# Summary of Complaint by Save Lamu and Kwasasi Mvunjeni Farmers Self-Help Group to the Compliance Advisor/Ombudsperson of the International Finance Corporation

The Complaint was filed by Save Lamu and the Kwasasi Mvunjeni Farmers Self-Help Group. Accountability Counsel and Natural Justice are supporting the complaint as Advisors.

The Complaint explains that Save Lamu and the Kwasasi Mvunjeni Farmers Self-Help Group jointly share grave concerns about serious risks posed by the coal plant to their communities' health, livelihoods, food security, environment and valuable cultural heritage. It also explains how these concerns have been exacerbated by the lack of meaningful community consultation and participation in project design.

The complaint is addressed to the Compliance Advisor/Ombudsperson or CAO, the complaint office of the International Finance Corporation (IFC) of the World Bank Group. We believe that the IFC is contributing to the Lamu coal plant through investments in three commercial banks: the Co-Operative Bank of Kenya, the Kenya Commercial Bank and the FirstRand Bank (this third connection was discovered shortly after the complaint was filed). After receiving funds from the IFC, those banks provided financial support to companies involved in the development of the coal plant.

We believe that these investments have violated and continue to violate policies that are designed to protect communities and the environment, including the IFC Performance Standards. The Complaint requests that the CAO independently investigates whether the coal plant project has achieved the standards set by these policies – a process known as compliance review. The Complaint also demands that the IFC take immediate steps to restrict its clients' participation in this disastrous project and to review any new investments in the Kenyan financial sector closely to avoid any further contribution.

The Complaint has four main sections and many sub-sections dealing with different environmental and social issues. The main sections are:

- I: An introduction to the proposed coal-fired power plant in Lamu County
- II: A summary of the connections between the IFC and the Lamu coal plant
- III: The violations, and potential violations, of the IFC's policies and procedures
- IV: Efforts to raise these issues with Amu Power, investors and other authorities

Below is a summary of each of those sections.

### I: An introduction to the proposed coal-fired power plant in Lamu County

The first section describes the proposed Lamu coal-fired power plant and explains its context within Lamu County and LAPSSET. It aims to highlight the inherent dangers of building a coal-fired power plant – in addition to other major planned developments – in such a culturally- and ecologically-rich location. Key arguments include:

Lamu County: a socially- and environmentally-sensitive location

Lamu County is internationally recognized for the richness of its marine and land environments. It is home to a number of protected marine, forest and wildlife reserves, including the Boni and Dodori Forest National Reserves and the Kiunga Marine National Reserve. Lamu hosts 70% of

Kenya's mangroves, a critically important natural resource that protects against erosion and flooding and serves as a breeding ground for various fisheries.

The proposed 975-acre coal plant site is on the Lamu mainland, adjacent to those vitally important coastal mangrove forests. The land is to being compulsorily acquired from local farmers, who, years after displacement was announced, continue to face uncertainties around the extent and type of compensation and resettlement support they will receive. At least 109 farmers and their families in Kwasasi have already been displaced by the construction of the site access road without any consultation or compensation.

This proposed site is approximately 20 km north of Lamu Old Town. Lamu Old Town is a UNESCO World Heritage Site, as the oldest and best-preserved Swahili settlement in East Africa. It is a small, conservative and preserved society, maintaining its traditional architecture and its distinct social, cultural, and religious functions up to the present day.

Many Lamu residents hold grave concerns about impacts of the proposed coal-fired power plant on these valuable environmental and cultural resources and have been active in protesting it. The project clearly puts Lamu at risk of serious air, water and land pollution, a decline in marine resources, and destruction of critical habitats. Physical and economic displacement and environmental degradation will negatively impact health, livelihoods, food security and valuable cultural heritage. The impacts will be felt across the Lamu archipelago.

#### Lamu residents explain:

"We are grieved that whatever ecological value the site has now will be permanently lost. We fear the ash will be blown by our monsoon winds and may settle on nearby houses, vegetation, and ocean. There can also be runoff of these pollutants by rain and this will contaminate both our lands and water."

