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ZAMBIA (ORIO13/ZM/02)

Quick Scan Review of the EIA for the Upgrading and Rehabilitation of the Education Infrastructure of Agriculture Colleges



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Advice of the Secretariat

To Netherlands Enterprise Agency (RVO.nl)

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From the Netherlands Commission for Environmental Assessment (NCEA)

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Subject **Quick Scan Review of the EIA for the Upgrading and Rehabilitation of the Education Infrastructure of Agriculture Colleges in Zambia**

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1. Introduction

The ministry for Agriculture of Zambia is applying to the ORIO facility for funding for the rehabilitation and upgrade of 9 agriculture colleges in Zambia (ORIO13ZM02). To aid decision-making on this project, a limited environmental impact assessment (EIA) has been prepared. This EIA addresses key environmental aspects of the project, such as soil degradation and waste management.

The RVO, who manages the ORIO facility, has requested that the Netherlands Commission for Environmental Assessment (NCEA) review this limited EIA report. The aim of this review is to check the quality and completeness of the EIA for decision-making, and to give recommendations to improve the EIA and the project, where necessary, or to help determine conditions for implementation. In the most immediate future, the NCEAs review will provide input into further discussion between the ORIO staff and the project initiator on the project approach and implementation.

Given the short time available for review, the NCEA has undertaken a Quick Scan of the EIA. Relevant external expertise has been mobilized to provide input into this review. In section 1.1. below the approach taken to this Quick Scan EIA review is explained. Chapter 2 then sets out the main conclusions on the agricultural college upgrade project's limited EIA report. In chapter 3, we elaborate on these conclusions and provide a few additional, more detailed observations. Recommendations for the next steps and decisions to be taken are included in the text.

1.1 Approach to this Quick Scan

This Quick Scan advice is a so-called NCEA 'Advice of the secretariat'. It has been prepared by technical secretaries of the NCEA, by means of a desk study, with input provided by one external experts. The external expert engaged was Ing Thie Arend Brouwer, MBA. Mr Brouwer has a background in sustainable farming generally, and experience in the management of environmental and social impacts of demonstration farms and agricultural teaching facilities specifically. No site visit was undertaken for the purpose of the review, and the experts involved do not have first-hand knowledge of the Zambian context.

As references for the review the NCEA has made use of the relevant IFC environmental health and safety guidelines, including those for Construction and Decommissioning, and for Annual Crop Production, as well as the (global) good agricultural practices¹. Note that the NCEA did not check the EIA against the Zambian regulatory requirements for EIA, nor the procedural guidance, since no local EIA procedure has been initiated for this project. Clarification on the application of the Zambian EIA requirement for this project is still needed.

The NCEA does not express an opinion on the project itself, but focuses on the quality and completeness of the EIA. Usually, the NCEA reviews an EIA report as a stand-alone document, meaning that all information necessary for decision making should be contained in the EIA report, without requiring the reader to consult other documentation to

¹ See the FAO overview here: http://www.fao.org/prods/GAP/index_en.htm, as well as the GAP certification programmes on www.globalgap.org

complement gaps in information in the EIA itself. However, for this Quick Scan review, the NCEA also reviewed relevant sections of the project plan, particularly information contained in the chapter 5 on sustainability. Social impacts were addressed more directly in the project plan, as the EIA was “limited to the environmental impact of the project measures and [did] not include a comprehensive analysis of social, health and safety aspects” (page 4 EIA report). Note that the NCEA did not review the detailed project plan for each college.

2. Key conclusions

Overall, the NCEA concludes that the (limited) EIA for the Agricultural Colleges Upgrade project presents a good and focused overview of the environmental and social issues. Useful baseline information is presented and the key risks and impacts are identified. The key issues listed on page 3 of the report provide an appropriate short-list. The information is presented in an accessible way; the report reads well.

