Republic of the Philippines Department of Health NATIONAL NUTRITION COUNCIL 2332 Chino Roces Avenue extension, Taguig City Tel./Fax No. 816-4239 Website: www.nnc.gov.ph

## Request for Quotation

The National Nutrition Council is requesting quotation for the hiring of services of a contractor to design a system to monitor the dietary supplementation program "Tutok Kainan" (please see attached terms of reference for details of the project).

Contractor should have previous experience in developing a similar system that allows Real-time reporting from the barangay using SMS.

Prospective bidders must submit the following eligibility documents:

- 1. Mayor's Permit
- 2. Philgeps Certificate of Registration
- 3. Statement of on-going and completed similar contracts

Contract Duration: 1 month from receipt of NTP

Total Approved Budget for the Contract (ABC) - P 850,000.00

The NNC reserves the right to reject any or all bids, to declare the bidding a failure or waive any or all information or to award such bids to the supplier whose bid is considered most advantageous to government. For more details, please call the BAC Secretariat at telephone number 8816-4239.

CHONA M. FERNANDEZ Chief, Administrative Division and Chair, Bids and Awards Committee

# Republic of the Philippines Department of Health NATIONAL NUTRITION COUNCIL

# TERMS OF REFERENCE

## I. Project Title:

Hiring of a Contractor to Design a System to Monitor the Dietary Supplementation Program or Tutok Kainan of the National Nutrition Council (NNC)

#### II. Background:

Stunting among children under-five years old continues to be a major nutrition problem, affecting millions of children. While the prevalence of stunting among children under-five years old decreased from 33.8% in 2003 to 30.3% in 2018 and then to 28.8% in 2019, the decline has been slow with increases between 2008 (32.2%) and 2011 (33.7%), 2013 (30.3%) and 2015 (33.4%). (Source: DOST-FNRI)

Furthermore, prevalence of stunting by single-age group would show that even in the first eleven months of life, stunting prevalence is greater than 10% (11.5% among 0-5 montholds and 15.5% among 6-11 montholds in 2018). In addition, the prevalence of stunting among one-year old (36.6%) is more than double that among infants 6-11 months and remains at about the same level for the other single-age groups up to 4 years old.

Poor maternal nutritional status as well as poor infant and young child feeding practices can help explain this trend. For the former, results of national nutrition surveys have shown that the prevalence of nutritionally-at-risk pregnant women has hovered around the 25% level since 2011 (25% in 2011, 24.8% in 2013, and 24.7% in 2015), with a decrease to 20% in 2018.

The practice of complementary feeding or the introduction of semi-solid and solid foods with continued breastfeeding has also been very poor.

This situation presents the urgent need for interventions to improve maternal nutritional status and complementary feeding practices. While there have been efforts along these lines particularly along nutrition education (including counseling), direct assistance in the form of food or dietary supplementation has been missing.

In order to address this gap, NNC operationalizes RA 11148 or the *Kalusugan at Nutrisyon ng Mag-Nanay* Act by zeroing on one of the needed services indicated in the law that has not been given attention especially the Dietary Supplementation Program of pregnant women and young children 6-23 months old.

NNC shall provide supplemental food to pregnant women for 90 calendar days and complementary food for children 6-23 months for 180 calendar days with priority to those who are nutritionally at-risk or undernourished. The beneficiaries will be strictly monitored to ensure they consume the food provided for them. Thus, the program shall be known as Tutok Kainan.

For this purpose, the NNC would like to determine the effectiveness of the implementation of the Tutok Kainan for pregnant women given the substantial investment of the government used in its implementation. The NNC shall engage the services of a contractor to design a system to allow monitoring of its implementation from the field. The contractor to be hired should have a previous experience in developing a similar system that allows real-time reporting from the field using SMS, and can generate reports daily, weekly, and monthly aggregated by barangay up to the national level.

NNC does not have the human resource to develop a monitoring system needed by the Program. It is the best interest of the project that a contractor be hired considering that such is allowed under RA 9184 or the Government Procurement Reform Act.

#### III. Objective:

The project aims to hire a contractor to develop a system that will monitor the implementation of the Dietary Supplementation Program for pregnant women in real-time and to facilitate the delivery of nutrition messages to beneficiaries and program implementers.

IV. Expected Output

Online reporting system to monitor the implementation of the dietary supplementation program in real-time through SMS that can generate reports aggregated by time and area, as well as transmits SMS alerts and key nutrition messages to the beneficiaries.

V. Duration

The project will have a duration of one month to include development of the system, and training for the users, upon receipt of Notice to Proceed.

# VI. Technical Specifications:

The system should have the following features:

1. Inbound SMS

The following are the features of the system:

- a. The system should allow the field personnel to send formatted text messages to a designated mobile number. This mobile number can be a number on a designated SIM or a virtual number that is defined by the telco.
- b. The system may be housed on-premises (in NNC) or in the cloud, with appropriate security measures in place to safeguard the information hosted by the system. These measures should be compliant with the existing data privacy and data security laws of the Philippines.
- c. The system should have an interface for managing the users who are authorized to send messages to the system.
- d. The system should be able to extract required information from inbound messages from authorized users, as reported by the field personnel. The extracted values will then be stored in a database that can be made accessible to other systems.

e. The format of the text message will be provided by NNC.

