



Netherlands Commission for  
Environmental Assessment

# Advice on Quality of ESIA Project Brief for Proposed Increase of Sugar Production by Reclamation of Papyrus Area

Memorandum by the NCEA

RWANDA



30 August 2013



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## Advice of the Secretariat

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**To** Netherlands Embassy, Kigali Rwanda  
**Attn** Mr Ben Zech  
**From** Ms Ineke Steinhauer (The Netherlands Commission for Environmental Assessment, NCEA)  
**Date** August 30, 2013  
**Subject** **Advice on quality of ESIA project brief for proposed increase of sugar production by reclamation of papyrus area, Rwanda; August 2013**

By: Secretariat of the Netherlands Commission for Environmental Assessment – Ineke Steinhauer/Arend Kolhoff

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### 1. INTRODUCTION

Kabuye Sugar Works is the proponent of this project that aims to contribute to competitive, sustainable and inclusive sugarcane value chain development. The objectives of the project are as follows:

- increase the area of arable land for sugarcane cultivation by reclamation of papyrus infested land;
- thus increasing sugarcane production and eventually reduce the import of sugarcane.

The outcome of this proposed project will be achievement of food security, improvement of socio- economic status of the people and improvement of flood management measures. The project will have two major components being construction/reclamation and sugarcane production.

The aim of the project brief is to assist the Investment Implementation division of Rwanda Development Board to assess the level of requirement for the ESIA study.

The Netherlands Embassy in Rwanda asked NCEA to review the quality of the project brief. This advice is a so-called NCEA 'Advice of the secretariat', no external input was used at this stage. If the ESIA will be finalized, a review by the NCEA could also be considered. At that stage probably external experts (e.g. with expertise in sugarcane production) would be involved.

In drafting the advice, use has been made of the following documents in addition to the ESIA project brief of August 2013:

- NL Agency, Appendix I – Project Description FDOV12RW02, Sugar: make it work (Isukari: imvugo tuyigire ingiro (IITI). explaining all elements of the project proposal for ORIO financing, December 2012, 40 p.
- NCEA screening on EIA requirement for FDOV12RW02, January 2013, by Gwen van Boven, 3 p.
- USAID Environmental Guidelines for Small-Scale Activities in Africa, Chapter 1: Agriculture: Soil and Water Resources including irrigation, March 2009. 50 p.

## 2. MAIN OBSERVATIONS

A great deal of the points of attention for the ESIA that were raised by NCEA as part of its screening advice on Rwanda EIA requirements (Jan. 2013) for this project remain valid. These points of attention have been integrated in the main observations below:

### 2.1 Policy framework

In the project brief is stated that existing policies allow the extension of 2400 hectares in the floodplains of Nyabarongo river. Par. 2.7 of the project brief indicates that the planning regulations allow for sugarcane plantation and that all the necessary Physical Planning regulations such as zoning, plot ratio and plot coverage were taken into account during the planning stage and are all in line with the requirements of the District zoning and regulations. However, the exact project location is not clearly described in the ESIA project brief (no map is provided). Therefore it is unclear whether the project areas will include any environmentally sensitive areas, this should be further assessed in the ESIA.

No reference is made to any water basin planning in the project brief. In the FDOV12RW02 project description, reference is made to the Water Resources Master Plan that is being developed by SHER Consultants under the responsibility of the Rwanda Water Resources Department at the RNRA. This Master Plan will direct the implementation of Integrated Water Resources Management (IWRM) in Rwanda in the coming years. It would be recommendable to check consistency of the project proposal with the Master Plan.

Par. 3.2 till 3.5 gives an overview or relevant environmental and land requirements in Rwanda, including relevant institutions. Remarkably 3.3 and 3.4 speak of 'the exploitation of clay', which is probably an error. Just listing all these policies and

regulations is not very useful if no translation is made to specific implications for the project.

- In the view of the NCEA land use and water basin planning together with an ESIA are the most suitable tools to guide the development of this project in a sustainable manner. The NCEA recommends to describe all relevant policies and discrepancies between these and the project at hand need to be assessed and discussed. In particular the suitability of the area for sugar instead of other crops needs to be justified. This includes a justification of the suitability of the proposed extension with 2400 hectare by providing an analysis of the soil conditions.

## 2.2 Present situation

In the introduction is stated that the floodplain of the Nyabarongo river provides important ecosystem services. The NCEA supports this observation but notices that an assessment of the eco-system services is not foreseen in the ESIA. This is essential information to assess the impact of potential changes in hydrologic regime, disturbance of river morphology, disturbance of aquatic life, land subsidence, changes in ground water levels and water quality, and negative effects on flora and fauna.

- The NCEA recommends that present ecosystem services in the project area be identified including an assessment and valuation of the use by different user groups. This will enable a comparison between the existing situation and the proposed situation after project implementation.

## 2.3 Hydrology

As stated in the project brief, flooding is a serious risk. This year a large part of the harvest was lost due to flooding.

