



REQUEST FOR QUOTATION (RFQ)
(ALL ENTRIES ARE MANDATORY)

Name of Owner/ Corporation/ Cooperative/ Agency: _____

QUOTATION NO. 554

Name of Business : _____

DATE: MAR 19 2026

Address: _____

P.R. NO. : 2026-03-SP-138

Email address: _____ Telephone No. _____

ABC: Php. 350,000.00

FUND SOURCE: DOST-PCAARRD-
 PROJECT 1-DPSCCV-CAR

The Benguet State University through its Bids and Awards Committee will undertake SVP
 for the item/s listed below under the following terms and conditions:

- All entries must be written legibly and accurately.
- Delivery period is within 60 calendar days.
- Warranty period shall be for a minimum of three months, in case of expendable supplies, and a minimum of one year in case of non- expendable supplies from date of acceptance by the University.
- Price validity shall be for a period of 40 calendar days.
- Compliance with specifications: Kindly specify in the column provided below whether the offer fully complies with the specifications or a counter offer.
- Deadline of submission of quotation is on or before 5:00 Pm of April 06, 2026. Offers may be submitted in sealed or open quotation in person, or through facsimile (074-661-1839) or email (procurement@bsu.edu.ph)
- The item/s shall be procured by: a) line item; b) lot; c) sub-lot
- Business Permit Number : _____, date of issue: _____, place of issue: _____, (If renewal of Business Permit is still on process, please indicate OR No: _____, date of OR : _____ for the payment of renewal).
- * PhilGEPS Registration Number: _____

JOSEL M. FLORENTIN
 Chairperson, BAC (Goods & Services)

College/Dept./Office: ISRD-SP

Item No.	Qty	Unit	Item	Technical Specifications (Brand and Model)		ABC	Unit Cost	Total Cost
				COMPLY	COUNTER OFFER			
Subscription Expense								
1	1	lot	Vegetable Consumers Survey (Package) Deliverables and Terms of Reference (TOR): 1. Conduct face-to-face interviews with 400 respondents (household consumers) in wet markets and green markets (talipapa) and 200 respondents from hotels, restaurants, and institutional buyers across the National Capital Region; 2. Data collection should follow the attached sampling design; 3. Field edit and edit accomplished survey questionnaires; 4. Callback (interview again) for missing data; 5. Clean, encode, and consolidate the gathered data using prescribed encoding sheet; 6. Transcribe open ended questions from recorded interviews; 7. Deliver edited, encoded, and valid survey returns to the assigned field supervisor; and 8. Complete the survey within 60 days.			350,000.00		
TOTAL						350,000.00		
XXXXXXXXXXXX								

Counter offers:

Delivery Period: _____
 Warranty: _____
 Price Validity: _____

We hereby submit our quotations, accept the general conditions for the above items and be bound by our offer.

Signature over Printed Name _____

Date and Time of Receipt of RFQ _____

* Not a ground for disqualification for failure to indicate but required as a condition for award.

SURVEY PROPOSAL

(2 Components)

Component 1: Vegetable Consumption Patterns and Preferences of Household Consumers in the National Capital Region

Component 2: Demand and Quality Requirements of Hotels, Restaurants, and Institutional Buyers in the National Capital Region

RATIONALE

The Cordillera region leads the production of highland vegetables such as potatoes, carrots, cabbage, and Chinese cabbage due to its climatic advantage in growing semi-temperate vegetables. However, the region faces persistent challenges in managing its supply chain-from production to market access. These include (1) limited market access for farmers to high-value markets, due to limited real-time market information and coordination among stakeholders and insufficient integration of smallholder farmers into formal supply chains; (2) high postharvest losses; and (3) price fluctuations. These lead to oversupply and market saturation during peak seasons, dependence on intermediaries, and reduced profitability. A coordinated supply chain ensures that production schedules align with market needs, minimizing episodes of under- or oversupply, and stabilizing prices for farmers and consumers.

Vegetables play a significant role in ensuring food security and provide a lot of health benefits at different age levels as a great source of vitamins and minerals to protect against cancer and other diseases. These benefits of vegetables are a good reason to encourage the consumers to be a part of their daily consumption. However, despite these well-established health benefits, many urban populations in developing countries including the Philippines continue to consume vegetables below recommended levels. A study of Turingan et al., (2024) reveals that Filipinos' vegetable consumption is less than the recommended vegetable intake of 400 grams by the World Health Organization (WHO), as per the Expanded National Nutrition Survey conducted from 2018 to 2019.

Metro Manila, as the country's economic and political center and the most densely populated region in the Philippines, is an appropriate setting for examining household vegetable consumption. Its large population supports numerous markets and distribution channels, giving consumers a wide range of vegetable choices. Household consumption patterns are influenced by preferences shaped by factors such as taste, income, price, and availability, which determine the type and quantity of vegetables consumed.

