक्तिकरण लागि वृहत प्रदेश प्रोफाइलिङ कार्यक्रमलाई समष्टिगत रूपमा सम्झनु पर्छ ।

(ख) “उपमहानगरपालिका” भन्नाले यस कार्यविधिको दफा १० बमोजिम पाइलटको लागि छनौट भएको लुम्बिनी प्रदेश अन्तर्गतका उपमहानगरपालिकाको नगर कार्यपालिकाको कार्यालय सम्झनु पर्छ ।

(ग) “मन्त्रालय” भन्नाले लुम्बिनी प्रदेशको अर्थ मन्त्रालयलाई सम्झनु पर्छ ।

(घ) “सेन्सस” भन्नाले उपमहानगरपालिकाको प्रोफाइलिङ गरिने यस कार्यविधिको दफा ४ उपदफा (१) अनुसारको क्षेत्रमा प्रत्येक घरधुरीबाट दफा ६ बमोजिम तथ्याङ्क संकलन गरिने प्रकृत्यालाई सम्झनु पर्छ ।

(ङ) “गणक, सहजकर्ता र संयोजकहरू” भन्नाले एक कार्यक्रम संयोजक, एक कृषि तथ्याङ्क विश्लेषक, एक फिल्ड संयोजक र दफा ७ उपदफा (४) बमोजिमको संख्या अनुसार वडा सहजकर्ताहरू र गणकहरूलाई सम्झनु पर्दछ ।

(च) “एक्स्ट्र्याक्ट” भन्नाले संकलित तथ्याङ्क डिजिटल प्रणालीबाट विभिन्न फाइल फर्म्याट र विभिन्न विषयगत तरिकाले छनौट गरी डाउनलोड गरिने प्रकृत्यालाई सम्झनु पर्छ ।

(२) उद्देश्य: यस कार्यक्रमका उद्देश्य निम्न बमोजिका रहने छन् :

(क) डिजिटल नक्सालाई परम्परागत नक्सासंग एकिकृत गर्दै प्रत्येक घरधुरीको कृषिगत अवस्था र आर्थिक स्थिति स्पष्ट हुने गरी नक्शाङ्कन गर्ने,

(ख) सेन्सस र एकिकृत डिजिटल नक्शाको प्रयोगार्थ सम्बन्धित वडाको विस्तृत डिजिटल सिस्टम तयार गर्ने,

(ग) विकास परियोजनाहरूको योजना र कार्यान्वयनमा सम्बन्धित निकायलाई मार्गदर्शन प्रदान गर्ने प्रकारको वैज्ञानिक विधिको परिक्षण गर्ने,

(घ) डिजिटल प्रविधि र डाटा विज्ञानको सहयोगमा सिस्टम मार्फत महत्वपूर्ण जानकारी प्राप्त गर्न, सूचनामुलक निर्णय लिन र समानुपातिक तथा दिगो विकासको सुनिश्चितता गर्न मद्दत गर्ने ।

## परिच्छेद २

### कार्यक्रम सञ्चालन प्रकृया

३. **उपमहानगरपालिकाको जिम्मेवारी हुने:-** (१) यस कार्यविधि बमोजिम कार्यक्रम सञ्चालन गर्ने आर्थिक तथा प्रशासन लगायत सम्पूर्ण जिम्मेवारी तथा दायित्व उपमहानगरपालिकाको हुनेछ ।
- (२) लुम्बिनी प्रदेशभित्र यस कार्यविधि बमोजिम पाइलटको रूपमा गरिने आयोजना कुनै एक उपमहानगरपालिकाको छनौट दफा १० बमोजिम हुनेछ ।
- (३) छनौट भएको उपमहानगरपालिकालाई मन्त्रालयले स्वीकृत कार्यक्रम “तथ्याङ्कमा आधारित ग्रामीण सशक्तिकरण लागि वृहत प्रदेश प्रोफाइलिङ” शीर्षकमा रहेको सम्पूर्ण बजेट वित्तिय हस्तान्तरण मार्फत उपलब्ध गराउने छ ।
४. **क्रियाकलाप:-** (१) पाइलट उपमहानगरपालिकाका वडाहरूमा बजार/आवाशिय क्षेत्र बाहेकका क्षेत्रमा सम्पूर्ण घरधुरीको यथार्थ तथा विश्लेषणात्मक अध्ययन गरिनेछ । जस अन्तर्गत सो घरधुरीहरूसँग सम्बन्धित आर्थिक क्रियाकलापहरू तथा जग्गाको अवस्था र उपयोगिताको बारेमा तथ्याङ्क संकलन गर्नु पर्नेछ ।
- (२) उपदफा (१) बमोजिम हुने तथ्याङ्क संकलन प्रतिबिम्बित हुने गरी नक्शा तयार गरिनेछ । जस अन्तर्गत भौगोलिक नक्शालाई प्रत्येक घरधुरीको आर्थिक तथ्याङ्क र विकास पुर्वाधारको अवस्था, चुनौती, समस्या र आवश्यकताको तथ्यांकसंग एकिकृत गरिनेछ ।
- (३) उपदफा (२) बमोजिम एकिकृत सेन्सस र डिजिटल नक्शाको प्रयोगार्थ सम्बन्धित वडाको विस्तृत डिजिटल सिस्टम तयार गरिनेछ । सो सिस्टलाई “Dynamic Development Assessment and Mapping Interface (DDAAMI)” वा “दामी” भनिनेछ ।
- (४) प्रोफाइलिङका विषयगत कार्यहरू दफा ५ मा उल्लेख गरे अनुरूप दुई खण्डका रहनेछन् ।
५. **क्रियाकलापका खण्ड-**(१) प्रोफाइलिङका लागि उपमहानगरपालिकाको भुगोल भित्रै रहनु पर्ने वा नरहनु पर्ने विषय र प्राविधिक वा गैरप्राविधिक विषयसँग सम्बन्धित विषयगत क्रियाकलाप अनुसार प्रोफाइलिङलाई दुई खण्डका क्रियाकलापमा बाँडिनेछ ।
- (२) उपदफा (१) मा उल्लेखित खण्डहरू निम्न प्रकारका रहनेछन्:
- (क) आर्थिक-भौतिक तथ्याङ्क संकलन: यस कार्यविधिको दफा ६ र ७ मा उल्लेख भए अनुसार सञ्चालन गरिनेछ । यस खण्ड अन्तर्गतका क्रियाकलापहरू उपमहानगरपालिका आफैले सञ्चालन गर्नेछ ।
- (ख) तथ्याङ्क, नक्शा र डिजिटल सिस्टम निर्माण: यस कार्यविधिको दफा ८ र ९ मा उल्लेख भए अनुसार सञ्चालन गरिनेछ । यस खण्ड अन्तर्गतका क्रियाकलापहरू उपमहानगरपालिकाले सेवा प्रदायक संस्था मार्फत सञ्चालन गर्नेछ ।

## परिच्छेद ३

### आर्थिक-भौतिक तथ्याङ्क संकलन

६. तथ्याङ्क संकलन- (१) यस दफाको उपदफा (२) र (३) मा उल्लेखित विषयहरू समावेश हुने गरी वडागत तहमा प्रत्येक घरधुरीबाट तथ्याङ्क संकलन गर्नु पर्नेछ ।

(२) प्रत्येक घरधुरीको जग्गा स्वामित्व, र जग्गा उपभोगको स्थिति संकलन गर्नु पर्नेछ । जग्गा उपभोगको स्थिति मौसमी आधारमा वर्षभरिको आर्थिक क्रियाकलाप समेटिने गरी हुनु पर्नेछ । यस अन्तर्गतका विवरणहरूमा देहायका तथ्याङ्कहरू समावेश हुनेछः

- (क) जनसांख्यिक विवरणहरू,
- (ख) कुल जग्गा स्वामित्व (रैकर, ऐलानी वा अन्य),
- (ग) रैकर जग्गा विवरणहरू (कित्ता नम्बर सहित),
- (घ) जग्गा उपभोग स्थिति (कृषियोग्य जग्गा, उपभोग भैरहेको र बाझो जग्गा),
- (ङ) जग्गा उपभोग नहुने कारणहरू ।

(३) प्रत्येक घरधुरीको आमदानी, जग्गा स्वामित्व, र जग्गा उपभोगको स्थिति अनुसार वार्षिक आर्थिक क्रियाकलापहरूका विवरणहरू लिनुपर्नेछ । कृषिसँग सम्बन्धित सम्पूर्ण तथ्याङ्क मौसमी आधारमा वर्षभरिको आर्थिक क्रियाकलाप समेटिने गरी हुनु पर्नेछ । यस अन्तर्गतका विवरणहरूमा देहायका विषयहरू समावेश हुनेछः

- (क) कच्चा पदार्थको विवरण (परिमाण, मूल्य, र स्रोत),
- (ख) उत्पादनको विवरण (परिमाण, उत्पादन र बजार),
- (ग) समस्या र चुनौतीहरू (बजार पहुँच सहित) ।

(४) तथ्याङ्क संकलन गर्दा साविकमा नेपाल सरकार, प्रदेश सरकार, स्थानीय तह वा अन्य कुनै निकायबाट उपलब्ध भएका तथ्याङ्कको सदुपयोग गर्दै दोहोरोपना घटाउने गरी गर्नु पर्नेछ ।

७. उपमहानगरपालिका आफैले सञ्चालन गर्ने: (१) दफा ६ मा व्यवस्था भए बमोजिमको तथ्याङ्क संकलनको कार्य उपमहानगरपालिकाले गणक, सहजकर्ता र संयोजकहरू परिचालन गरी गर्नेछ ।

- (२) गणक, सहजकर्ता र संयोजकहरूको काम, कर्तव्य र अधिकार अनुसूची-१ बमोजिम हुनेछ ।
- (३) गणक, सहजकर्ता र संयोजकहरू छनौट अनुसूची-२ बमोजिमको योग्यता अनुसार हुनेछ ।
- (४) गणक, सहजकर्ता र संयोजकहरूको संख्या र करार समयावधि अनुसूची-३ बमोजिम हुनेछ ।
- (५) गणक, सहजकर्ता र संयोजकहरूको सेवा, सुविधा अनुसूची- ४ बमोजिम हुनेछ ।

## परिच्छेद ४

### तथ्याङ्क, नक्शा र डिजिटल सिस्टम निर्माण

८. सिस्टम निर्माण-(१) सिस्टम निर्माण अन्तरगतका क्रियाकलापहरू यस दफाको उपदफा (२) र (३) अनुसार दुइ प्रकारका हुनेछः-

(२) क्रियाकलाप एकः तथ्याङ्क संकलन तथा व्यवस्थापन प्रणालीको डिजाइन र निर्माण गर्ने। संकलित तथ्याङ्कको गुणस्तरमा सुचिञ्चितता र मुल्याङ्कनको योजना तयार गर्न यस अन्तर्गत निम्न क्रियाकलापहरू समावेश हुन पर्नेछः

- (क) तथ्याङ्क संकलन तथा व्यवस्थापनका लागी मोबाइल वा वेब-एप प्रणालीको डिजाइन र निर्माण
- (ख) संकलित तथ्याङ्कको व्यवस्थापन
- (ग) तथ्याङ्क भिजुएलाइजेशनका लागी तथ्याङ्क मुल्याङ्कन योजनाको तयारी
- (घ) एकीकृत पालिका भु-तथ्याङ्क तयारी

(३) क्रियाकलाप दुईः जि.आई.एस.मा आधारित स्पेशियल डिसिजन समर्थन प्रणालीको डिजाइन र निर्माण गरी “दामी” तयार गर्ने। यस अन्तर्गत दुई मुख्य कार्यहरू रहनेछन्ः

(क) आर्थिक नक्शा र तथ्याङ्क समायोजना गर्ने । यस अन्तर्गत निम्न क्रियाकलापहरू समावेश हुनपर्नेः

- (१) भूमिगत नक्शा र कृषि सम्बन्धित विवरण
- (२) विकास पुर्वाधारको चित्राङ्कन र थिमेटिक नक्शा समायोजन
- (३) सेटलाइट नक्शा (High Resolution Satellite Image) र नापी नक्शा (केडेस्ट्रल म्याप) समायोजन
- (ख) आर्थिक तथ्याङ्क र जिआइएस नक्शा समायोजन गरी प्रयोगकर्ता-मैत्री

डिजिटल प्ल्याट्फर्म/सिस्टम निर्माण गर्ने । यस अन्तर्गत निम्न प्रावधानहरू समावेश हुनपर्नेः

- (१) तथ्याङ्क हेर्ने र एक्स्ट्र्याक्ट गर्न मिल्ने प्रावधान
  - (क) शारांश र एकाङ्की रूप दुवैमा हेर्ने र तथ्याङ्क एक्स्ट्र्याक्ट गर्न मिल्ने,
  - (ख) आवश्यकता अनुसार भौगोलिक क्षेत्र तोकी सो अन्तरगत विविध विषयो क्लष्टरगत तथ्याङ्क हेर्ने र एक्स्ट्र्याक्ट गर्न मिल्ने
- (२) सिस्टममा पहुँचः
  - (क) सिस्टममा विभिन्न तहमा पहुँच रहने गरी विविध युजर एकाउन्ट र युजर ग्रुपहरूले सञ्चालन गर्न सकिने प्रावधान,
  - (ख) सीमित तथ्याङ्क सार्वजनिक रूपमा हेर्ने मिल्ने प्रावधान ।
- (३) घरधुरीले सुचना दर्ता वा अद्यावधिक प्रस्ताव गर्न सकिने प्रावधान
  - (क) वार्षिक/मासिक/सिजनल अवस्था सम्बन्धित व्यक्तिले संशोधन प्रस्ताव गर्न सक्ने,

(ख) जग्गाको स्वामित्व परिवर्तनको अवस्था सम्बन्धित व्यक्तिले संशोधन प्रस्ताव गर्न सक्ने प्रावधान वा सो प्रावधानलाई भविष्यमा सुचारु हुन सक्ने गरी सिस्टम विकास ।

