#### **TERMS OF REFERENCE FOR**

Detailed Project Report –DPR Preparation for the Infrastructure Development of Agriculture Market Package 3: Semlar Butawal (Rupendehi), Barbardia (Bardia), Bandganga (Kapilbastu)

#### 1. INTRODUCTIOIN

#### **1.1 BACKGROUND TO TOR**

Analysis on migration trends of Nepalese community revels that more people are moving towards the urban and semi urban areas in search of better livelihood and facilities. Rapid growing urbanization obviously demands more food commodities and in turns the infrastructure and other systems on Agriculture business. To our context the demand of edible commodities, fresh vegetables and fruits is growing rapidly due to the faster rate of urbanization and increasing population density but in contrast market system and value chain for agricultural production is not growing rapidly due to lack of timely inputs and proper management. The proper development of market system helps to boost production and productivity and that also plays important role to improve the livelihood of farmers, supply healthy foods and efficient management of agriculture products. The rapidly expanding cities like Ithari, Pokhara, Hetuda, Birgunj, Butwal is already lagging adequate and facilitated agricultural whole shale market and no of collection centers for collection and supply of fresh fruits and vegetables as a major requisites. In many Urban and sub urban areas market connectivity is major circumstances to low production and required to develop proper market system to increase the production to meet growing demand of fresh vegetables and fruits. The production and supply of edible commodities, fresh fruits and vegetables are the most important pre-requisites for market channeling and strengthen the value chain of agricultural commodities.

In addition market driven high value vegetable cultivation has contributed significantly to the reduction of poverty and improving the livelihoods of countless people in several areas of Nepal. To boost up the agricultural marketing need connection of the value chain from producer, collectors, wholesalers, retailers and end consumers is required. The mission and vision of ADS in agricultural sector is to address the food sovereignty and food security with the sustainable commercialized agricultural development through competitive and self-dependency. The ADS

focuses on four broader categories Governance, Productivity, Profitable commercialization and Competitiveness. To meet the goals and objectives set by the ADS and sectorial plan and policies of Agriculture, Nepal Government has highly prioritized the infrastructure and value chain management of agricultural products. In this F.Y 2075/076 Nepal government has planned for the detail planning for upgrading and new wholesale market in Nine different city areas of Nepal as Ithari (Sunsari), Rangeli (Morang), Hetauda (Makawanpur), Birjung (Parsa), Bardibas (Mahotari), Pokhara (Kaski), Semlar Butawal (Rupendehi), Barbardia (Bardia) and Bandganga (Kapilbastu). Government has target of starting construction and upgrading of these markets as priority government program in this and coming fiscal year.

#### 1.2 **RELEVANCY OF THE TASK** :

Different scales and nature of agricultural markets are started along with the population increase and urbanization process on need based but in Nepal the almost agricultural markets are not up to standard lacking multiple facilities on storage, trading, transportation, infrastructure, environmental issues and even not assessed the demand and supply capacities. So these markets are functional despite of many lacking and inefficiencies. Nepal government has realized these issues and has priority programs for making numbers of agriculture wholesale markets with modern facilities and standards which may include facilities for cold storages, enough trading and storing spaces for separate commodities , parking, ripening chambers if needed, market sheds, office spaces, toilets and sanitary, drainage , washing , shorting , garbage / waste management, guard house , rest house, guest house , cold storage, boundary , gates, pavements ,orchard, electricity, electronic /digital boards and many other requirements to the specific market as per site condition and standard norms. All these requirements should be based on the in depth knowledge of total catchment of that market for collection and distribution, different commodities and their volume , Season and potential traders, market linkages and other aspects. .

Detail survey, design and estimation for wholesale market referenced to the international agriculture markets will set a model for the future construction and replication of similar market on other areas of country in coming days. As GON has prioritize the new markets and upgradation of running markets this CAIDMP office is planning to go for construction from current fiscal year on the basis of prepared detail project plans as per this TOR.

