

## REQUEST FOR PROPOSALS

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# LANDSCAPE ANALYSIS AND REVIEW OF PORTABLE QUANTITATIVE AND SEMI QUANTITATIVE DEVICES FOR MEASUREMENT OF VITAMIN A IN EDIBLE OIL: FIELD READINESS OF AVAILABLE OPTIONS

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Issued by  
The Global Alliance for Improved Nutrition (GAIN)

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## I. PROJECT BACKGROUND AND SCOPE OF WORK

### 1. ABOUT GAIN

The Global Alliance for Improved Nutrition (GAIN) is a Swiss-based foundation launched at the UN in 2002 to tackle the human suffering caused by malnutrition. Working with both governments and businesses, we aim to transform food systems so that they deliver more nutritious food for all people.

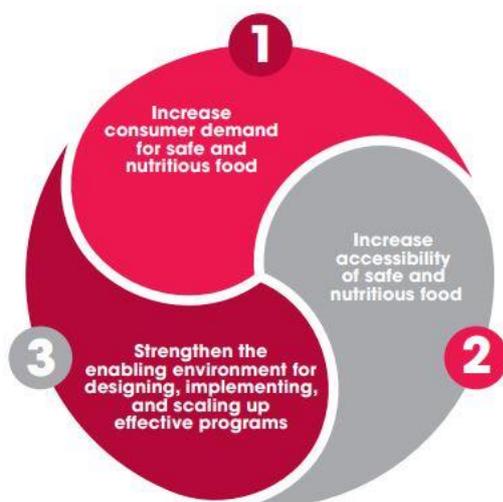
At GAIN, we believe that everyone in the world should have access to nutritious and safe food. We work to understand and deliver specific solutions to the daily challenge of food insecurity faced by poor people. By understanding that there is no “one-size-fits-all” model, we develop alliances and build tailored programmes, using a variety of flexible models and approaches.

We build alliances between governments, local and global businesses, and civil society to deliver sustainable improvements at scale. We are part of a global network of partners working together to create sustainable solutions to malnutrition. Through alliances, we provide technical, financial and policy support to key participants in the food system. We use specific learning, evidence of impact, and results of projects and programmes to shape and influence the actions of others.

Headquartered in Geneva, Switzerland, GAIN has representative offices in Denmark, The Netherlands, the United Kingdom, and the United States. In addition, we have country offices in Bangladesh, Ethiopia, India, Indonesia, Kenya, Mozambique, Nigeria, Pakistan, and Tanzania. Programmes and projects are carried out in a variety of other countries, particularly in Africa and Asia.

GAIN’s programs in Africa and Asia enable better diets via nutritional products, such as fortified staple foods, including cooking oil and flour, and condiments like salt and soy sauce.

GAIN’s work to improve the consumption of safe and nutritious food is based on three strategic objectives:



## 2. BACKGROUND

The Global Alliance for Improved Nutrition (GAIN) is issuing this Request for Proposal (RFP) and will be the administrative lead organisation for this RFP.

Over two billion people, mainly living in Asia and Africa, are affected by malnutrition. One of the most critical forms of malnutrition is micronutrient deficiency, or a lack of the essential vitamins and minerals required for healthy growth, development and function. Children and women of reproductive age are most often affected, with children suffering irreversible damage such as decreased cognitive development potential and pregnant women at risk of increased maternal mortality. According to a 2013 Lancet series on undernutrition, malnutrition is an underlying cause of 45% of all child deaths under age five<sup>1</sup>. Micronutrient deficiency also reduces socio-economic progress and development potential: adults who were malnourished during childhood earn on average 20% less than those who were not<sup>2</sup>. This impacts countries: the Cost of Hunger in Africa Study found that Ethiopia lost an estimated US\$4.7 billion in 2009 because of child under-nutrition, equivalent to 16.5% of GDP.