९. सेवा प्रदायक संस्था मार्फत कार्यक्रम सञ्चालन गर्ने: (१) दफा ८ मा उल्लेख भए बमोजिमका कार्यहरू उपमहानगरपालिकाले सेवा प्रदायक संस्थामार्फत सेवा खरिद गरी सञ्चालन गर्नेछ ।

(२) सेवा खरिद गर्दा दफा ८ उपदफा (२) बमोजिमको क्रियाकलापहरू समेटिने निर्धारित कार्यविवरण (Terms of Reference - ToR) अनुसूची- ८ बमोजिम हुनेछ ।

(३) दफा ८ उपदफा (३) बमोजिमको क्रियाकलापहरू समेटिने निर्धारित कार्यविवरण (Terms of Reference - ToR) अनुसूची- ९ बमोजिम हुनेछ ।

(४) उपदफा (२) र उपदफा (३) अनुसार कार्यविवरणलाई उपमहानगरपालिकाले सेवा खरिदको प्रमुख आधार बनाई सेवा प्रदायक संस्थासँग प्रचलित नियम कानून अनुसार खरिद गर्नु पर्नेछ ।

#### परिच्छेद ५

#### उपमहानगरपालिकाको छनौट प्रकृया र भुक्तानी

१०. उपमहानगरपालिकाको छनौट: (१) लुम्बिनी प्रदेशअन्तर्गत उपमहानगरपालिकाहरू मध्ये यस पाइलट कार्यक्रमका लागि दफा १२ बमोजिमको समितिले अनुसूची ५ को आधारमा कुनै एक उपमहानगरपालिका छनौट हुनेछ ।

(२) मन्त्रालयले लुम्बिनी प्रदेशमा अवस्थित सम्पूर्ण उपमहानगरपालिकाको सुचनाको लागि तीन दिनको समय तोकी अनुसूची-६ को ढाँचामा मन्त्रालयले वेबसाईट मार्फत सुचना प्रकाशित गर्नेछ ।

(३) ईच्छुक उपमहानगरपालिकाले अनुसूची-१ को मापदण्डमा विवरण खुल्ने गरी अनुसूची-७ को ढाँचा आवेदन दिन सक्नेछ ।

(४) सुचनाको म्याद समाप्त भएको मितिले दुई दिनभित्र दफा १२ बमोजिमको छनौट समितिले कुनै एक उपमहानगरपालिका छनौट गरी मन्त्रालयले उपमहानगरपालिकामा वित्तिय हस्तान्तरण गर्नेछ ।

११. भुक्तानी: (१) मन्त्रालयले उपमहानगरपालिकालाई बजेटमा व्यवस्था भए बमोजिम वित्त हस्तान्तरण गर्नेछ ।

(२) उपमहानगरपालिकाले परिच्छेद ३ मा उल्लेखित दफाहरू अनुसारको कार्य आफै गर्नेछ र परिच्छेद ४ मा उल्लेखित दफाहरू अनुसारको कार्य सेवा खरीद गरी गर्नु पर्नेछ । सो अनुसार प्रत्येक कार्यको प्रकृति अनुसार प्रचलित नियम कानून बमोजिम उपमहानगरपालिकाले सम्बन्धित व्यक्ति, संस्था वा निकायलाई भुक्तानी गर्नेछ ।

परिच्छेद ६

समिति र सरोकारवाला निकायको भूमिका

१२. छनौट समिति: (१) यस कार्यक्रम सञ्चालन गर्नका लागि पाइलट उपमहानगरपालिका छनौट गर्न एक छनौट समिति रहने छ। अनुसूची- ५ मा तोकिएको मापदण्डका आधारमा छनौट समितिले लुम्बिनी प्रदेशको कुनै एक उपमहानगरपालिका छनौट गर्नेछ ।

(२) छनौट समितिमा देहायका सदस्यहरू रहने छः-

सचिव, अर्थ मन्त्रालय	संयोजक
सदस्य (अर्थ हेर्ने), लुम्बिनी प्रदेश योजना आयोग	सदस्य (स्थायी आमन्त्रित)
अर्थ विज्ञ, मुख्यमन्त्री तथा म.प.का.	सदस्य
उपसचिव, अर्थ मन्त्रालय	सदस्य
तथ्याङ्क अधिकृत, अर्थ मन्त्रालय	सदस्य-सचिव

१३. मन्त्रालयको भूमिका:- (१) मन्त्रालयले कार्यविधि पेश गरी पाइलटका लागि छनौट समितिमार्फत उपमहानगरपालिका छनौट गर्नेछ।

(२) उपमहानगरपालिका छनौट भए पश्चात मन्त्रालयको भूमिका देहाय बमोजिम हुनेछः

(क) वित्ति हस्तान्तरण मार्फत बजेट उपलब्ध गराउने,

(ख) कार्यक्रम सञ्चालनमा सहजिकरण गर्ने, प्राविधिक सल्लाह र सुझाव प्रदान गर्ने,

(ग) आवश्यकता अनुसार विषय विज्ञ खटाउन सक्ने,

(घ) कार्यक्रमलाई प्रभावकारी रूपमा कार्यान्वयन गराउन नियमित रूपमा लुम्बिनी प्रदेश योजना आयोगसँग समन्वय गरी अनुगमन र मुल्याङ्कन गर्न सक्नेछ।

१४. उपमहानगरपालिकाको भूमिका:- (१) यस कार्यविधि बमोजिम कार्यक्रम सञ्चालन गर्ने सम्पूर्ण जिम्मेवारी उपमहानगरपालिकाको हुनेछ ।

(२) दफा ५ को उपदफा (२) को खण्ड (क) बमोजिमको क्रियाकलाप सञ्चालनका लागी नियुक्त सहजकर्ता र संयोजकहरूलाई आवश्यक पर्ने प्रशासनिक तथा प्राविधिक समायोहरू छनौट भएको उपमहानगरपालिकाले व्यवस्था गर्नेछ।

(३) उपमहानगरपालिकाले कार्यक्रम सञ्चालनका क्रममा मन्त्रालयसँग आवश्यक समन्वय र सहकार्य नियमित रूपमा गर्नेछ ।

(४) उपमहानगरपालिकाले यस कार्यक्रमको उद्देश्य प्राप्ति र सञ्चालनार्थ आवश्यक पर्ने थप प्रावधान र शर्तहरू मन्त्रालयको सहमतिमा तय गर्न सक्नेछ ।

## परिच्छेद ७

### विविध

१५. स्वामित्व: यस कार्यविधि बमोजिम कार्य सम्पन्न हुँदा तयार हुने तथ्याङ्क र प्रणाली (DDAAMI) को स्वामित्व उपमहानगरपालिका र मन्त्रालयको संयुक्त रूपमा रहनेछ ।
१६. कार्यविधिको संशोधन: यस कार्यविधिलाई आवश्यकता अनुसार मन्त्रालयले संशोधन गर्न सक्नेछ ।
१७. अरुमा प्रचलित कानून बमोजिम हुने: यो कार्यविधिमा लेखिए जति सोही बमोजिम हुने र अरुमा प्रचलित कानून बमोजिम हुनेछ ।
१८. बाधा अड्काउ फुकाउ: यस कार्यविधि कार्यान्वयन गर्दा कुनै बाधा अड्काउ उत्पन्न यस मन्त्रालयले त्यस्तो बाधा अड्काउ फुकाउन सक्नेछ ।
१९. अनुसूचीमा हेरफेर गर्न सक्ने: यस कार्यविधिका अनुसूचीहरूलाई आवश्यकता अनुसार मन्त्रालयले हेरफेर गर्न सक्नेछ ।

## अनुसूची १

गणक, सुपरभाइजर र संयोजकहरूको काम, कर्तव्य र अधिकार

(दफा ७ उपदफा (२) सँग सम्बन्धित)

- (१) **कार्यक्रम संयोजक:** कार्यक्रम संयोजकको काम, कर्तव्य र अधिकार देहाय बमोजिमका हुनेछः
- क) उपमहानगरपालिकामा सञ्चालन हुने कृषि/आर्थिक गणनाका लागि सम्बन्धित सरकारी निकाय, गैरसरकारी संस्था, निजी क्षेत्र तथा सरोकारवालाहरूसँग आवश्यकता अनुसार समन्वय गर्ने ।
  - ख) उपमहानगरपालिका भित्रका वडाहरूमा टोल वा समुदाय स्तरका सुचना र समन्वयका कार्यहरू आवश्यकता अनुसार सञ्चालन गर्ने ।
  - ग) उपमहानगरपालिका भित्र स्थलगत गणना गर्न आवश्यक वडा सहजकर्ता र गणकको व्यवस्थापन, तालिम सञ्चालन र कार्यविवरणको आधारमा परिचालन फिल्ड संयोजक र कृषि तथ्याङ्क विश्लेषक मार्फत गराउने ।
  - घ) गणना क्षेत्रको स्थलगत नक्सा तयार गर्ने र फिल्ड संयोजक तथा गणकहरूलाई नक्सा प्रयोग गर्न आवश्यक प्रशिक्षण गर्ने ।
  - ङ) जि.आई.एस. डाटाबेस (GIS Database)सँग एकिकृत गर्नका लागि तथ्याङ्कको शुद्धता र गुणस्तर यकिन गर्ने ।
  - च) गणनाको विषय र प्रश्नावली तयार गर्न र गणना कार्यको गुणस्तर यकिन गर्न कृषि तथ्याङ्क विश्लेषकसँग समन्वय गरी आवश्यक कार्य गर्ने ।
  - छ) प्रोफाइलिङ कार्यविधि २०८० मा उल्लेखित खण्ड २ को क्रियाकलाप गर्न उपमहानगरपालिकासँग संझौता गरेको सेवा प्रदायक संस्था सँग आवश्यक समन्वय र सहजिकरण गर्ने ।
- (२) **कृषि तथ्याङ्क विश्लेषक:** कृषि तथ्याङ्क विश्लेषकको काम, कर्तव्य र अधिकार देहाय बमोजिमका हुनेछः
- (क) उपमहानगरपालिकामा सञ्चालन हुने कृषि/आर्थिक गणनाको निरीक्षण गर्ने र प्रशिक्षण गर्न आवश्यक सहजिकरण गर्ने ।
  - (ख) कृषिको प्रकृति र आवश्यकता अनुसारको तथ्याङ्कको विषय निर्माण गर्न कार्यक्रम संयोजक र सेवा प्रदायक संस्थसँग सहजिकरण गर्ने ।
  - (ग) तथ्याङ्क गुणस्तर (Data Quality Assurance, data validation) र तथ्याङ्क व्यवस्थापन (Data cleaning) कार्यका लागि कार्यक्रम संयोजकलाई आवश्यक सहयोग गर्ने ।
  - (घ) तथ्याङ्क एकिकृत र विश्लेषण (Data Analysis)को प्रकृति अनुसार तथ्याङ्क संकलन र संरक्षण कार्य भैरहेको सुनिश्चित गर्ने ।
  - (ङ) तथ्याङ्कको गुणस्तर सुनिश्चितताको लागि र तथ्याङ्क संकलनको क्रममा आउने समस्याहरू समाधानका लागि फिल्ड संयोजकलाई आवश्यक सहयोग गर्ने ।
  - (च) गणकद्वारा संकलन गरेको तथ्याङ्कको डाटावेश रुजु गर्ने र फिल्ड स्तरमा आवश्यकता अनुसार निरीक्षण गर्ने ।
  - (छ) तथ्याङ्क रिपोर्टिङमा कार्यक्रम संयोजकलाई आवश्यक सहयोग गर्ने ।



(३) **फिल्ड संयोजक:** फिल्ड संयोजकको काम, कर्तव्य र अधिकार देहाय बमोजिमका हुनेछः

- (क) उपमहानगरपालिकामा सञ्चालन हुने कृषि/आर्थिक गणनाका लागि सम्बन्धित वडा कार्यालय, टोल विकास संस्था, कृषि सहकारी, समुह/समिति तथा सरोकारवालाहरूसँग आवश्यकता अनुसार समन्वय गर्ने ।
- (ख) उपमहानगरपालिका भित्रका वडाहरूमा टोल वा समुदाय स्तरमा सुचना र समन्वयका कार्यहरू कार्यक्रम संयोजकसँगको समन्वयमा आवश्यकता अनुसार सञ्चालन गर्ने ।
- (ग) उपमहानगरपालिकामा गणनाका लागी आवश्यक गणकको व्यवस्थापन र परिचालन कार्यक्रम संयोजकसँगको समन्वयमा वडा सहजकर्ता मार्फत गराउने।
- (घ) गणना गरिएका प्रश्नावलीहरू सही रूपमा गरिएको सुनिश्चितताको लागि रुजु गर्ने, सच्याउनु पर्ने भएमा सो अनुसार कृषि तथ्याङ्क विश्लेषकसँग समन्वय गर्ने।
- (ङ) विविध कारणले वडा सहजकर्ता र गणक हेरफेर गर्नु परेमा कार्यक्रम संयोजक समक्ष आवश्यक समन्वय गर्ने।

(४) **वडा सहजकर्ता:** वडा सहजकर्ताको काम, कर्तव्य र अधिकार देहाय बमोजिमका हुनेछः

- (क) वडा सहजकर्ताको आफ्नो तोकिएको वडाहरूमा खटिएका गणकहरूको स्थलगत कार्यविभाजन र परिचालनमा सहयोग र निरीक्षण गर्ने ।
- (ख) गणकहरूलाई गणना आवश्यक सामग्रीहरू वितरण गर्दा सहयोग र समन्वय गर्ने।
- (ग) गणना गरिएका फारामहरूका प्रश्नावलीहरू सही रूपमा भरेको सुनिश्चितताको लागि रुजु गर्ने, सच्याउनु पर्ने भएमा सो अनुसार फिल्ड संयोजक र कृषि तथ्याङ्क विश्लेषकसँग समन्वय गर्ने ।
- (घ) सङ्कलित विवरणको सूचना नियमित रूपमा फिल्ड संयोजकलाई जानकारी गराउने ।
- (ङ) विविध कारणले गणक हेरफेर गर्नु परेमा कार्यक्रम संयोजक समक्ष आवश्यक समन्वय गर्ने।

