OLUME 4, STUDY 12

CNOOC UGANDA LIMITED

KINGFISHER OIL PROJECT, HOIMA DISTRICT, UGANDA -INFLUX MANAGEMENT PLAN

Submitted to:

PRINTREA

The Executive Director National Environment Management Authority, NEMA House, Plot 17/19/21 Jinja Road, P. O. Box 22255 Kampala, Uganda

Report Number: 1776816-319444-5

- 1 x electronic copy CNOOC Uganda Limited
- 1 x electronic copy NEMA

Distribution:

- 1 x electronic copy Eco & Partner
- 1 x electronic copy Golder





Executive Summary

This influx management plan has been prepared for China National Offshore Oil Corporation (CNOOC) Uganda Limited guided by the 2009 International Finance Corporation (IFC)'s handbook for addressing project-induced in-migration. The plan specifies the IFC performance standards which apply to the proposed influx management approaches and defines project-affected areas, the status of influx in project affected area, areas likely to be affected by influx and influx impact analysis. According to the IFC, an influx management approach should be aimed at minimising in-migration into the project area and managing the migrant physical and social footprint. The key approaches to reducing potential influx risk and impacts as proposed by the IFC include:

- Promotion of regional diversified growth strategies;
- Local recruitment and workforce management;
- Use of buffer zones:
- Initial project footprint;
- Access control;

May 2018

- Spatial planning, administration and resource allocation;
- Planning infrastructure, services and utilities;
- Provision of worker transportation and housing
- Procurement of goods and services;
- Building multi-stakeholder framework and capacity; and
- Definition of project affected people, compensation and benefits.

Lastly, the plan specifies stakeholders to be involved as per the Stakeholder Engagement Plan (SEP) and influx monitoring parameters which should be considered. This influx management plan needs to be:

- Further developed in consultation with government, key donors, affected people and other key stakeholders:
- Integrated into the company and contractor social management plans for the proposed project;
- Implemented in tandem with CNOOC's Community Development Plan (CDP) with a focus on establishing synergies between the two plans; and
- Implemented in tandem with and as supporting activities to donor and government initiatives for the affected area.

Report No. 1776816-319444-5



ABBREVIATIONS AND ACRONYMS

Abbreviation	Explanation
СВО	Community-based Organisation
CDP	Community Development Plan
CNOOC	China National Offshore Oil Corporation
DWRM	Directorate of Water Resource Management
EA	Exploration Areas
ESIA	Environmental and Social impact Assessment
IFC	International Finance Corporation
LSA	Local Study Area
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organisation
NEMA	National Environment Management Authority
OECD	Organisation for Economic Co-operation and Development
RAP	Resettlement Action Plan
SMC	School Management Committee
UPE	Universal Primary Education
USE	Universal Secondary Education





Table of Contents

1.0	INTRO	DUCTION	1
	1.1	Aim and objectives	1
	1.1.1	Aim	1
	1.1.2	Objectives	1
2.0	INTER	NATIONAL STANDARDS	1
	2.1	IFC performance standards	1
3.0	IN-MIG	GRATION IN PROJECT AFFECTED AREAS	2
	3.1	Definition of project affected areas	2
	3.1.1	Regional project affected areas	2
	3.1.2	Local project affected areas	6
	3.2	Status of the current influx	8
	3.3	Influx impact analysis	
	3.3.1	Factors likely to give rise to population influx	13
	3.3.2	Likely areas to be affected by in-migration	13
	3.3.3	Potential risks and impacts of population influx	15
4.0	PROP	OSED INFLUX MANAGEMENT APPROACHES	17
	4.1	Proposed key influx management approaches	17
	4.1.1	Promotion of regional diversified growth strategies	17
	4.1.2	Local recruitment and workforce management	17
	4.1.3	The use of a buffer zone	17
	4.1.4	Initial project footprint	17
	4.1.5	Access control	18
	4.1.6	Spatial planning, administration and resource allocation	18
	4.1.7	Planning infrastructure, services and utilities	18
	4.1.8	Provision of worker transportation and worker housing	18
	4.1.9	Procurement of goods and services	18
	4.1.10	Building multi-stakeholder frameworks and capacity	18
	4.1.11	Definition of project affected people (PAPs), compensation and benefits	19
5.0	STAKI	EHOLDER ENGAGEMENT AND MONITORING OF THE MIGRANT POPULATION	19
6.0	CONC	LUSION	21





TABLES Table 1: IFC Performance standards which apply to this plan	1
Table 1: IFC Performance standards which apply to this plan	1
T. I. O. I. 1975 J. I. I. I. I. I.	8
Table 3: Identified stakeholders	20
FIGURES	
Figure 1: Hoima District	3
	4
Figure 3: Buhuka Parish	5
Figure 4: Kingfisher development area	
Figure 5: Comparison of Nsunzu and Nsonga villages, 2003, 2013 and 2017	9
Figure 6: Comparison of Kacunde village, 2003, 2010, 2013 and 2017	10
Figure 7: Comparison of Busigi village, 2003, 2013 and 2017	11
Figure 8: Comparison of Kyakapere village, 2003, 2013 and 2017	12
Figure 9: Likely areas of population influx and migration patterns	14
APPENDIX A Influx Impacts in Project-Affected Areas APPENDIX B Document Limitations	



1.0 INTRODUCTION

Golder Associates Africa (Pty) Ltd (Golder) has prepared this influx management plan for the proposed Kingfisher oil project in Hoima District, Uganda, guided by the 2009 IFC's handbook for addressing project-induced in-migration.

1.1 Aim and objectives

1.1.1 Aim

The main aim of this influx management plan is to propose measures aimed at:

- Avoiding or reducing negative influx impacts, and enhancing positive impacts in the project zone of influence; and
- Providing capacity building for local government and communities to help them cope with project-induced in-migration.

1.1.2 Objectives

The objectives of this influx management plan are to:

- Specify the IFC performance standards that apply to the proposed influx management approaches;
- Assessing in-migration in project-affected areas;
- Identify influx risks and impacts;
- Propose influx management approaches as identified by the IFC;
- Describe stakeholders affected by the influx and stakeholders to involve in managing the influx; and
- Define monitoring parameters.

2.0 INTERNATIONAL STANDARDS

2.1 IFC performance standards

This influx management plan adheres to international best practices viz., the IFC policy and performance standards for social and environmental sustainability (2006) as amended in 2012. The policy sets out a range of recommendations for managing social and environmental impacts including those associated with the influx. Table 1 shows the key performance standards that apply to this plan.

Table 1: IFC Performance standards which apply to this plan

Applicable performance standards	Reference where applicable
IFC's Performance Standard 1: Social and environmental assessment and management system	The plan considers all social and environmental aspects related to the project.
IFC's Performance Standard 4: Community health, safety and security	The plan considers areas of risk viz., housing and respiratory issues, vector-related diseases, sexually transmitted infections, soil and water-borne diseases, food and nutrition related issues, accidents or injuries, exposure to potentially hazardous materials, social determinants of health, cultural health practices, health services infrastructure, non-communicable diseases, veterinary medicine.
IFC's Performance Standard 5: Land acquisition and involuntary resettlement	The plan considers project-induced in-migration and resettlement.





3.0 IN-MIGRATION IN PROJECT AFFECTED AREAS

3.1 Definition of project affected areas

In September 2013, the Ugandan Government awarded the first oil production licence to CNOOC, to start the development of the Kingfisher Field that lies within EA 3A, with commercial production expected to commence in 2018. Project affected areas are defined in regional and local terms. These areas are further defined below.