### 2. OBJECTIVE:

The major objectives of the task is to prepare detail project plan of the agricultural wholesale market at the selected locations as guided by the Master Plan of Agricultural Marketing ,need and demand. Some specific objectives of the task are as:

- Survey and detailing of the area selected for the agriculture wholesale market.
- Detail design, estimation and costing of all the required structures and spaces like market sheds, office spaces, parking, toilets and sanitary, drainage, washing, shorting, ripening chamber, Garbage collection, waste management, guard house, rest house, guest house, cold storage, boundary, gates, pavements, orchard, electricity and many other requirements to the specific market as per site condition and standard norms.
- Obtain soil test and test for others as required and use of this information for design and planning.
- Environmental study (as per requires)
- Clear construction plan, details of designs and drawing, estimation and cost for each structure separately and in total are the required outputs.
- Study about the catchment (Arial coverage), Types of agricultural products, Market, potential value add activities, socioeconomic status of the local and its catchment area needs to be assessed and reported.
- Using primary & secondary information, through field survey and discussion at local level suggest the suitable models of operation of the agriculture market.

#### **3. SCOPE OF SERVICES:**

In order to meet the objectives of the study, the scope of the work of proposed task shall include, but not limited to, the followings:

• Study and Observations of the agriculture wholesale markets for the background knowledge of current markets, standard & site specific requirements, related secondary and primary data/information.

- Conduct a comprehensive survey of the purposed market area using standard engineering methods /tools for the design of various structured and non-structured requirements within the wholesale markets.
- Comprehensive land use plan clearly illustrating the different market structures and nonstructural requirements (Like open space, orchard etc.), utilities (water, electricity, road, walking path, food stall etc) with locations and dimensions with all technical specifications.
- Design, Estimation, Costing and all other requirements for the purposed market structures and utilities with optimal engineering standards.
- Required study on major/minor agricultural commodities that has current and future potential of trading on purposed markets and their requirements like storages, cold storages, ripening chambers, cleaning, grading, packaging and other value add activities and their requirements planning for at least next 25 years.
- Conduct environmental study as per required as planning for their mitigations like waste management, Bio -composting, energy efficiency technologies, drainage etc.
- Carryout Soil test, Ground water and any other test requirement specific to market site/locations.
- Socio economic study of the market premise and locations.
- Prepare visuals and 3D models of the design /plan of market using computer software.
- Prepare construction planning with master schedule and construction program for development of the project
- Suggest proper and possible modality of sustainable market management from the FGD, Key informant and discussions with stakeholders.
- Present and supply the study documents as per the mentioned reporting obligations.

# 4 APPROACH

It is anticipated that the following approaches be adopted in course of rendering requisite services:

• Adoption of a "system perspective" approach, wherever possible instead of an ad-hoc provisional measure;

- Fielding of most able and relevant professionals to perform and accomplish their respective jobs as described in this proposal. Due care will be taken as to materialize timely and efficient mobilization to accomplish the assigned tasks within stipulated periods;
- Use of prudent tools, processes and technologies that have been tested and proven effective at the field level in on-going as well as past projects wherever applicable;
- Full use of available and applicable primary/secondary information such as reports, maps/drawings, specifications, guidelines and any other relevant information relating to the accomplishment of the proposed services with established professional standards, sound engineering, and socio-economic practices;
- Fullest use of all standards/guidelines/instructions formulated by Nepal Government.
- Close coordination and effective communication with all stakeholders and clients;
- Completion of the proposed services within the bounds of project stipulated time and resources.

# **5 METHODOLOGY**

The consultants do have liberty to use varieties of widely accepted and scientific methods to accomplish the given task. They should keep themselves informed of the relevant activities and concerned in the given context. All the activities should be carried out as per the latest applicable and established methodologies tools and techniques. CAIDMP, DOA, MOALD are the major clients of this task whose inputs and concerns should be well considered during this study.

SN	Position Professional Staffs	No	Expected Input (person Month)	Required Basic Qualification & Experience
1	TL / Senior Construction Management Engineer/ Senior Structural Engineer	1	3.50	At least Master degree on related field with 10 years of working experiences.