Micronutrient deficiency has multiple underlying causes but is most directly affected by narrow diets of energy-dense staple foods that lack micronutrients (refined cereal grains, rice and cassava). One of the most rapid, cost-effective and directly impactful strategies to reach hundreds of millions to combat micronutrient malnutrition is to fortify staple grains and condiments with vitamins and minerals – this process is done through the addition of *Vitamin and Mineral Premix or straight fortificants (either a Vitamin or Mineral)* to a food vehicle, e.g. wheat flour, maize flour, edible oil or condiments such as sugar, soy sauce and salt. Food fortification has been ranked among the top three international development priorities by the Copenhagen Consensus<sup>3</sup>. The intervention needs to be scaled up to ensure it plays its part to help achieve the Sustainable Development Goals (SDGs), including Goal 2 which aims to end hunger and ensure access by all people, in particular, the poor and those in vulnerable situations, to safe, nutritious and sufficient food and end all forms of malnutrition by 2030. Staple and condiment fortification increases intakes of critical micronutrients, including iron, folic acid, vitamin A and iodine in populations without requiring them to change their diet or household spending and has been used effectively since the early 20th century in the U.S. and Europe. GAIN has, over the past 18 years, mobilised partnerships to catalyse food fortification programmes in over 30 countries.

GAIN is seeking the services of an individual or organisation who will conduct an extensive review to identify all commercially available devices that may be used to test for the presence of vitamin A in refined edible vegetable oils which are commonly available in countries with vitamin A fortification programmes including: Palm, soy, cottonseed, sunflower, peanut, rapeseed, coconut and rice bran oils.

This research will be conducted to take account of the situation and activity globally.

Pilot assessment work to be planned as part of a research and development should be focused on being conducted in India as a priority. This will be supported where appropriate by GAIN and their country office, India.

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<sup>1</sup> Black RE, Victora CG, Walker SP, Bhutta ZA, Christian P, de Onis M, et al. Maternal and child undernutrition and overweight in low-income and middle-income countries. *Lancet* 2013;382:427-451.

<sup>2</sup> Grantham-McGregor S, Cheung YB, Cueto S, Glewwe P, Richter L, Strupp B. Developmental potential in the first 5 years for children in developing countries. *Lancet* 2007;369:60–70.

<sup>3</sup> Hoddinott J, Rosegrant M, Torero M. Hunger and malnutrition. In Lomborg B, editor. *Global problems, smart solutions: costs and benefits*. New York: Cambridge University Press and Copenhagen Consensus Center; 2013: 332-367.

### 3. SCOPE OF WORK AND DELIVERABLES

#### 3.1 CURRENT SITUATION

Several quantitative testing methodologies for the determination of Vitamin A in fortified products (edible oils, sugar and flour) exist. These are mostly lab-based and require significant capital investment in high-cost equipment such as HPLC. This option may only be commercially feasible for a business to operate if the number of tests required is sufficiently high. Another option is to send samples to a commercial laboratory for analysis – this can be time consuming and the cost of analysis is usually prohibitively high. For internal quality control, the rapid testing of Vitamin A by quantitative or semi-quantitative methods has the potential to provide many benefits in cost and time but the options are limited. Where available, the devices can be expensive, they may not be sufficiently “rapid”. Some are not so easy to use reliably and the consumables in the form of vials/reagents may not be locally available.

This consultancy will focus on landscaping and mapping various “quantitative” and “semi-quantitative” devices or alternatives for Vitamin A analysis in collaboration with key industry players, research institutes and diagnostics devices manufacturers. Where candidate devices or technologies are identified and readily available, these can be validated by industry as part of their internal quality controls. The report may also identify devices/prototypes in development showing promise and also R&D needs for cost effective devices – a principal consideration would be that any such devices which requires developing should make use of reagents that are available on the local market in most developing countries.

#### 3.2 SCOPE OF WORK

Assessment of currently available devices

Devices should be quantitative or semi-quantitative and have the capability to detect the presence of vitamin A at levels consistent with those of national fortification programmes.

The testing devices to be included in this review should broadly meet the following criteria:

- Designed to be used by those who are not highly trained in food or chemical analysis
- Be used in an environment which is not restricted to a fully equipped testing laboratory
- Able to provide useful data to indicate whether an oil has been fortified around a target level or within a target range
- Be affordable in terms of capital investment relative to ‘fixed-equipment’ laboratory test methods such as UV-visible spectrophotometry and HPLC high-performance liquid chromatography
- Portable and easily able to be set up in a new location

Devices are to be assessed and compared by using all published information, research papers and manufacturer’s data. Information should be supported by using multiple sources for each device and should include interviews with manufacturers, users, regulators and other parties.

