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# Advisory Review of the ESIA for the KIWASCO Water Supply Project



14 December 2018  
Ref: 7218



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## Advisory Report by the NCEA

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<b>Title</b>	Advisory Review of the ESIA for the <u>KIWASCO</u> Water Supply Project
<b>To</b>	The Netherlands Enterprise Agency (RVO.nl) /D2B
<b>Attn</b>	Ms S. (Sylvie) Sprangers
<b>Date</b>	14 December 2018
<b>From</b>	The Netherlands Commission for Environmental Assessment
<b>Members of the working group</b>	Mr R.A.A. (Rob) Verheem – Chairperson Mr J. (Johannes) Hunink – Expert Eco-Hydrology Ms B. (Brenda) Brainch – Expert Social impacts & Resettlement Mr G.A. (Giel) Hendriks – Technical Secretary
<b>Quality control</b>	Mr R.A.A. (Rob) Verheem
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Contact:

w [www.eia.nl](http://www.eia.nl)

t +3130 234 76 60

e [ncea@eia.nl](mailto:ncea@eia.nl)

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# 1. Introduction

## **The project initiative**

The Water Supply Project for Kisumu and its surrounding is to be financed under the Kenya Pooled Water Fund through Kisumu Water and Sewerage Company (KIWASCO). The overall goal of the project is to increase coverage of the drinking water supply in the in the areas: Korando A, Kogony, Kanyakwar, Dago, Mkendwa, Nyahera, Wathorego, Kadero K and Konya. The project aims to enlarge KIWASCO's coverage up to 100.000 people in the targeted areas. With the provision of drinking water, the project envisions to improve the health and quality of life and reduce poverty levels of the population of Kisumu.

The project consists of:

- construction of a water treatment plant
- rehabilitation of different springs to improve the discharge volumes
- construction of drinking water transmission main
- extension of distribution network
- construction of additional storage capacity
- implementation of Non–Revenue Water programme

The proponent for this project is the Kisumu Water and Sewerage Company (KIWASCO) who has commissioned a consultant to conduct a Detailed Design, Environmental and Social Impact Assessment (ESIA)<sup>1</sup> and Resettlement Action Plan. The consultancy contract was awarded to Finix Consulting Ltd in Association with Zamconsult Consulting Engineers Ltd.

In October 2018 the Netherlands Commission for Environmental Assessment (NCEA) was asked by RVO to review the ESIA report that was received on 29 October. The main purpose of this advisory review report is to give advice on the quality of the ESIA report and process. A draft of this advisory report has been discussed with RVO on 14 December 2018. The publication of the final advisory review is scheduled for beginning of December 2018.

## **Approach taken by the NCEA**

This advice was prepared by a working group of experts acting on behalf of the NCEA<sup>2</sup>. The group comprises expertise in the following disciplines: (eco)hydrology, social impacts and re-settlement procedures.

The NCEA has reviewed the following version of the ESIA report:

- Environmental and Social Impact Assessment Report – August 2018

In addition, the NCEA has received the following supplementary information to better understand the information provided in the ESIA report:

- Final Draft Detailed Design Report – 27 August 2018;
- Resettlement Action Plan Report – August 2018.

For the review of the ESIA report the NCEA has made use of the following reference framework:

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<sup>1</sup> The term Environmental and Social Impact Assessment (ESIA) is used to emphasise that social aspects are included.

<sup>2</sup> The NCEA is an independent statutory body of experts based in the Netherlands and has provided independent advice on EIA in the Netherlands since 1985 and abroad since 1993.

- Kenyan Laws and Regulations concerning Environmental Assessment, mandated by the National Environment Management Authority (NEMA);
- The IFC Performance standards.

The objective of the ESIA is to provide information for well-informed decision making by RVO. The NCEA has reviewed the ESIA report and the provided RAP.

