

Cost-benefit analysis of SCP & markets for sustainable products ToR for consultancy assignment

Background

Efforts and policies to stimulate more sustainable consumption and production (SCP) can offer several opportunities to developing countries, such as the reduction of production costs, creation of new markets and job generation, pollution prevention and the opportunity to leapfrog to more efficient and environmentally-sound technologies. Taking these opportunities can support developing countries in pursuing their national development priorities.

Sustainable consumption and production (SCP) can be defined as: “the production and use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the ability to meet the needs of future generations.” (Norwegian Ministry of Environment, Oslo Symposium, 1994). The SCP approach implies the **use of a range** of public policies, technologies, investments and private sector and consumer actions, **in an integrated manner**, to influence both the **supply of and demand for** more sustainable goods and services, reducing the negative impacts of their **production and consumption**. Some key SCP policy challenges include achieving decoupling of economic growth from environmental degradation, implementing life-cycle thinking and preventing the rebound effect (which occurs when growing consumption outstrips technology improvements and efficiency gains).

A definition of SCP

The United Nations Environment Programme (UNEP) is implementing a project- ‘Promoting sustainable consumption and production in developing countries for poverty alleviation’- which aims to demonstrate the potential of SCP as a tool for poverty reduction. The project focuses on four sectors, i.e. energy, water, waste management and food&agriculture. Although using the term ‘SCP’, the project recognizes the fact that in developing countries, especially in least-developed countries, the focus will be more on sustainable production than on sustainable consumption. However, in developing countries with a growing middle class the topic of sustainable consumption will be of increasing relevance.

One important activity within the project is to provide developing country actors with relevant and up-to-date information as well as tools and guidance on:

- the costs and benefits of SCP in a developing country context, taking into account the life cycle of goods and services;
- the potential of new and existing markets for sustainable goods and services.

This is the focus of this consultancy assignment, which follows up on the recommendation made at the [3rd expert meeting on SCP](#) in June 2007 in Stockholm to “Gather evidence that SCP can contribute to poverty reduction”, including by showing the socio-economic gains from investing in environmental and sustainable practices.

Based on the analysis of relevant available information and including the outcomes of two case studies (described in more detail below) the assignment will result in the following outputs:

- A guidance document that provides recommendations and support to developing country actors who may be interested in SCP as a tool for poverty reduction and increased profitability;
- A summary for policy and decision-makers;
- A summary for entrepreneurs in developing countries;

The assignment will also include two sector specific case studies, which build on and feed into existing initiatives, as highlighted below and in the annexes. The case studies consist of two components:

- a cost-benefit analysis, highlighting the socio-economic costs and benefits (both quantitative and qualitative) linked to the product throughout its' life cycle;
- a market study, assessing the existing and potential local, regional and/or international markets for the sustainable product under review;

The assignment will therefore consist of three (3) separate but linked components:

1) **Guidance document and summaries for target groups**

Based on the analysis of available relevant information and taking into account the outcomes of the two case studies, a guidance document will be prepared paying special attention to the following questions:

- What are the main costs and benefits linked to SCP for developing country actors? What are the main opportunities for these countries? What are the risks involved?
- What are the main barriers, both at policy and entrepreneurial level, for making use of the opportunities and how can these barriers be addressed?
- Taking into account regional differences, which products or product groups of sustainable goods and services offer best potential for local, regional and international markets?
- How to undertake a cost-benefit analysis and market study to increase chance of success and impact of a SCP-initiative?

In addition, two summaries of the guidance document will be prepared, one targeting policy and decision makers in the public sector, the other targeting the private sector.

2) **Cost-benefit analysis and markets – Energy – Mali**

The African Rural Energy Enterprise Development-initiative ([AREED](#)) offers sustainable energy entrepreneurs in five African countries, including Mali, a combination of enterprise development and start-up financing. One of the gaps that AREED has identified is the lack of available information on costs and benefits of switching to sustainable energy and the lack of good market studies, both for new and established businesses. In addition to providing useful information to entrepreneurs this information may also be useful in showing the Government that it is worth investing in sustainable energy. The case study will focus on USISS (Usine Semi-Industrielle Sechoire Solaire) is a company in Mali that has been drying meat, onions and mango since 1990 using solar power. USISS buys surplus raw product during harvest times and supplies the dried products outside the harvest season when the demand is greatest. An initial cost-benefit analysis for the company has been done in 2004 but an updated and more detailed cost-benefit analysis is requested. In addition, the company has not yet carried out market surveys to analyse the potential for market expansion. See Annex I for more details on USISS.

3) **Cost-benefit analysis and markets – Food and agriculture - Peru**

The [SEED Initiative](#) is an award scheme that provides tailor made support to newly established entrepreneurial partnerships for environment and development. One of the winners of the 2007 award is T'ikapapa, a Peruvian initiative to link Andean small-scale farmers of native potato varieties with new urban markets. T'ikapapa has been successful in getting access to a local, urban market but is eager to get more information on possibilities at the regional and international markets as well. In addition, a cost-benefit analysis will support T'ikapapa in its' efforts to better communicate its' achievements. The case study will respond to the needs of T'ikapapa and will build neatly on the support provided to T'ikapapa through the SEED-initiative. See Annex I for more details on the T'ikapapa initiative;

The case studies will serve as illustrations to the guidance documents and the two summaries.

