



TERMS OF REFERENCE – Carbon credit potential study

Evolving a Women-centred Extension Model for Improved Cook Stoves Extension (SWITCH-Asia II)

This document sets out the terms on which **CARE France** is aiming to hire the professional services of a consultant/center of research to carry out a study on *the relevance to use carbon credits to finance the business model of the improved cook stoves in India.*

| | |
|------------------------------|--|
| CONSULTANCY TO: | <i>Evaluate the relevance to use carbon credits to finance the business model of improved cook stoves in India</i> |
| PROJECT | Evolving a Women-centered Model of Extension of Improved Cook Stoves for Sustained Adoption at Scale |
| PROJECT AREA | Kalahandi and Kandhamal Districts of Odisha and Jashpur District of Chhattisgarh, India |
| NGO implementing the project | CARE India in partnership with CARE France |
| TIMELINE | Publication of the TOR: MAY 2018 Study: JUNE-MID AUG 2018 |

1. Background

Founded in 1945, CARE is one of the world's leading humanitarian organizations. It is non-partisan and non-sectarian. In 2016, CARE worked in 94 countries and reached 80 million people around the world. In its **emergency response** and **long-term development programs**, CARE seeks to fight underlying causes of poverty. CARE places **special focus on working alongside poor girls and women** because, equipped with the proper resources, they have the power to lift whole families and entire communities out of poverty.

CARE INDIA (CISSD) is the lead applicant in the project “Evolving a Women-centered Model of Extension of Improved Cook Stoves for Sustained Adoption at Scale” and CARE France is co-applicant.

CARE India, based in National Capital Region of Delhi, with offices in the project locations of Chhattisgarh and Odisha, has a long record of working with women and girls, developing their skills, capacities and capabilities, and successfully promoting and engendering pro-poor value chains for women’s empowerment.

The project “Evolving a Women-centered Model of Extension of Improved Cook Stoves for Sustained Adoption at Scale” in the states of Chhattisgarh and Odisha (EuropeAid project), began its implementation in January 2016 with a duration of 48 months. **The main objective of the action is to promote sustainable adoption of Improved Cook Stoves (ICS) as an improved cooking energy solution among forest-dependent households (FDH).**

The aim of the action is a switch to Improved Cooked Stove (ICS) from traditional polluting cook stove to improve the quality of life of women and enhance their social, economic, and environmental wellbeing.



Fuel wood is one of the main products derived by the largely poor forest-dependent households (FDHs) and its use has increased in the decade since 2000 in rural India. No wonder, India lost 367 sq. km. of forest cover between 2009 and 2011; the country's tribal districts alone lost 679 sq. km between 2009 and 2011. A decline in fuel wood availability or access poses a risk to food and energy security of households using traditional cook stoves, while its continued unrestricted and free availability reduces the incentive for households to switch to cleaner options.

More than 800 million Indians depend on simple cook stoves that burn solid fuel, mainly fuel wood or coal. Household Air Pollution (HAP) caused by the use of traditional cook stoves is responsible for around 500,000 deaths in India every year, which can be avoided through adoption of ICS. According to a WHO report, over 145 million Indian households use traditional cook stoves for their daily cooking and depend on biomass (wood, dung, agricultural residue) as fuel, and despite government thrust and subsidies, poor adoption of ICS in India has been a puzzle. Despite subsidy-backed government initiatives like the National Biomass Cook-stove Initiative (NBCI) or its predecessor, the National Program on Improved Cook stoves (ICS), poor adoption of ICS in India remains a challenge.

The gendered cooking energy dimension is ignored and the ICS value chain remains weak. A complex combination of factors like cooking traditions, intra-household distribution of incomes and gender dynamics, culture, religion, and affordability affect sustained adoption and use of ICS in the country. However, women in India do not have a say in household energy related decisions even though they suffer the effects of Household Air Pollution (HAP) the most. The demand for alternative fuels and ICS remains low due to high transaction costs for the price-sensitive poor. Despite high market potential, there is a major gap in the availability of ready-to-use models that address the needs and preferences of households. A lack of government research and testing initiatives that considers the social desirability of ICS models is another contributing factor. Low demand discourages suppliers from investing or doing business, and suitable financing options for consumers and entrepreneurs are unavailable.