#### **NCEA Review and local EIA Process**

In order to receive the necessary permits, the project initiators will need to comply with Kenyan requirements for the EIA-process and submit an ESIA to the Environmental Assessment Agency: NEMA. This current review undertaken by the NCEA has been conducted based on a final version of the ESIA, dating from August 2018. The NCEA has been informed that this ESIA is currently under review by NEMA. Note that NEMA's decision-making can take up to 90 days.

There are provisions for public participation in the EMCA and in the EIA and audit regulations. Particularly, during the review process, the EIA report must be made available to the public. Moreover, the public has to be able to submit written reactions on the EIA, and a public hearing may be held if NEMA deems this necessary. for review:

In addition, the EIA guidelines in Kenya<sup>3</sup> state that public participation should be part of all the stages of EIA: the screening, scoping and review of an EIA report. The guidelines consider the proponent responsible for collecting the views of the public during these stages. During the screening phase, for example, the possibly affected people have to be informed about the project and consulted on their concerns. Their views will be incorporated into the project report that is used for screening.

On the basis of the above, the NCEA notes that the current ESIA might require additional information provision and consultation in order to comply with Kenyan EIA requirements and guidelines concerning public participation and consultation. The NCEA recommends to utilise any such consultation requirements to augment the (too) limited consultation that has taken place so far.

#### **Reading guide**

In chapter 2 the main findings of the working group are presented and explained. In chapter 3 the detailed findings are listed and explained.

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<sup>3</sup> For more information on Kenyan EIA guidelines, please consult the NEMA website on guidelines: [www.nema.go.ke](http://www.nema.go.ke).

## 2. Main findings

This Environmental and Social Impact Assessment (hereafter 'the ESIA') contains major shortcomings. The NCEA concludes that the ESIA does not provide sufficient information to assess all relevant risks and impacts. In this chapter the NCEA sets out 4 key areas where the ESIA needs to be improved in order to meet the relevant good practice benchmarks. Detailed findings in relation to the IFC Performance Standards are described in chapter 3 of this advice.

The NCEA recommends that additional assessment is undertaken and that the ESIA is supplemented to address the following shortcomings:

- **Water availability:**  
The ESIA does not address the full extent of the project activities. Its focus is mainly on the distribution network. The impact of the project on current and future water availability has not been assessed.
- **Institutional stakeholders & public consultation:**  
Key water institutes like WRA's have not been consulted and public consultation is limited and inadequate. The focus is on beneficiaries and not those potentially impacted negatively during the construction phase nor in terms of reduced access to current water supplies.
- **The ESIA process:** This process has not been effectively utilized to increase understanding and acceptance of the project amongst potentially negatively affected people
- **Environmental and Social Management and Monitoring Plan (ESMMP):**  
The management and monitoring of environmental and social impacts is not sufficiently addressed in the current ESMMP.
- **Resettlement Action Plan (RAP):**  
The RAP provides insufficient information on the extent of expropriation of land, compensation and restoration of livelihoods.

Each of these shortcomings is further explained below.

### **Water Availability**

The ESIA concerns a water supply project that includes a variety of works, including extension of distribution network, works to rehabilitate and tap new springs, additional storage capacity, among others. The focus of the ESIA is on the impacts related to the new pipelines but pays less attention to risks related to the use of the new and/or rehabilitated springs.

From the ESIA and the project design report it becomes clear that at present the targeted springs already do not provide enough water to meet the needs of existing communities, let alone the amount of water required for the project supply. The ESIA mentions that this might be overcome by rehabilitating the springs, and/or tapping from new springs. No reference to any hydrological study clarifies this proposed solution. Also, the potential yield of the new springs is limited and based on the information in the ESIA. A scenario is plausible in which insufficient water is available for the project.

The fact that at this stage it is not clear which springs will be used, to what extent, what the overall potential yield is, and how the use of these springs may affect other sources and current downstream users, is an issue of serious concern. The potential impact of the total water demands of the project initiative should be addressed in the ESIA.

