The Gold Standard Suppressed Demand Small-scale Methodology for Low GHG Food Preservation

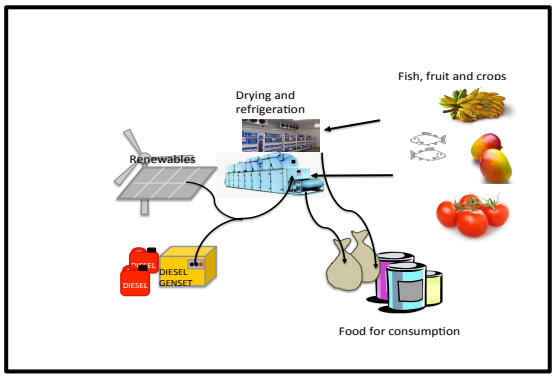
This methodology introduces renewable energy and/or efficiency in food preservation, defined as activities of food processing and/or food storage. Such activities aim at (i) making the food available over longer periods of time (ii) reducing food spoilage and/or (iii) improving quality of dried or refrigerated foods. The preserved food can be sold locally or outside the project boundary.

The methodology applies to project activities that:

- Provide food preservation with lower associated greenhouse gas emissions
- Expand the food preservation beyond pre-project levels

Examples of technologies that accomplish this include solar drying, solar cooking, biogas cooking or drying and solar cooling for refrigeration and freezing. Relevant food products to be treated include vegetables, fruit, fish and other perishable foods for later consumption. Applicable projects could include one or more of the following categories:

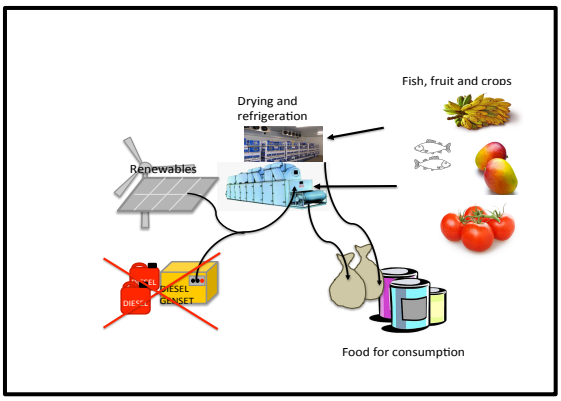
- Application A1: Installation of new equipment based on waste heat/waste gas/renewable energy technology
- Application A2: Increased energy efficiency in food preservation equipment
- Application A3: Increased amount of food preserved
- Application A4: Increased duration over which food is preserved for later use



Baseline Scenario

Switch to renewables and/or increased efficient technologies increased production and/or improved quality

Project Scenario



The first diagram above depicts a generic food preservation baseline scenario. The project would replace all or part of the fossil fuels and/or Non Renewable Biomass (NRB) by improved efficiency or switching to renewable energy sources.

Being a suppressed demand methodology, the project shall result in at least one of the following improvements: (i) increased production; (ii) increased quality of products and/or (iii) decreased manual labour.

Determining Baseline

The baseline is determined as the most realistic combination of technology and fuel, which would have provided the *project service level*. In situations where the level of service is below that of the minimum nutrition level, the methodology allows for a default of 2100 kCal/person/day.

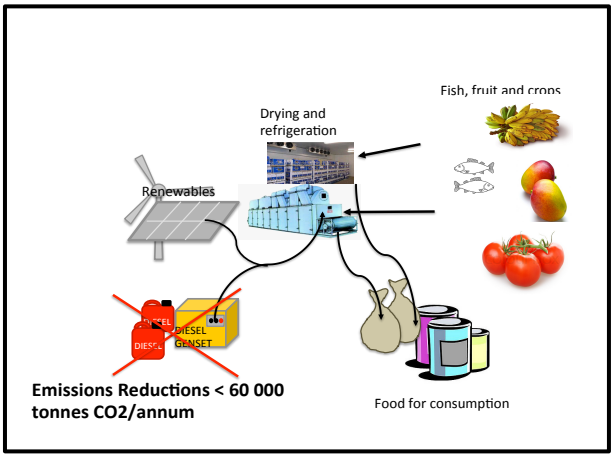
The baseline scenario of the project includes the existing technology (if replaced or upgraded) or technologies that are commonly used for the required service multiplied by the project level of service or a minimum default service related to minimum nutrition levels. Energy intensities for power/heat (SPC and/or SEC) of food preservation using the baseline technologies are calculated from previous 2 years of data or from similar operations close to the project. The intensities multiplied by the project service levels and emissions intensities are used to calculate the baseline emissions.

Leakage would pertain to electricity and fossil fuels where leakage tools are applied. Leakage related to biomass and/or biofuels (palm and plant oil) and/or efficient technology displacements utilise regular leakage calculation methods included in approved methodologies.

Encouraging Local Production and Use

The methodology aims at an increased local use of processed products. Therefore, the Local Stakeholder Consultations will enable projects to decide whether they can

export the processed products. If demand is established as part of the Local Stakeholder Consultation then it will be compulsory for 75% of the processed products to be supplied within the project boundary. In the case when processed products are exported without meeting local demand, then credits would only be issued for the quantity supplied locally and up to 25% of that exported. In situations where more than 25% of the processed product is exported outside the project boundary, emission reductions can be claimed for the entire amount but only if it can be demonstrated that there was no local demand. As a small-scale methodology, projects are only eligible, if they generate emission reductions of less than 60,000 tonnes of CO_2 per year.



Download the Methodology here. Download the Emission Reduction Calculation Tool here.