# 6. HUMAN RESOURCES REQUIRED

3 Architect Engineer 2 6.00 At least Bachelor degree on related field with 5 years of working experiences.   4 Senior Surveyor / Engineer 2 5.00 At least Bachelor degree on related field with 5 years of working experiences.   5 Agricultural Engineer 2 4.00 At least Bachelor degree on related field with 5 years of working experiences.   6 Mechanical Engineer 1 2.50 At least Bachelor degree on related field with 5 years of working experiences.   7 Electrical Engineer 1 2.50 At least Bachelor degree on related field with 5 years of working experiences.   8 Quantity Surveyor 2 5.00 At least Bachelor degree on related field with 5 years of working experiences.   9 Sanitary Engineer 1 2.50 At least Bachelor degree on related field with 5 years of working experiences.   10 Environmental Expert 1 3.50 At least Bachelor degree on related field with 5 years of working experiences.   11 Agriculturist 1 3.50 At least Bachelor degree on related field with 5 years of working experiences.   13 Sociologist 1 3.50 At least Bachelor degree on related field with 5 years of working experiences.   13 Support Stuffs 1 3.50 At least Bachelor degree on related field with 5 years of working experiences.	2	Structural Engineer	2	4.00	At least Master degree on related field with 5 years of working experiences.
4Senior Surveyor / Engineer25.00on related field with 5 years of working experiences.5Agricultural Engineer24.00At least Bachelor degree on related field with 3 years of working experiences.6Mechanical Engineer12.50At least Bachelor degree on related field with 5 years of working experiences.7Electrical Engineer12.50At least Bachelor degree on related field with 5 	3	Architect Engineer	2	6.00	At least Bachelor degree on related field with 5 years of working
5Agricultural Engineer24.00on related field with 3 years of working experiences.6Mechanical Engineer12.50At least Bachelor degree on related field with 5 years of working experiences.7Electrical Engineer12.50At least Bachelor degree on related field with 5 	4	Senior Surveyor / Engineer	2	5.00	on related field with 5 years of working experiences.
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11Agriculturist13.50on related field with 5 years of working experiences.12Agri. Economist13.00At least Master degree on related field with 5 years of working experiences.13Sociologist13.50At least Master degree on related field with 5 	10	Environmental Expert	1	3.00	on related field with 5 years of working
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13 Sociologist 1 3.50 on related field with 5 years of working experiences.	12	Agri. Economist	1	3.00	on related field with 5 years of working
Support Staffs	13	Sociologist	1	3.50	on related field with 5 years of working
		Support Staffs			

14	Surveyor	3	9.00	
15	Sub Engineer	2	4.50	
16	Auto CAD Expert	2	5.50	
17	Computer Assistant	2	6.00	
18	Assistants	7	22.00	

# 7. INPUTS TO BE PROVIDED BY CLIENT.

CAIDMP will provide the following support to the consultant.

- CAIDMP can provide Data/information, reports and references up to availability upon request from the consultant.
- Officials from the CAIDMP will facilitate/guide for the task up to their availability of time and resource.
- CAIDMP may provide space for discussions and meeting upon request from the consultant

### 8. OUTPUT

A comprehensive report giving outcomes of all the tasks described in the scope of the work has to be produced. The report needs to be fully referenced (with data sources identified). The final report should be submitted in 5 sets of hardcopy and electronic copies in CD each for individual market locations.

# Time Schedule and Reporting Requirements

The consultancy assignment will be effective with the contract. The consultant will be required to prepare and submit Inception Report, Progress Report and Draft Final Report; and 5 copies of Final Report (hard copy and electronic copy) in accordance with the time schedule presented below.

### **Reporting Time Schedule**

Inception Report	Within 15 days of Contract
Progress Report	Each Month.

Draft Final Report	Within 3 Months of Contract.
Final Report (comments of incorporated)	Within 3.5 Months of Contract

# 9. MODE OF PAYMENT

The amount shall be paid as per agreement to the consultant assigned for the study. However, the consultant can claim the payment either in a single installment after submission and acceptance of final report as per TOR or in installment as follows;

SN	Installment	Schedule	
1	First Installment (if necessary)	<b>20%</b> of the total amount upon submission and acceptance of desk study/inception report	
2	Second Installment	<b>20%</b> of the total amount upon submission and acceptance of field study report.	
3	Third Installment	<b>30 %</b> of the total amount upon submission and acceptance of draft final report.	
4	Final Installment	Remaining <b>30%</b> of the total amount upon submission and acceptance of final report complying with TOR.	