#### Details of the proposed Lamu coal plant

In September 2014, the government awarded the contract for the coal plant to Amu Power, a special-purpose company established by Gulf Energy, a Kenyan energy company, and Centum Investment, a Kenyan investment firm. In May 2018, these companies announced a "collaboration agreement" with U.S. multinational General Electric (GE) to supply GE's ultra-supercritical coal plant technology to Amu Power, with an opportunity for GE to acquire an equity interest in Amu Power.

According to the ESIA dated July 2016, the coal plant will include three supercritical coal-fired thermal generating units. (Despite GE's May 2018 announcement that it would be providing *ultra-supercritical* technology to the Lamu coal plant, no updated technical assessments have been published.) The power plant will burn about 2.8 megatons (Mt) of coal per year. The facility will operate 24 hours per day, seven days per week.

The coal plant will use a type of cooling system called once-through cooling. This system will pull in seawater from Manda Bay. After the water has gone through the cooling system, it will be returned to Manda Bay, desalinated and at a higher temperature.

The plant will release exhaust gases into the air from a stack around 210 meters high. Seawater will be used to help clean the flue gases. Ash waste will be stored in a dry ash yard.

The coal plant will also require the following infrastructure:

- Limestone mining at Witu. A 2,000-acre mining concession has already been approved by local authorities. Limestone is needed for a pollution control system called wet flue gas desulfurization. The limestone will be transported by land and sea to the power plant;
- A coal receiving system including a coal berth at Lamu port, coal handling equipment and a conveyor system approximately 15 km long to transport coal from the port to stockyards;
- Two coal stockyards, with capacity for up to 420,000 metric tons of coal;
- A 400 kV substation;
- A permanent workers' colony accommodating 250-300 persons;
- A new rail system to transport coal if Kenyan coal becomes available; and
- Associated roads, buildings and other structures.

Construction of the coal plant itself is yet to begin, although development of the site access road – and associated displacement of Kwasasi farmers – is underway. At least 109 farmers and their families have already lost their income and food security, without compensation or consultation.

#### **LAPSSET**

The proposed Lamu coal plant and its impacts can only be fully understood in the context of the Lamu Port-South Sudan-Ethiopia-Transport (LAPSSET) Corridor mega-project. Lamu is a major hub for LAPSSET projects, including the proposed site for a 32-berth deep sea port, industrial facilities, oil pipelines, resort city, airport developments, a desalination plant and electricity transmission lines (in various states of development).

The Kenyan Government describes the proposed Lamu coal-fired power plant as an "associated project" of LAPSSET. However, ties between the two projects appear even closer than that. Among other connections, the LAPSSET Corridor Development Authority is the entity acquiring the land on which the Lamu coal plant is proposed to be built.

There is some division in the greater Lamu community with regard to the coal plant, as well as several other LAPSSET developments. As discussed in detail in Section III of the complaint, many community members hold grave concerns about the potential impacts of the coal plant and have been active in protesting it. This is especially true once individuals have accurate information about the likely impacts of the project. Some community members, however, have been vocal in their support for the plant, due to promises of much-needed jobs, compensation and economic development. These concerns and divisions are exacerbated by the failure to meaningfully consult affected communities.

#### II: A summary of the connections between the IFC and the Lamu coal plant

Because of a lack of transparency, it is difficult to trace the financing supporting the Lamu coal plant. However, based on limited publicly-available information, we believe that the IFC is contributing to the Lamu coal plant through three clients: the Kenya Commercial Bank, the Co-Operative Bank of Kenya and the FirstRand Bank (this third connection was discovered shortly after the complaint was filed and was explained in a supplementary letter to the CAO). After receiving funds from the IFC, those banks provided financial support to companies involved in the development of the coal plant.

The key IFC projects, for the purpose of this complaint, are:

IFC project	Type of financing	Approval date	Status

Kenya Commercial Bank					
Kenya Commercial Bank III – Project 32805	Loan	May 16, 2013	Active		
Kenya Commercial Bank – Project 36791	Loan/possible equity	Sep 22, 2016	Active		
Co-Operative Bank of Kenya					
Coop Bank Kenya – Project 31321	Loan	Oct 5, 2012	Active		
Co-Operative Bank II – Project 35393	Loan	Dec 22, 2015	Active		
Co-Operative Bank III – Project 41133	Loan	Mar 27, 2018	Active		
AMSME Coop Bank – Project 601493	Advisory services	Oct 11, 2016	Active		
DFS Coop Phase 2 – Project 602467	Advisory services	Oct 12, 2017	Active		
FirstRand Bank *not disclosed on the IFC's Project Information Portal*					
The IFC Asset Management Company	Convertible loan	Apr. 2014	Active		
provided US\$172.5 million in subordinated	(automatically				
(convertible) debt to FirstRand Bank	converts to equity)				