3.1.1 Regional project affected areas

The regional project affected area has been defined as the Hoima District (Figure 1), Kyangwali Sub-County (Figure 2) and Buhuka Parish (Figure 3).







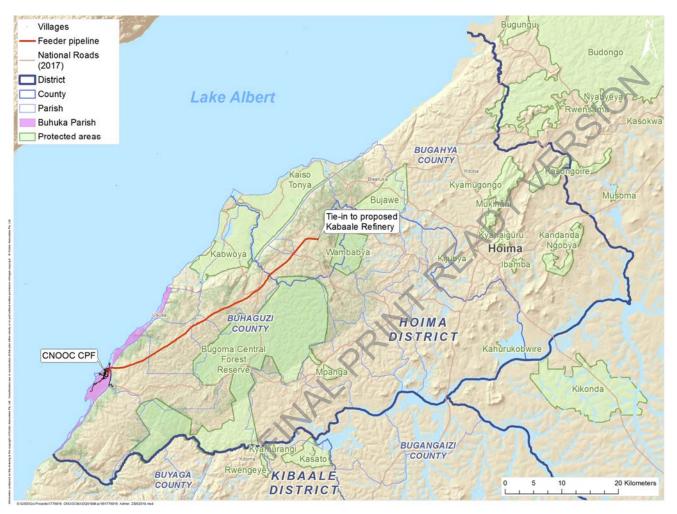


Figure 1: Hoima District





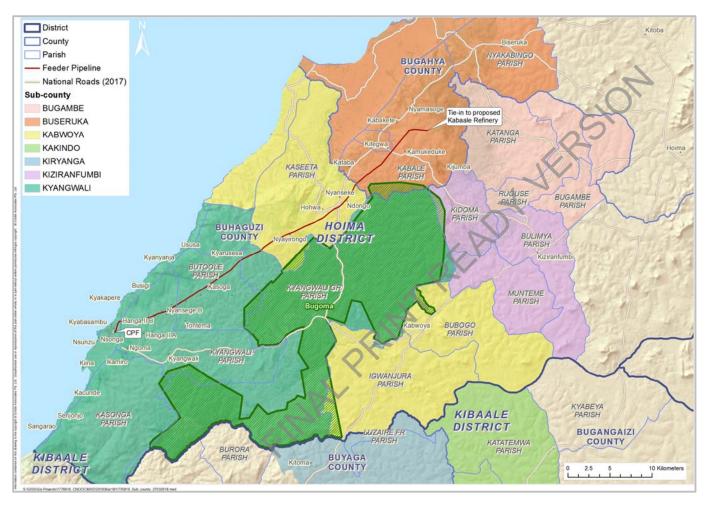


Figure 2: Kyangwali Sub-County







Figure 3: Buhuka Parish





3.1.2 Local project affected areas

The local projected affected areas include the Kingfisher development area and the pipeline (from Kingfisher to Kabaale). The Kingfisher development area is located in the Buhuka Flats, a flat area of land between the escarpment and Lake Albert in Buhuka Parish, which is the area where the majority of project infrastructure will be developed. Infrastructure includes the following:

- Four onshore well pads (Pad 1-KF, Pad 2-KF, Pad 3-KF and Pad 4A-KF);
- A total of 31 wells will be drilled (20 of which will be production wells and 11 water injection wells);
- CPF (process the fluids to produce crude oil, produced water and gas that meets the crude oil export standard);
- Kingfisher feeder pipeline (transport the stabilised crude oil approximately 52km from the CPF to a delivery point in Kabaale); and
- Supporting infrastructure, including in-field access roads and flowlines, an upgraded jetty and water abstraction station on Lake Albert, a permanent camp, a material yard (or 'supply base'), a laydown area, a safety check station at the top of the escarpment and construction camps located on the Buhuka flats and midway along the feeder pipeline.

The Kingfisher LSA focuses on the villages of Kyabasambu, Kyakapere, Nsonga, Nsunzu and Kiina as the villages closest to the proposed infrastructure (and which are located in the Buhuka Flats) and the villages of Busigi, Kyenyanja, Ususa, Kacunde, Senjonjo and Sangarao adjacent to the proposed infrastructure, which are neighbouring the Buhuka Flats areas to the north and south (Figure 4).







Figure 4: Kingfisher development area





The pipeline (from Kingfisher to Kabaale) passes through four Sub-countries, six parishes and near 24 villages (Table 2).

Table 2: Sub-counties, parishes and villages within the vicinity of the pipeline

Sub-county	Parish	Village
Kyangwali	Kyangwali	Hanga II A
		Hanga II B
		Kibale
		Ngoma
		Nyasenge A
		Nyasenge B
		Kyangwali
		Kyarusheshe
	Butoole	Kasoga
		Kyarujumba A
		Kyarujumba B
		Tontema
Kabwoya	Kaseeta	Ndongo
		Hohwa
		Nyairongo
		Nyaseke
Buseruka	Kyangwali GR	Kitegwa
	Kabale	Kabakete
		Kamukeduke
		Kataaba
	, 4	Kijumba
		Nyamasoge
		Kitegwa
Bugambe	Bugambe	Nyahaire

3.2 Status of the current influx

According to national population census (2002), between January 1980 and September 2002, the population of Hoima District increased from 142,247 to 343,480. This rapid increase was mainly due to the high fertility rates, early marriage patterns and immigrants from other parts of Uganda as well as internationally. In 1991, the population density of Hoima District was 56 persons/km², lower than the national average of 85 persons/km². By 2014, the district population had increased to 572,986 people, of whom just over 77% lived in rural areas (Uganda Bureau of Statistics, 2014). Based on the 2014 Census, the Kyangwali subcounty population stood at a total of 97,366, comprising 49,598 males and 47,768 females, respectively.

Lake Albert plays a key role in the socio-economic support of people from Uganda and the Democratic Republic of the Congo (DRC). Population movement across the lake between the two countries is significant, and there has been an upsurge in in-migration and settlement along the shores of Lake Albert from the DRC. The total number of refugees in Uganda in 2014 was estimated to be 238,040 (United Nations High Commission for Refugees, 2014). Refugees fleeing into Bundibugyo District in Uganda have spilt over into the Kyangwali refugee settlement in Hoima District.

The growth in the lakeside villages of the Buhuka Parish has been analysed drawing upon available google aerial imagery. The figures below show the changes over the years.

Figure 6 shows a clear increase in settlement between 2010 and 2013 in Kacunde village. This is despite the lack of proper access down the escarpment, local road networks and social services.