Devices should be compared using a wide range of criteria including but not limited to:

- Affordability/cost of device
- Availability & affordability of consumables
- Special storage conditions
- Shelf life of consumables
- Calibration requirement
- Simplicity/ease of use including sample preparation and overall time required for analysis
- Capability to determine vitamin A levels around a national fortification target level or within a target range
- Portability
- Measurement uncertainty

- Reliability & repeatability of results
- Validation against established reference methods including HPLC
- Availability of manufacturer's support
- Ability to test a range of oil types
- Manufacturer's current and potential capacity to supply a global demand either directly or through a distribution network

### 3.3 RESEARCH & DEVELOPMENT

A second area of work will extend to new research and development.

From the **assessment of currently available devices**, gaps will be identified, and a set of recommendations issued relating to areas to be addressed or developed in existing devices.

These recommendations may be used constructively by current manufacturers to modify and improve their products, or for new players in the market to develop new products that meet demand or for research organisations to embark on a programme of research work using available technology to develop and create potential new devices which meets the demands of industry, regulators and other stakeholders.

To steer such a programme of research and development, the service provider will prepare the terms of reference and compile a list of relevant organisations who have been identified to potentially undertake such a programme.

Pilot assessment work should be planned to be conducted in India as a priority.

### 3.4 DELIVERABLES

Comprehensive reporting of device assessment

A comparative analysis of devices will need to be provided along with a discussion about their advantages and disadvantages. Conclusions and recommendations are to be drawn.

Research & development recommendations including the cost and resources required to carry out such programmes of work will be estimated so that their feasibility can be gauged.

### 3.5 QUALIFICATIONS

The research organisation or consultancy taking on this set of work will be expected to have extensive experience in scientific research with focus on food and nutrition. Proven knowledge and exposure to the markets and food supply chain. Demonstrable experience and knowledge of the food processing and, or food analysis arena.

### 3.6 KEY CRITERIA

Proven research expertise in food processing technology, agriculture, quality systems or other relevant field, and at least 15 years work experience in the relevant field or combination of individuals qualified in these areas.

Strong analytical skills and experience relevant to the understanding and implementation of practical research.

Proven experience in working with similar projects related to food systems in developing countries with global and regional expertise would be an advantage.

Excellent knowledge of English and ability to communicate effectively.

Excellent writing skills in the English language.

## II. INSTRUCTIONS FOR RESPONDING

This section addresses the process for responding to this solicitation. Applicants are encouraged to review this prior to completing their responses.

### 1. CONTACT

**David Morgan** is part of the selection team of the organisation and will review the proposals. They will be available via email to respond to clarifications on this solicitation. Please direct all inquiries and other communications to the contact below. Responses will not be confidential except in cases where proprietary information is involved.

- David Morgan: Senior Technical Specialist – Quality & Safety  
[dmorgan@gainhealth.org](mailto:dmorgan@gainhealth.org)  
+44 7867 475400

### 2. BUDGET

Applicants are required to provide GAIN with an overall budget and a categorised breakdown. The final budget amount will be approved by the organisation prior to starting the project.

### 3. FORMAT FOR PROPOSAL

The proposal may be submitted in the proposer's format

In response to this Request for Proposal, organisations/consultancies are requested to prepare a detailed proposal with accompanying budget explaining how the organization will address the abovementioned areas of work. The proposal should list the details of the individuals who will be involved, as well as expected level of effort from during the project. Any assumptions made should be clearly listed in the proposal.