Insufficient water availability is an important risk to the viability of the project, but also a risk to the related communities and the project environment. This concerns especially the water resources the project aims to abstract and its related ecosystem. The ESIA should explore credible alternatives or mitigation actions to reduce this risk.

It is recommended that further information on hydrological aspects and currently dependent communities and ecosystems is provided. This should at least encompass an assessment at the catchment level, of current water abstractions and water use compared against water availability.

### **Institutional stakeholders & public consultation**

The ESIA does not contain a full stakeholder analysis which distinguishing various stakeholder interests in the project as well as specific roles and responsibilities. Consequently, key institutions and communities may not be in view, and human and financial capacity to deliver may not be secured.

The ESIA does not involve the most significant water agencies and experts in the public participation process. It is crucial that these stakeholders are part of the process, since it is their responsibility to manage and control water resources. It would appear that there is a lack of institutional collaboration and communication. This may lead to conflict over (water) resources and environmental degradation, and ineffective implementation of the project. The ESIA currently lacks sufficient information on these risks, which affects the entire project implementation and assessment of environmental and social impacts. Without proper key institutional consultation, critical collaboration between the stakeholders is at risk.

From the ESIA, it seems that neither the Water Resources Authority, nor the related WRUAs (Water Resources User Associations), were involved in the stakeholder consultation process. One person was interviewed on water resources: the person in charge of the two principle springs. The report mentions that she indicated that the water supply to Nyahera and Mkendwa sub locations is inadequate and cannot meet the demands of the present population. It is recommended to interview more experts on this matter. Currently the source of information is too limited, therefore more information is required in order to establish a well-informed assessment. Experts could be involved from WRA (both down- and upstream of the catchment), or from water resource projects that are going on in this catchment or basin. To our knowledge, the World Bank finances the development of basin management plans in this region.

Public consultation comprised of only two public meetings attended by 115 individuals. This figure is not disaggregated in the ESIA to indicate how many were potentially directly impacted versus indirectly affected, who should be considered general public, or to which extent women and vulnerable groups participated. Minutes of the meetings indicate a proportion of the stakeholders present were more concerned with other, broader water issues. Not all key elements of the project were discussed, such as estimated draw on local labour force, conditions of and criteria for employment, training opportunities, and encouragement of women to apply for specific tasks. Questions raised by some PAPs relating to proposed water tariffs were left unanswered. Thus, the conclusion in the ESIA on the level of 'acceptance' of the project may not be accurate. The ESIA is silent on the form and objective of either a

project-related or a labour Grievance Mechanism.

It is recommended to include all authorities and institutes concerning water and water resource management in Kisumu and surrounding, downstream county authorities in the consultation process. The public consultation needs to be inclusive of all PAP's (including vulnerable groups, women and minorities) and provide more complete information about the project as well as details of compensation, and a full description of related project and labour grievance mechanisms.

### **Environmental and Social Management and Monitoring Plan (ESMMP)**

The ESMMP is not adequate for project implementation. It does not cross-reference the mitigation measures proposed in the ESIA. For example, the mitigation measures indicated in the ESMMP do not correlate or cross-reference to Table 7-1 in the ESIA. Furthermore, the ESMMP does not specify standards to which it subscribes in, for example, applying 'recommended best construction practices that make effective and economical use of locally available resources' (Section 8.1)

The allocation of responsibility is inadequately described in the ESMMP. For example:

- There is no reference to whether the capacity of those allocated responsibility is adequate or needs building.
- Crime Management does not appear to involve police or other security agencies.
- No reference to Human Resources, rather allocating responsibility for 'gender empowerment' to the Contractor, supervised by the Resident Engineer.

The ESIA lacks definition of an organisational structure with designated personnel specific to roles, responsibilities and authority within the project. Where needed, additional responsibility for training employees and capacity should be implemented in the ESMMP. This is currently not reflected in the ESMMP.

It is recommended that a revised ESMMP incorporates all mitigation and monitoring activities mentioned in the ESIA. Roles, tasks and responsibilities should be clearly defined and inclusive of budget allocations.