Figure 5: Comparison of Nsunzu and Nsonga villages, 2003, 2013 and 2017





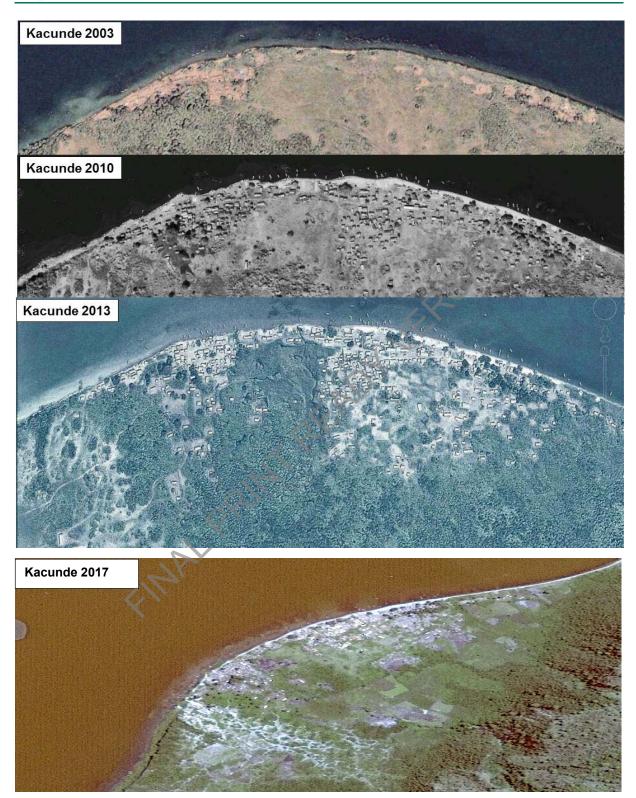


Figure 6: Comparison of Kacunde village, 2003, 2010, 2013 and 2017





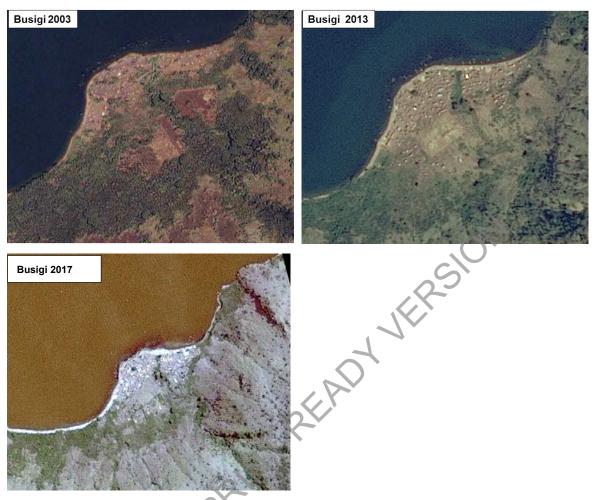


Figure 7: Comparison of Busigi village, 2003, 2013 and 2017







Figure 8: Comparison of Kyakapere village, 2003, 2013 and 2017

According to 2014 and 2018 CNOOC Uganda ESIA report, villagers report that the influx was because of people seeking opportunities from fishing and fish processing at Lake Albert. Cattle herders from up north also migrated into the Buhuka Flats and live there now with large herds of cattle. As a result, the population on the flats and adjacent villages on the lake is diverse. Little or no in-migration is reported because of current Kingfisher Project activities on the flats, although this is certain to increase as jobs and other opportunities become available.



3.3 Influx impact analysis

3.3.1 Factors likely to give rise to population influx

Influx is likely because of the following:

- Being the first oil and gas production licence issued in Uganda, the Kingfisher Project has a high profile with ongoing media coverage. The oil discoveries generally in the Lake Albert basin, with Tullow and Total being the operators of the two concessions to the north, and the proposed government oil refinery complex in Kabaale, are also widely publicised. This publicity attracts attention across Uganda and neighbouring countries;
- CNOOC Uganda's widely publicised commitment to local employment, community development and upliftment, and again, those of its partners Tullow and Total. Regardless of the lack of consistent and reliable statistics for unemployment in African countries, unemployment in Africa is a reality. This includes Uganda and its neighbouring countries. People seek work opportunities to earn income to care for their families, driven by basic needs food, shelter, income, security. Large-scale projects that offer employment of any kind, or opportunities from the wages of the employed, invariably attract work and opportunity seekers;
- As more money starts circulating in villages from wages earned by local people, economic opportunities will increase. Coupled with the general lack of modern goods and services in the villages, opportunity seekers will be quick to recognise the commercial advantage of this:
- The proposed escarpment road, although being constructed by CNOOC for the Kingfisher Project, will be a public road. It will thus not be possible to deny people access to the road. It is likely that job seekers, entrepreneurs, traders and other groups will want to access the flats and fishing products using the road;
- It is conceivable that, as money from wages, salaries, local procurement and supply start to circulate in the Hoima as well as Ntoroko and potentially adjacent districts, the influx will increase. Given cumulative developments of other oil and gas projects, accessibility, employment opportunities, emerging markets and opportunities, the influx is likely to increase exponentially. This is likely to be a *long-term* phenomenon;
- Active trade across Lake Albert has been taking place for years with citizens of the DRC, both in fish products and other goods. Trade goods from the DRC are evident in shops in the fishing. This is likely to increase from the DRC side when more money starts circulating in the villages. DRC traders would also want to use the new road for access to the escarpment and to further inland markets for their goods;
- Stakeholders also report trade with Rwandan refugees from the refugee village on top of the escarpment. Refugees descend on the escarpment to trade basic foodstuffs such as maize and other flour, oil etc. they receive as aid. It would be easy for some refugees to stay on in the villages; and
- Importantly, people in local villages are keen to improve their circumstances through any manner of employment and economic activity possible. Where this will rely on additional people entering the area, villagers are likely to encourage it.

3.3.2 Likely areas to be affected by in-migration

Based on preliminary assessments, six areas of likely in-migration have been identified viz., area 1-6 (Figure 9)..





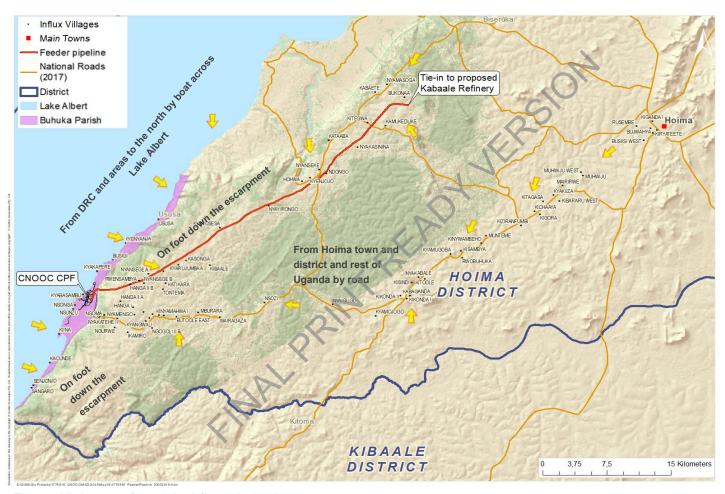


Figure 9: Likely areas of population influx and migration patterns



- Within the Kingfisher development area on the Buhuka Flats, villages likely to be directly affected by the proposed project are Kiina, Nsunzu, Nsonga, Kyabasumbu, and Kyakapere (collectively referred to herewith as area 1);
- Several near neighbours within the Buhuka Parish which, although out of range of the direct impacts, may nevertheless experience some indirect effects. This includes, for example, increased accessibility between the top and bottom of the escarpment, indirect impacts associated with employment, access to social infrastructure and impacts on demographic, social cohesion and the associated tensions and conflicts resulting from population influx. These neighbouring villages include:
 - Ususa, Kenyanya, Busigi (north of the flats between the shore of Lake Albert and the escarpment),
 and Kacunde, Senjonjo and Sangaro (south) (collectively referred to herewith as area 2);
 - The two villages of Ikamiro (A and B) at the top of the escarpment from where the escarpment road down to the flats will start (collectively referred to herewith as area 3).
- Within the footprint of the 55 km transmission pipeline from the Buhuka Flats to Kabaale where individuals and communities may suffer some loss of access to land and assets, while the surrounding areas may be subject to short-term construction impacts, notably associated with noise and dust generation, loss of access and social disruption as a result of construction crews. These areas potentially may experience short-term population influx and more population movement as a result of improved access. These villages are **collectively referred to as area 4**;
- Impacts are also anticipated across a wider area of influence that, though initially centred on the Buhuka Flats where CNOOC activities will be focussed, may extend out over the wider area of the Hoima District and beyond (Hoima and Hoima District is herewith **collectively referred to as area 5)**; and
- Notably, the road from Buhuka to Hoima links a number of settlements including towns, villages and hamlets (**collectively referred to herewith as area 6**), some of which may represent important market and trading centres for communities along the road. The nature and extent of this influence will depend on the areas from which job seekers may migrate and within which the supply chains originate. To a greater or lesser extent, this area is likely to extend over the entirety of Uganda as well as beyond the borders into the DRC and potentially other nearby countries, the refugee camp in the Hoima District with refugees mainly from Rwanda being a case in point. This wider area of influence also includes areas subject to impacts from other oil-related development and other development in the region which together with those from the Kingfisher Project will generate cumulative impacts.