(५) **गणक:** गणकको काम, कर्तव्य र अधिकार देहाय बमोजिमका हुनेछः

- (क) आफूलाई खटाइएको स्थानमा गई मूल प्रश्नावली अनुसारको विवरण तथा तथ्याङ्क तोकिएको समयभित्र सङ्कलन गर्ने ।
- (ख) संकलित तथ्याङ्क र विवरणहरू गोपनीयता कायम गरी सुरक्षित राख्ने ।
- (ग) वडा सहजकर्तासँग नियमित सम्पर्कमा रहने, फिल्ड अनुगमनमा फिल्ड संयोजक र कृषि तथ्याङ्क विश्लेषकलाई सहयोग गर्ने ।
- (घ) कार्यक्षेत्रमा गणना गर्न छुट भएको वा दोहोरो गणना भए/नभएको यकिन गर्ने ।
- (ङ) तथ्याङ्क संकलनका क्रममा केही समस्या परेमा फिल्ड संयोजक तथा कार्यक्रम संयोजकलाई समेत अबिलम्ब जानकारी दिने ।
- (च) फिल्ड संयोजक तथा कार्यक्रम संयोजकले तोकेका अन्य कार्य गर्ने।

## अनुसूची २

गणक, सुपरभाइजर र संयोजकहरू छनौटका आधार  
(दफा ७ उपदफा (३) सँग सम्बन्धित)

(१) **कार्यक्रम संयोजक:** उपमहानगरपालिकाले खण्ड एक बमोजिमको कार्यक्रम सञ्चालनको लागि निम्न बमोजिमको योग्यता पुगेको कार्यक्रम संयोजक छनौट गर्नु पर्नेछ ।

- (क) छनौट भएको उपमहानगरपालिका वा सो सँग मिल्दोजुल्दो भुगोल भएको र भौगोलिक निकटता भएको स्थानीय तहको वासिन्दा ।
- (ख) जिओम्याटिक्स इन्जिनियरिङ वा सम्बन्धित विषयमा स्नातक तह उत्तीर्ण गरेको ।
- (ग) स्थानीय तहको भू-उपयोग वर्गिकरणमा कार्य गरेको साथै अन्य GIS र सर्भेसम्बन्धि एक वर्ष कार्यअनुभव भएकोलाइ प्राथमिकता दिने ।
- (घ) GIS related software (ArcGIS/QGIS) र Basic Programming (C/C++/Java/Python/R/STATA) का साथै MS Excel, MS Powerpoint, MS Word र Internet/Email मा दखलता भएको ।
- (ङ) नेपाली र अंग्रेजी भाषामा लेखपढमा दखलता भएको ।
- (च) नेतृत्वदायी भूमिका निर्वाह गरी टोली/जनसक्तिलाई परिचालन गर्न सक्ने क्षमता भएको ।
- (छ) दफा ६ सम्बन्धित कार्यासम्पादनका लागि उपमहानगरपालिकाद्वारा तोकिएको अन्य कार्यको जिम्मेवारी लिन सक्ने क्षमता भएको ।

(२) **कृषि तथ्याङ्क विश्लेषक:** उपमहानगरपालिकाले खण्ड एक बमोजिमको कार्यक्रम सञ्चालनको लागि निम्न बमोजिमको योग्यता पुगेको कृषि तथ्याङ्क विश्लेषक छनौट गर्नु पर्नेछ ।

- (क) छनौट भएको उपमहानगरपालिका वा सो सँग मिल्दोजुल्दो भुगोल भएको र भौगोलिक निकटता भएको स्थानीय तहको वासिन्दा ।
- (ख) कृषि विषयमा स्नातक तह उत्तीर्ण गरेको । कृषि अर्थशास्त्र विषय लिइ अध्ययन गरेकोलाइ प्राथमिकता दिने ।
- (ग) कृषि तथ्याङ्क संकलन र विश्लेषण सम्बन्धि कार्यअनुभव भएकोलाइ प्राथमिकता दिने ।
- (घ) Basic Programming (Python/R/STATA) र MS Excel का साथै MS Powerpoint, MS Word र Internet/Email मा दखलता भएको ।
- (ङ) नेपाली र अंग्रेजी भाषामा लेखपढमा दखलता भएको ।
- (च) दफा ६ सम्बन्धित कार्यासम्पादनका लागि उपमहानगरपालिकाद्वारा तोकिएको अन्य कार्यको जिम्मेवारी लिन सक्ने क्षमता भएको ।

(३) **फिल्ड संयोजक:** उपमहानगरपालिकाले खण्ड एक बमोजिमको कार्यक्रम सञ्चालनको लागि निम्न बमोजिमको योग्यता पुगेको सुपरभाइजर छनौट गर्नु पर्नेछ ।

- (क) छनौट भएको उपमहानगरपालिकाले वा सो सँग मिल्दोजुल्दो भुगोल भएको र भौगोलिक निकटता भएको स्थानीय तहको वासिन्दा ।
- (ख) सो स्थानीय तहमा उद्यम वा कृषि व्यवसायमा तीन वर्ष वा सो भन्दा बढी कार्यअनुभव भएकोलाइ प्राथमिकता दिने ।
- (ग) प्रविणता प्रमाणपत्र तह वा सो सरह उत्तीर्ण ।
- (घ) नेतृत्वदायी भुमिका निर्वाह गरी समुहलाइ परिचालन गर्न सक्ने क्षमता भएको ।
- (ङ) नेपाली र अंग्रेजी भाषामा लेखपढ गर्न सक्ने ।
- (च) स्मार्टफोन (एनड्रोइड वा आइफोन) सञ्चालन गर्न सक्ने र आफ्नै स्मार्टफोन भएको ।
- (छ) दफा ६ सम्बन्धित कार्यासम्पादनकालागि उपमहानगरपालिकाद्वारा तोकिएको अन्य कार्यको जिम्मेवारी लिन सक्ने क्षमता भएको ।
- (ज) दुई पाइन्ने सवारी चालक अनुमति पत्र भएको ।

(४) **वडा सहजकर्ता:** उपमहानगरपालिकाले खण्ड एक बमोजिमको कार्यक्रम सञ्चालनको लागि निम्न बमोजिमको योग्यता पुगेको फिल्ड संयोजक छनौट गर्नु पर्नेछ ।

- (क) छनौट भएको उपमहानगरपालिकाको सम्बन्धित वडा वा सो वडासँग भौगोलिक निकटता भएको स्थानीय तहको वासिन्दा ।
- (ख) प्रविणता प्रमाणपत्र तह वा सो सरह उत्तीर्ण ।
- (ग) नेपाली र अंग्रेजी भाषामा लेखपढ गर्न सक्ने ।
- (घ) स्मार्टफोन (एनड्रोइड वा आइफोन) सञ्चालन गर्न सक्ने र आफ्नै स्मार्टफोन भएको ।
- (ङ) तथ्याङ्क सम्बन्धित कार्यमा समुहमा काम गरेको वा गणक परिचालनमा अनुभव भएकोलाइ प्राथमिकता दिने ।

(५) **गणक:** उपमहानगरपालिकाले खण्ड एक बमोजिमको कार्यक्रम सञ्चालनको लागि निम्न बमोजिमको योग्यता पुगेको गणक छनौट गर्नु पर्नेछ ।

- (क) छनौट भएको उपमहानगरपालिकाको सम्बन्धित वडा वा सो वडासँग भौगोलिक निकटता भएको स्थानीय तहको वासिन्दा ।
- (ख) प्रविणता प्रमाणपत्र तह वा सो सरह उत्तीर्ण गरेको व्यक्ति वा कृषि विषयमा डिप्लोमा तहमा अध्ययनरत विद्यार्थी ।
- (ग) कृषि गणना र अद्योगिक गणना लगायतका गणना कार्यमा अनुभव भएकोलाई प्राथमिकता दिने ।
- (घ) नेपाली र अंग्रेजी भाषामा लेखपढ गर्न सक्ने ।
- (ङ) स्मार्टफोन (एनड्रोइड वा आइफोन) सञ्चालन गर्न सक्ने र आफ्नै स्मार्टफोन भएको ।

अनुसूची ३

गणक, सहजकर्ता र संयोजकहरू को संख्या र समयावधि  
(दफा ७ उपदफा (४) सँग सम्बन्धित)

(१) कार्यक्रम संयोजक, कृषि तथ्याङ्क विश्लेषक र फिल्ड संयोजक: कार्यक्रम संयोजक एक जना, कृषि तथ्याङ्क विश्लेषक एक जना र फिल्ड संयोजक एक जना रहनेछन् । कार्यक्रम संयोजक, कृषि तथ्याङ्क विश्लेषक र फिल्ड संयोजकको करार समयावधि न्युनतम ६ महिनाको हुनुपर्नेछ ।

(२) वडा सहजकर्ता: प्रति ८ देखि १४ जना गणक बराबर १ जना वडा सहजकर्ता र प्रति २ वटा वडा बराबर १ जना वडा सहजकर्तामा कम नहुने गरि आवश्यक संख्यामा वडा सहजकर्ताहरू छनौट गर्नुपर्नेछ । वडा सहजकर्ताको करार समयावधि न्युनतम ४ महिनाको हुनुपर्नेछ ।

(३) गणक: गणक छनौट गर्दा देहाय बमोजिमको संख्यामा गर्नुपर्नेछ:

(क) ४० प्रतिशतभन्दा बढी कृषि योग्य जमीन भएको उपमहानगरपालिका भएको खण्डमा एक गणकले एक दिनमा ५ देखि ८ घरधुरीमा तथ्याङ्क संकलन गर्ने गरी सम्पूर्ण छनौट भएका वडाहरूको तथ्याङ्क संकलन न्युनतममा ९० दिन भित्र गर्ने गरी सोका लागी आवश्यक पर्ने कुल संख्यामा गणकहरू ।

(ख) ४० प्रतिशतभन्दा कम कृषि योग्य जमीन भएको उपमहानगरपालिका भएको खण्डमा एक गणकले एक दिनमा ७ देखि १५ घरधुरीमा तथ्याङ्क संकलन गर्ने गरी सम्पूर्ण छनौट भएका वडाहरूको तथ्याङ्क संकलन न्युनतममा ९० दिन भित्र गर्ने गरी सोका लागी आवश्यक पर्ने कुल संख्यामा गणकहरू ।

अनुसूची ४

गणक, सुपरभाइजर र संयोजकको सेवा सुविधा  
(दफा ७ उपदफा (५) सँग सम्बन्धित)

पद	पारिश्रमिक (प्रति घरधुरी रु.)	कैफियत
गणक	१००	किसान सुचिकरण कार्यक्रम कार्यान्वयन विधि २०७७ को मापदण्ड सरह
पद	पारिश्रमिक (मासिक रु.)	
कार्यक्रम संयोजक	४५,८५१	अधिकृत सातौं सरह
कृषि तथ्याङ्क विश्लेषक	४५,८५१	अधिकृत सातौं सरह
फिल्ड संयोजक	४३,६८९	अधिकृत छैटौं सरह
बडा सहजकर्ता	२४,७०२	का.स. प्रथम स्तर सरह
पद	पेट्रोल (मासिक लि.)	
कार्यक्रम संयोजक	२५	
फिल्ड संयोजक	२५	
बडा सहजकर्ता	१५	
पद	खाजा (मासिक रु.)	
कार्यक्रम संयोजक	१५००	दैनिक रु ५० को दरले
कृषि तथ्याङ्क विश्लेषक	१५००	
फिल्ड संयोजक	१५००	
बडा सहजकर्ता	१५००	
गणक	१५००	
पद	संचार खर्च (मासिक रु.)	
कार्यक्रम संयोजक	५००	कार्यक्रम/गणनाका लागी इन्टरनेटको प्रयोगार्थ
कृषि तथ्याङ्क विश्लेषक	५००	
फिल्ड संयोजक	५००	
बडा सहजकर्ता	५००	
गणक	५००	

अनुसूची ५

उपमहानगरपालिका छनौटका आधार

(दफा १० उपदफा (१) र दफा १२ उपदफा (१) सँग सम्बन्धित)

(१) प्राविधिक मूल्याङ्कनमा देहाय बमोजिमको अङ्कको सीमा ननाघने गरी उपमहानगरपालिकाको प्रकृति र प्रोफाइल प्रतिको उपयुक्त अङ्क उल्लेख गर्नुपर्नेछः

क्र.सं.	विवरण	अंकभार	मापदण्ड
(क)	कुल क्षेत्रफलको आवासिय क्षेत्रको प्रतिशत कम भएको र कृषियोग्य क्षेत्रको प्रतिशत बढी भएको	पच्चीस	कृषियोग्य क्षेत्र कुल क्षेत्रफलको ५०% भन्दा माथि भए २५ अंक, ४०% देखि ५०% सम्म भए २० अंक, ४०% भन्दा कम भए १० अंक ।
(ख)	भुउपयोग नीति तर्जुमा गरेको	पाच	भुउपयोग नीति तर्जुमा गरेको भए ५ अंक, नभए ० अंक ।
(ग)	तथ्याङ्कमा आधारित नीति निर्माणको सिद्धान्तलाई आत्मसाथ गरी सो सँग सम्बन्धित अभ्याष वा प्रयासहरू गरिरहेको	चालिस	सुशासनमा नविन प्रयास (जस्तै इ-गभर्नेन्स, पेपरलेस अवधारणा, एकिकृत सुचना व्यवस्थापन प्रणाली, इत्यादी) गरेकालाई आवेदनमा सो सम्बन्धि प्रस्तुत गरिएका विवरणको मुल्याङ्कनका आधारमा अधिकतम २० अंक सम्म । तथ्याङ्क संकलण र संरक्षणमा प्रयास (जस्तै कृषक सुचिकरण, पालिका प्रोफाइल, गरिब घरधुरी परिचयपत्र इत्यादि) गरेकालाई आवेदनमा सो सम्बन्धि प्रस्तुत गरिएका विवरणको मुल्याङ्कनका आधारमा अधिकतम २० अंक सम्म ।
(घ)	लागत साझेदारी	तीस	दफा ६ र ८ मा उल्लेखित कार्यको कुनै क्रियाकलापहरूमा वा सोको सञ्चालन सहजिकरण गर्न थप खर्च (जस्तै गणक तालिम कार्यक्रम, वडा अभिमुखीकरण कार्यक्रम, उद्घाटन र समापन कार्यक्रम आदि, सिस्टम वा तथ्याङ्कमा थप फिचर, विवरण वा स्केलमा लाग्न सक्ने थप लागत आदी)मा स्वयम् खर्च गर्न तयार उपमहानगरपालिकालाई आवेदनमा प्रस्ताव गरिएका लागत साझेदारीका आधारमा तुलनात्मक रूपमा बढी प्रस्ताव गर्नेलाई बढी अंक प्राप्त हुने गरी मुल्याङ्कन गरि अधिकतम ३० अंक ।

अनुसूची ६  
मन्त्रालयको सूचनाको ढाँचा  
(दफा १० उपदफा (२) सँग सम्बन्धित)



प्रदेश सरकार  
अर्थ मन्त्रालय  
राप्ती उपत्यका (देउखुरी)

तथ्याङ्कमा आधारित ग्रामीण सशक्तिकरण लागि वृहत प्रदेश प्रोफाइलिङमा छनौट हुन लुम्बिनी प्रदेश अन्तरगतका उपमहानगरपालिकाले प्रस्ताव पेश गर्ने सम्बन्धी सूचना

प्रकाशित मिति: २०८०/११/.....