- The NCEA recommends to assess the risks of flooding for the short and the long term. The expected change of hydrology parameters due to climate change or upstream land use change needs to be considered for the project area but also for the down stream area.

## 2.4 Alternatives

The project brief does not consider alternatives and is only focussing on mitigating measures and good design considerations. The FDOV12RW02 project description however, correctly includes a consideration of possible project alternatives. The ESIA ought to assess in further detail the impacts of these alternatives in order to demonstrate whether the choice for the current project design is sound from an environmental and social perspective, or whether other project alternatives should be more seriously considered. Special reference is made in this context to the alternative 'accept flooding'. This alternative is considered primarily from an economic view point, while no mention is made how the expected loss of water absorption and buffering functions of the converted wetlands will be managed, compensated or mitigated.

- The NCEA recommends to make in the ESIA at least a comparison between the existing situation and the proposed situation. A comparative assessment needs to be made by using environmental, social and economic indicators. But in addition, NCEA recommends to include in the project brief and subsequent ESIA a chapter on problem analysis, proposed objectives to solve these problems, including a justification why other forms of livelihood improvement or development are not considered feasible. Also the ESIA should include an assessment of alternative locations for the 2400 ha. of sugarcane production as well as a justification of the site selection in relation to the Rwandan policies in terms of allocating land for sugarcane production. Finally, the ESIA should contain relevant design, lay-out, technology and operational alternatives (e.g. methods of harvesting, transportation etc.).

## 2.5 Environmental Management Plan

An EMP is an important instrument for environmental management and implementing the proposed mitigating measures in a good way. However, the effectiveness of the EMP depends on the quality / capacity of the staff responsible for environmental management as well as the intention of the top-management. Equally important is sufficient budget allocated for the implementation of the EMP.

- Due to the fact that the proponent is already active in this area, the NCEA recommends to make use of that situation. Reports of environmental management of the other plantations owned by the proponent need to be included in the ESIA report as well as how they managed environmental problems or responded to comments made by people/users affected by possible negative environmental effects.

## 2.6 Stakeholder participation

The project brief mentions that throughout the duration of the project, local farmers will be continuously consulted. Apparently for this project brief all relevant parties were identified through a stakeholder identification process. However, the project brief does not provide further details in terms of minutes of meetings, or e.g. concerns raised. Par. 1.6 of the project brief explains the role of the EIA expert, which seems to be very much environment focussed and less on social impacts. This could be a handicap in relation to e.g. the public participation process and sound assessment of socio-economic impacts. It is not clear whether the ESIA will be elaborated by 1 individual expert or whether an expert team will be involved.

- At the stage of a project brief, one would expect a more detailed public participation plan, including budget building on consultation meetings and minutes already held in the past. NCEA recommends to make an overview of what meetings already have been held, what were main observations and concerns and out-lining what still needs or is planned to be done.

## 2.7 Potential social and environmental impact

Chapter 4 gives an overview of positive and negative impacts and mentions mitigation measures in par. 4.4. Remarkably, not all the significant environmental issues, as mentioned in par. 1.5.2 for the construction and operation phase, are dealt with in chapter 4. Also cumulative impacts are not mentioned (e.g. as a result of the Chinese rice project near to the project area on the same river, p.18 of project brief). Other impacts which are not mentioned yet are for example

- Intensified sugarcane production may lead increased water consumption, which may in turn affect water availability year-round for other uses/purposes. This is not described as yet in the project brief.
- Apparently, the water management infrastructure works may include open, stagnant water sources (overflow locations), which could cause health problems (mosquitoes, vector borne diseases). Such health risks could be further studied in the ESIA and included in any compensation/mitigation measures.
- Also the drainage works (gravity designed) may in some cases require extra pumping. It is unclear where the energy comes from and whether this is a sustainable option.
- Par. 2.6.2. mention a list of specific design considerations, but these require further elaboration, as they are now phrased in terms of 'due consideration will be given to' and 'will be kept limited and/or mitigated'. It is not clear how this will be put in practice and should receive further assessment in the ESIA.

Currently lacking in the project brief is a proper assessment of possible impacts, the project brief does not propose concrete mitigation measures for any impacts that are expected. The project brief mentions on p. 27 that 'feasible' mitigation measures are provided, but this cannot be substantiated by the table in Chapter 4 at all. These impacts and mitigation measures would need to be included and further assessed in the ESIA.

- The NCEA recommends to include in the project brief and subsequent ESIA the potential impacts as mentioned above. Especially the social impacts should also be carefully addressed through addressing issues like:
  - How will the project guarantee equitable access to benefits from sugarcane production to avoid social disruption?
  - Are there differences in men's and women's roles that may affect the long term future of the project and the environment?
  - What may realistically happen when the project ends? What will the project area look like?

### **3. CONCLUSION**

The NCEA supports the conclusion in the project brief that a full ESIA is required. The NCEA is of the opinion that this project brief provides insufficient information to justify the conclusion that the proposed project does not pose any serious environmental concern. A conclusion on the environmental impacts can only be drawn after a review of the full ESIA, the NCEA is ready to assist in executing this review.