3.3.3 Potential risks and impacts of population influx

An analysis of various impacts that can be expected because of project-induced in-migration in areas 1 - 6 are shown in APPENDIX A. This section provides a general analysis of project-induced influx risks and impacts.

Various positive and negative environmental and social impacts can be a result of influx, this include and not limited to the following:

- Greater economic linkages and monetisation of rural economies can lead to increased purchasing power and trade opportunities for local communities and new markets for local products and services (IFC, 2009);
- Individual, household, and community empowerment: Increased technical capacity, earning capacity, wealth accumulation, and purchasing power can provide new opportunities and power to local people (IFC, 2009);
- Access to, and expansion of, infrastructure and public services: Migrant-based population growth may serve as the basis for greater national allocation of resources to a region, thereby stimulating the development or expansion of infrastructure and public services. A more world-wise and articulate migrant population allows for the development of a more empowered and articulate population, capable of placing greater demands on local government for: (i) better infrastructure, public services, and utilities; (ii)



V

INFLUX MANAGEMENT PLAN

access to the legal justice system; and (iii) more responsive and effective public security forces (IFC, 2009);

- Business opportunities: Both the arrival and the activities of migrants have the potential to stimulate business development by introducing or increasing demand for goods and services in the area. Migrants' need for transportation, accommodation, and food stimulates the local economy, and additional development of new businesses may create further demand for goods and services, fuelling more local business and infrastructure development (IFC, 2009);
- Improved range, availability, and accessibility of goods and services: Local employment provides the local population with increased disposable income, leading to increased demand for goods and services. Such demand is often met by migrant entrepreneurs and traders who establish commercial facilities within the area. Competition among migrants can facilitate market structure, promote competition, increase variety, and reduce the prices of certain goods (IFC, 2009);
- **Higher skill base:** Migrants bring new skill sets into a project area. By employing and working with the local population, they can contribute to building the capacity, skills and knowledge of local people (IFC, 2009); and
- Increased local employment: The development of small and medium enterprises by migrants is often associated with increased demand for a local workforce. While much of this employment relies on the transfer of wealth from the project to the enterprise and onto the workforce, project development often leads to further unrelated development, through improved access and communication, introduction of and/or links to other markets, and provision of enough demand to guarantee expansion and capture of other markets (IFC, 2009).

Negative environmental and social impacts resulting from the influx. These impacts include, but are not limited to the following:

- Pollution (air, noise, water and soil), Logging, deforestation, exploitation and loss of biodiversity, land degradation, depletion of natural resources (fuelwood, water, aquatic resources, etc.), erosion and loss of soil productivity and disruption of waterways (backwaters, rivers, tributaries) (IFC, 2009);
- Infrastructure, services and utilities viz., increased the pressure on existing roads and transportation systems, education and health services, waste management systems, electricity, water supplies, and sanitation, housing, communication networks and Unplanned and uncontrolled development of squatter settlements (IFC, 2009);
- Local economy and livelihood strategies viz., Increased poverty, increased cost of living (inflation), competition for economic resources and employment, reduced availability and increased cost of land, food, fuel and housing, reduced reliance on local subsistence production systems, increased dependence on broader cash-based economy to meet needs and increased economic vulnerability for marginal groups (women, elderly, minorities, etc.) (IFC 2009);
- Health viz., increased incidence of accidents and fatalities associated with project traffic proliferation of communicable diseases (including sexually transmitted infections, respiratory infections, water-borne diseases), an insufficient number of health centres, staff and medical supplies, inadequate public hygiene facilities and changes in nutrition status (IFC, 2009); and
- Social dynamics viz., impacts on traditional beliefs, damage to cultural heritage, loss of knowledge, skills, and experience related to traditional livelihood activities, upheaval in traditional leadership, behaviour, customs, values, and norms, changes in power relationships, including undermining and changing of leadership and traditional authority structures. welfare imbalances and differential wage incomes, wealth accumulation and opportunities, dilution of social cohesion and cultural disruption (separation of households and communities), changing relationships between groups (gender, age, socio-economic status, ethnicity), possible marginalisation of women, ethnic minorities, and other vulnerable groups, loss of local identity, creation of land markets leading to changes in traditional land tenure systems, increased tension, disputes, and conflicts between locals and migrants concerning, natural resources, employment



opportunities, and other project benefits, increased incidence of social ills, including alcoholism, drug abuse, prostitution, gambling, increase in domestic violence, increase in criminality, decrease in law and order and increased ethnic tension and violence (IFC, 2009).

4.0 PROPOSED INFLUX MANAGEMENT APPROACHES

This plan adopts an influx management approach as proposed by the IFC to develop an influx management strategy aimed at managing project-induced in-migration while taking into consideration the following aspects:

- Minimising in-migration into the project area; and
- Managing the migrant physical and social footprint.

4.1 Proposed key influx management approaches

The key approaches to reducing potential influx risk and impacts as proposed by the IFC include following;

4.1.1 Promotion of regional diversified growth strategies

CNOOC could support the development and implementation of regional growth strategies that create alternative economic opportunities distant from the project area of influence. Thus support could ensure that the project does not become the sole focus of economic development and attraction. To successfully develop regional diversified growth strategies, collaborate with various stakeholders such as national, regional, and local government, the private sector, civil society, and local communities. Should no regional growth strategy exist, CNOOC could directly contribute to the promotion and development of multiple regional economic poles as this may still reduce medium-to-long-term project costs. Contributions to the development of public infrastructure, services, and utilities outside of the project requirements may stimulate economic development, while innovative approaches to ensuring that a broader population can access and benefit from infrastructure, services, and utilities that are developed in support of the project may address the discrepancies between the project, the project area, and more distant locations.

4.1.2 Local recruitment and workforce management

CNOOC could develop a "local-first recruitment policy" aimed at ensuring the use of local recruitment centres rather than recruitment centres distant from the project location. The use of project transport, hiring policy and practice for day and casual labourers, medium-to-long-term localisation plans and worker mobilisation and demobilisation strategies, need to be defined at an early stage. CNOOC needs to work with local government to help ensure that local people can obtain identification cards. Where government systems are weak, high levels of internal migration may impose high costs on project human resource management, and also require capacity building of the relevant government bodies.

Projects which may also experience and benefit from international (cross-border) migration should be aware of country policies and requirements for recruitment of migrant labour.

4.1.3 The use of a buffer zone

CNOOC may decide to include buffer zones in its design, spatially separating the project from existing and migrant populations. Such buffer zones may exist as exclusion zones into which entry is forbidden or as zones with designated (and restricted) occupation and land use rights. Use of buffer zones may pre-empt the development of fence-line settlements proximate to construction and operations and, together with appropriate workforce recruitment policies, may encourage settlement in the nearest villages and towns.