यस मन्त्रालयको स्वीकृत कार्यक्रम “तथ्याङ्कमा आधारित ग्रामीण सशक्तिकरण लागि वृहत प्रदेश प्रोफाइलिङ” कार्यान्वयन गर्न लुम्बिनी प्रदेश अन्तरगतका उपमहानगरपालिकाको नगर कार्यपालिकाको कार्यालयले यो सूचना प्रकाशित भएको मितिले ३ (तीन) दिनभित्र यस मन्त्रालयमा वा मन्त्रालयको इमेलमा (कार्यालय समय भित्र) पाइलट उपमहानगरपालिकाको रूपमा छनौट भई पाउँ भनी प्रस्ताव पेश गर्न यो सूचना प्रकाशन गरिएको छ ।

प्रस्तावको साथमा पेश गर्नुपर्ने कागजात, वित्तीय हस्तान्तरणको शर्त तथा अन्य मापदण्ड “तथ्याङ्कमा आधारित ग्रामीण सशक्तिकरण लागि वृहत प्रदेश प्रोफाइलिङ कार्यविधि, २०८०” बमोजिम हुनेछ । प्रस्ताव कार्यविधिको अनुसूची ७ बमोजिमको ढाँचामा हुनुपर्नेछ । सो कार्यविधि यस मन्त्रालयको वेबसाइट (<https://moeap.lumbini.gov.np>)बाट प्राप्त गर्न सकिनेछ ।

प्रस्ताव पेश गर्ने अन्तिम मिति: २०८०/११/..... गते कार्यालय समय भित्र (प्रस्ताव पेश गर्ने अन्तिम दिन सार्वजनिक विदा पर्न गएमा सो पछि कार्यालय खुलेको पहिलो दिनसम्म) ।

अनुसूची ७

उपमहानगरपालिकाको आवेदनको ढाँचा  
(दफा १० उपदफा (३) सँग सम्बन्धित)

श्रीमान सचिव ज्यू,  
प्रोफाइलिङ छनौट समिति  
अर्थ मन्त्रालय, लुम्बिनी प्रदेश  
राप्ती उपत्यका (देउखुरी), दाङ

**विषय: प्रोफाइलिङ कार्यक्रमका लागि पाइलट उपमहानगरपालिकाको रूपमा छनौट भई पाउँ ।**

उपरोक्त विषयमा लुम्बिनी प्रदेश अर्थ मन्त्रालयको “तथ्याङ्कमा आधारित ग्रामीण सशक्तिकरण लागि वृहत प्रदेश प्रोफाइलिङको कार्यविधि, २०८०” बमोजिम प्रोफाइलिङ कार्यक्रमको उद्देश्य अनुरूप कार्य गर्न पाइलट उपमहानगरपालिकाको रूपमा ..... उपमहानगरपालिका (..... जिल्ला, लुम्बिनी प्रदेश, नेपाल) छनौट गरियोस भनि देखाय बमोजिमको आवश्यक विवरण सहित निवेदन पेश गरेको छु ।

१) उपमहानगरपालिकाले समेट्ने क्षेत्रफल

कुल क्षेत्रफल: ..... वर्ग किलोमिटर

कृषियोग्य क्षेत्रको क्षेत्रफल: .....वर्ग किलोमिटर

कुल क्षेत्रफलमा कृषियोग्य क्षेत्रको क्षेत्रफल: ..... प्रतिशत

२) भुउपयोग नीति

तर्जुमा गरीएको  तर्जुमा नगरिएको

३) तथ्याङ्कमा आधारित नीति निर्माणको सिद्धान्तलाई आत्मसाथ गरी सो सँग सम्बन्धित अभ्यास वा प्रयासहरू

१) सुशासनमा गरिएका नविन प्रयासहरू

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.....

२) तथ्याङ्क संकलण र संरक्षणमा गरिएका प्रयासहरू

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.....



४) लागत साझेदारी

कार्यविधिमा उल्लेखित क्रियाकलाप अनुसारको लागत अनुमान र सो को श्रोत (यस कार्यक्रममा मन्त्रालय बाट उपलब्ध गराइने बजेट रु.७०.००.०००/- मा उपमहानगरपालिकाको तर्फबाट थप लागत साझेदारीको प्रस्ताव समेत):

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५) कार्यालय व्यवस्थापन (कार्यविधिको दफा १४ उपदफा २ बमोजिम)

व्यवस्थापन हुने  व्यवस्थापन नहुने

निवेदक

नाम: .....

पद: .....

कार्यालय: ..... उपमहानगरपालिका नगर कार्यपालिकाको कार्यालय

ठेगाना: ..... जिल्ला, लुम्बिनी प्रदेश, नेपाल

सहिच्छाप:

अनुसूची ८

सेवा प्रदायक संस्थाको लागि क्रियाकलाप १ को निर्धारित कार्यविवरण (Terms of Reference - ToR)  
(दफा ९ उपदफा (२) सँग सम्बन्धित)

**Terms of Reference (TOR)**

**Term of Reference (ToR) for the "Designing and Developing of a Toolkit for Household Level Agricultural Decision-Making and Land Use in Rural Context - A case of .....  
Sub-Metropolitan City"**

..... Sub-Metropolitan City,  
..... District, Lumbini Province

<b>Assignment title</b>	<b>Designing and Developing of a Toolkit for Household Level Agricultural Decision-Making and Land Use in Rural Context - A case of ..... Sub-Metropolitan City'</b>
<b>A. Duty Station</b>	..... Sub-Metropolitan City (Full Address: ..... ....., Lumbini Province)
<b>B. Reporting to</b>	..... Sub-Metropolitan City
<b>C. Responsible staff</b>	<b>Name of the responsible person</b>
<b>D. Duration of assignment</b>	<b>All software ..... days</b>
<b>E. Expected starting/completion date</b>	<b>Start, End Date: .....</b>
<b>F. Service provider</b>	<b>1 firm / company</b>

**Contents of the TOR**

1. Background
2. Significance of Work
3. Objective
4. Scope of the Service
5. Methodology
6. Output/Deliverables
7. Submission of reports and presentation of the works
8. Coordination and Facilitation Committee
9. Experience of Firm/Company and Team
  - 9.1 Firm/Company
  - 9.2 Team
10. Proposal Evaluation
11. Documents to be submitted
  - 11.1 Company Documents
  - 11.2 Technical Proposal (along with proposed staff and their CVs)
  - 11.3 Financial Proposal
12. Conditions of Contract and Contract Forms
13. Source and Procurement Process
14. Confidentiality
15. Monitoring and Reporting Arrangements
16. Other Terms and Conditions

## 1. Background

*[Write background info about the Sub-Metropolitan City]*

## 2. Significance of Work

This project once completed will benefit different stakeholders in multiple different ways. Following is the summary:

- **Empowering Local Youths with Data Collection Skills:** The project provides an invaluable opportunity for local youths in rural and semi-urban parts of Nepal to learn about data collection methodologies. This educational aspect not only builds their technical knowledge but also enhances their understanding of the agricultural sector, potentially opening up new career opportunities and contributing to their personal and professional development.
- **Building Capacity for Informed Agricultural Decision-Making:** By designing a framework for informed decision-making in agriculture, the project empowers farmers and local communities to make data-driven choices. The framework facilitates conducting detailed study of economic activities and agricultural practices. This becomes a foundational framework to support demand analysis for specific agricultural projects, facilitating targeted interventions and optimizing subsidy allocation. This leads to more efficient and effective agricultural practices, potentially increasing crop yields and ensuring better resource management.
- **Development of a Mobile-Based Household-Level Data Collection System:** The creation of a mobile app for data collection democratizes data access and simplifies the process of gathering crucial agricultural and land usage information. This technology makes it easier for households to contribute and access data, fostering a more connected and informed rural community.
- **Preparation of an Integrated Geodatabase of the Sub-Metropolitan City :** This aspect of the project involves developing an extensive geodatabase that encapsulates a wide array of crucial data points specific to the Sub-Metropolitan City. The geodatabase will serve as a central repository for data on household-level agriculture and land holdings, integrating diverse datasets in a single, accessible location. Besides agricultural data, the database will encompass information on municipal resources such as water, energy, and waste management facilities, as well as details about community infrastructures like educational institutions, healthcare centers, and transportation networks.
- **Enhancing Quality Assurance and Analysis of Datasets:** The project's focus on quality assurance and thorough analysis of collected data including developing data protocols ensures reliability and accuracy. This is vital in forming a trustworthy foundation for decision-making and policy development, leading to more effective and sustainable agricultural practices.
- **Support Data-Driven Development Planning:** Developing and implementing a data collection system and a comprehensive data infrastructure provides planning authorities an infrastructure to access updated datasets to efficiently gather comprehensive information, build planning methodologies, and make plans for informed decisions about rural development and infrastructure projects. Streamline local government service delivery with exact information.: Identify disaster-vulnerable communities. Make subsidy allocation system data-based, systematic and traceable, thereby enhancing efficiency in resource distribution.

- **Institutional Data Inventory:** Build a culture of keeping data inventory and motivate the government to be based on geodata to prioritize activities related to good governance and accelerate municipal service delivery transparently.
- **Support Data Collaboration:** The data system allows for collaboration of existing data, and collects new data as well as enhance data sharing practices.
- **Support Access to Information:** The project provides the framework to access accurate economic information for the public. It also avails, for all citizens, a credible source of data, including maps and resources, on behalf of the local government. It offers businesses and suppliers of local products a reliable market insight framework through developing systematic data collection practices and quality assurance processes.

### 3. Objectives

The objective of this project is to establish a robust Data Collection and Management System, ensuring the quality assurance of collected datasets and formulating analysis plans to support data-driven decision-making related to agriculture, land usage and related economic activities in rural areas of the Sub-Metropolitan City. This project aims to create a solid foundation for accurate data, fostering efficient rural development, administrative service delivery, and strategic planning including data-driven planning and decision-making capabilities.

#### **The sub objectives of this project are as follows:**

- Prepare framework to Collect and analyse demographic details and other economic data as needed at individual household level.
- Design questionnaire for data collection for enumerators after a comprehensive literature review and also extensive consultation with actors from local level and also at province.
- Design and develop a user-friendly mobile application for efficient collection and management of geospatial and attribute dataset.
- Train the enumerators hired by the local government officials in collection of datasets using the mobile app developed.
- Develop a checklist to ensure data quality and conduct regular checks to ensure the quality of collected datasets.
- Conduct cleaning of collected datasets and format it as per standard database template
- Develop accurate and up-to-date Integrated Municipal GeoDatabase. of the Sub-Metropolitan City and that can be linked it to household level planning activities
- Prepare data analysis plan to support data visualization for future
- Prepare a detailed System Requirement Specification (SRS) document to guide the development of a web-based decision system.
- Prepare a detailed information filling system on land ownership and usage status that can include rich details such as seasonal variations, input-output details, and production activities.

### 4. Scope of the Service

The scope of work for the consulting services encompasses the following key areas, although it may be further refined during the project initiation phase.

#### **i. Literature Review and Local Consultation:**

- Conduct a comprehensive review of existing literature and engage in consultations with local stakeholders to understand the current landscape of agricultural data and practices in the Sub-Metropolitan City.

- Perform a data gap analysis to identify missing information crucial for effective decision-making and planning.

## ii. Preparatory Phase:

- Prepare and finalize the data collection framework
- Finalize the questions for data collection, ensuring they are comprehensive and tailored to capture the necessary information.
- Formalize all local level partnerships including necessary MoUs and agreements.

## iii. Software Development - Data Collection Mobile-Based App Development:

- **App Conceptualization:** Define the purpose, functionalities, and user interface of the mobile application.
- **Development of Core Features:** Build core features of the app, including map integration, data visualization, and user interactivity.
- **Testing and Feedback:** Conduct user testing sessions with a select group of stakeholders and gather feedback.
- **App Refinement:** Refine the app based on testing feedback, focusing on usability and functionality.