Linkages

This work will build on and complement other existing initiatives of relevance to sustainable consumption and production in developing countries. The case studies have been identified and

selected with the purpose of making sure that the outcomes of the cost-benefit analysis and market studies will not only benefit the development of the guidance document but will also directly feed into and add value to these other initiatives. These are the African Rural Energy Enterprise Development-initiative that offers sustainable energy entrepreneurs in five African countries a combination of enterprise development and start-up financing and the SEED-initiative, which is an award scheme that provides tailor made support to newly established entrepreneurial partnerships for environment and development

The outcomes of the consultancy assignment will also benefit other on-going initiatives. For example, the information on markets for sustainable products can provide guidance to the on-going efforts to develop an African eco-label as well as to the UNEP-project '[Enabling developing countries to seize eco-label opportunities](#)'. In addition, the information on cost-benefit analysis and the summary for policy-and decision makers may be of special interest to the [UNDP-UNEP Poverty and Environment Initiative](#). These can help to make the case for integrating environmental concerns into development planning and convince planners by showing the socio-economic gains from investing in environmental and sustainable practices.

Further, the assignment will follow up on the recommendations from the discussion paper '[Challenging preconceptions about trade in sustainable products. Towards win-win-win for developing countries](#)' published in 2005 by the International Institute for Environment and Development (IIED). This discussion paper includes the recommendations to 'generate and disseminate information on markets for sustainable products' and 'carry out studies on the social, economic and environmental impacts of the sustainable products'.

Objective

The objective of the consultancy assignment is twofold:

- Through the case studies *gather and present evidence* on whether and if so, how SCP can contribute to poverty alleviation in developing countries, highlighting opportunities;
- Using available information plus the results from the case studies, to *provide guidance* to both governments and entrepreneurs on enhancing policies on and investments in SCP as a means to contribute to poverty reduction in developing countries;

Activities

Component 1

The consultant for this component will undertake the following activities to achieve the objective outlined above:

- Undertake a literature review/desk study of existing studies and information related to cost-benefit analyses and market studies related to SCP practices in developing countries. The review will pay attention to recent trends, products and services (for example more technology oriented businesses). In addition it will identify new SCP markets around the world and opportunities for developing countries (for example e-waste recycling, technologies for energy efficiency). The literature review/desk study will also help to identify conditions allowing SCP to work for reducing poverty, such as the policy framework, institutional set-up, market access and involvement of external donors;
- Review and provide inputs on draft outputs of components 2 and 3;
- Based on the literature review, desk study and the results of the two case studies, develop a guidance framework for both governments and entrepreneurs aiming to strengthen the utilization of SCP as a tool for poverty reduction and increased profitability in developing countries. This guidance framework will highlight what generally are the costs and benefits related to SCP initiatives in developing countries and will also address the issue of markets for sustainable products. It will provide guidance on how to undertake such assessments in order to enhance chance of success and sustained impact of SCP initiatives;

- Prepare a 5-page summary of the guidance framework for policy and decision-makers in developing countries, also paying attention to the role of government;
- Prepare a 5-page summary of the guidance framework for entrepreneurs in developing countries, also paying attention to the role of the private sector;

Component 2 and component 3

The consultants for each of the components 2 and 3 will undertake the following activities to contribute to the achievement of the objective outlined above:

- Undertake a detailed assessment of socio-economic costs and benefits related to the initiative in question, taking into account the life-cycle of the selected product. This analysis will also identify possible market externalities that may hamper further growth of the initiative;
- Undertake a market study, identifying existing as well as potential new local, regional and/or international markets for the specific sustainable product;
- Write a report (max 50 pages), presenting the results of these activities. This report will follow a general format (contents page);
- Prepare a 3-page summary, presenting key conclusions and recommendations. This summary will follow a general format;

Outputs

Component 1 will result in the following outputs:

- A guidance framework (max 40 pages) providing recommendations and support to developing country actors who may be interested in SCP as tool for poverty reduction and increased profitability, paying special attention to cost-benefit analysis of and markets for sustainable goods and services;
- A 5-page summary for policy and decision-makers in developing countries;
- A 5-page summary for entrepreneurs in developing countries

For each of the components 2 and 3 the following outputs are expected:

- A report (max 50 pages), presenting the outcomes of the analysis and assessment undertaken concerning the cost-benefit analysis and market study of the specific component;
- A 3-page summary, presenting the key conclusions and recommendations.

Following satisfactory completion of the outputs, the outputs under component 1 will be translated into French and Spanish the outputs under component 2 into French and the outputs under component 3 into Spanish.