4.1.4 Initial project footprint

The location of the logistical base of the proposed Kingfisher oil project (project footprint) determines the target destination of potential in-migrants. CNOOC should decide whether to operate one or multiple offices, and whether to locate and operate a logistical base on the project site, in the nearest town with adequate infrastructure, or in the nearest centre that can function as a service centre for the project as this can contribute to the influx.



4.1.5 Access control

To protect the host community from the speculative land acquisition, CNOOC may decide to secure all required land up-front. During this intervening period, the CNOOC may permit PAPs to use the land through the development of annual land use agreements. Additionally, a "minimal impact policy" that includes the adoption of an "offshore inland operations" approach to minimise the need to open access roads and discourage unplanned population influx to the affected communities can be developed by CNOOC. Compared to opening access roads, air and river transportation of material, equipment, and personnel can be maximised using lake barges and helicopters. When temporary access roads are required, the CNOOC may implement access control measures for those roads, and once they are no longer required, they are re-vegetated.

4.1.6 Spatial planning, administration and resource allocation

To avoid spontaneous and unplanned growth in housing, CNOOC may work together with local government to develop and implement master urban/spatial plans for existing and new settlements within the project area of influence. The proposed plans should allow for controlled development through zoning and regulation, for instance, by directing development and in-migration to defined nodes. In this way, they will promote better management in the development of infrastructure, services, and utilities. Appropriate "pull" factors, such as demarcated housing sites, roads, water supplies, schools, and clinics, should be included in the definition and preparation of sites.

4.1.7 Planning infrastructure, services and utilities

The availability of infrastructure, services, and utilities can affect settlement patterns. For example, project development of infrastructure, services, and utilities for its use often requires the development of these facilities outside of the project site (IFC, 2009). Both the infrastructure and the increased availability of services and utilities may lead to considerable social pressure being placed on the project to either share their resources or meet the cost of providing resources to the public. Alternatively, project resources may also be tapped illegally or otherwise utilised (IFC, 2009). An assessment of current capacity against predicted population increases will allow strategic planning and resource allocation decisions.

4.1.8 Provision of worker transportation and worker housing

The provision of transportation services for a project workforce living within a 50 - 100-km radius of the project may reduce the need for migration toward the project site, reduce the demand for local housing, reduce the pressure on local infrastructure, services, and utilities, and thus pre-empt the development of larger population centres close to the site. CNOOC should note that decisions regarding the provision of worker housing have the potential to affect local demand for housing, pressure placed on existing infrastructure, services, and utilities, the development of local economies to support the workforce and the development of local level jealousies regarding standards of housing, utilities, and services, as well as post-project disposal of housing.

4.1.9 Procurement of goods and services

It is proposed that CNOOC procures goods and services locally, localisation will create service towns entirely dependent upon the project for employment and the procurement of goods and services. To mitigate dependency, the development and use of more distant and, perhaps, established supply centres that serve multiple sectors within the region should be considered, with a full accounting of the medium-to-long-term economic, financial, and social costs and benefits. In the case of the Kingfisher Project Development, the centre can be located either at Kyangwali Sub-county Headquarters, Kabwoya Township or Hoima Municipality.

4.1.10 Building multi-stakeholder frameworks and capacity

CNOOC should include several stakeholders in managing project-induced in-migration, these may include local, regional and national government; non-government organisations; community-based organisations; religious groups; and affected communities themselves. Stakeholder roles and responsibilities should be identified, CNOOC should take the lead role and should ensure the following:

All stakeholders speak with one voice in support of the agreed policies and programmes;





- All stakeholders contribute resources to the implementation of recommended actions;
- Where appropriate, management responsibilities are assumed by the relevant stakeholder; and
- Systems promoting accountability and responsibility are adopted.

4.1.11 Definition of project affected people (PAPs), compensation and benefits

CNOOC should clearly define PAPs, compensation and benefits for the Kingfisher Project. The population within the project area of influence needs to understand the process of identifying project PAPs. Their understanding will reduce expectations concerning entitlement to project benefits and further protect local benefits from in-migration.

5.0 STAKEHOLDER ENGAGEMENT AND MONITORING OF THE MIGRANT POPULATION

CNOOC should engage various stakeholders when deciding which of the key approaches will be applicable for the Kingfisher oil project. Stakeholder engagement and monitoring aim to ensure the following:

- SEP addresses influx related issues;
- CNOOC selects and implements relevant key approaches; and
- Early and effective monitoring systems are in place.

The SEP encapsulates the stakeholders who have been identified as part of the project and stipulates overall engagement strategy with various project stakeholders.





Key identified stakeholders can be consulted for further development and consequent management and implementation of the influx management plan. Table 3 shows identified stakeholders.

Table 3: Identified stakeholders

National level	District level	County level	Sub-country level	Parish level	Village level
 Ministry of Lands, Housing and Urban Development; Ministry of Local Government; Ministry of Education and Sports; National Environmental Management Authority; Wildlife Department; Water Resources Department; Donors such as the World Bank and others; NGOs with programmes in the Hoima District; Ministry of Energy and Mineral Development; Ministry of Internal Affairs; Ministry of Finance, Planning and Economic Development. 	 Chief Administrative Officer (CAO); Local Council V Chairman and executive committee; District Land Officer; Head of Department: Planning; Head of Department: Environment; Head of Department: Head of Department: Head of Department: Education; Natural Resources Department; Local Government Council; and Administrative Unit Council 	Assistant Administrative Officer (AAO).	Sub-county Chief: and Local Council III Chairman and executive committee.	 Parish Chief; and Local Council II Chairman and executive committee. 	 Village Chiefs; CBOs; and Ad-hoc groups (women, fisheries, business etc.).





- The monitoring of influx and its impacts must be carried out regularly by CNOOC. An influx monitoring plan should be developed by CNOOC, the parameters that should be included in the monitoring plan include and not limited to the following:
 - Aerial imagery of project affected areas;
 - Employment and unemployment rates;
 - Grievances related to the influx;
 - Total number of in-migrants within each project affected area;
 - Waste management;
 - Evidence of conflicts or tensions with or within host communities;
 - Evidence of social ills viz., problems with alcohol, drugs, gambling and prostitution;
 - Crime statistics recorded by local police; and
 - Health statistics.

6.0 CONCLUSION

This plan has specified the IFC performance standards which apply to the proposed key approaches. Project affected areas, the status of influx in project affected area, areas likely to be affected by influx and influx impacts, the proposed IFC key approaches to reduce potential influx risk and impacts, stakeholder engagement and monitoring parameters have been defined in this plan. However, the proposed influx management plan needs to be:

- Further developed in consultation with government, key donors, affected people and other key stakeholders:
- Integrated into the company and contractor social management plans for the proposed project;
- Implemented in tandem with CNOOC's CDP with a focus on establishing synergies between the two plans; and
- Implemented in tandem with and as supporting activities to donor and government initiatives for the affected area.

7.0 REFERENCES

- 1) Golder Associates, 2014. Socio-economic impact assessment for the proposed Kingfisher Development.
- 2) Golder Associates, 2018. Socio-economic assessment for proposed Kingfisher oil project in Hoima district, Uganda, Social Impact Assessment Report: Production facility and pipeline.
- 3) Hoima District Local Government, 2011. District Development Plan 2011/12 2015/16.
- 4) IFC, 2009. Projects and People: A Handbook for Addressing Project-Induced In-migration. www.ifc.org
- 5) IFC, 2007. Stakeholder Engagement A Good Practice Handbook for Companies Doing Business in Emerging Markets.
- World Bank, 2013. Uganda Support to Municipal Infrastructure Development Program (USMID). www.world bank.org.
- 7) World Bank, 2013. Albertine Region Sustainable Development Project (ARSDP). www.world bank.org





GOLDER ASSOCIATES AFRICA (PTY) LTD.

