



**FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS**  
**Terms of Reference for Consultant/PSA**

<b>Name:</b>	
<b>Job Title:</b> National or International consultant – Sustainability	
<b>Division/Department:</b> FAO Vietnam Programme	
<b>Programme/Project Number:</b> UNJP/VIE/054/UNJ – (Enhancing NAMA Readiness in Viet Nam)	
<b>Location:</b> Must be based in Hanoi with occasional travels to provinces.	
<b>Expected Start Date of Assignment:</b>	<b>Duration:</b> 01 months (July-August 2014)
<b>Reports to: Name:</b> TBD	<b>Title:</b> FAO VN Programme Officer

**GENERAL DESCRIPTION OF TASK(S) AND OBJECTIVES TO BE ACHIEVED**

**1. Background**

Viet Nam has urgent needs to develop greenhouse gas (GHG) mitigation options from agriculture sector as communicated through the biannual National Communications to the UNFCCC. In preparation of suitable mitigation options, the Government of Viet Nam has approved “Plan of GHG emissions management” through the Decision No. 1775/QĐ-TTg 21 November 2012 where the development of NAMA framework is considered a key step for such management. However, the capacity to streamline and implement readily applicable emission-reduction pathways that enable the country to successfully balance socio-economic development targets with reduction in GHGs emission targets is currently limited.

Agriculture not only suffers from the impacts of climate change such as reduction of productivity and high level of food insecurity. The agricultural sector is also responsible for 43 per cent of national GHG emissions in Viet Nam in the year of 2000 (SNC, 2010). But agriculture has the potential to be an important part of the solution, through reducing a significant amount of the emissions. As an increasingly industrialized food producing country, alternative systems that convert excess agricultural by-products into food, energy, and fertilisers such as household biogas and nutrient-rich biogas slurry for smallholder farmers are proposed in Viet Nam. These systems potentially represent lower carbon pathways than business as usual and are known as “integrated food-energy systems” (IFES). While the scaling up of such integrated farming systems combined with biogas technologies or agroforestry systems are a potential low-emission pathway, it needs to be determined whether they are sustainable in environmental, economic and social aspects, and whether an enabling environment exists to facilitate their replication and large-scale dissemination.

Due to the large potential of IFES to reduce GHG emissions while ensuring food security, these systems have been suggested as a pilot case to exercise the development of an agricultural NAMA in Viet Nam. A significant progress has been made with the development of relevant IFES in Viet Nam in the past decades however, an overarching framework that ensures both food security and low carbon pathway of the country is still missing: more diversified mitigation options from sub-sectors and scale of economy are still a challenge to success. Besides household and commercial manure treatment systems, emissions from crop production within the wide variety of Viet Nam specific IFES cases, those that are based on wetland rice cultivation is of particular importance to Viet Nam due to its large contribution driven by methane emission. And the socio-economic benefits of IFES on livelihood, climate change and other direct environmental benefits need to be fully recognized among farmers, national experts, and policy makers of Viet Nam.

Analytical methodologies need to be urgently applied to define current and potential IFES pathways that minimise inefficiencies and thereby form the basis for an agricultural NAMA. Policy makers and national experts have to be trained in these analytical methodologies, and most importantly, government policy has to be promoted to encourage both industrial producers and smallholders to actively participate in the sustained application of lower carbon emission pathways of food and energy production.

## 2. Objectives of the Project

The goal of this project is to support ‘climate-smart’ agriculture through Integrated Food-Energy Systems (IFES) and to improve the national capacity for planning and implementing agriculture NAMAs in Viet Nam.

This project will contribute outcome that the national capacity will be developed to enable the adoption of NAMA from agricultural production practices using IFES as a pilot with a focus on integrated crop-livestock systems and renewable energy options. On impact level, the project outcomes may positively influence in reducing fossil fuel based energy and fertilizer use in the lowlands of Viet Nam, while, at the same time, sustainably increasing agricultural productivity and improving the resilience of smallholder farming systems to climate change and variability.

This project will contribute following outputs: (i) policy guidelines for building NAMA systems in agriculture sector of Viet Nam; (ii) improved technical capacity of national experts for data collection on GHG emissions, modelling of emission factors and interpretation to define mitigation options in agricultural sector; (iii) increased capacity of national policymakers to design and implement climate smart agriculture policies and; (v) increased readiness of national policymakers to develop policies that promote and support the NAMA implementation and so contribute to international initiatives to combat climate change.

## 3. Scope of service

**Overall task:** Support for sustainability assessment component of the project as an integral part of the output 1 of the project “A guideline for low carbon pathway options IFES in Vietnam is developed”. Under the overall supervision of FAO Vietnam programme officer and technical supervision of the FAO Rome (LTU) and following the framework developed by LTU, the international/national consultant will contribute to successful implementation of the Output 1 with attention to, but not limited to the following project activities:

A2: Assess triple bottom line sustainability aspects of existing system and analyse existing data on emissions in IFES systems

### **Core tasks include:**

Under the overall supervision of FAO Vietnam programme officer and technical supervision of the FAO Rome (LTU), the consultant will undertake the following activities:

1. Perform evidence-based assessment of sustainability and replicability of integrated food and energy systems;
  - (1) Assessing the sustainability of IFES;
    - Formulate the exact objectives of the sustainability assessment
    - Define the system, the local context and its actors
    - Select relevant criteria and indicators
    - Define reference values to measure sustainability
    - Define an appropriate sampling design and collect data
    - Report the results (assessment report), considering coherence of the Synthesis report of the output 1
  - (2) Assessing the replicability of IFES;
    - Identify the exact objectives of the replicability assessment
    - Define the system, its context and involved actors
    - Identify leading questions and features
    - Define the sampling design and collect data
    - Weigh the answers and make an informed decision
    - Report the results (assessment report), considering coherence of the Synthesis report of the output 1
  - (3) Provide an executive summary document containing key recommendations for policy makers to be circulated at the stakeholder consultation meeting;
  - (4) Travel to selected systems for field work if necessary;
  - (5) Take part in technical discussions/webinars/conference calls with FAO VN, FAO Regional office and HQs if necessary.

## 2. Reporting

The consultant will report to the FAO Vietnam office.

## 3. Qualifications/selecting criteria

- Good knowledge and proven record of professional experience on agricultural sustainability, with attention to integrated farming system and renewable energy;
- Strong analytical skills and proven record of scientific writing is a must;
- Excellent verbal communication skills, especially in culturally diverse stakeholder setting;
- Current knowledge of Climate Smart Agriculture is a plus;
- Strong coordination and time & project management skills;
- Knowledge of Vietnam and the Mekong region, especially in the area of agriculture and rural development;
- Ability to work under tight deadlines and to handle multi-tasking;
- Computer literacy especially in the use of Microsoft Office software;
- Strong competency in (verbal and written) English is a must and knowledge in Vietnamese language is a plus;
- Must be based in Hanoi, Vietnam (international flight fare will not be covered);
- Master's degree or higher in the relevant field is required;
- Willingness to travel to provinces of Vietnam.

### KEY PERFORMANCE INDICATORS

Expected Outputs: stated below.

Required Completion Date:  
15 August 2014 (with a possibility of extension)

- Sustainability assessment report (July 15, 2014)
- Replicability assessment report (July 30, 2014)
- Executive summary document for policy makers (July 31, 2014)