# 2. Outbound SMS

The following are the features of the system:

- a. The system should be accessible via a designated URL. It may be housed on-premises or in the cloud, with appropriate security measures in place to safeguard the information hosted by the system. These measures should be compliant with the existing data privacy and data security laws of the Philippines.
- b. The system should have an interface for managing the users who are authorized to send messages and authorized to approve the deployment of messages.
- c. The system should allow the end-user to enter numbers one-by-one (for small text broadcasts) and in bulk via a text file (for broadcasts to a large number of recipients).
- d. There should be an on-screen character counter so that the user can keep track of the message length.
- e. The system should have a preview screen where the user can see how the message will look like on the screen of the recipient's mobile phone whether the recipient is using a normal GSM handset (analog phone), or a smartphone.
- f. The system should be able to route the message to the appropriate telco based on the mobile number of the recipient.
- g. The system should be able to send messages at the rate of at least 20 messages per second.
- h. The system should be able to generate reports such as:
  - 1) Total number of numbers in the recipient list that was uploaded for a batch.
  - 2) Number of messages sent for a given batch, expressed as a fraction (e.g. 350/10,000) and as a percentage of total number of recipients in the queue.
  - 3) Number of messages sent per telco.

#### 3. Geotagging of Images

The following are the features of the system:

- a. The system should be accessible via a designated URL. It may be housed on-premises or in the cloud, with appropriate security measures in place to safeguard the information hosted by the system. These measures should be compliant with the existing data privacy and data security laws of the Philippines.
- b. The system should allow the administrators to create and maintain a list of authorized mobile numbers that will be allowed to upload images to the system from their mobile phones to a designated URL.
- c. Once uploaded, the system will check if the appropriate the image has geographic information embedded in its EXIF (exchangeable image file format) data. If no geographic information was found, the system should notify the sender to make sure that the location services of his/her mobile phone is active for the geographic information (coordinates) to be embedded in the EXIF. If the image file has geographic information, the system should be able to extract it and store the coordinates in a database along with the corresponding reference to the original image file.

- d. The system should allow its users to display the collected geographic information from the images as points on a map. When a user clicks on the point, the system should display the corresponding image as well as display information associated with the image.
- e. The system should be able to label the points on the map with the corresponding filename of the image.
- f. The base map of the system should include the following map layers, at the very least: barangay boundaries, city/municipal boundaries, provincial boundaries, regional boundaries, river system, and primary road network.
- g. The system should allow the end-user to filter the displayed points based on:
  - 1) Date uploaded: single date or date range
  - 2) Geographic location: by region, province, city/municipality, barangay

## 4. Reporting

The system should be able to generate reports aggregated by time (daily, weekly, monthly) and by area (by barangay, by municipality or city, by province).

## VII. Roles and Responsibilities

## 1. Contractor

- Submit an inception report to include program of work for the development of the system;
- b. Develop a beta-version of the system for pre-testing;
- c. Revise and finalize the beta-version based on the results of the pre-testing;
- d. Train a core team of users who will roll-out the system;
- e. Submit a Manual of Operations of the system with instructions for troubleshooting the system;
- f. Conduct aftersales technical support for one month after submission of final output; and
- g. Submit certified financial report.
- 2. National Nutrition Council
  - a. Provide the contractor with the background and requirements of the project, and together with the contractor, pre-test the beta-version of the system;
  - b. Review the revised version of the system based on the results of the pre-test of the beta version;
  - c. Assist the contractor in coordinating the training for a core team of users;
  - d. Assign a focal person who will coordinate the requirements of the contractor; and
  - e. Process the payment of the contractor upon submission of complete deliverables.

#### VIII. Project Cost

The total project cost of Php 850,000 inclusive of taxes charged against NNC's 310100100002000 funds (NSD) subject to existing government accounting and

auditing rules and regulations. The budget includes the cost for the development of the system, development of manual of operations, training for the end-users and internal IT support system; and aftersales technical support.

## IX. Payment Terms

| Payment                 | Deliverable   | Amount (Php) |
|-------------------------|---|--------------|
| First payment (15%)     | Upon submission and approval of the inception report  | 127,500      |
| Second payment<br>(40%) | Upon receipt of billing and<br>submission of beta-version of the<br>system  | 340,000      |
| Third payment<br>(30%   | Upon receipt of billing and<br>submission of final version of the<br>system incorporating comments on<br>the beta-version | 255,000      |
| Fourth payment (15%)    | Upon receipt of billing and<br>completion of training for users and<br>submission of Manual of Operations.                | 127,500      |
| Total                   |   | 850.000      |

The contractor shall be paid in the following tranches:

#### X. Timetable

| Activities                                   |   | Wk 1 | Wk 2 | Wk 3 | Wk 4 |
|--|---|------|------|------|------|
| 1. Signing of Contract of Services           | X |      |      |      |      |
| 2. Submission of Inception Report            | Х |      |      |      |      |
| 3. Review and approval by NNC                | Х |      |      |      | -    |
| 4. System development                        |   | Х    | Х    |      | *    |
| 5. Submission of beta-version and pretesting |   |      | X    |      |      |
| 6. Revision of beta-version and finalization |   |      | X    | Х    |      |
| 7. Deployment of the system                  |   |      |      |      | X    |

## XI. Penalty Clause

A penalty clause of 1/10 of 1% per day of delay on the submission of required outputs shall be imposed as provided by existing government accounting and auditing rules and regulations.

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