Dr Sithandiwe Khoza Social Scientist Dr David De Waal Technical Director, Africa Social Management Lead

RL/DdW/up

Reg. No. 2002/007104/07

Directors: RGM Heath, MQ Mokulubete, SC Naidoo, GYW Ngoma

Golder and the G logo are trademarks of Golder Associates Corporation

g:\projects\1776816 - cnooc esia finalisation\6.1 deliverables\specialist studies\12.influx\1776816-319444-5_rea_cnooc_kfda_esia_vol_4_ss_12_influx_management_plan.docx





APPENDIX A

JERSION S

Influx Impacts in Project-Affected Areas





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
		Y/N	L/M/H	S/M/L	L/M/H
Positive Impacts					
Increased links to the	Area 1	Υ	Н	L _i	Н
mainstream economy	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	L	S	L
	Area 5	Υ	М)	М
	Area 6	Υ	M	М	М
Increased local skills base	Area 1	Υ	Н	L	М
	Area 2	Υ	М	L	М
	Area 3	Y	Н	L	Н
	Area 4	Y	L	S	L
	Area 5	Y	М	L	L
	Area 6	Υ	М	L	L
Business development	Area 1	Υ	Н	L	Н
opportunities	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	L	S	L
	Area 5	Υ	М	L	М
	Area 6	Υ	М	L	М
Employment creation	Area 1	Υ	Н	L	М
	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	М
	Area 4	Υ	М	s	М
	Area 5	Υ	М	L	М
	Area 6	Υ	М	L	М
	Area 1	Υ	Н	L	Н





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
The increased local labour	Area 2	Υ	М	L	М
pool	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	М	М
	Area 5	Υ	Н	L	М
	Area 6	Υ	М	L	М
The opening of new	Area 1	Υ	Н	76	Н
markets for local products and services	Area 2	Υ	М	M	М
	Area 3	Υ	Н 2	L	Н
	Area 4	Υ	Н	М	М
	Area 5	Υ	Н	L	М
	Area 6	Y	М	L	М
Increased accessibility	Area 1	Y	Н	L	Н
and availability of goods and services	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	М
	Area 4	Υ	М	М	L
	Area 5	Υ	М	М	М
18	Area 6	Υ	М	L	М
Alternate livelihood	Area 1	Υ	М	L	Н
opportunities	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	М	М
	Area 5	Υ	М	L	М
	Area 6	Υ	М	L	М
Improved wage and	Area 1	Υ	Н	L	Н
income levels	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	М
	Area 4	Υ	M	М	М





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
	Area 5	Υ	М	М	М
	Area 6	Υ	М	М	L
Increased local tax	Area 1	Υ	Н	L	Н
revenue levels	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	М	М
	Area 5	Υ	М	Q	М
	Area 6	Υ	М	L	М
Increased individual,	Area 1	Υ	М	L	М
household, and community empowerment	Area 2	Υ	М	М	L
	Area 3	Y	Н	L,	М
	Area 4	Y	М	L,	М
	Area 5	Υ	М	L,	М
	Area 6	Υ	М	L,	L
Improved local training	Area 1	Υ	М	М	М
and skills development opportunities	Area 2	Υ	L	М	L
	Area 3	Υ	М	L,	М
	Area 4	Υ	L	М	L
	Area 5	Υ	М	L,	М
	Area 6	Υ	L	S	L
The monetisation of	Area 1	Υ	Н	L	Н
remote rural economies	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	М	М
	Area 5	Υ	М	L	М
	Area 6	Υ	М	М	М
	Area 1	Υ	Н	L	Н





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
Opportunities to build	Area 2	Υ	М	L	М
community organisational structures	Area 3	Υ	Н	L	М
	Area 4	Υ	L	М	L
	Area 5	Υ	М	L	М
	Area 6	Υ	L	L	L
mproved access through	Area 1	Υ	Н	7/2	Н
the development of road systems	Area 2	Υ	М	T)	М
	Area 3	Υ	Н	L	М
	Area 4	Υ	М	L	М
	Area 5	Υ	М	L	М
	Area 6	Υ	М	L	М
Improved information and	Area 1	Y	Н	L	М
communication	Area 2	Υ	L	L	М
	Area 3	Υ	Н	L	М
	Area 4	Υ	L	М	М
	Area 5	Υ	М	L	М
18	Area 6	Υ	L	М	М
Improved housing, water,	Area 1	Υ	L	L	L
and sanitation	Area 2	Υ	L	L	L
	Area 3	Υ	L	L	L
	Area 4	N	-	-	-
	Area 5	Υ	L	L	L
	Area 6	N	-	-	-
mproved access to and	Area 1	Υ	М	L	М
expansion of infrastructure and public	Area 2	Υ	М	L	L
services	Area 3	Υ	М	L	М
	Area 4	Υ	М	L	М





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
	Area 5	Υ	М	L	М
	Area 6	Υ	L	L	L
Increased attention and	Area 1	Υ	М	L	L
input by government authorities, NGOs, etc.	Area 2	Υ	L	L	L
	Area 3	Υ	М	L	L
	Area 4	Υ	L	76	L
	Area 5	Υ	М	P	L
	Area 6	Υ	L , Q-	L	L
Increased political power	Area 1	Υ	F//	L _.	L
	Area 2	Υ	L	L _.	L
	Area 3	Υ	L	L	L
	Area 4	Y	L	L	L
	Area 5	Υ	L	L	L
	Area 6	Υ	L	L	L
Adverse Impacts	8,				
Environmental					
Logging	Area 1	Υ	Н	L	Н
	Area 2	Υ	Н	L	М
	Area 3	Υ	Н	L	М
	Area 4	Υ	Н	М	М
	Area 5	Υ	Н	L	М
	Area 6	Υ	Н	L	М
Deforestation	Area 1	Υ	Н	L	Н
	Area 2	Υ	Н	L	М
	Area 3	Υ	Н	М	Н
	Area 4	Υ	Н	L	М
		-	-	-	





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
	Area 5	Υ	Н	L	М
	Area 6	Υ	Н	L	М
Exploitation and loss of	Area 1	Υ	Н	L	Н
biodiversity	Area 2	Υ	Н	L	Н
	Area 3	Υ	Н	L	Н
	Area 4	Υ	Н	7/2	Н
	Area 5	Υ	Н	()	М
	Area 6	Υ	Н	L	М
Land use change	Area 1	Υ	М	L	М
	Area 2	Υ	Н	L,	М
	Area 3	Y	Н	L	М
	Area 4	Y	М	L	М
	Area 5	Y	Н	L	М
	Area 6	Υ	М	L	L
Land degradation	Area 1	Υ	Н	L	М
	Area 2	Υ	Н	L	Н
18	Area 3	Υ	Н	L,	М
	Area 4	Υ	М	М	М
	Area 5	Υ	Н	L,	М
	Area 6	Υ	М	М	М
Depletion of natural	Area 1	Υ	Н	L,	Н
resources	Area 2	Υ	Н	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	Н	L	М
	Area 5	Υ	Н	L	М
	Area 6	Υ	н	L	М
	Area 1	Υ	Н	L	М