Qualifications/special skills or knowledge required

For component 1 the following skills and knowledge are required:

- A Masters degree in Environment/Natural resources Management, Environmental Economics or a related field;
- At least five years professional experience in environmental management and economics;
- Proven experience and ability to develop accessible guidance and training material;
- Relevant working experience in developing countries, including in the area of SCP;
- Effective written and oral communication skills, including proven experience of ability to write for policy- and decision makers in public and private sector;
- Fluency in oral and written English is required and knowledge of Spanish and French is highly recommended.

For components 2 and 3 the following skills or knowledge are required:

- A Masters degree in Environment/Natural resources Management, Environmental Economics or a related field;
- At least five years professional experience in environmental management and economics;
- Proven experience in undertaking cost-benefit analysis from a life cycle perspective, using relevant tools such as Life Cycle Costing (LFC) and Total Cost Accounting (TCA);
- Proven experience in undertaking market research studies;
- Proven experience in conducting research/analytical studies;
- Excellent knowledge and working experience in the selected sector and country or region;
- Effective written and oral communication skills;
- Fluency in oral and written English is required as well as fluency in French (component 2) or Spanish (component 3);

Management and reporting

The draft versions of the outputs will be circulated for comments and input to members of the advisory board of the project 'Promoting sustainable consumption and production in developing countries for poverty alleviation'.

The consultants will report to Ms. Esther Reilink, UNEP, with who they will be in touch regularly throughout the duration of the assignment. Ms. Reilink will seek additional technical support from UN-colleagues working in relevant areas when required.

The consultant for component 1 can be based anywhere in the world (home-based) as long as he/she has access to reliable internet, email and telephone connections. An opening briefing with UNEP in Paris, France, may be considered necessary for component 1. In this case an amount for travel and accommodation will be included in the consultancy fee. The consultants for the components 2 and 3 can be based in the country or region which is the focus of the specific component or should have close links with the country. They also need to have access to reliable internet, email and internet connections.

Duration

The total duration of the assignment is 7 months; all three components have a duration of 5 months. Components 2 and 3 will be completed during months 1-5 and component 1 will be completed during months 2-7.

Milestones of the assignments are:

Week	What - Component 2 & component 3	What - Component 1
7	First draft of the case studies	
9		Comments on first draft of each of the case studies
13	Second draft of the case studies	
15		First draft guidance document
18	Final version of report of each case study	
20	Summary document of case studies	Draft summaries of guidance document for policy- and decision makers and entrepreneurs
22		Second draft guidance document
28		Submit final version of all outputs

How to apply

People interested to apply for a component of the assignment can do so by sending their CV (max. 3 pages) and motivation letter (max 2 pages) to Ms. Esther Reilink (esther.reilink@unep.fr). Please clearly state in your motivation letter whether you are applying for component 1, 2 or 3. Closing date: **10 December 2007**.

ANNEX I

USISS – Drying fruit using solar power

USISS started as a pilot project coordinated by GTZ and evolved into a commercial enterprise. A loan from AREED allowed USISS to purchase new drying units and new packaging equipment to increase production capacity. Since then average sales have increased by 60% and profits by 170% and the loan to AREED has been fully repaid.

Mango is heavily overproduced during the season of April to July, with high percentages rotting before it is sold. Providing a conservation mechanism for the mangos adds value and creates an additional revenue stream.

USISS is financially self-sustaining and it has built solid partnerships with financial institutions. As the tunnel driers like the one applied is a quite basic technology, the business model has a good potential for replication. However, a weakness of USISS that has been identified is the fact that the company has not yet carried out market surveys for product innovations and has not yet done an analysis on the market expansion potential. In addition, an up-to-date and detailed cost-benefit analysis, throughout the life cycle, can help convince policy and decision-makers that it's worth investing in sustainable energy initiatives that can become self-supporting.

T'ikapapa - Linking Andean small-scale farmers to new urban markets

Extreme poverty and rich biodiversity coexist in the Peruvian Andes, a region that is home to more than 3000 native potato varieties, many vitamin-packed and organically grown. Most of these varieties are little known in urban markets. T'ikapapa was set up to bridge the gap between the Andean farmers and the potato market, especially the local urban market, offering the opportunity to farmers to generate a sustainable income. T'ikapapa also aims to create awareness of the importance of local potato varieties to the cultural and ecological well-being of small-scale Andean farmers.

The T'ikapapa initiative has already managed to increase the income of over 300 families in the Peruvian Andes, stimulated new collaboration among farmers and commercial organizations and created a completely new market for native potato varieties in Peru. The commercial success of T'ikapapa as a gourmet food has helped to prove the worth of native potatoes from small-scale farmers and the value of their cultural heritage.

As a 2007 SEED award winner, the T'ikapapa initiative will be receiving tailor-made support to address their priorities. The proposed case study will neatly link to the support provided through the SEED-initiative, providing the initiative with information on potential new markets as well as a cost-benefit analysis throughout the life cycle, which can play an important role in communicating on the initiative to different groups of stakeholders.