

# Scientific and Technical Advisory Panel

The Scientific and Technical Advisory Panel, administered by UNEP, advises the Global Environment Facility



## STAP Scientific and Technical screening of the Project Identification Form (PIF)

Date of screening: 29<sup>th</sup> September 2009

Screener: Lev Neretin

Panel member validation by: N.H. Ravindranath

### I. PIF Information

**GEF PROJECT ID: 4037**

**COUNTRY(IES): THAILAND**

**PROJECT TITLE:** OVERCOMING POLICY, MARKET AND TECHNOLOGICAL BARRIERS TO SUPPORT TECHNOLOGICAL INNOVATIONS AND SOUTH-SOUTH TECHNOLOGY TRANSFER: THE PILOT CASE OF ETHANOL PRODUCTION FROM CASSAVA

**GEF AGENCY(IES): UNIDO**

**OTHER EXECUTING PARTNER(S): NATIONAL SCIENCE AND TECHNOLOGY**

**GEF FOCAL AREA (S): CLIMATE CHANGE**

**GEF-4 STRATEGIC PROGRAM(S): CC-SP4**

### II. STAP Advisory Response (see table below for explanation)

1. Based on this PIF screening, STAP's advisory response to the GEF Secretariat and GEF Agency(ies):  
**Consent**

### III. Further guidance from STAP

It is a comprehensive proposal promoting technology transfer in biofuels production and processing, covering all aspects of technology transfer namely; capacity building, financing, technology co-operation, commercialization and private sector involvement and improving policy environment. It is a very good example of promoting South-South technology transfer, focused on South-East Asian region. STAP recommends this proposal. However, the following suggestions should be considered during the next phase of project brief development.

- **Barrier Analysis:** A scientific assessment of the technical, financial, pricing, market and policy barriers is necessary to identify, rank and prioritize the barriers for intervention.
- **Sustainable Biofuel Production Criteria:** There is a lot of uncertainty with respect to environmental impacts of biofuels production on GHG emissions, food production, water, biodiversity and rural development. Thus it is very important to develop and adopt sustainable biofuel production practices to minimize any adverse impacts and to maximize the global and local environmental benefits.
- **Life Cycle Analysis for GHG Emissions:** The project should also provide tools and techniques for generating data and conducting Life Cycle Analysis of GHG emissions or CO2 balance. This is necessary to ensure that biofuel production and usage leads to net GHG or CO2 benefit. It is necessary to consider which land category will be used for Cassava production in South-East Asia, since any land use conversion from forest and grassland could lead to large CO2 emissions and Carbon debt.
- **Economic Analysis:** It is suggested to conduct economic analysis of biofuel production under different socio-economic conditions. It is also necessary to consider the implications of market demand and petroleum prices on biofuel production.
- **Toolkits and Guidelines:** These should be flexible to adapt to local land-use, soil, water, and socio-economic conditions within the South-east Asian region.
- **Risks:** Potential climate change impact risks on biofuel production could be considered. Other risks such as adverse environmental impacts, land use competition, low market demand and fluctuating petroleum prices could be considered along with mitigation measures.

| <i>STAP advisory response</i>      | <i>Brief explanation of advisory response and action proposed</i>  |
|------------------------------------|--|
| 1. <b>Consent</b>                  | STAP acknowledges that on scientific/technical grounds the concept has merit. However, STAP may state its views on the concept emphasising any issues that could be improved and the proponent is invited to approach STAP for advice at any time during the development of the project brief prior to submission for CEO endorsement. |
| 2. <b>Minor revision required.</b> | STAP has identified specific scientific/technical suggestions or opportunities that should be discussed with the proponent as early as possible during development of the project brief. One or more options that remain open to STAP include:   |

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|  | <p>(i) Opening a dialogue between STAP and the proponent to clarify issues</p> <p>(ii) Setting a review point during early stage project development and agreeing terms of reference for an independent expert to be appointed to conduct this review</p> <p>The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.</p>   |
| <p>3. <b>Major revision required</b></p> | <p>STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical omissions in the concept. If STAP provides this advisory response, a full explanation would also be provided. Normally, a STAP approved review will be mandatory prior to submission of the project brief for CEO endorsement.</p> <p>The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.</p> |