However, there are two areas where the NCEA concludes that essential information is still lacking:

- Firstly, although measures are proposed, the report does not provide a detailed and tailored environmental and social management plan for the project. Ambitions in terms of, for example, soil and water quality are stated in the EIA, but mostly in general terms and often without concrete commitments. It is not clear what the tangible objectives are for environmental and social performance of the colleges, how these will be achieved, what monitoring and management will be necessary, and what capacities and resources will be made available.
- Secondly, the analysis of the Zambian environmental regulation and its implications for the project is too limited. For example, there is not reference to the Environmental Management (Licensing) Regulations (S.I. No 112 of 2013).
- The NCEA therefore recommends that the necessary measures and actions needed to address the environmental and social issues identified in the EIA are further developed. The NCEA suggests that this can best be done in tailored environmental and social management plans for each college.

In the next chapter more detail on the key conclusions above is provided. Also, recommendations are given on additional issues that need further attention, including: community engagement, waste management, and animal welfare. Each of the issues mentioned here, can be tackled in the development of the environmental and social management plans for the colleges.

3. Detailed observations

3.1 Environmental and Social management plan is needed

To continually manage environmental and social risks, all projects need to develop and adopt a tailor-made environmental and social management approach. Both the IFC (performance standard 1: Assessment and Management of Environmental and Social Risks and Impact) and the OECD (Guidance for multinational enterprises, chapter VI) demand an integrated environmental (and social) management system.

The EIA process helps to develop such an environmental and social management approach. Often this approach is documented in an Environmental and Social Management or Action Plan (ESMP²) that is part of the EIA report. The approach can also be documented in a separate ESMP or integrated into other management programmes. So, while the EIA report “contains predictions about the environmental impacts of proposals and recommendations for their mitigation and management ... an [ESMP] translates recommended mitigation and monitoring measures into specific actions that will be carried out by the proponent”³.

These concrete commitments can then be included by financiers or permitting authorities into their conditions. Commitments can also be publicized so that interested parties are clear on what can be expected in terms of environmental and social performance.

Such an ESMP should have at least the following elements:

- A description of the measures that will be implemented to enhance benefits of the project, and measures to avoid, minimise, mitigate and compensate or remedy the adverse environmental and social impacts, as identified in the assessment process.
- Programme for surveillance, monitoring and auditing, with explicit references to the performance standards (including indicators) that the monitoring results will be compared against.
- Any reporting and accountability arrangements that will help ensure proper implementation and regular feedback on compliance.
- Contingency plan for when impacts are greater than expected, particularly concerning impacts about which uncertainty remains, such as the impact on groundwater.
- A description of the resources and responsibilities needed for plan implementation.

Note that the ESMP need not be very elaborate. It should be commensurate with the level of environmental and social risks and impacts. In the case of this project, the impacts are limited in number and scale, which should enable a very focused ESMP.

However, no ESMP is presented in the material provided to the NCEA. The (limited) EIA for the project provides a brief mitigation plan, and the project plan but this is not sufficiently concrete to qualify as an ESMP. In fact, the EIA consultant specifically states on page 4 of the EIA

² For ease of communication the NCEA will use the acronym ESMP to indicate an Environmental and Social Management Plan, note that in this context this is essentially the same as an Environmental and Social Action Plan (ESAP), and includes monitoring arrangements.

³ Source: UNU EIA course, on the basis of World Bank practice (http://eia.unu.edu/course/index.html%3Fpage_id=120.html)

report that they “will not be providing recommendations on ... how the environmental performance of the colleges will be managed and promoted throughout the project.”

As a result, it is now not sufficiently clear to what level of environmental and social performance the colleges are committed, and environmental and social management is underrepresented in the institutional management structure set out for the project in the project plan.