However, few programs recognize and address these challenges in an integrated manner and still fewer engage men and Value Chain (VC) actors while keeping women at the center of the ICS adoption challenge.

There is a need to recognize and address these challenges in an integrated manner and engage men and VC actors while keeping women at the center of the ICS adoption challenge. Such an approach will enable women to switch sustainably to ICS from traditional polluting cook stoves, resulting in improvements in their health and quality of life. Environmental well-being through reduced dependence on forest fuel and an increased tree cover are some of the other long-term impacts from this action. The resulting women-centered extension model will be documented and disseminated widely among different ICS stakeholders to promote adoption of ICS at scale.

More recently, in India, Government incentives for improved cook stoves have been declining with greater interest and investments going to new and renewable energy sources like solar. This is particularly evident in plans and funding of the relevant State agencies in Chhattisgarh and Odisha. This puts at risk the energy security and clean energy adoption efforts of Forest Dependent Households for whom biomass based cookstoves remain the most affordable and preferred cooking media.

In order to find ways for economic sustainability of the model, **CARE France is recruiting a consultant/research center to evaluate the relevance of carbon credits to finance the business model of improved cook stoves in India especially those selected by the project participants.** A 2013 report from the Stockholm Environment Institute (SEI)³⁴ estimates that, based on 1 to 3 tons of carbon-di-oxide emissions per stove, the cost of emission reductions from improved cook stove projects is approximately \$5 to \$8 per ton of carbon-di-oxide emission (tCO₂e), including verification and monitoring costs. From an investment perspective, these projects are attractive if the carbon credits from these projects command a price of at least \$10 per tCO₂e or more. But the price levels have declined in the market for Certified Emission Reductions from 2012. On the contrary, the voluntary buyers place a high value on cook stoves carbon credits and demand for these credits is growing. In this context, a study *to evaluate the relevance to use carbon credits to finance the business model of improved cook stoves in India* will be conducted,



which will analyze the action for its eligibility for the carbon market and conduct a cost benefit and risk analysis for the project.

As the project is entering its 3rd year of implementation here is a summary of the accomplishments made so far:

- 150 Sustainable Household Energy (SHE) school have been created in 93 villages (3000 members)
- 150 women had been selected to be champions to facilitate the different learning sessions and testing in the SHE schools.
- Gender dialogues have started where women can share their concerns with men and boys on Household Air Pollution (HAP) and its ill effects, the drudgery and challenges faced in fuelwood collection, while offering ICS as an alternative to polluting cook stoves
- 590 women and their families have started testing of 23 ICS models and a few meetings have been organized with sellers to share preliminary results.
- 25 women have acquired necessary skills to be SHE technicians and facilitate the installation and maintenance of ICS in villages.
- 558 families are now early adopters of ICS and playing a role to share their experience and motivate others to invest.

2. Objective

The overall objective of the consultancy is to **evaluate the relevance to use carbon credits to finance the business model of the improved cook stoves in India with a special focus on those selected by the women ICS users of the project.**

The Study should in particular enable the team to

- (1) **Better understand overall carbon credit mechanisms:** how this is functioning at global level, what are the ways to access it? What are the costs to consider?
- (2) **Identify the specificity to consider when carbon credits are applied to ICS:** Example about using carbon credit for ICS should be highlighted and key steps and key factors of success and failure of such model should be detailed.
- (3) **Better understand carbon credit value chain in India (globally and for ICS) :** identifying main players for each step of the value chain, opportunities and barriers (political, social, economical) for using carbon credits, detailing ongoing carbon credit initiatives that could be related to CARE India project, identify who is getting benefit in the value chain and especially what are the main benefit for end-user of ICS.
- (4) **Evaluate if there is a potential for our project participants to benefit from carbon credit for the ICS they are adopting ? and what is this potential / what is the financial benefit that could be expected if any?**