#### 3.1 COMPONENTS

- Description of previous relevant work (maximum 1 page)
- Composition of team with names and brief bio of all key staff
- Detailed proposal explaining how the areas of work mentioned in Scope of Work will be addressed (maximum 10 pages)
- Budget – for multiple countries, budgets for each country should be presented separately.
- Detailed budget justification
- Risk and mitigation strategy
- Workplan and timeline

### 4. SUBMISSION

By email to [qualitynetwork@gainhealth.org](mailto:qualitynetwork@gainhealth.org)

### 5. TIMELINES

Proposals to be received by	20 July 2020
Selection decision	3 August 2020
Contractual arrangements	14 August
Study to commence	24 August 2020

Complete final report submissions      31 December 2020

Completed proposals should be submitted to GAIN **by close of day 20 July 2020 Central European Time.**

Printed hard copy submissions should not be made

## **6. UNACCEPTABLE**

The following proposals will automatically not be considered or accepted:

- Proposals that are received after the RFP deadline at the specified receiving address.
- Proposals received by fax.
- Incomplete proposals.

## **7. REVISIONS**

Proposals may be revised by electronic mail and confirmed by hard copy provided such revision(s) are received before the deadline.

## **8. ACCEPTANCE**

GAIN will not necessarily accept the lowest cost or any of the Proposals submitted. Accordingly, eligibility requirements, evaluation criteria and mandatory requirements shall govern.

## **9. COMPLETION**

- In case of errors in calculating overall costs, the unit costs will govern.
- It is the applicant's responsibility to understand the requirements and instructions specified by GAIN. In the event that clarification is necessary, applicants are advised to contact the responsible person at GAIN under section II. point 1., prior to making their submission.
- While GAIN has used considerable efforts to ensure an accurate representation in this Request for Proposal (RFP), the information contained in this RFP is supplied solely as a guideline. The information is not warranted to be accurate by GAIN. Nothing in this RFP is intended to relieve applicants from forming their own opinions and conclusions with respect to the matters addressed in this RFP.
- By responding to this RFP, the applicant confirms its understanding that failing to comply with any of the RFP conditions may result in the disqualification of their submission.

## **10. RIGHTS OF REJECTION**

GAIN reserves the right to reject any or all submissions or to cancel or withdraw this RFP for any reason and at its sole discretion without incurring any cost or liability for costs or damages incurred by any applicant, including, without limitation, any expenses incurred in the preparation of the submission. The applicant acknowledges and agrees that GAIN will not indemnify the applicant for any costs, expenses, payments or damages directly or indirectly linked to the preparation of the submission.

## **11. REFERENCES**

GAIN reserves the right, before awarding the Proposal, to require the applicant to submit such evidence of qualifications as it may deem necessary, and will consider evidence concerning the financial, technical and other qualifications and abilities of the applicant.

## 12. RELEASE OF INFORMATION

After awarding the Proposal and upon written request to GAIN, only the following information will be released:

- Name of the successful applicant.
- The applicant's own individual ranking.

## III. TERMS AND CONDITIONS OF THIS SOLICITATION

### 1. NOTICE OF NON-BINDING SOLICITATION

GAIN reserves the right to reject any and all bids received in response to this solicitation and is in no way bound to accept any proposal. GAIN additionally reserves the right to negotiate the substance of the successful applicants' proposals, as well as the option of accepting partial components of a proposal if deemed appropriate.

### 2. CONFIDENTIALITY

All information provided as part of this solicitation is considered confidential. In the event that any information is inappropriately released, GAIN will seek appropriate remedies as allowed. Proposals, discussions, and all information received in response to this solicitation will be held as strictly confidential.

### 3. RIGHT TO FINAL NEGOTIATIONS ON THE PROPOSAL

GAIN reserves the right to negotiate on the final costs, and the final scope of work of the proposal. GAIN reserves the right to limit or include third parties at GAIN's sole and full discretion in such negotiations.

### 4. EVALUATION CRITERIA

Proposals will be reviewed by the Selection Team. The following indicate a list of the significant criteria against which proposals will be assessed. This list is not exhaustive or 100% inclusive and is provided to enhance the applicants' ability to respond with substance.