The Mobile App should have following minimum features:

- **User Authentication:** Secure login feature for authorized users, with role-based access control.
- **Data Capture:** Ability to capture a wide range of data types including textual, numeric, photographic, video data, Geospatial datasets (Point, Line and Polygon datasets).
- **Editable location data:** A functionality to edit the location data of a household to ensure data accuracy. Base map during data edit could be the google earth based satellite image or any other high resolution image datasets if possible.
- **Offline Data Collection:** Functionality to collect data in offline mode and sync when internet connectivity is restored.
- **Customizable Forms:** Easily customizable data entry forms to cater to different types of data collection needs so that Sub-metropolitan City can design its own data collections survey in the future.
- **Data Validation:** Built-in data validation rules to ensure accuracy and consistency of the collected information.
- **Offline data collection with Real-Time Data Sync:** Ability to synchronize data in real-time with the central database when connected to the internet.
- **User Feedback and Reporting:** Features for users to provide feedback and generate basic reports directly from the app.
- **Push Notifications:** Sending notifications to users for important updates, reminders, or alerts.
- **Data Export and Sharing:** Options to export and share data in various formats like CSV, PDF, etc.
- **Help and Support:** In-app help and support features for technical assistance and user guidance.

## iv. Training of Local Enumerators:

- Identify and train locally selected enumerators in proper techniques and methodologies for household-level data collection using data collection mobile app.

**v. Data Management and Quality Assurance:**

- Implement rigorous quality check and control measures to maintain high standards of data accuracy and reliability.
- Mobilize a full time data quality check human resources to check datasets being collected on a daily basis for data completeness and data accuracy.
- Conduct data cleaning processes and prepare an Integrated Geodatabase, encompassing a wide range of data from household-level agricultural practices to municipal resources.
- Establish and maintain strict quality assurance protocols throughout the data collection and management process.
- Develop a systematic approach for the analysis of collected datasets, ensuring their utility for effective policy development and local governance.

**vi. Preparation of an Integrated Geodatabase for the Sub-metropolitan city:**

- Develop a comprehensive geodatabase that integrates data on household agriculture, land holdings, and various municipal resources.
- Include a diverse array of datasets covering key areas such as water and energy management, waste disposal, community infrastructure, and more.

**vii. Develop detailed SRS document**

- Prepare a comprehensive list of features for the envisioned decision support system along with multiple analysis and spatial queries that needs to be developed.
- Design of Infographics and list of features to guide the future development of envisioned Decision Support system using the data collected

**5. Methodology**

The following minimum approach is suggested while considering the methodology for this assignment:

**i. Literature review and consultations**

- Conduct an extensive literature review of relevant documents and reports to design a data collection framework for the given objective of the project.

**ii. Phased Implementation:**

- Break down the project into distinct phases such as Inception phase, System design planning, system development, implementation, and evaluation phases. This allows for better management, easier tracking of progress, and timely adjustments.
- Each phase should have clear objectives, deliverables, and timelines.

**iii. Data-Driven Decision Making:**

- Base all project decisions on data and empirical evidence. This includes decisions on mobile based data collection app development, training content, and data collection methods.
- Regularly review collected data to refine project strategies and approaches.

**iv. Agile Development for Software:**

- Adopt an agile methodology for the development of the mobile-based data collection app. This allows for iterative development, quick adjustments based on feedback, and a user-centric design process.

- Conduct sprint reviews and retrospectives to continuously improve the app.
- v. **Capacity Building and Training:**
- Implement comprehensive training programs for enumerators and local youths. Include modules on data collection techniques, app usage, data privacy, and quality control.
  - Encourage ongoing learning and development to adapt to evolving project needs and technologies.
- vi. **Accurate Survey and data collection works**
- Ensure accuracy and completeness in data collection activity.
- vii. **Quality Assurance and Data Validation:**
- Develop a robust framework for data quality assurance and validation. Incorporate regular data audits, cross-verification methods, and validation protocols.
  - Use automated tools and manual checks to ensure data accuracy and reliability.
- viii. **Sustainability and Scalability:**
- Design all project components with sustainability in mind. This includes creating a scalable geodatabase, developing an adaptable mobile app, and establishing long-term community engagement strategies.
  - Plan for the project's future, considering aspects like long-term funding, maintenance of technology solutions, and ongoing community involvement.

**Beside all mentioned activities, it is recommended to follow a Participatory Approach both in terms of project design and implementation:**

- Involve local stakeholders, including community members, agricultural experts, and local government officials, in all phases of the project. This approach ensures that the project addresses local needs and leverages local knowledge.
- Conduct regular community meetings and feedback sessions to ensure that the project aligns with the needs and expectations of the local population.

## 6. Output/Deliverables

After carrying out the scope of activities, the consultant should hand over the following output and deliverables to the Sub-Metropolitan City.

<b>S N</b>	<b>DELIVERABLES</b>	<b>TIME</b>
1	Inception Report along with revised scope of work and detailed implementation plan. 3 set hard copies and 1 set soft copy with advance payment request letter	Month 1
2	Finalized questions along with list of datasets to be collected and selection of enumerators to be mobilized for the field based data collection work.	Month 2
3	First draft of data collection report along with all raw datasets	Month 4

4	Final report along with a recommendation for the software development team in terms of a list of features that the local government would want to see in the decision support system.	Month 5
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## 7. Submission of reports and presentation of the works

Following report shall be submitted in time as mentioned below:

No of instalments	Time period	Payment in %	Deliverables submitted by the consultant
First	At the end of 1st month of date of agreement	20%	Inception Report along with findings from stakeholder interaction workshop at local level, data gap analysis finding document, revised scope of work and detailed implementation plan. Soft copy with advance payment request letter.
Second	At the end of 2nd month of date of agreement	30%	Finalized questions along with list of datasets to be collected and selection of enumerators to be mobilized for the field based data collection work.
Third	At the end of 4th month of date of agreement	30%	First draft of data collection report along with all raw datasets.
Fourth/ Final	At the end of the 5th month of the date of agreement.	20%	Final report along with final database and recommendation for the software development team in terms of a list of features that the local government would want to see in the decision support system.

## 8. Coordination and Facilitation Committee

- Mayor (Coordinator)
- Member, Lumbini Province Planning Commission (Member)
- Economic Advisor, Government of Lumbini Province (Member)
- Chief Administrative Officer (Member)
- Accounts Officer (Member)
- Planning Officer (Member)
- Information Technology Officer (Member-Secretary)

## 9. Experience of Firm/Company and Team

### 9.1 Firm/Company

The company should have experience in the following.

- Minimum of 7 years of relevant work experiences in design and development of information management systems, data collection and management systems in particular.
- Completed at least two national level projects related to Geospatial data collection, management and visualization.



- Led the deployment of mobile app for data collection of Geospatial data (point, line and polygon) along with attribute details.
- Household survey of at least 25000 houses using mobile based data collection app.
- Preparation of toolkit to guide spatial data collections works at local level.
- Software design and requirement documentations.
- Training government officials on mobile based data collection related works.
- Knowledge of the government integrated data/system administration system as well as data protection, safety, security and other essential mechanisms relating to database development, implementation and security system.
- Practical knowledge of software support, safety and security systems as well as related training/orientation to the users.

## 9.2 Team

The consulting firm, for this assignment, should propose the following experts with the mentioned responsibility, qualification, and experience:

### Key Experts | Staffs

- Team Leader (1)
- GIS Expert (1)
- Socio Economic Expert (1)
- Agriculture Expert (1)
- Sr. Software Developer (1)
- Sr. Mobile App Developer (1)
- Training Coordinator (1)
- Quality Assurance Engineer (1)

Team Leader	Responsibility	<ul style="list-style-type: none"> <li>• Responsible for planning and implementation of the project with desired scope and quality as per the TOR.</li> <li>• Responsible for mobilizing the team members and supervising team members' work.</li> <li>• Responsible for managing all aspects of a project, from planning to execution, monitoring and controlling, communication, quality management, and risk management, to ensure the successful completion of the project.</li> <li>• Result /output dissemination work.</li> </ul>
	Qualifications	Master Degree in Digital Development, Information Management, ICT for development or related courses.
	Experience	<p><b>General Experience:</b> At least 7 years of experience in the IT industry leading design and development of data management related digital systems.</p> <p><b>Specific Experience:</b></p> <ul style="list-style-type: none"> <li>• Design IT Policy at local and national level</li> <li>• Large scale data collection project - design development</li> <li>• Input for decision support system at local and national level</li> </ul>

		<ul style="list-style-type: none"> <li>Should have worked at local level in Nepal in design and implementation of GIS based digital systems.</li> </ul>
GIS Expert	Responsibility	<ul style="list-style-type: none"> <li>Design the conceptual framework for Integrated Municipal Geodatabase.</li> <li>Provide inputs during questionnaire design prior to the data collection exercise.</li> </ul>
	Qualifications	Master Degree in Geomatics Engineering or related field experience in GIS Mapping
	Experience	<p><b>General Experience:</b> At least 7 years of experience in the Geospatial sector, Surveying and Mapping Industry.</p> <p><b>Specific Experience:</b> Experience on designing Geodatabase to support the development of GIS Based decision system</p> <ul style="list-style-type: none"> <li>Experience on designing Geodatabase to support the development of GIS Based decision system</li> <li>Experience in design and development of Municipal Geodatabase at least 3 projects</li> </ul>
Socio Economic Expert	Responsibility	<ul style="list-style-type: none"> <li>Responsible for the design and development of a questionnaire that will be later used for household level data collection work.</li> </ul>
	Qualifications	Bachelor in Economics, Sociology, Statistics or related course.
	Experience	<p><b>General Experience:</b></p> <ul style="list-style-type: none"> <li>3 years of experience in questionnaire design.</li> </ul> <p><b>Specific Experience:</b></p> <ul style="list-style-type: none"> <li>Led the preparation of survey questions.</li> <li>Experience in designing household surveys and questions regarding socio-economic data.</li> </ul>
Agriculture Expert	Responsibility	<ul style="list-style-type: none"> <li>Responsible for the development of questionnaire, specially regarding agriculture following the seasonal pattern.</li> </ul>
	Qualifications	Bachelor is Agriculture
	Experience	<p><b>General Experience:</b></p> <ul style="list-style-type: none"> <li>3 years of experience in agriculture projects.</li> </ul> <p><b>Specific Experience:</b></p> <ul style="list-style-type: none"> <li>Experience of conducting baseline surveys.</li> <li>Experience in designing household level surveys regarding agricultural data.</li> </ul>
Sr. Software Developer (Backend)	Responsibility	<ul style="list-style-type: none"> <li>Designing ,developing, and maintaining high-quality software and web applications, while providing technical guidance and leading software development team in day to day programming on backend related aspects of a digital system.</li> </ul>

	Qualifications	Bachelor in ICT or Computer Engineering or equivalent
	Experience	<p><b>General Experience</b></p> <ul style="list-style-type: none"> <li>At least 4 years of experience in software development(backend)</li> </ul> <p><b>Specific Experience</b></p> <ul style="list-style-type: none"> <li>Experience in Design and development of digital software consisting of both web and mobile application in at least 3 nos.</li> </ul>
Sr. Software Developer (Frontend)	Responsibility	<ul style="list-style-type: none"> <li>Designing ,developing, and maintaining high-quality software and web applications, while providing technical guidance and leading software development team in day to day programing on frontend related aspects of a digital system.</li> </ul>
	Qualifications	Bachelor in ICT or Computer Engineering or equivalent
	Experience	<p><b>General Experience</b></p> <ul style="list-style-type: none"> <li>At least 4 years of experience in software development(frontend)</li> </ul> <p><b>Specific Experience</b></p> <ul style="list-style-type: none"> <li>Experience in Design and development of digital software consisting of both web and mobile application in at least 3 nos.</li> </ul>
Mobile App Developer	Responsibility	<ul style="list-style-type: none"> <li>Designing, developing, and maintaining the mobile application, ensuring its functionality for efficient data collection, and integrating geospatial capabilities.</li> </ul>
	Qualifications	Bachelor in ICT or Computer Engineering or equivalent
	Experience	<p><b>General Experience</b></p> <ul style="list-style-type: none"> <li>At least 4 years of experience in Mobile App development.</li> </ul> <p><b>Specific Experience</b></p> <ul style="list-style-type: none"> <li>Customization of existing data collection systems to develop a robust geo data collection app.</li> <li>Ensure the smooth functioning of the App during the data collection and analysis process.</li> </ul>
Training Coordinator	Responsibility	<ul style="list-style-type: none"> <li>Conduct training on data collection and Data Quality Assurance practices.</li> <li>Coordinate trainings on the usage of the questionnaire and toolkit</li> </ul>
	Qualifications	Bachelors in Statistics or related courses
	Experience	<p><b>General Experience:</b></p> <ul style="list-style-type: none"> <li>3 years of experience in providing training related to household surveys.</li> </ul> <p><b>Specific Experience:</b></p> <ul style="list-style-type: none"> <li>Experience in Data Quality Assurance practices</li> </ul>

		<ul style="list-style-type: none"> <li>• Experience in survey related softwares.</li> </ul>
Quality Assurance Engineer	Responsibility	<ul style="list-style-type: none"> <li>• Identify, document, and track defects found during testing, collaborating with development teams to ensure timely resolution.</li> <li>• Develop and execute comprehensive test plans to ensure software meets all requirements and quality standards.</li> <li>• Design, develop, and maintain automated testing scripts and frameworks to increase efficiency and reliability of testing</li> </ul>
	Qualifications	Bachelor's degree in IT or Computer Science or Computer Engineering
	Experience	<p><b>General Experience</b> 3 years of working experience in the field of quality testing/assurance</p> <p><b>Specific Experience</b></p> <ul style="list-style-type: none"> <li>• Proven experience as a QA Engineer in software development projects, with a focus on both manual and automated testing.</li> <li>• Experience with automated testing tools (e.g., Selenium, JUnit, TestNG) and continuous integration/continuous delivery (CI/CD) pipelines.</li> <li>• Proficiency in scripting or programming languages relevant to test automation (e.g., Python, Java).</li> <li>• Familiarity with bug tracking tools (e.g., JIRA, Bugzilla) and version control systems (e.g., Git).</li> </ul>

