Scientific and Technical Advisory Panel

The Scientific and Technical Advisory Panel, administered by UNEP, advises the Global Environment Facility
(Version 5)

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

Date of screening: February 26, 2014 Screener: Guadalupe Duron

Panel member validation by: Anand Patwardhan
Consultant(s):

I. PIF Information *(Copied from the PIF)*
FULL SIZE PROJECT SPECIAL CLIMATE CHANGE FUND
GEF PROJECT ID: 5666
PROJECT DURATION : 4
COUNTRIES : Pakistan
PROJECT TITLE: Mainstreaming Climate Change Adaptation through Water Resource Management in Leather Industrial Zone Development
GEF AGENCIES: UNIDO
OTHER EXECUTING PARTNERS: Sialkot Tannery Association Guarentee Ltd (STAGL) (Lead Executing Partner) District Government Sialkot, Irrigation and Environment Departments, Provincial Government Punjab.
GEF FOCAL AREA: Climate Change

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

Based on this PIF screening, STAP's advisory response to the GEF Secretariat and GEF Agency(ies):
Major revision required

III. Further guidance from STAP

STAP acknowledges UNIDO's proposal on "Mainstreaming Climate Change Adaptation through Water Resource Management in Leather Industrial Zone Development". The initiative seeks to address vulnerability reduction to climate risks through water conservation, improved water management and waste-water treatment in the Sialkot District in Pakistan. The proposal also targets the urban and rural sectors in the Sialkot District, particularly the Sialkot Tannery Zone (STZ) and the agricultural areas nearby. While the proposed project deals with climate risks in a region of high vulnerability and targets an important economic sector (leather); there are several issues that merit fuller consideration during further project development â€“ the reason for the STAP recommendation of "major revision".

To strengthen the proposal further, STAP recommends for UNIDO to address the following aspects during the project development.

1. STAP suggests identifying explicitly the outcomes and outputs for each component. At the moment, these sections appear to be stated in a general manner. Furthermore, it will be useful for the project proponents to review the outcomes and output sections as they appear to be in reverse order in some places (example â€“ the output 3.2.1).

2. One of the central issues with the proposal is the lack of detail on the specific climate risks that are being addressed; the way in which they are likely to change in the future and the vulnerability of target communities and sectors to those risks. The climate sensitivity of agriculture in that region is well established. What is less clear is the sensitivity of the leather sector to climate risks, vis-Ã -vis a range of other stressors, including technological change, demand change and competition. While interventions to strengthen the leather sector and reduce environmental impacts of tanneries are well justified, their connection with regard to climate change adaptation needs to be developed further. In that respect, the additional cost reasoning would need strengthening. Some more specific suggestions in this regard follow.

3. STAP recommends defining further the problem(s) or barriers that need to be addressed. For example, the project proponents could describe further the problems that result from the use of tannery wastewater for agricultural purposes. This could include health problems, food insecurity (resulting from contaminated soils), and polluted drinking water â€“ factors that may influence coping and adaptive strategies to climate

risks. Two literature sources describing some of these issues is as follows: 1) Murtaza, G. et al. "Disposal and Use of Sewage on Agricultural Lands in Pakistan: A Review". 2010. Pedosphere (20): 23-24.; and 2) Mahmood, A. et al. "Human health risk assessment of heavy metals via consumption of contaminated vegetables collected from different irrigated sources in Lahore, Pakistan". 2014. Arabian Journal of Chemistry (7): 91-99.

It also will be helpful to add climate projections (data and temperature) for the target region. Similarly, defining the socio-economic characteristics of the target population also will be useful since these factors tend to influence individual's adaptation and coping measures.

4. During the project development, STAP encourages the project proponents to define explicitly the water conservation/management and wastewater treatment approaches, or technologies, this initiative will focus on. More importantly, the project needs to describe fully what approaches it will use to strengthen adaptive capacities and reduce vulnerability to climate risks, as well as how the initiative intends to build-on, or up-scale, local knowledge, and traditional strategies, on water conservation/management. This information will strengthen the additional cost reasoning, which is defined weakly.

5. STAP recommends to identify specific indicators for each adaptation benefit, and to detail how the benefits will be measured and monitored. This information will strengthen the additional cost reasoning, and an effective monitoring of adaptation benefits â€“ currently defined as component #4.

6. Throughout its interventions (possibly more applicable to component #1), it is recommended for the project developers to consider water governance frameworks as they identify measures to integrate the safe use of the STZ's wastewater into agricultural production, and improve water management and irrigation policies. This includes identifying the needs of all stakeholders and ways to build their participation into policies on water conservation, irrigation, and wastewater. Monitoring the impacts of the project interventions also will be important to developing appropriate policies and strengthening water governance structures. The following literature source provides further details on the implications of water governance on wastewater irrigation: Hanjra, M. et al "Wastewater irrigation and environmental health: Implications for water governance and public policy". (2012) International Journal of Hygiene and Environmental Health: 255-269.

STAP advisory response	*Brief explanation of advisory response and action proposed*
1. Consent	STAP acknowledges that on scientific or technical grounds the concept has merit. However, STAP may state its views on the concept emphasizing any issues where the project could be improved. Follow up: The GEF Agency is invited to approach STAP for advice during the development of the project prior to submission of the final document for CEO endorsement.
2. Minor revision required.	STAP has identified specific scientific or technical challenges, omissions or opportunities that should be addressed by the project proponents during project development. Follow up: One or more options are open to STAP and the GEF Agency: (i) GEF Agency should discuss the issues with STAP to clarify them and possible solutions. (ii) In its request for CEO endorsement, the GEF Agency will report on actions taken in response to STAP's recommended actions.
3. Major revision required	STAP has identified significant scientific or technical challenges or omissions in the PIF and recommends significant improvements to project design. Follow-up: (i) The Agency should request that the project undergo a STAP review prior to CEO endorsement, at a point in time when the particular scientific or technical issue is sufficiently developed to be reviewed, or as agreed between the Agency and STAP. (ii) In its request for CEO endorsement, the Agency will report on actions taken in response to STAP concerns.