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
Erosion and loss of soil productivity	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	L	М
	Area 5	Υ	Н	L	Н
	Area 6	Υ	М	М	М
Air, water, and soil pollution	Area 1	Υ	Н	7/2	Н
	Area 2	Υ	н	T)	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	L	М
	Area 5	Υ	М	L	М
	Area 6	Υ	М	М	М
Disruption of waterways	Area 1	Y	Н	L	Н
	Area 2	Υ	Н	L	М
	Area 3	N	-	-	-
	Area 4	N	-	-	-
	Area 5	N	-	-	-
	Area 6	N	-	-	-
Increased pressure on, and possible disputes over, land use and common property natural resources	Area 1	Υ	Н	L	Н
	Area 2	Υ	Н	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	Н	М	М
	Area 5	Υ	Н	М	Н
	Area 6	Υ	Н	М	М
Project Security					-
Reduced ability to protect the workforce	Area 1	Υ	М	L	М
	Area 2	Υ	L	L	L
	Area 3	Υ	М	L	М





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
	Area 4	Υ	М	М	М
	Area 5	Υ	L	М	L
	Area 6	Υ	L	М	L
Reduced ability to safeguard physical assets	Area 1	Υ	М	L,	М
	Area 2	Υ	L	М	М
	Area 3	Υ	М	М	М
	Area 4	Υ	L C	M	L
	Area 5	Υ	L , Q-	М	L
	Area 6	Υ	T//	М	L
Increased threats to business continuity	Area 1	Υ	L	М	L
	Area 2	Υ	L	М	L
	Area 3	Y	L	М	L
	Area 4	Υ	L	М	L
	Area 5	Υ	L	М	L
	Area 6	Υ	L	М	L
Increased threats to corporate reputation on the project (social licence to operate)	Area 1	Υ	М	L	L
	Area 2	Υ	L	L	L
	Area 3	Υ	М	L	L
	Area 4	Υ	L	L	L
	Area 5	Υ	L	L	L
	Area 6	Υ	L	L	L
nfrastructure, Services, and	l Utilities				
Increased use of existing roads and transportation systems	Area 1	Υ	Н	L	Н
	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	L	М
	Area 5	Υ	Н	L	М





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
	Area 6	Υ	Н	L	Н
Increased pressure on	Area 1	Υ	Н	L	Н
education and health services	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	L	L
	Area 5	Υ	Н	7/2	М
	Area 6	Υ	М	Q	L
Increased demand for	Area 1	Υ	Н	L	Н
electricity, water supplies, and sanitation	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	L	М
	Area 5	Y	Н	L	М
	Area 6	Υ	М	L	М
Increased pressure on	Area 1	Υ	Н	L	Н
waste management systems	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	Н
18	Area 4	Υ	М	L	L
	Area 5	Υ	Н	L	М
	Area 6	Υ	М	L	L
Unplanned and	Area 1	Υ	Н	L	Н
uncontrolled development of squatter settlements	Area 2	Υ	Н	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	L	М
	Area 5	Υ	Н	L	М
	Area 6	Υ	М	L	М
Increased demand for	Area 1	Υ	Н	L	Н
communications networks	Area 2	Υ	М	L	М





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
	Area 3	Υ	Н	L	М
	Area 4	Υ	М	L	М
	Area 5	Υ	Н	L	М
	Area 6	Υ	М	L,	М
Increased demand for	Area 1	Υ	Н	L	Н
housing	Area 2	Υ	М	7/2	М
	Area 3	Υ	Н	()	н
	Area 4	Υ	M	L.	М
	Area 5	Υ	М	L,	М
	Area 6	Υ	М	L	L
Increased use/demand for	Area 1	Υ	Н	L	М
community, religious, and recreational facilities	Area 2	Y	L	L	L
	Area 3	Υ	М	L	М
	Area 4	Υ	L	М	L
	Area 5	Υ	М	L,	L
	Area 6	Υ	L	L,	L
Economics and Livelihood	Strategies				
The increased cost of	Area 1	Υ	Н	L,	Н
living (inflation)	Area 2	Υ	М	L,	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	L	М
	Area 5	Υ	Н	L,	Н
	Area 6	Υ	М	L	L
Reduced availability and	Area 1	Υ	Н	L	Н
increased cost of land, food, fuel, and housing	Area 2	Υ	М	L	М
	Area 3	Υ	н	L	Н
	Area 4	Υ	M	L	М





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
	Area 5	Υ	Н	L,	М
	Area 6	Υ	М	L	L
Increased dependence on	Area 1	Υ	Н	L	Н
the broader cash-based economy to meet needs	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	76	М
	Area 5	Υ	н с	Q .	М
	Area 6	Υ	М	L	L
Reduced reliance on local	Area 1	Υ	н	L	Н
subsistence production systems	Area 2	Υ	М	L	М
	Area 3	Y	Н	L	Н
	Area 4	Y	М	L	М
	Area 5	Y	Н	L	М
	Area 6	Υ	М	L	L
Competition for economic	Area 1	Υ	Н	L	Н
resources	Area 2	Υ	М	L	М
IP	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	L,	L
	Area 5	Υ	М	L	М
	Area 6	Υ	М	L,	L
Increased economic	Area 1	Υ	Н	L	Н
vulnerability for marginal groups (women, elderly,	Area 2	Υ	М	L	L
minorities, etc.)	Area 3	Υ	Н	L,	М
	Area 4	Υ	М	L	L
	Area 5	Υ	М	L	L
	Area 6	Υ	М	L	L
	Area 1	Υ	Н	L	Н





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
"Boom /Bust" cycles	Area 2	Υ	М	L	М
associated with initial construction, eventual	Area 3	Υ	Н	L	М
closure	Area 4	Υ	М	L	М
	Area 5	Υ	М	L _.	М
	Area 6	Υ	М	L	L
Health				and a	
The proliferation of	Area 1	Υ	Н	P	Н
communicable diseases	Area 2	Υ	M	L	L
	Area 3	Υ	Н	L	Н
	Area 4	Υ	М	L	М
	Area 5	Υ	М	L	М
	Area 6	Y	М	L	L
Inadequate public hygiene	Area 1	Υ	Н	L	М
facilities	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	М
	Area 4	Υ	М	L	L
JP	Area 5	Υ	М	L	L
	Area 6	Υ	М	L	L
Pollution (air, water, dust,	Area 1	Υ	Н	L	М
noise, traffic)	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	М
	Area 4	Υ	М	L	L
	Area 5	Υ	М	L	L
	Area 6	Υ	М	L	М
Increased incidence of	Area 1	Υ	Н	L	Н
accidents and fatalities	Area 2	Υ	L	L	L
	Area 3	Υ	М	L	М





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
	Area 4	Υ	М	L	М
	Area 5	Υ	L	L	L
	Area 6	Υ	М	L	М
Changes in nutrition	Area 1	Υ	М	L,	М
status	Area 2	Υ	М	L	L
	Area 3	Υ	М	7/2	М
	Area 4	Υ	L C	Ž)	L
	Area 5	Υ	М	L	L
	Area 6	Υ	T///	L	L
Social Dynamics		7			
Increased poverty	Area 1	Υ	Н	L	Н
	Area 2	Y	М	L	L
	Area 3	Υ	Н	L	М
	Area 4	Υ	М	L	М
	Area 5	Υ	М	L	М
	Area 6	Υ	L	L	L
Loss of local identity	Area 1	Υ	М	L	М
	Area 2	Υ	L	L	L
	Area 3	Υ	М	L	М
	Area 4	Υ	L	L	L
	Area 5	Υ	М	L	L
	Area 6	Υ	L	L	L
Loss of knowledge, skills,	Area 1	Υ	М	L	М
and experience related to traditional livelihood	Area 2	Υ	L	L	L
activities	Area 3	Υ	М	L	М
	Area 4	Υ	М	L	L
	Area 5	Υ	M	L	L