The study should help to understand if there is a scope to link the project with manufacturers/ supplier and community level platforms within the existing carbon credit regime. The study needs to come with recommendations based on economic and feasibility analysis of the market and the cost benefit analysis including risk analysis for CARE India on how to take up the suggested business model. If carbon credits as financial back up is a viable option, the study should make sure to analyze who will get the main benefit from such carbon credits (Households of the projects, intermediaries, others...) and under which conditions it will work what are the laws and processes that the organization has to promote to link the stakeholders



and ensure credit transfers, etc including identifying main barriers or challenges in the Indian context and overall carbon credit regime.

3. Deliverables:

The following deliverables are to be submitted to CARE:

- I. A substantive workplan against a logical timeline to agree on the main steps of the consultancy
- II. The detailed plan for carrying the study specifying approach, methodology, strategic objectives and measurement/ analysis plans with specific derivable/s at every stage including analysis plans, key national and international stakeholders-regulators-Key Informants to be interviewed and list of documents to be reviewed, support required for connecting different actors, etc. to be approved by CARE France and CARE India
- III. Draft study report (at least 2 back and force should be done)
- IV. Final study report in English – maximum 30 pages
This must be at a minimum level containing:
 - a) Table of content
 - b) Executive Summary (2-3 pages max)
 - c) Introduction
 - d) Objectives of study
 - e) Methodology
 - f) Findings
 - g) Recommendations
 - h) Conclusions
 - i) Annexes
- V. Power point presentation in English

4. Scope of work:

The scope of the consultancy will cover all the necessary activities to carry out the study. The consultant will review the basic project documents, reports, case studies and other external relevant documents. The consultant(s) will then design the methodology to carry out the study, carry out a complete desk review to understand the trends of carbon credit market, relevant policies, ongoing and past initiatives/effort in similar context and their outcomes, carry out the necessary interviews (in person or remotely), analyze the data, produce a draft and then final report (in coordination with the project team) and present the final result to the team (ppt).

5. Qualification

- Economical background and solid experience in cost / benefit analysis study
- Strong knowledge of carbon market functioning especially in Asia and in particular in India
- Extensive knowledge in improved cook stoves sector
- Good interpersonal skills, including the ability to conduct discussions with diversified people, particularly government officials, academics, market players and community.
- Experience of working with NGOs
- Demonstrated analytical, communication and report writing skills
- Proficiency in English and Hindi is required (to be able to access all relevant national documents and conduct interviews, etc.)



6. Reporting

The consultant(s) will report to CARE France Program Manager and be in regular contact and review on progress with CARE India Project Manager

7. Logistic Support

Selected consulting firm will be responsible for all logistic supports like transportation, human resources, stationery, accommodation, per diem or if any other expenses.

8. Documents to be submitted by the consultant:

Need to submit one financial and one technical proposal separately. Along with the technical proposal, consultant/ firm's need to include CV's of the consultant.

- Technical Proposal:
 - I. Cover letter – maximum one page
 - II. Technical proposal – Maximum 6-8 pages
 - a. Relevant experience of the consultants / consultancy firm
 - b. Understanding of the assignment / objectives of the study
 - c. Detailed proposal for the methodology
 - d. Proposed timeline for completing the study
 - e. A plan for analysis of the data
 - f. Team composition
- Financial Proposal – (In EUR)
 - a. Financial Proposal – Maximum one page
 - b. Breakdown of cost estimates for services to be rendered.
 - c. This should include, but not be limited to: daily consultancy fees, accommodation costs; transportation cost,
 - d. Vat/Tax calculation

9. How to apply?

Please send all the requested documents in English to ceinos@carefrance.org with the reference **BACHAT CARBON STUDY** in the object of your email.

Deadline for submission: **May 27th 2018.**