Highland vegetables such as carrot and cabbage are commonly produced in Benguet and transported in Metro Manila for various purposes and for consumption. A study conducted by Dagupen et al. (2009) reveals that the important product attributes of carrots for consumers, according to order of importance, are price, origin, freshness, size,

and color. Similarly, cabbage consumers gave the highest importance value to price followed by production method, origin, shape, and freshness.

A study conducted by Conception (2009) revealed that households generally purchase vegetables three times a week and predominantly from the wet market. While most households consider price as their primary criteria for purchase, quality in use is considered important. Similarly, Kouamé et al. (2013) reported that freshness, wholesomeness, and color of the fruit or leaves determined the decision to purchase vegetables. Diversification of diet which is good for health, the preference of family members, and taste were the main reasons for consuming vegetables. Taste, degree of sliminess (okra), and smell after cooking were factors that increased satisfaction during consumption.

On the demand side, the focus will be on meeting market requirements. This will involve examining different marketing chains along the value chains. Key customer requirements such as volume, quality, packaging, logistics, payment, and other terms will be identified which will be the reference information for production and post-production activities. Furthermore, initiating and sustaining linkages with various markets will require the examination and adherence to different guidelines, policies, and procedures.

With increasing population, rising household income and greater urbanization in the Philippines, markets are emerging for the vegetable industry to supply hotels, hospitals, supermarkets, restaurants and fast-food chains. These institutional buyers, who need more vegetables for their menus, are looking for reliable suppliers who can provide a constant supply at a good price and maintain good quality. Smallholder vegetable producers acting independently are generally unable to meet the quality specifications or to supply the institutional market at a competitive price. More recently, their inability to supply has been exacerbated by increasing competition from imported products.

This study aims to examine the vegetable consumption patterns and preferences of household consumers, as well as the demand and quality requirements of hotels, restaurants, and other institutional buyers in Metro Manila. By understanding the commonly consumed and procured vegetables, frequency of purchase, buying behaviors, and factors influencing preferences, the study seeks to provide valuable insights for policymakers, farmers, and market players. Ultimately, understanding these patterns can help coordinate the supply chain by ensuring that production schedules align with market demand, stabilizing prices for both farmers and buyers, and improving the allocation of vegetables to reduce oversupply.

Objectives of the Studies:

The objectives of the Household Consumers' Survey are:

1. To determine the consumption patterns of vegetables;
2. To determine the key factors associated with vegetable consumption;
3. To provide actionable insights for effective supply chain management, considering the vegetable consumption pattern; and
4. To inform the development of consumption-side potential policies and interventions.

The objectives of the Hotels, Restaurants, and Other Institutional Buyers Survey are:

1. To identify the types, volume, frequency, and seasonality of vegetables commonly procured by hotels, restaurants, and institutional (HRI) buyers in Metro Manila;
2. To examine the sourcing practices and key purchasing factors influencing supplier choice among HRI buyers;
3. To assess the quality standards and specifications required by HRI buyers (packaging, freshness, size, and certifications); and
4. To identify supply gaps and opportunities for local producers to meet HRI market needs.

SURVEY METHODOLOGY (2 Components)

Coverage

The domain of the study is the National Capital Region. The survey will cover households and hotels, restaurants, and other institutional buyers (HRI). The survey will serve to understand the demand, preferences, and market requirements of households and HRI that can help coordinate the supply chain of highland vegetables.

Reference Period

The reference period is from January to May 2026.

Scope

The data to be collected are the following:

Household Consumers Survey	HRI Survey
Block 1. Information and Consent	Block 1. Information and Consent
Block 2. Socio-economic Profile	Block. 2 Hotels and Restaurants Profile
Block 3. Vegetable Consumption	Block 3. Current Vegetable Procurement

	Block 4. Current Imported Vegetable
	Block 5. Vegetable Preferences
	Block 6. Market Linkage Opportunities

Component 1: Vegetable Consumption Patterns and Preferences of Household Consumers in the National Capital Region

Sampling Frame

For household consumers, since there is no available list of consumers, and considering an infinite population the sampling was based on the available information including the number of markets and talipapa in the 16 cities of Metro Manila. Based on Cochran's formula for an infinite population, 384 consumers will be interviewed. The following is the actual list of cities, markets, and talipapa, which will serve as the sample for household consumers survey.