### **Resettlement Action Plan (RAP)**

The RAP is instigated by a need for land acquisition as identified in the ESIA. The RAP lacks a list of parcels of land affected and the status of tenure of the occupier. There is a concern that the ESIA is silent on the possible need for borrowed land (e.g.: access roads during construction, construction site for materials and labour) in which case the RAP may need to be extended. There is no Monitoring and Evaluation Plan included.

In terms of the number of individuals impacted and attendant project costs, as expressed in the RAP, figures may not be accurate due to inconsistent use of the terms: PAPs (project affected people); and PAHs (project affected households which may comprise up to 6 PAPs). There are also questions over the disaggregation of impacted livelihoods and whether the figures include informal businesses or only registered ones. The RAP makes brief reference to affected 'vulnerable populations' but goes no further in terms of the risks ascribed, nor



proposed mitigation measures to remove that risk and provide whatever measure of support may be appropriate.

There is no explanation in the RAP as to how information was disseminated to PAPs regarding the degrees of acquisition and compensation for land or livelihood, nor what details of the RAP were shared. Some basic elements of a RAP appear to be absent, for example:

- Where compensation is proposed or listed, there is no information as to the basis on which it was calculated and whether PAPs have been advised of what to expect and asked if they are satisfied;
- Agreement with PAPs on notice period described simply as 'adequate', but no reference as to how this agreement was established.

A project Grievance Redress Mechanism is envisaged. However it assumes only claims for compensation, with no provision for other considerations (such as a need for providing information to the PAPs concerning the project). Furthermore, there is no evidence of public participation in its composition of the persons/groups consulted, nor criteria for how the consulted persons/groups are representative of the people potentially impacted.

It is recommended that the RAP is supplemented with additional information on the acquisition of (borrowed) land and the accurate number of PAPs. The RAP should also include a clear explanation on the methodology used for identifying PAPs, conducting consultations, the calculation of compensation and how livelihood restoration is envisioned. The Grievance Redress Mechanism should be extended and the extent to which the PAPs are satisfied to be documented.

### 3. Detailed findings

#### IFC Performance Standards

The ESIA does not refer to the IFC Performance standards (IFC PS). This benchmark does not appear to have been sufficiently in view when the assessment work was undertaken. The NCEA concludes that Performance Standards 1–6 are relevant to the project. Neither PS 7 nor PS 8 are likely to apply, but there is no sufficient information to draw a definitive conclusion.

The NCEA has reviewed the ESIA against each of the IFC PSs. In the following sections, the objectives of the respective IFC PSs<sup>4</sup> are presented in a box, followed by the shortcomings, in as far as these not already addressed in the previous chapter.

To comply with the IFC PS, the NCEA recommends remedying the shortcomings in the next version of the ESIA study.

#### 3.1 PS 1 – Assessment and Management of Environmental and Social Risks and Impacts

##### Objectives PS 1:

- To identify and evaluate environmental and social risks and impacts of the project.
- To adopt a mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimize and where residual impacts remain, compensate/offset for risks and impacts to workers, Affected Communities, and the environment.
- To promote improved environmental and social performance of clients through the effective use of management systems.
- To ensure that grievances from Affected Communities and external communications from other stakeholders are responded to and managed appropriately.
- To promote and provide means for adequate engagement with Affected Communities throughout the project cycle on issues that could potentially affect them and to ensure that relevant environmental and social information is disclosed and disseminated.

The size of the project and significance of risks and impacts is sufficient to justify a full scale ESIA. The ESIA and the RAP lack essential information on the full range of project activities for example: non-pipeline construction including possibly water storage, sewerage, borrowed sites and communities impacted thereby.