### Non-Key Experts | Staffs

- Data Analyst (1)
- Jr. Software Developer (1)
- UX/UI Designer (1)
- Jr. Mobile App Developer (1)
- Project Coordination Officer (1)

Data Analyst	Responsibility	<ul style="list-style-type: none"> <li>• Set standards to ensure day to day data collection works is being done properly by all the enumerators mobilized in the field.</li> <li>• Respond to queries of the enumerators who are mobilized in the field during the data collection process.</li> <li>• Analyse the datasets collected from the field and other secondary sources and come up with a list of functionalities that could be developed in the future.</li> </ul>
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	Qualifications	<ul style="list-style-type: none"> <li>• Bachelor's degree in Data Science, Statistics, or a related field.</li> </ul>
	Experience	<p><b>General Experience:</b> At least 4 years of experience</p> <p><b>Specific Experience:</b></p> <ul style="list-style-type: none"> <li>• Experience in data cleaning and standardization processes, demonstrating a strong understanding of data integrity and consistency.</li> <li>• Skilled in data visualization using Python libraries (e.g., Matplotlib, Seaborn, Plotly) to create insightful and accessible data representations.</li> </ul>
Jr. Software Developer	Responsibility	<ul style="list-style-type: none"> <li>• Assist in the development and maintenance of web applications under the guidance of senior developers.</li> <li>• Support the design and implementation of user interfaces for web applications.</li> <li>• Collaborate with team members to integrate server-side functionalities and ensure cross-platform compatibility.</li> </ul>
	Qualifications	<ul style="list-style-type: none"> <li>• Bachelor's degree in Computer Science, Information Technology, or a related field.</li> </ul>
	Experience	<ul style="list-style-type: none"> <li>• Entry-level position; however, previous experience in web development is highly valued.</li> <li>• Demonstrated ability to support senior software development team.</li> <li>• Experience with version control systems, such as Git, is beneficial.</li> </ul>
Jr. Mobile App Developer	Responsibility	<ul style="list-style-type: none"> <li>• Assist in the design, development, and maintenance of mobile applications under the guidance of senior developer.</li> <li>• Support the creation and implementation of intuitive and user-friendly mobile app interfaces.</li> <li>• Collaborate with cross-functional teams to ensure seamless integration with backend services and compatibility across various devices and operating systems.</li> </ul>
	Qualifications	<ul style="list-style-type: none"> <li>• Bachelor's degree in Computer Science, Software Engineering, or a related field.</li> </ul>
	Experience	<ul style="list-style-type: none"> <li>• Previous experience in mobile app development is highly valued.</li> <li>• Experience with version control systems, such as Git, and an understanding of RESTful APIs and how they are used in mobile applications are beneficial.</li> </ul>

UX/UI Designer	Responsibility	<ul style="list-style-type: none"> <li>• Conduct user research and usability testing to gather feedback and insights, using this data to inform and refine design decisions.</li> <li>• Develop and iterate on user interfaces and experiences through wireframes, mockups, and interactive prototypes, ensuring they meet user needs and promote a seamless user experience in the mobile based data collection app and associated web dashboard.</li> <li>• Work closely with developers and other stakeholders to ensure designs are feasible and align with project objectives, and effectively communicate design processes, ideas, and solutions.</li> </ul>
	Qualifications	Bachelors in ICT or Computer Engineering or equivalent
	Experience	<p><b>General Experience</b> 3 years of sound experience in UX/UI design of web applications, demonstrating a strong portfolio of design projects.</p> <p><b>Specific Experience</b></p> <ul style="list-style-type: none"> <li>• Proficiency in design and prototyping tools such as Adobe XD, Sketch, Figma, or InVision.</li> <li>• Designed mobile based data collection apps .</li> <li>• Experience in responsive and adaptive design practices, ensuring optimal usability across various devices and screen sizes.</li> </ul>
Project Coordination Officer	Responsibility	<ul style="list-style-type: none"> <li>• Assist in the development and maintenance of project plans, schedules, and documentation to ensure timely project delivery.</li> <li>• Serve as a liaison between project teams and stakeholders, ensuring clear communication of project statuses, milestones, and changes.</li> <li>• Coordinate resources, including personnel, equipment, and materials, to ensure project needs are met efficiently.</li> <li>• Monitor project progress, identify potential risks and issues, and assist in developing mitigation strategies.</li> </ul>
	Qualifications	Bachelor's degree in Business Administration, Project Management, or a related field.
	Experience	<p><b>General Experience</b> 3 years of working experience in the field of Project Coordination</p> <p><b>Specific Experience</b></p>

		<ul style="list-style-type: none"> <li>• Proven experience in project coordination or management, preferably within a project-driven or technical environment.</li> <li>• Familiarity with project management tools (e.g., Microsoft Project, Asana, Trello) and methodologies (e.g., Agile, Waterfall).</li> <li>• Experience in stakeholder management, with the ability to engage effectively with diverse groups.</li> <li>• Understanding of budgeting and resource allocation within the context of project management.</li> </ul>
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## 10. Proposal Evaluation

The consultant selection shall be based Quality and Cost Based Service (QCBS) as per Public Procurement Act, 2063, Section 31 (4) and Public Procurement Regulation, 2064, Rule 72 (3), accordingly the scoring weight shall be as:

- 90 percent weightage to the Technical Proposal and
- 10 percent weightage to the Financial Proposal.

The bases for evaluation of the technical proposal and scoring weightage shall be as follows.

### Technical Proposal Scoring Criteria and Score Weight:

The evaluation criteria, sub-criteria, and point system for the evaluation are:

	<u>Points</u>
1. <b>Consultant's Work Experience</b> <i>As per clause 9.1</i>	<b>25</b>
2. <b>Expert's Qualification and Experience of the key staffs</b> <i>Qualification &amp; Experience of Key Experts as per clause 9.2</i>	<b>40</b>
3. <b>Methodology and work plan</b>	<b>30</b>
a. Understanding of TOR & Scope of Work	
b. Comments and Suggestions on TOR if any	
c. Detailed breakdown of all activities into different phases of the project along with a timeline	
d. Methodology: Preparation of data collection framework	
e. Methodology: Design and Development of data collection app	
f. Methodology: Preparation of data analysis plan to support data visualization	
g. Methodology: Preparation of Integrated Municipal GeoDatabase	
4. <b>Technology Transfer OR Training</b>	<b>5</b>
<b>Total Points:</b>	<b><u>100</u></b>

The minimum technical score (St) required to pass is 50 Points or 50 percent.

## 11. Documents to be submitted

### 11.1 Company Documents

- Company profile
- Copy of registration, renewal and affiliation certificates
- Copy of VAT/PAN registration certificate
- Any document that provides evidence about the company's similar experience.

### 11.2 Technical Proposal (along with proposed staff and their CVs)

### 11.3 Financial Proposal

## 12. Conditions of Contract and Contract Forms

**12.1 Organizational:** The consulting firm, for this assignment, should meet the **experience criteria as mentioned in clause 9.1** and company criteria as follows:

- Registered in VAT under the office of company registrar.
- Consultant must have the latest audit report.
- Consultant should submit tax clearance of the recent fiscal year
- Consultant companies should not have been blacklisted by any agencies under the Government of Nepal, province governments or any local government.

**12.2 Experts:** The consulting firm, for this assignment, should propose the experts as suggested in Clause 9.2.

### 12.3 Input of Experts:

S.N.	Major Team Members	Required Personnel Numbers	Per Person Input in Working Days
1	Team Leader	1	40
2	GIS Expert	1	20
3	Socio Economic Expert	1	30
4	Agriculture Expert	1	30
5	Sr. Software Developer	1	30
6	Sr. Mobile App Developer	1	30
7	Training Coordinator	1	15
8	Quality Assurance Engineer	1	15
9	Data Analyst	2	30
10	Jr. Software Developer	1	60
11	UX/UI Designer	1	25
12	Jr. Mobile App Developer	1	60
13	Project Coordination Officer	1	80

### 12.4 Cost Estimate and Payment Terms

#### i) Estimated Cost:

The proposer shall bear all costs associated with the preparation and submission of the proposal and, ..... Sub-Metropolitan City will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the solicitation.



This estimation of cost, however, doesn't include the cost of hosting the system and doesn't include the cost of post-development support on the system. The hosting environment will be provided by ..... Sub-Metropolitan City (preferably government cloud service or data center), and the post-development (besides technical support) support on the system will be demand based. However, one year of continued technical support will be provided free of cost to ..... Sub-Metropolitan City through consultancy.

**ii) Payment Terms:**

The payment terms will be as specified in clause 7.

**13. Source and Procurement Process**

The procurement process shall be applied to GoN procurement acts and rules.

**14. Confidentiality**

All deliberations relating to developing and establishing the system softwares including all information collected from various meetings/documents, primary & secondary data, etc. shall be kept confidential and shall not be divulged to any third party either verbally or in writing or in any other form.

**15. Monitoring and Reporting Arrangements**

The consultant/company will work under guidance of the Chief Administration Officer and in-coordination with IT officers and planning unit officials of the Sub-Metropolitan City as well as in consultation with a representative from the Ministry of Finance, Government of Lumbini Province. The consultant/company will report and present progress as provided in the schedule above. In addition, the IT officer/designated officer will monitor all activities and progress as needed as well as provide necessary suggestions and feedback for quality product development. It is expected to work in a highly interactive way with ..... Sub-Metropolitan City's departments, experts and Ministry of Finance, Government of Lumbini Province as well as the beneficiaries of the consultant.

Consultant shall prepare and submit the reports as specified. All reporting shall be in English language. Each report shall be submitted in one copy to ..... Sub-Metropolitan City and one copy to the Ministry of Finance, Government of Lumbini Province.

**16. Other Terms and Conditions**

- If the system requirement changes beyond this ToR during the discussion, development and/or in the support/maintenance period of the system, the consultant will have to incorporate the changes in the system accordingly as part of this ToR.
- The designated municipal officer can give instructions to the consultants during the task period and the consultant needs to follow these instructions as part of this ToR.
- Other applicable terms and conditions will be included in the agreement letter, as required.

## अनुसूची ९

सेवा प्रदायक संस्थाको लागि क्रियाकलाप २ को निर्धारित कार्यविवरण (Terms of Reference - ToR)  
(दफा ९ उपदफा ३ सँग सम्बन्धित)

### Terms of Reference (TOR)

Term of Reference (ToR) for the “Design and Development of ‘Dynamic Development Assessment And Mapping Interface (DDAAMI)’” of the

..... Sub-Metropolitan City,

..... District, Lumbini Province

<b>Assignment title</b>	<b>Development of Design and Development of “Dynamic Development Assessment And Mapping Interface (DDAAMI)”</b>
<b>A. Duty Station</b>	..... Sub-Metropolitan City (Full Address: ....., Lumbini Province)
<b>B. Reporting to</b>	..... Sub-Metropolitan City
<b>C. Responsible staff</b>	<b>Name of the responsible person</b>
<b>D. Duration of assignment</b>	<b>All software ..... days</b>
<b>E. Expected starting/completion date</b>	<b>Start, End Date: .....</b>
<b>F. Service provider</b>	<b>1 firm / company</b>

### Contents of the TOR

1. Background
2. Significance of Work
3. Objective
4. Scope of the Service
5. Methodology
6. Output/Deliverables
7. Submission of reports and presentation of the works
8. Coordination and Facilitation Committee
9. Experience of Firm/Company and Team
  - 9.1. Firm/Company
  - 9.2. Team
10. Proposal Evaluation
11. Documents to be submitted
  - 11.1 Company Documents
  - 11.2 Technical Proposal (along with proposed staff and their CVs)
  - 11.3 Financial Proposal
12. Conditions of Contract and Contract Forms
13. Source and Procurement Process
14. Confidentiality
15. Monitoring and Reporting Arrangements
16. Other Terms and Conditions

## 1. Background

*[Write background info about the Sub-Metropolitan City]*

## 2. Significance of Work

This project once completed will benefit different stakeholders in multiple different ways. Following is the brief summary:

### i. Planners and Development Authorities:

- **Enhanced Economic Planning:** Provide Urban Planners and Development Authorities with a dynamic interface (DDAAMI) for analyzing and visualizing economic and development data, aiding in evidence-based planning. By leveraging the GIS-based mapping onto the traditional maps, officials can enhance their capabilities in identifying clusters of need and plan cluster-based interventions.
- **Socio-Economic Integration:** Integrate socio-economic indicators with geographical data, offering comprehensive insights into the economic status, development needs, and challenges faced by each community.
- **Data-Driven Development Planning:** Utilize updated datasets to make informed decisions about rural development and infrastructure projects.
- **Infrastructure Development Prioritization:** Identify areas with low reach and high necessity for effective infrastructure planning.
- **Utilities Management and Services Allocation:** Identify each household individually for better management of utilities and service allocation.
- **Resource Allocation and Fund Management:** Map -vulnerable communities for better resource allocation and fund management.
- **Administrative Service Delivery:** Utilize government information to Streamline local government service delivery including subsidy allocation
- **Integration with IoT Devices:** Integrate with IoT devices for improved monitoring and maintenance.

### ii. Local Government Officials:

- **Optimized Infrastructure Planning:** Support local government officials in optimizing infrastructure planning by providing real data on infrastructures including irrigation facilities.
- **Systematic intervention:** Support local government to plan government intervention based on systematic selection and categorization of rural areas.

### iii. Subsidy Allocators:

- **Systematic Subsidy Allocation:** Streamline subsidy allocation processes, by identifying exact areas of need, relying on credible information including land details, making them systematic and traceable, thereby enhancing efficiency in resource distribution.
- **Demand Analysis:** Enable subsidy allocators to conduct detailed demand analysis for specific agricultural projects, facilitating targeted interventions and optimizing subsidy allocation.