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
	Area 6	Υ	L	L	L
Upheaval in traditional	Area 1	Υ	М	L	М
eadership, behaviour, customs, values, and	Area 2	Υ	L	L	L
norms	Area 3	Υ	М	L	М
	Area 4	Υ	М	L	L
	Area 5	Υ	L	76	L
	Area 6	Υ	М)	L
Changing relationships	Area 1	Υ	н 🔑	L	М
petween groups (gender, age, socio-economic	Area 2	Υ	L	L	L
status, ethnicity)	Area 3	Υ	М	L	М
	Area 4	Y	М	L	L
	Area 5	Y	М	L.	L
	Area 6	Υ	М	L	L
Dilution of social cohesion	Area 1	Υ	Н	L	М
and cultural disruption separation of households	Area 2	Υ	М	L	L
and communities)	Area 3	Υ	М	L	М
AP.	Area 4	Υ	М	L	L
	Area 5	Υ	М	L	М
	Area 6	Υ	М	L	L
ncreased incidence of social ills, including	Area 1	Υ	Н	L	Н
alcoholism, drug abuse,	Area 2	Υ	М	L	М
prostitution, gambling	Area 3	Υ	Н	L	М
	Area 4	Υ	М	L	М
	Area 5	Υ	М	L	М
	Area 6	Υ	М	L	L
	Area 1	Υ	Н	L	М





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
Creation of land markets leading to changes in traditional land tenure	Area 2	Υ	М	L	М
	Area 3	Υ	Н	L	М
systems	Area 4	Υ	М	L	L
	Area 5	Υ	М	L	М
	Area 6	Υ	М	L	L
ncreased tension,	Area 1	Υ	Н	7/2	Н
disputes, and conflicts between locals and	Area 2	Υ	М	Q	L
migrants concerning natural resources,	Area 3	Υ	М	L	М
employment opportunities, and other project benefits	Area 4	Υ	М	L	L
	Area 5	Υ	М	L	М
	Area 6	Υ	М	L	L
Welfare imbalances and	Area 1	Y	Н	L	Н
differential wage incomes, wealth accumulation and	Area 2	Y	М	L	L
opportunities	Area 3	Υ	М	L	М
	Area 4	Υ	М	L	L
	Area 5	Υ	М	L	М
JP	Area 6	Υ	М	L	L
The marginalisation of	Area 1	Υ	Н	L	М
women, ethnic minorities, and other vulnerable	Area 2	Υ	L	L	L
groups	Area 3	Υ	М	L	М
	Area 4	Υ	М	L	L
	Area 5	Υ	М	L	М
	Area 6	Υ	М	L	L
ncrease in domestic	Area 1	Υ	М	L	М
violence	Area 2	Υ	L	L	L
	Area 3	Υ	М	L	М
	Area 4	Υ	М	L	L





Category	Impacted areas	Applicability	Probability	Timeframe	Severity
	Area 5	Υ	М	L	М
	Area 6	Υ	L	L	L
Increase in crime	Area 1	Υ	Н	L	М
	Area 2	Υ	М	L	L
	Area 3	Υ	М	L	М
	Area 4	Υ	М	7/1	М
	Area 5	Υ	М))	М
	Area 6	Υ	М	L	М
Increase in ethnic tension and violence	Area 1	Υ	Н	L	Н
and violence	Area 2	Υ	М	L	L
	Area 3	Y	М	L	М
	Area 4	Y	М	L	М
	Area 5	Y	М	L	L
	Area 6	Υ	М	L	L
The decrease in law and	Area 1	Υ	Н	L	М
order	Area 2	Υ	М	L	L
	Area 3	Υ	М	L	М
	Area 4	Υ	М	L	L
	Area 5	Υ	М	L	М
	Area 6	Υ	М	L	L

Key

Applicability	Probability	Timeframe	Severity
Y: Yes; and	L: Low;	S: Short-term;	L: Low;
N: No.	■ M: Medium; and	■ M: Medium-term;	■ M: Medium; and
	■ H: High.	L: Long-term.	■ H: High.





FIRML PRINT READY VERSION





APPENDIX B

Document Limitations

FINAL PRINT READY VERSION





DOCUMENT LIMITATIONS

This Document has been provided by Golder Associates Africa Pty Ltd ("Golder") subject to the following limitations:

- This Document has been prepared for the particular purpose outlined in Golder's proposal and no responsibility is accepted for the use of this Document, in whole or in part, in other contexts or for any other purpose.
- The scope and the period of Golder's Services are as described in Golder's proposal, and are subject to restrictions and limitations. Golder did not perform a complete assessment of all possible conditions or circumstances that may exist at the site referenced in the Document. If a service is not expressly indicated, do not assume it has been provided. If a matter is not addressed, do not assume that any determination has been made by Golder in regards to it.
- Conditions may exist which were undetectable given the limited nature of the enquiry Golder was retained to undertake with respect to the site. Variations in conditions may occur between investigatory locations, and there may be special conditions pertaining to the site which have not been revealed by the investigation and which have not therefore been taken into account in the Document. Accordingly, additional studies and actions may be required.
- In addition, it is recognised that the passage of time affects the information and assessment provided in this Document. Golder's opinions are based upon information that existed at the time of the production of the Document. It is understood that the Services provided allowed Golder to form no more than an opinion of the actual conditions of the site at the time the site was visited and cannot be used to assess the effect of any subsequent changes in the quality of the site, or its surroundings, or any laws or regulations.
- Any assessments made in this Document are based on the conditions indicated from published sources and the investigation described. No warranty is included, either express or implied, that the actual conditions will conform exactly to the assessments contained in this Document.
- Where data supplied by the client or other external sources, including previous site investigation data, have been used, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Golder for incomplete or inaccurate data supplied by others.
- vii) The Client acknowledges that Golder may have retained sub-consultants affiliated with Golder to provide Services for the benefit of Golder. Golder will be fully responsible to the Client for the Services and work done by all of its sub-consultants and subcontractors. The Client agrees that it will only assert claims against and seek to recover losses, damages or other liabilities from Golder and not Golder's affiliated companies. To the maximum extent allowed by law, the Client acknowledges and agrees it will not have any legal recourse, and waives any expense, loss, claim, demand, or cause of action, against Golder's affiliated companies, and their employees, officers and directors.
- viii) This Document is provided for sole use by the Client and is confidential to it and its professional advisers. No responsibility whatsoever for the contents of this Document will be accepted to any person other than the Client. Any use which a third party makes of this Document, or any reliance on or decisions to be made based on it, is the responsibility of such third parties. Golder accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this Document.

GOLDER ASSOCIATES AFRICA (PTY) LTD

Report No. 1776816-319444-5

As a global, employee-owned organisation with over 50 years of experience, Golder Associates is driven by our purpose to engineer earth's development while preserving earth's integrity. We deliver solutions that help our clients achieve their sustainable development goals by providing a wide range of independent consulting, design and construction services in our specialist areas of earth, environment and energy.

For more information, visit golder.com

Africa + 27 11 254 4800
Asia + 86 21 6258 5522
Australasia + 61 3 8862 3500
Europe + 44 1628 851851
North America + 1 800 275 3281

solutions@golder.com www.golder.com

QIM PERDY VERSION

Golder Associates Africa (Pty) Ltd.
Building 1, Maxwell Office Park,
Magwa Crescent West, Waterfall City,
Midrand, 1685, South Africa
P.O. Box 6001,
Halfway House, 1685

T: +27 11 254 4800