- The ESIA, ESMMP and RAP are inadequate in fulfilling PS 1 requirements.
- The focus of the ESIA is on beneficiaries, thus the extent of the RAP is limited.
- Scope of project is not inclusive of populations upstream who will be impacted by water being taken from sources into pipelines. From the ESIA and the RAP it is clear that there is insufficient supply for both project and local needs.
- Impacts are not addressed either upstream from the beneficiaries nor within the city in terms of drainage and sewerage.
- Stated assumptions that populations impacted are evenly spread are not supported by any data, maps or survey details.

<sup>4</sup> For a full description and explanation of the IFC Performance Standards: [www.ifc.org](http://www.ifc.org).

- No stakeholder analysis or evidence of complete consultation is provided.
- Much responsibility is allocated to other stakeholders, for example: the Land Commission, without consideration of their human and / or financial capacity
- There is no information as to how questionnaires were delivered to the PAPs to enable them to understand and reply constructively either for the ESIA nor the RAP, nor how information was disseminated regarding the acquisition and compensation for land.
- No Communications Strategy is provided for disseminating information about disruptions to the general public or those whose property is affected, with timelines for notice and responsibilities attributed
- There is no information regarding stakeholders who are made responsible for certain activities (County Government / Land Commission / Environmental Supervisor) as to their capacity to deliver both financially and in terms of expertise and what support may be needed, and from whom, to secure this.
- ESMMP does not correlate with ESIA. The RAP has no analysis of risks or mitigation measures nor MMP.

### 3.2 PS 2 – Labour & Working Conditions

**Objectives PS 2:**

- To promote the fair treatment, non-discrimination, and equal opportunity of workers.
- To establish, maintain, and improve the worker-management relationship.
- To promote compliance with national employment and labour laws.
- To protect workers, including vulnerable categories of workers such as children, migrant workers, workers engaged by third parties, and workers in the client's supply chain.
- To promote safe and healthy working conditions, and the health of workers.
- To avoid the use of forced labour.

The project will mobilize a workforce that warrants careful impact and risk assessment with attendant policies on HR (recruitment, welfare, protection), child labour and gender, and which will relate to local legislation and regulations. For example: are there other opportunities outside the Contractor's remit for employment? This should be carefully explained in the ESIA, the following observations are made:

- No information regarding local labour situation nor reference to unions.
- No Employment, Gender or Health and Safety Policies are provided or referred

### 3.3 PS 3 – Resource efficiency & Pollution Prevention

**Objectives PS 3:**

- To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities.
- To promote more sustainable use of resources, including energy and water.
- To reduce project-related GHG emissions.

Concerning PS 3, the following observations are made:

- To assess the available yield based on the potential yield, an abstraction criterion is taken of 60%. This percentage seems quite arbitrary, as it should be based on a hydrological study that considers connections of the springs with other sources.

- Negative impacts are limited to an increase in solid waste, and an increase in tariffs. Risks related to pipeline bursts or leakages are not mentioned, which would lead to an increase in the non-revenue water.
- The increase in consumption of water in the area is not addressed in the ESIA. Performance Standard 3 requires that the client shall adopt measures that reduce water usage so that the project's water consumption does not have significant adverse impacts on others. Possibly KIWASCO has such water conservation program already in place, but then these should be mentioned and summarized in the ESIA.
- Impacts related to increased amounts of waste water from the project are not assessed in the ESIA. The increase in waste water requires additional capacity for waste water (sewage) treatment. Reference should be made to the corresponding plans of KIWASCO.
- The ESIA does not provide any information on the project-related GHG emissions.

### 3.4 PS 4 – Community Health, Safety & Security

**Objectives PS 4:**

- To anticipate and avoid adverse impacts on the health and safety of the Affected Community during the project life from both routine and non-routine circumstances.
- To ensure that the safeguarding of personnel and property is carried out in accordance with relevant human rights principles and in a manner, that avoids or minimizes risks to the Affected Communities.

This project will have significant impact outside the project boundaries on people living and maintaining livelihoods in the zone of influence.