### iv. Emergency Responders and Disaster Management Teams:

- **Rapid Location Identification:** Enable emergency responders to quickly and precisely locate households and critical areas during emergencies, enhancing response times and resource allocation

- **Improved Disaster Preparedness:** Access to up-to-date datasets on roads, buildings, infrastructure, and land aids disaster management officials in better preparedness planning and response capacity building.

#### v. Citizens

- **Timely input supply:** Avail timely access to farmers resources based on the seasonal demand of inputs.
- **Market access to farmers:** Provide market access based on the least cost-measure of transport and storage.
- **Need based resources:** Proposing infrastructure or other intervention based on cost-benefit analysis allows resources to be availed based on where they are most justified.

#### vi. Businesses and Service Providers:

- **Business Estimation:** Assist businesses and service providers by providing accurate economic data for estimating demand and planning services effectively.
- **Access to Accurate Data:** Offer access to reliable and up-to-date information about households, roads, and infrastructure for business planning and service provision.

#### vii. Other Government Agencies:

- **Collaborative Planning:** Facilitate collaborative planning among various government agencies by providing a unified infrastructure status and comprehensive economic data.
- **Data-Driven Decision Making:** Enhance data-driven decision-making for other government agencies by offering insights for project planning based on real information.
- **Road and Infrastructure Planning:** Access updated infrastructure inventory data for better planning of updates, maintenance, and expansions.
- **Institutional Data Inventory:** Utilize accurate datasets on educational facilities, health facilities, government institutions, etc., for planning and decision-making purposes.
- **Good Governance:** Provide advice to the government based on geodata to prioritize activities related to good governance and accelerate municipal service delivery transparently.
- **Seamless Collaboration:** The system's integration allows for seamless collaboration with other technology-based programmes technologies for enhanced data keeping and data sharing practices.

### 3. Objective

The objective of this project is to design and develop the Dynamic Development Assessment and Mapping Interface (DDAAMI) with data-driven planning recommendation capabilities for the Sub-Metropolitan City. This platform aims to provide urban and rural planners, businesses, citizens, and government agencies with a dynamic tool for assessing and mapping development, aiding in strategic decision-making, and fostering efficient service delivery.

#### **The sub objectives of this project are as follows:**

- Design a user-friendly and dynamic interface (DDAAMI) to empower urban and rural planners with intuitive tools for development assessment and strategic decision-making.
- Develop an accurate and up-to-date database of land and of agricultural activities to support data-driven development planning and decision making by the Sub-Metropolitan City.

- Integrate traditional and legal land maps with the satellite map.
- Integrate economic data to assist government and citizens in accessing reliable and up-to-date information about households and land usage for business planning and service provision.
- Integrate infrastructure points on the thematic maps.
- Develop provision at various user-level to view and extract details.
- Identify clusters based on the nature of business or nature or resources in the sub-metropolitan city area.
- Draw cluster-wise information in the map. Develop provision for layers of query to answer development assessment questions.
- Compute season-wise demand estimates for select regions for agricultural inputs.
- Develop accurate data inventory of the Sub-Metropolitan City and link it to household level planning and government intervention activities.
- Assist other government agencies by providing a tool for data-driven decision-making during crises and supporting the planning of various projects based on real-time information.
- Assess sources of water and condition of the road network and explore development possibilities, focusing on agriculture, industries, and overall municipal growth.

#### 4. Scope of the Service

The scope of work for the consulting services encompasses the following key areas, although it may be further refined during the project initiation phase:

##### i. Inception Phase:

- Organize a meeting with key stakeholders, including Sub-Metropolitan City officials and community representatives, to align visions and expectations.
- Formalize partnerships with local government and other relevant organizations for data sharing, collaboration, and support.
- Conduct comprehensive discussions to understand and document specific requirements and expectations for the DDAAMI system.
- Review the collected datasets from Survey and analyse it to conceptualize the envisioned digital system.
- Develop an inception report that includes revised deliverables, timelines, and a summary of the findings from the initial phase.

##### ii. Software Design Phase:

- Conduct a stakeholder design thinking workshop to understand the requirement of the envisioned system in detail.
- Create a comprehensive design framework for the DDAAMI, outlining the user interface, functionalities, and integration capabilities.
- Develop a UX/UI and graphical mock-up prototype of the DDAAMI for initial testing and stakeholder review.
- Refine the design based on feedback and finalize the software architecture and design specifications.

##### iii. Development of the Web-Based DDAAMI:

- Create a dynamic and user-friendly web interface for the DDAAMI.
- Integrate various datasets and mapping tools into the web interface.
- **Feature Development and Testing:** Develop and test advanced features such as data analytics, report generation, and interactive mapping.

- **Security and Compliance Checks:** Ensure the web interface meets all required security standards and compliance regulations.

The Web App should have following minimum features:

- **Comprehensive Dashboard:** An intuitive and interactive dashboard for a quick overview of various datasets and indicators as designed in consultation with local government officials.
- **Advanced Data Visualization:** Tools for advanced data visualization including heat maps, thematic maps, interactive map layers.
- **Layer Management:** Ability to manage multiple layers of data, including toggling visibility, editing, and layer-specific analysis for different spatial data layers.
- **Real-Time Data Updating and Display:** Feature to display real-time data updates and changes within the GIS environment.
- **Economic Scenario Analysis:** Functions to generate economic scenario analysis results based on the parameters provided by the users
- **Household level profile :** Auto generate household profile
- **Other WMS layer overlay:** Overlay other WMS layers from Geoserver and map servers through WMS Capabilities in a map.
- **Spatial data overlay:** Overlay other available layers like, education, health, public offices, religious places, and other layers.
- **Measurement functions:** A functionality to measure area and length in a map
- **Label layers:** A functionality to update the vector layer styles and labels in a map as per the municipal need.
- **Export as a map:** A functionality to export the map as an image map format with option to dynamically change the size of map, map grid, scale, legend, title and description etc.
- **Data Query and Filter:**
  - Geographic query module with filter by polygon, geographical area.
  - A functionality to filter the geographic datasets by attribute query where municipal officials should be able to write advanced attribute queries on their own and show the results in a map.
- **Data Upload Module:** Allow the Sub-Metropolitan City to upload any other layers in different formats like geojson, shapefile, csv etc. Also allow to style all the layers as per need along with label style management.
- **Data Export Module:** Allow the Sub-Metropolitan City to export the layers in different formats like geojson, csv, shapefile, kml etc. Also allow Sub-Metropolitan City to download filtered datasets (attribute and geographically filtered)
- **Dynamic data attributes:** Implement attribute addition along with attribute management functionality allowing to assign as mandatory field, dropdown field or image field.
- **Data Edit feature:** Implement geometry and attribute edit functionality for building and road including all overlay layers like school, health, public facilities along with attribute.
- **API for data access:** Develop an open API for public information so that other government and service based systems operating inside the Sub-Metropolitan City can benefit from it.
- **Customizable Reporting:** Facility to generate customizable reports based on specific criteria and data selections.
- **Interactive Query Tool:** Tools for users to query the database using various parameters and criteria.

The system should fulfil basic minimum criteria:

- **Scalability and Performance Optimization:** Ensuring the system is scalable to handle increasing data and user load and optimized for performance.
- **Security and Data Privacy:** Robust security protocols to protect sensitive data and ensure privacy compliance.
- **Access Control and User Management:** Access control options to manage user roles, permissions, and access to different modules.
- **Integration with External APIs:** Ability to integrate with external APIs for extended functionalities and data exchange.
- **Mobile Responsiveness and Compatibility:** Ensuring the web interface is responsive and compatible with various devices, including tablets and smartphones.
- **Training and Help Modules:** Inclusion of training modules and help guides within the system for user assistance.

iv. **System Installation, Training, and Capacity Building:**

- **System Installation and Setup:** Install the DDAAMI system in the designated environment and ensure full functionality.
- **Training Workshops:** Conduct training workshops for stakeholders, focusing on system use, data analysis, and report generation.
- **Capacity Building:** Implement capacity-building initiatives to enhance the stakeholders' ability to effectively use the DDAAMI for decision-making and planning.

v. **Handover and Project Implementation Planning:**

- **Handover Documentation:** Prepare comprehensive documentation for system operation, maintenance, and troubleshooting.
- **Implementation Roadmap:** Develop a detailed roadmap for the implementation of the DDAAMI, including timelines and responsibilities.
- **Support Mechanism Establishment:** Establish a support mechanism for technical assistance and system updates post-handover.
- **Final Review Meeting:** Conduct a final review meeting with stakeholders to ensure a smooth transition and address any outstanding concerns.

## 5. Methodology

The suggested approach for this assignment is the 'agile development' model, which aims at evolving, improving, delivering, and supporting services based on Sub-Metropolitan City's needs, feedback, and experience. This is to ensure that the software functionality is customized to meet the demands of the Sub-Metropolitan City. The following minimum approach is thus suggested:

- Conduct a comprehensive analysis to understand the needs and expectations of the system at both Provincial and Municipal level.
- Discussions with Sub-Metropolitan City's relevant departments, experts and other relevant GoN/ Institutions.
- Review the relevant documents which would give a deeper understanding of the Municipal context in aspects related to this ToR.
- Collaborate with agencies in and outside of Nepal to collect a high resolution Aerial imagery of the entire Sub-Metropolitan City area.
- Organize a design thinking workshop, present a graphical wireframe of the envisioned system and finalize it in close consultation with all relevant stakeholders at local level.

- Prepare a System Requirement Specification (SRS) document first and finalize a list of features that the Sub-Metropolitan City wants to develop under this envisioned concept.
- Design and develop the digital system.
- Install the digital system on the Nepal government server.
- Train and capacitate all relevant government officials at the Sub-Metropolitan City office.
- Submit a 1-year support and maintenance plan along with a long term sustainability planning documentation.

## 6. Output/Deliverables

After carrying out the scope of activities, the consultant should hand over the following output and deliverables to the Sub-Metropolitan City.

SN	DELIVERABLES	TIME
1	Inception Report along with a first draft of System Requirement Specifications (SRS) document.	1 month from starting of contract
2	Finalized System Architecture, Database diagram , Wireframes /Graphical mockups and detailed SRS document approved by the local government officials	2nd month since starting of contract
3	Presentation of the Finalized first version of the decision support system	2nd-5th month of contract
4	Capacity building training and workshop and organize final system handover workshop	6th/Final month of contract

## 7. Submission of reports and presentation of the works

Following report shall be submitted in time as mentioned below:

No of instalments	Time period	Payment in %	Report submitted by the consultant
First	At the end of 1st month of date of agreement	20%	Inception Report along with a first draft of System Requirement Specifications (SRS) document.
Second	At the end of 2nd month of date of agreement	30%	Finalized System Architecture, Database diagram , Wireframes /Graphical mockups and detailed SRS document approved by the local government officials
Third	At the end of 5th month of date of agreement	30%	Presentation of the Finalized first version of the decision support system
Fourth/ Final	At the end of the 6th month since date of agreement	20%	Capacity building training and workshop and organize final system handover workshop

## 8. Coordination and Facilitation Committee

- Mayor (Coordinator)



- Member, Lumbini Province Planning Commission (Member)
- Economic Advisor, Government of Lumbini Province (Member)
- Chief Administrative Officer (Member)
- Accounts Officer (Member)
- Planning Officer (Member)
- Information Technology Officer (Member-Secretary)

**9. Experience of Firm/Company and Team**

**9.1 Firm/Company**

The company should have experience in the following.

- Minimum of 7 years of relevant work experiences in design and development of GIS based decision support system for local governments.
- Should have completed at least two National-level Web GIS Based Systems for Data Management and Visualization.
- Should have worked on projects involving collection of household level datasets and development of GIS systems that can manage those household level data and also generate profiles down to household level.
- Experience of designing and developing information management systems that has functionality to query datasets and export results in the form of tables, charts and diagrams
- Strong knowledge of data protection, safety, security and other essential mechanisms relating to database development, implementation and security system and evidence of implementing data security measures in previous projects.
- Practical knowledge of software support, safety and security systems as well as related training/orientation to the users.