CITY	Number of Markets	Number of Talipapa
Caloocan	10	2
Las Pinas	2	5
Makati	12	6
Malabon	3	-
Mandaluyong	3	-
Manila	10	4
Marikina	2	1
Muntinlupa	3	4
Navotas	1	-
Paranaque	9	2
Pasig	11	3
San Juan	1	7
Valenzuela	4	3
Pasay	3	6
Quezon City	21	25
Taguig	37	3
TOTAL	132	71

Sample Size

$$\text{Cochran (for infinite population)} = \frac{z^2 pq}{e^2} = \frac{1.96^2 (.5)(.5)}{0.05^2} = 384 \text{ consumers}$$

Sampling Design and Sample Selection Procedure

Household Consumers Survey. Stratified Two–Stage Cluster Sampling with Probability Proportional to Size was followed with market/talipapa as the first level, and the respondents as the second level.

AT THE MARKET/TALIPAPA LEVEL (First Stage)

Compute the number of sample markets/ talipapas with the design effect (deff) of cluster sampling.

deff = 1 + (m – 1) ρ, **where:** m = respondent size per cluster, ρ (rho) = Intraclass Corr. Coeff. (ICC)

Note: In many social sciences where ρ is mostly unknown, the *deff* is often 1.5 to 2. With the central limit theorem, the minimum number for large sample size per market/ talipapa would be 30 consumers (*m*).

$$\begin{aligned} \text{Number of sample markets/ talipapas (k)} &= \frac{n (\text{deff})}{m} = \frac{384 (2)}{30} \\ &= 25.6 \sim 26 \text{ markets or talipapa} \end{aligned}$$

1. Proportional allocation of the number of clusters per strata i.e. type (market and talipapa)

Type	Total No.	Weight	Sample Clusters
Markets	132	132/203 = 0.62	26 (0.62) = 17
Talipapa	71	71/203 = 0.35	26 (0.35) = 9
TOTAL	203		26

2. Probability Proportional to Size (PPS)

- a. MARKETS (n = 132)

- Assign a cumulative range with respect to the number of markets per city
- Compute the SI

$$\text{Sampling Interval (SI)} = \frac{\text{Total Units}}{\text{Clusters}} = \frac{132}{17} = 7.9$$

- Pick a random number from 1 to 7.8. Say, you randomly selected 4.
- Add the SI cumulatively.
- Thus, the 17 markets would be 6, 11.8, 19.6, 27.2, 35.2, 43, 50.8, 58.6, 66.4, 74.2, 82, 89.8, 97.6, 105.4, 113.2, 121, and 128.8.
- Since 4 is within 1 -10, which is under Caloocan, then 1 market shall be randomly selected from the 10 markets. Then, the same logic shall follow. The last column summarizes the number of markets that will be randomly selected per city.

CITY	Number of Markets	Cumulative Range	SAMPLE MARKET to be randomly selected
Caloocan	10	1 – 10	1
Las Pinas	2	11 – 12	1
Makati	12	13 – 24	1
Malabon	3	25 – 27	1
Mandaluyong	3	28 – 30	0
Manila	10	31 – 40	1
Marikina	2	41 – 42	0
Muntinlupa	3	43 – 45	1
Navotas	1	46 – 46	0
Paranaque	9	47 – 55	1
Pasig	11	56 – 66	1
San Juan	1	67 – 67	1
Valenzuela	4	68 – 71	0
Pasay	3	72 – 74	1
Quezon City	21	75 – 95	2
Taguig	37	96 – 132	5
TOTAL	132		17

b. TALIPAPA (n = 71)

- Assign a cumulative range with respect to the number of markets per city •
Compute the SI

$$\text{Sampling Interval (SI)} = \frac{\text{Total Units}}{\text{Clusters}} = \frac{71}{9} = 7.8$$

- Pick a random number from 1 to 7.9. Say, you randomly selected 6.
- Add the SI cumulatively.
- Thus, the 9 markets would be 6, 13.9, 21.8, 29.7, 37.6, 45.5, 53.4, 61.3, 69.2.
- Since 6 is within 3 - 7, which is under Las Pinas, then 1 market shall be randomly selected from the 10 markets. Then, the same logic shall follow. The last column summarizes the number of markets that will be randomly selected per city.

CITY	Number of Talipapa	Cumulative Range	SAMPLE MARKET to be randomly selected
Caloocan	2	1 – 2	0
Las Pinas	5	3 – 7	1
Makati	6	8 – 13	1
Malabon	-	-	-
Mandaluyong	-	-	-
Manila	4	14 – 17	0
Marikina	1	18 – 18	0
Muntinlupa	4	19 – 22	1
Navotas	-		
Paranaque	2	23 – 24	0
Pasig	3	25 – 27	0
San Juan	7	28 – 34	1
Valenzuela	3	35 – 37	1
Pasay	6	38 – 43	0
Quezon City	25	44 – 68	3
Taguig	3	69 – 71	1
TOTAL	71		9

Note: *Cities with no Talipapa are excluded*

AT THE RESPONDENT – LEVEL (Second Stage)

Use **ONSITE SYSTEMATIC RANDOM SAMPLING** to select the 30 consumers. You can stay at the entrance or exit of the market or talipapa that were randomly selected during peak hours, perhaps. Afterwards, interview every 10th person, who is obviously a consumer and not a vendor or reseller, carrying at least a kilo of highland vegetables.