Applicants are required to submit the following information, conforming to the guidelines given in this section:

- Understanding of the scope of work:
  - Proposal shall demonstrate a clear understanding of the project objective and deliverables as outlined in Section I.
- Demonstrate a clear understanding of the technical requirements of this RFP:
  - Providing detailed technical documentation of the proposed strategy.
  - Evidence of experience delivering solutions using the proposed information technology platform.
- The creative and methodological approaches required to implement each of the parts of the scope of work.
- Comprehensiveness of work plan and reasonableness of proposed time frame:
  - Proposal shall include a feasible work plan to ensure successful completion of deliverables.
  - The work plan details how activities will be coordinated.

- Detailed budget and cost-effectiveness of proposed approach:
  - Evidence of cost-effective approaches to undertaking the scope of work within the proposed budget.
  - Proposal shall identify possible challenges and include creative approaches to addressing them.
- Management and personnel plan:
  - The team members working on this project shall have the relevant qualifications and overall experience required to successfully implement the project.
  - Roles and responsibilities of each team member shall be clearly defined. GAIN shall have one main contact person clearly identified in the proposal.
- A duly completed offer of services.

**GAIN reserves the right to contact the individuals and contractor(s) in order to verify the information provided as part of the Proposal.**

## **5. REVIEW PROCESS**

The review process will involve a Review Panel with participants selected by GAIN.

## **6. LIMITATIONS WITH REGARD TO THIRD PARTIES**

GAIN does not represent, warrant, or act as agent for any third party as a result of this solicitation. This solicitation does not authorize any third party to bind or commit GAIN in any way without GAIN's express written consent.

## **7. COMMUNICATION**

All communication regarding this solicitation shall be directed to appropriate parties at GAIN. Contacting third parties involved in the RFP, the review panel, or any other party may be considered a conflict of interest and could result in disqualification of the proposal.

## **8. FINAL ACCEPTANCE**

Award of a Proposal does not imply acceptance of its terms and conditions. GAIN reserves the right to negotiate on the final terms and conditions including the costs and the scope of work when negotiating the final contract to be agreed between GAIN and the applicant.

## **9. VALIDITY PERIOD**

The offer of services will remain valid for a period of 60 days after the Proposal closing date. In the event of award, the successful applicant will be expected to enter into a contract subject to GAIN's terms and conditions.

## **10. INTELLECTUAL PROPERTY**

Subject to the terms of the contract to be concluded between GAIN and the applicant, the ownership of the intellectual property related to the scope of work of the contract, including technical information, know-how, processes, copyrights, models, drawings, source code and specifications developed by the applicant in performance of the contract shall vest entirely with GAIN.

**11. SCOPE OF CHANGE**

Once the contract is signed, no increase in the liability of GAIN or in the fees to be paid by GAIN for the services resulting from any change, modification or interpretation of the documents will be authorised or paid to the applicant unless such change, modification or interpretation has received the express prior written approval of GAIN.

**IV. OFFER OF SERVICES**

- 1. Offer submitted by:

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(Print or type business, corporate name and address)

- 2. I (We) the undersigned hereby offer to GAIN, to furnish all necessary expertise, supervision, materials, and other things necessary to complete to the entire satisfaction of the Executive Director or authorised representative, the work as described in the Request for Proposal according to the terms and conditions of GAIN for the following prices:
  - a. Click or tap here to enter text.
  - b. Click or tap here to enter text.
  - c. Click or tap here to enter text.
  - d. Click or tap here to enter text.
- 3. I (We) agree that the Offer of Services will remain valid for a period of sixty days (60) calendar days after the date of its receipt by GAIN.
- 4. I (We) herewith submit the following:
  - (a) A Proposal to undertake the work, in accordance with GAIN's requirements specified.
  - (b) A duly completed offer of services, subject to the terms herein.

**OFFERS WHICH DO NOT CONTAIN THE ABOVE-MENTIONED DOCUMENTATION OR DEVIATE FROM THE PRESCRIBED COSTING FORMAT MAY BE CONSIDERED INCOMPLETE AND NON-RESPONSIVE.**

Date this day of Click or tap here to enter text. in Click or tap here to enter text.

\_\_\_\_\_ Click or tap here to enter text.

Signature (applicant)

\_\_\_\_\_ Click or tap here to enter text.

Signature (applicant)

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