**9.2 Team**

The consulting firm, for this assignment, should propose the following experts with the mentioned responsibility, qualification, and experience:

**Key Experts | Staffs**

- Team Leader (1)
- GIS Expert (1)
- Database Expert (1)
- Sr. Software Developer - Backend (1)
- Sr. Software Developer - Frontend (1)
- Web GIS Developer (1)
- Cyber Security Specialist (1)

Team Leader	Responsibility	<ul style="list-style-type: none"> <li>• Responsible for planning and implementation of the project with desired scope and quality as per the TOR.</li> <li>• Responsible for mobilizing the team members and supervising team members' work.</li> <li>• Responsible for managing all aspects of a project, from planning to execution, monitoring and controlling, communication, quality management, and risk management, to ensure the successful completion of the project.</li> <li>• Result /output dissemination work.</li> </ul>
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	Qualifications	Master Degree in Informatics/Information Technology /Digital Development /Geoinformatics
	Experience	<p><b>General Experience:</b> At least 7 years of experience in the IT industry leading design and development of data management related digital systems.</p> <p><b>Specific Experience:</b></p> <ul style="list-style-type: none"> <li>• Should have led on Web GIS Based data management or decision support system</li> <li>• Should have worked at local level in Nepal in design and implementation of GIS based digital systems.</li> </ul>
GIS Expert	Responsibility	<ul style="list-style-type: none"> <li>• Design the conceptual framework for Integrated Municipal Geodatabase.</li> <li>• Prepare thematic GIS Maps.</li> <li>• Collect and provide all necessary GIS shapefile, datasets to the technical team as per their need during system design and development.</li> </ul>
	Qualifications	Master Degree in Geomatics Engineering or related field experience in GIS Mapping
	Experience	<p><b>General Experience:</b> At least 7 years of experience in the Geospatial sector, Surveying and Mapping Industry.</p> <p><b>Specific Experience:</b></p> <p>Experience on designing Geodatabase to support the development of GIS Based decision system</p> <ul style="list-style-type: none"> <li>• Experience in design and development of Municipal Geodatabase at least 3 projects</li> </ul>
Database Expert	Responsibility	<ul style="list-style-type: none"> <li>• Responsible for design of a scalable database system where majority of the datasets are geospatial datasets.</li> </ul>
	Qualifications	Bachelor in ICT or Computer Engineering or equivalent
	Experience	<p><b>General Experience:</b></p> <ul style="list-style-type: none"> <li>• 3 years of experience in database design.</li> </ul> <p><b>Specific Experience:</b></p> <ul style="list-style-type: none"> <li>• Led the design of scalable database at Municipal level to store households level datasets for the entire municipality.</li> </ul>
Sr. Software Developer (Backend)	Responsibility	<ul style="list-style-type: none"> <li>• Designing ,developing, and maintaining high-quality software and web applications, while providing technical guidance and leading software development team in day to day programming on backend related aspects of a digital system.</li> </ul>
	Qualifications	Bachelor in ICT or Computer Engineering or equivalent
	Experience	<p><b>General Experience</b></p> <ul style="list-style-type: none"> <li>• At least 4 years of experience in software development (backend).</li> </ul> <p><b>Specific Experience</b></p>

		<ul style="list-style-type: none"> <li>• Experience in Design and development of digital software consisting of both web and mobile application in at least 3 nos.</li> </ul>
Sr. Software Developer (Frontend)	Responsibility	<ul style="list-style-type: none"> <li>• Designing ,developing, and maintaining high-quality software and web applications, while providing technical guidance and leading software development team in day to day programing on frontend related aspects of a digital system.</li> </ul>
	Qualifications	Bachelor in ICT or Computer Engineering or equivalent
	Experience	<p><b>General Experience</b></p> <ul style="list-style-type: none"> <li>• At least 4 years of experience in software development(frontend)</li> </ul> <p><b>Specific Experience</b></p> <ul style="list-style-type: none"> <li>• Frontend development related works in web systems that stores and visualize geospatial datasets.</li> <li>• Experience with data visualization libraries (e.g., D3.js, Chart.js, Leaflet for mapping) is important for presenting complex data in an accessible and user-friendly manner, a common requirement in municipal DSS projects.</li> </ul>
Web GIS Developer	Responsibility	<ul style="list-style-type: none"> <li>• Architecting and developing interactive, user-friendly Web GIS applications that meet project requirements.</li> <li>• Integrating map functionalities with geospatial data to create dynamic, interactive web maps and geospatial visualizations.</li> <li>• Conducting spatial analysis and integrating these capabilities into the web application to provide insights and support decision-making.</li> </ul>
	Qualifications	Bachelor in Geospatial Technologies or Geo ICT
	Experience	<p><b>Specific Experiences</b></p> <ul style="list-style-type: none"> <li>• Proven track record in developing Web GIS applications.</li> <li>• Proficiency in geospatial web technologies (e.g., Leaflet, OpenLayers, ArcGIS API for JavaScript).</li> <li>• Experience with spatial databases (e.g., PostGIS, GeoServer) and server-side technologies (e.g., Node.js, Django).</li> <li>• Skilled in API integration and development, especially geospatial data services (WMS, WFS, REST endpoints).</li> </ul>
Cyber Security Specialist	Responsibility	<ul style="list-style-type: none"> <li>• Responsible for protecting computer systems, networks, and data from security breaches and implementing measures to prevent and mitigate cyber threats.</li> <li>• VAPT and other security audit to make system secured</li> </ul>

	Qualifications	Bachelor degree in Networking and Security / Cyber Security or related field
	Experience	<b>General Experience:</b> At least 4 years of experience <b>Specific Experience:</b> Experience in protecting digital systems, networks, and data from unauthorized access, breaches, and cyber threats in at least two projects (completed)

### Non-Key Experts | Staffs

- Data Analyst (1)
- UI/UX Designer (1)
- QA Engineer (1)
- Project Coordination Officer (1)

Data Analyst	Responsibility	<ul style="list-style-type: none"> <li>• Data Cleaning and Standardization: Lead efforts in cleaning, standardizing, and preprocessing data to ensure data quality and consistency across datasets.</li> <li>• Use Python to interpret complex data sets, identifying trends, patterns, and insights that inform business decisions.</li> <li>• Develop reports and visualizations using Python libraries (e.g., Matplotlib, Seaborn, Plotly) to present findings clearly to stakeholders.</li> <li>• Work closely with cross-functional teams to understand business needs, translating them into actionable data analysis projects.</li> </ul>
	Qualifications	<ul style="list-style-type: none"> <li>• Bachelor's degree in Data Science, Computer Science, Statistics, or a related field.</li> </ul>
	Experience	<p><b>General Experience:</b> At least 4 years of experience <b>Specific Experience:</b></p> <ul style="list-style-type: none"> <li>• Experience in data cleaning and standardization processes, demonstrating a strong understanding of data integrity and consistency.</li> <li>• Proficiency in Python for data analysis, including libraries like Pandas, NumPy, and SciPy for data manipulation and statistical analysis.</li> <li>• Skilled in data visualization using Python libraries (e.g., Matplotlib, Seaborn, Plotly) to create insightful and accessible data representations.</li> </ul>
UX/UI Designer	Responsibility	<ul style="list-style-type: none"> <li>• Develop and iterate on user interfaces and experiences through wireframes, mockups, and interactive prototypes, ensuring they meet user needs and promote a seamless user experience.</li> <li>• Conduct user research and usability testing to gather feedback and insights, using this data to inform and refine design decisions.</li> <li>• Work closely with developers and other stakeholders to ensure designs are feasible and align with project objectives, and effectively communicate design processes, ideas, and solutions.</li> </ul>

		<ul style="list-style-type: none"> <li>Establish and maintain design systems, style guides, and best practices to ensure design consistency and quality across all web applications.</li> </ul>
	Qualifications	Bachelors in ICT or Computer Engineering or equivalent
	Experience	<p><b>General Experience</b> 3 years of sound experience in UX/UI design of web applications, demonstrating a strong portfolio of design projects.</p> <p><b>Specific Experience</b></p> <ul style="list-style-type: none"> <li>Proficiency in design and prototyping tools such as Adobe XD, Sketch, Figma, or InVision.</li> <li>Knowledge of web technologies (HTML, CSS, JavaScript) and understanding of how designs are implemented in web development.</li> <li>Experience in responsive and adaptive design practices, ensuring optimal usability across various devices and screen sizes.</li> </ul>
QA Engineer	Responsibility	<ul style="list-style-type: none"> <li>Identify, document, and track defects found during testing, collaborating with development teams to ensure timely resolution.</li> <li>Develop and execute comprehensive test plans to ensure software meets all requirements and quality standards.</li> <li>Design, develop, and maintain automated testing scripts and frameworks to increase efficiency and reliability of testing</li> </ul>
	Qualifications	Bachelor's degree in IT or Computer Science or Computer Engineering
	Experience	<p><b>General Experience</b> 3 years of working experience in the field of quality testing/assurance</p> <p><b>Specific Experience</b></p> <ul style="list-style-type: none"> <li>Proven experience as a QA Engineer in software development projects, with a focus on both manual and automated testing.</li> <li>Experience with automated testing tools (e.g., Selenium, JUnit, TestNG) and continuous integration/continuous delivery (CI/CD) pipelines.</li> <li>Proficiency in scripting or programming languages relevant to test automation (e.g., Python, Java).</li> <li>Familiarity with bug tracking tools (e.g., JIRA, Bugzilla) and version control systems (e.g., Git).</li> </ul>
Project Coordinat	Responsibility	<ul style="list-style-type: none"> <li>Assist in the development and maintenance of project plans, schedules, and documentation to ensure timely project delivery.</li> </ul>

ion Officer		<ul style="list-style-type: none"> <li>• Serve as a liaison between project teams and stakeholders, ensuring clear communication of project statuses, milestones, and changes.</li> <li>• Coordinate resources, including personnel, equipment, and materials, to ensure project needs are met efficiently.</li> <li>• Monitor project progress, identify potential risks and issues, and assist in developing mitigation strategies.</li> </ul>
	Qualifications	Bachelor's degree in Business Administration, Project Management, or a related field.
	Experience	<p><b>General Experience</b> 3 years of working experience in the field of Project Coordination</p> <p><b>Specific Experience</b></p> <ul style="list-style-type: none"> <li>• Proven experience in project coordination or management, preferably within a project-driven or technical environment.</li> <li>• Familiarity with project management tools (e.g., Microsoft Project, Asana, Trello) and methodologies (e.g., Agile, Waterfall).</li> <li>• Experience in stakeholder management, with the ability to engage effectively with diverse groups.</li> <li>• Understanding of budgeting and resource allocation within the context of project management.</li> </ul>

## 10. Proposal Evaluation

The consultant selection shall be based Quality and Cost Based Service (QCBS) as per Public Procurement Act, 2063, Section 31 (4) and Public Procurement Regulation, 2064, Rule 72 (3), accordingly the scoring weight shall be as:

- 90 percent weightage to the Technical Proposal and
- 10 percent weightage to the Financial Proposal.

The bases for evaluation of the technical proposal and scoring weightage shall be as follows.

### Technical Proposal Scoring Criteria and Score Weight:

The evaluation criteria, sub-criteria, and point system for the evaluation are:

	<u>Points</u>
1. <b>Consultant's Work Experience</b> <i>As per clause 9.1</i>	<b>25</b>
2. <b>Expert's Qualification and Experience of the key staffs</b> <i>Qualification &amp; Experience of Key Experts as per clause 9.2</i>	<b>40</b>
3. <b>Methodology and work plan</b>	<b>30</b>
a) Understanding of TOR & Scope of Work	
b) Comments and Suggestions on TOR if any	
c) Detailed breakdown of all activities into different phases of the project along with a timeline.	
d) Methodology: Finalization of features to develop in the envisioned DDAAMI system.	

- e) Methodology: Development of user friendly version of software that's easier to use for local government officials with low literacy
- f) Methodology: Training and capacity building to local government officials
- g) Methodology: Sustainability plan so that local government officials can themselves manage the system even after the completion of the system.

4. **Technology Transfer OR Training** **5**

**Total Points:** **100**

The minimum technical score (St) required to pass is 50 Points or 50 percent.

## 11. Documents to be submitted

### 11.1 Company Documents

- Company profile
- Copy of registration, renewal and affiliation certificates
- Copy of VAT/PAN registration certificate
- Any document that provides evidence about the company's similar experience.

### 11.2 Technical Proposal (along with proposed staff and their CVs)

### 11.3 Financial Proposal

## 12. Conditions of Contract and Contract Forms

**12.1 Organizational:** The consulting firm, for this assignment, should meet the **experience criteria as mentioned in clause 9.1** and company criteria as follows:

- Registered in VAT under the office of company registrar.
- Consultant must have the latest audit report.
- Consultant should submit tax clearance of the recent fiscal year
- Consultant companies should not have been blacklisted by any agencies under the Government of Nepal, province governments or any local government.

**12.2 Experts:** The consulting firm, for this assignment, should propose the experts as suggested in Clause 9.2.

### 12.3 Input of Experts:

S.N o.	Major Team Members	Required Personnel Numbers	Per Person Input in Working Days
1	Team Leader	1	60
2	GIS Expert	1	45
3	Database Expert	1	25
4	Sr. Software Developer - Backend	1	75
5	Sr. Software Developer - Frontend	1	75
6	Web GIS Developer	1	45
7	Cyber Security Specialist	1	20
8	Data Analyst	1	30
9	UI/UX Designer	1	30
10	QA Engineer	1	60
11	Project Coordination Officer	1	240

### 12.4 Cost Estimate and Payment Terms

**i) Estimated Cost:**

The proposer shall bear all costs associated with the preparation and submission of the proposal and, ..... Sub-Metropolitan City will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the solicitation.

This estimation of cost, however, doesn't include the cost of hosting the system and doesn't include the cost of post-development support on the system. The hosting environment will be provided by ..... Sub-Metropolitan City (preferably government cloud service or data center), and the post-development (besides technical support) support on the system will be demand based. However, one year of continued technical support will be provided free of cost to ..... Sub-Metropolitan City through consultancy.

**ii) Payment Terms:**

The payment terms will be as specified in clause 7.

**13. Source and Procurement Process**

The procurement process shall be applied to GoN procurement acts and rules.

**14. Confidentiality**

All deliberations relating to developing and establishing the system softwares including all information collected from various meetings/documents, primary & secondary data, etc. shall be kept confidential and shall not be divulged to any third party either verbally or in writing or in any other form.

**15. Monitoring and Reporting Arrangements**

The consultant/company will work under guidance of the Chief Administration Officer and in-coordination with IT officers and planning unit officials of the Sub-Metropolitan City as well as in consultation with a representative from the Ministry of Finance, Government of Lumbini Province. The consultant/company will report and present progress as provided in the schedule above. In addition, the IT officer/designated officer will monitor all activities and progress as needed as well as provide necessary suggestions and feedback for quality product development. It is expected to work in a highly interactive way with ..... Sub-Metropolitan City's departments, experts and Ministry of Finance, Government of Lumbini Province as well as the beneficiaries of the consultant.

Consultant shall prepare and submit the reports as specified. All reporting shall be in English language. Each report shall be submitted in one copy to ..... Sub-Metropolitan City and one copy to the Ministry of Finance, Government of Lumbini Province.

**16. Other Terms and Conditions**

- If the system requirement changes beyond this ToR during the discussion, development and/or in the support/maintenance period of the system, the consultant will have to incorporate the changes in the system accordingly as part of this ToR.
- The designated municipal officer can give instructions to the consultants during the task period and the consultant needs to follow these instructions as part of this ToR.
- Other applicable terms and conditions will be included in the agreement letter, as required.