- Public Health Services (devolved function of the County Government) should assist in the process of identifying as well as assessing project-related risks and costing mitigation measures for example: water spillage, waste management / disposal; contaminated air emissions; traffic congestion and dust.
- What risks are associated with either private or public security personnel? And how will grievances about their arrangements and behaviour be addressed?

Although strictly speaking the Project Proponent may be responsible, it is the responsibility of the Contractor to draw up a separate ESIA for 'borrowed land' and the construction campsite area. The Report is silent on risks associated with transport, delivery, use and impact on the community of explosives for example possible damage to structures, impacts on livestock and fear among the PAPs themselves.

### 3.5 PS 5 – Land Acquisition & Involuntary Resettlement

#### Objectives PS 5:

- To avoid and, when avoidance is not possible, minimize displacement by exploring alternative project designs.
- To avoid forced eviction.
- To anticipate and avoid or, where avoidance is not possible, minimize adverse social and economic impacts from land acquisition or restrictions on land use by (1) providing compensation for loss of assets at replacement cost and (2) ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected.
- To improve, or restore, the livelihoods and standards of living of displaced persons.
- To improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure at resettlement sites.

As the project entails both physical and economic displacement, it will require in-depth consultation with PAPs and establishment of a range of grievance mechanisms to address and seek to resolve disputes quickly. This includes PAPs who may not have formal rights, such as illegal squatters and farmers. It will involve participative land and resource mapping (referring to UN Free Prior Informed Consent principles) and assessment of effects: e.g. on houses, stores, graves. The following observations are made:

- There is an overriding assumption that most land for the project will be public land and therefore no compensation is needed. Nevertheless, a large (but unknown) proportion of the population in the area is apparently dependent on agriculture. Removing their access to water (by taking water from the source) will have an impact on their livelihoods and way of life. No data on how many people are thus affected is provided.
- No data or maps on what land will be borrowed for the project for e.g.: quarries, access roads, construction campsite is provided.
- No description of compensation procedures, nor responsibilities within the attendant grievance mechanism is included.
- The RAP lacks information on identification of risks associated with its implementation, nor proposes any mitigating measures or suggestions in the Management and Monitoring Plan.

### 3.6 PS 6 – Biodiversity Conservation & Sustainable Management of Living Natural Resources

#### Objectives PS 6:

- To protect and conserve biodiversity.
- To maintain the benefits from ecosystem services.
- To promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities.

Concerning PS 6, the following observations are made:

- The ESIA does not refer to the needed, and possibly planned extension of the wastewater treatment plant, to deal with the additional wastewater and in order to mitigate the related risks for the biodiversity in the Lake Victoria.
- From the information provided in the ESIA, it is not clear whether there are ecosystem services that depend on the water sources that are targeted in this project. The targeted springs may currently feed certain downstream natural areas or may feed cattle or used for other use. These downstream uses should be mapped and analysed in the ESIA to be able to assess the related risks to these dependent services.
- If long-term impacts related to changes in water use, on dependent uses and ecosystem services are not clear, the IFC standard states that the client should adopt a practice of adaptive management in which the implementation of mitigation and management measures are responsive to changing conditions and the results of monitoring throughout the project's lifecycle.

### 3.7 PS 7 – Indigenous People

**Objectives PS 7:**

- To address the need to avoid or minimize impacts on indigenous peoples.
- To ensure sustainable and culturally appropriate development of benefits and opportunities.
- To ensure Free, Prior and Informed Consent (FPIC) of all peoples.

This PS would seem not to apply but there is no reference in the ESIA confirming such.

### 3.8 PS 8 – Cultural Heritage

**Objectives PS 8:**

- To protect cultural heritage from the adverse impacts of project activities and support its preservation.
- To promote the equitable sharing of benefits from the use of cultural heritage.

The ESIA does not address this, even by way of stating that there are none affected. The NCEA makes the following observation:

- A 'chance find' procedure should support the budget allocation or require one to be developed by the contractor. It is not clear who is responsible and who will have to pay the allocation once a cultural heritage is found. This should be clarified.