Component 2: Demand and Quality Requirements of Hotels, Restaurants, and Institutional Buyers in the National Capital Region

Sampling Frame

The sampling frame consisted of hotels, restaurants, and institutional buyers (HRIs) identified from the official list of accredited establishments provided by the Department of Tourism (DOT) Central Office 2025. A total of 412 accredited HRIs across selected cities in Metro Manila were included in the master list, distributed as follows: 167 hotels, 139 restaurants, and 106 institutional buyers.

CITY	HOTELS	RESTAURANTS	INSTITUTIONAL BUYERS
MANILA	39	8	27
MAKATI	34	37	27
QUEZON	29	23	16
PASAY	22	11	11
PASIG	12	4	2
PARANAQUE	10	10	3
TAGUIG	7	24	3
MUNTINLUPA	6	3	1
LAS PINAS	4	2	2
MANDALUYONG	3	10	7
SAN JUAN	1	5	0
VALENZUELA	0	0	1
NAVOTAS	0	0	0
MALABON	0	0	0
CALOOCAN	0	1	3

MARIKINA	0	1	3
SUB TOTAL	167	139	106
GRAND TOTAL			412

Sample Size

From the number of HRIs, the sample size was computed using Cochran's formula, following 95% confidence interval and 5% margin of error.

$$n_0 = \frac{(1.96)^2(0.5)(0.5)}{(0.05)^2}$$

$$n_0 = 384.16$$

Adjusting to a finite population:

$$n = \frac{384.16}{1 + \frac{384.16 - 1}{412}}$$

$$n = 199.1 \approx 200 \text{ respondents}$$

Sampling Design and Sample Selection Procedure

Hotels, Restaurants, and Institutional Buyer Survey. The number of respondents per city was computed proportionally based on the total number of accredited HRIs within each city. The total sample (n = 200) was proportionally allocated across the three strata (hotels, restaurants, and institutional buyers) based on their share of the total population. Further stratification was conducted by city to ensure geographic representation. Based on the number of HRIs per city, the number of respondents per city computed are as follows:

CITY	HOTELS	RESTAURANTS	INSTITUTIONAL BUYERS	TOTAL
MANILA	19	4	13	36
MAKATI	17	18	13	48
QUEZON	14	11	8	33
PASAY	11	5	5	21
PASIG	6	2	1	9
PARANAQUE	5	5	1	11
TAGUIG	3	12	1	17

MUNTINLUPA	3	1	0	5
LAS PINAS	2	1	1	4
MANDALUYONG	1	5	3	10
SAN JUAN	0	2	0	3
VALENZUELA	0	0	0	0
NAVOTAS	0	0	0	0
MALABON	0	0	0	0
CALOOCAN	0	0	1	2
MARIKINA	0	0	1	2
TOTAL	81	67	51	200

Ethical Considerations

Compliance with the Data Privacy Act of 2012

In compliance with the Data Privacy Act of 2012 (R.A. No. 10173), individual personal information collected from the survey are secured and protected. Security measures such as, but not limited to, data backup, data encryption, data anonymity and other data protection methods will be employed to prevent unintended disclosure and data theft. No results will include individual data information.

General Guidelines in Conducting the Field Data Collection

Household Consumers Survey

Prior to data collection, enumerators were trained on the objectives of the study, the survey instrument, and ethical standards. Since there was no available list of household consumers, the population was considered infinite, and respondents were selected from identified markets and talipapa in the 16 cities of Metro Manila following the prescribed sampling procedure. Enumerators introduced themselves, explained the purpose of the study, and obtained informed consent before conducting the interview. Participation was voluntary, and respondents were assured that their answers would remain confidential and used solely for research purposes. Completed questionnaires were checked for accuracy and completeness before submission to the field supervisor.

Hotels, Restaurants, and Institutional Buyers Survey

In cases where a randomly selected establishment was unavailable, declined participation, or could not be reached after reasonable attempts, a replacement respondent was selected through random sampling from the remaining establishments within the same stratum and city to maintain proportional representation.

IMPLEMENTING AGENCIES AND ROLES

Agency	Roles
Benguet State University (BSU)	-Assist in the development of proposal and survey instruments -Assist in the report writing -Assist in the data collection -Provide funds for BSU personnel involved in the project
Department of Agriculture- Cordillera Administrative Region- Research Division (DA-CAR-ResD)	-Assist in the development of proposal and survey instruments -Assist in the report writing -Assist in the data collection

Prepared by:

CHERYLL C. LAUNIO

Chief SRS, Benguet State University

Endorsed by:

ROSCINTO IAN C. LUMBRES

Vice President for Research and Extension