- The NCEA recommends that tailor-made environmental and social management plans are developed for this project, which contain the elements above. Both for the construction and realization of facilities, as well as for their operation. The NCEA suggests that these are developed individually for each college, although a framework may be provided that applies to all. The NCEA suggests that the environmental monitoring system, Emergency preparedness and response plan, and the various staff manuals and instructions announced in the project plan document (in 5.1 and 5.2) are integrated into the ESMP.

As the project concerns teaching institutions, the NCEA feels that the example-function of the colleges in terms of environmental and social performance requires specific attention. The NCEA therefore suggest that the leadership of the colleges is engaged in the development of commitments (goals, objectives, targets) for environmental and social performance, in communication on these commitments externally, and in ensuring long-term resources for their implementation.

The NCEA further suggests that in the development of the ESMPs relevant good practice standards and guidance are explicitly considered and included. These can help to identify specific targets, measures and monitoring arrangements. The EIA and project plan now regularly refer to various standards and guidance but are not sufficiently specific in translating these into verifiable, concrete commitments.

The EIA and project plan also regularly refer to the Good Agricultural Practices (GAP). For example, the project plan states, on page 117, that: “The project will make use, introduce and promote internationally acceptable agricultural practices in crop cultivation and livestock farming (GAP, Good Agricultural Practice)...Staff will receive training on the GAP scheme and the implementation at each college is supported by the technical assistance component of the project.” The NCEA wants to point out that the GAP as set out by the FAO provide a set of principles for soil, water, crop protection, etc.⁴. They will provide a good starting point for development of an ESMP, but need to be translated into specific targets and measures that match the activities and context of each college.

There is also an extensive range of GAP related codes and standards, which form the basis for a range of certifications for different types of agricultural products (the GLOBAL GAP⁵). Such certification schemes could also be included in the ESMP for the colleges, which means that certain monitoring and review activities would fall under the certification scheme. However, these certifications may not have added-value for the colleges at this stage, due to their ambition level and cost. It would be good if the project initiators further clarify their intentions concerning the GLOBAL GAP standards.

⁴ http://www.fao.org/prods/GAP/home/principles_en.htm

⁵ <http://www.globalgap.org>

Similarly, the EIA and project plan refers to a number of other benchmarks which will be relevant for the ESMP, including IFC performance standards 1, 2, 3 and 6, and the Hazard Analysis and Critical Control Points (HACCP) standards. These also still need to be further analysed and their consequences for the colleges be made more specific. For example, IFC PS 3 specifically addresses pesticide use, and has implications beyond those now described in the project plan. These benchmark can be useful in developing specific targets for, for example, effluent water, management of dust and noise during construction that can be incorporated in the ESMP.

- The NCEA recommends that relevant good practice benchmarks are considered in detail, and relevant performance indicators incorporated into the ESMPs. These could be from IFC, GLOBAL GAP, or local regulation. The ESMPs should be clear on which references have been used where.

The NCEA points out that the Zambian EIA regulation (1997) may also be a relevant reference for the development of an ESMP. This regulation refers to an “impact management plan” which is an integral part of the EIA, and should contain: “a description of measures proposed for preventing, minimising or compensating for any adverse impact, and enhancing beneficial effects, and measures to monitor effluent streams or important environmental features which may be affected by the project”.

3.2 Implications of environmental regulation

The EIA and project plan do address the Zambian legal requirements concerning the environment, but the analysis is currently too limited to inform an ESMP. Specifically, the EIA does not address the Environmental Management (Licensing) Regulations (S.I. No 112 of 2013), which provides for licensing requirements for:

- Air and water pollution;
- Waste management;
- Hazardous waste;
- Pesticides and toxic substances; and
- Ozone depleting substances.

Depending on the nature and volumes of wastes and pesticides, permission from the Zambian Environmental Management Authority (ZEMA) may be needed for use or disposal. Also, note that the regulation forbids burning of waste, unless prior permission has been given.

The EIA also does not present a statement on whether an EIA is required according to the Zambian EIA regulation. Although, by the NCEA assessment, this is not the case, the NCEA would recommend that this is stated unequivocally by the proponent, preferably supported by the ZEMA (see also 3.3).

- The NCEA recommends that the Zambian regulatory requirements as related to the environment are more closely analysed, and any relevant implications incorporated in the ESMPs.

3.3 Consultation

The NCEA notes that there has been extensive consultation with a range of actors in development of the project. The project plan helpfully explains how input from different actors has been used. However, two key actors groups have not yet been approached: local communities and environmental authorities. The project plan does state, in page 119, that information billboards will be used to inform surrounding communities and that they will be further engaged “when issues come up”.

However, both IFC and OECD expressly stress the need to engage with local communities early. For local communities, specific issues to do with, for example, traffic safety during construction or changes in water extraction, could already be discussed. This may lead to identification of measures to be included in project implementation. But more general consultation on the changes at each college, and how this will affect interaction with the surrounding communities, could be beneficial to both the project design and the relationship between the colleges and the surrounding communities.

This will be especially relevant for Cooperative college, NRDC and ZIAH, which have residential areas close by. The NCEA also notes mention of “tolerated squatters” in some of the college grounds. The provided documents state that their situation will not change. Nonetheless, the NCEA suggests that these parties are included in the next round of consultation, and that conclusions on their use rights and conditions are incorporated into the ESMPs.

Concerning the environmental authorities, the NCEA suggests that the ZEMA is consulted, both on applicable requirements, but also to provide good practice examples or suggestions from their experience that may be relevant.

- The NCEA recommends that the colleges augment the consultation that has taken place by engagement with the stakeholders mentioned above. Any conclusions from such consultation can be incorporated in the ESMPs.

3.4 Waste management

The EIA and project plan present generic goals concerning waste management. The NCEA suggests that it is both possible and necessary to be more specific regarding the waste management practices that the colleges will adopt. There is guidance and a range of relevant experiences available that this project could make use of to identify suitable practices.

- The NCEA recommends that the ESMPs specifically detail the waste management practices that will be adopted in the colleges.

3.5 Animal welfare

The NCEA notes that the subject of animal welfare is not well fleshed out in the EIA and project plan. The NCEA points out that there is guidance on animal welfare in agricultural operations that is cognizant of the context of developing and emerging economies: such as the IFC

good practice note “Animal Welfare in Livestock Operation” or guidance by the World Organisation for Animal Health, of which Zambia is a member country⁶.

- The NCEA recommends that animal welfare guidance is considered, and any relevant standards and practices incorporated in the project plan and ESMPs.

3.6 EIA and project plan not fully consistent

The (limited) EIA was completed in December 2015, while the project plan dates from September 2016. The NCEA notes that the overview of the planned facilities as presented in the EIA in table 4 does not match with the planned facilities as set out in the project plan. Apparently many new facilities have been added to the plans since Table 4 was drafted. See for example the facilities described for ZCAs Monze and Mpika under section 3.2.2. in the project plan, and those listed in Table 4. The project plan mentions farm buildings/sheds, poultry facilities, a milking parlour and ablutions blocks that are not included in the EIA activity overview.

Overall, the NCEA does not think that the conclusions on impacts in the EIA would change significantly, with one exception: the EIA suggests that the overall water use of the colleges will not increase, because of expected improvements in water extraction and use efficiency. The EIA also states that no new boreholes will be drilled, except where this is necessary to replace old boreholes. However, the project plan mentions several new boreholes, particularly where new training farms are planned.

- The NCEA recommends that, during the development of the ESMPs, the proponent consider the activities that have been included in the project plan after completion of the EIA, and determine whether this brings new impacts into view, or amplifies impacts already identified. Where additional measures are needed, these can be included in the ESMPs. In particular: how to ensure that water quantity and quality for other needs will not be affected by any increased water use of the colleges?

⁶ <http://www.oie.int/en/about-us/our-members/member-countries/>