In each case, the IFC is providing financial and/or technical support to the Kenyan banks to support their lending operations. While some of those projects mention "small and medium enterprises" as a key sector that the IFC wants to support, there is no evidence that the IFC funds are limited ("ring-fenced") to support *only* that sector. Instead, we believe that it is likely that the IFC funds are available to the Kenyan banks to support other financing activities.

After receiving funds from the IFC, the Co-Operative Bank of Kenya, the Kenya Commercial Bank and the FirstRand Bank have supported companies involved in the Lamu coal plant:

- In 2014, the Co-Operative Bank of Kenya issued a US\$5 million bid security bond backing Amu Power's proposal to develop the plant. The bond, which appears to still be active, insures Kenya Power & Lighting Company which has signed a 25-year agreement to purchase power from the Lamu coal plant against failure by Amu Power to make the plant operational by the agreed date.
- In addition, the Co-Operative Bank has an active, long-standing banking relationship with Centum Investment. Most recently, on 3 April 2017, Co-Operative Bank provided a 982.1 million KSh overdraft/guarantee facility that is renewable annually.
- The Kenya Commercial Bank has provided Centum Investment with a credit facility (potentially as much as 1.2 billion KSh) that it can draw down as needed to fund its business operations (including to finance the Lamu coal plant).
- In September 2017, FirstRand Bank provided a corporate loan worth US\$50 million to Centum Investment that matures in 2021 (explained in a supplementary letter to the CAO dated 3 May 2019).

Financial support to Centum represents significant financial support to the Lamu coal plant. As of the date of this complaint, Centum is the majority (51%) shareholder in Amu Power. The CEO of Centum Investment (James Mworia) appears to be actively involved in coal plant planning.

This is not the first time we have identified connections between the IFC and the Lamu coal plant. Two other IFC clients (or former clients) – Equity Bank Limited and Standard Bank of South Africa – appear to have contributed to fundraising for the coal plant in earlier stages of its development. It is also possible that other connections between the IFC and the Lamu coal plant exist that we are not currently aware of.

#### III: The violations, and potential violations, of the IFC's policies and procedures

The IFC's investments in Kenya Commercial Bank, Co-Operative Bank and FirstRand Bank are all subject to the 2012 IFC Performance Standards (IFC PS) and the IFC Policy on Environmental and Social Sustainability (IFC Sustainability Policy), as well as other relevant policies. Taken together, these policies require that the IFC and its clients each take steps to avoid, mitigate and manage the environmental and social risks posed by the Lamu coal plant. Despite the early stage of this project, grave violations of these policies are already occurring.

This section of the Complaint is 53 pages long and describes communities concerns about environmental and social impacts of the project in detail. The sub-sections and key arguments are summarised here:

# A. Kenya Commercial Bank and Co-Operative Bank are not complying with the IFC PS, and the IFC is not properly supervising these obligations

This section makes an overarching argument that flaws in the environmental and social assessments and consultation produced by Amu Power are so substantial that it is clear that Kenya Commercial Bank, Co-Operative Bank and the IFC are failing to properly review and supervise their clients' environmental and social risk management. These arguments equally apply with FirstRand Bank, whose connections to IFC and the coal plant were only discovered after the complaint was filed.

IFC PS 1 requires that the IFC review its clients' assessments of environmental and social risks to ensure that risks associated with their activities are identified and mitigation plans are in place. In the case of IFC investments in other banks, such as Kenya Commercial Bank, Co-Operative Bank and FirstRand Bank, the IFC must review each bank's existing portfolio and prospective business activities to identify risky activities and to define measures to mitigate those risks. The IFC must also conduct regular monitoring and supervision of the investments to ensure that each bank continues to comply with the IFC PS.

IFC PS 1 and the IFC Sustainability Policy also require that Kenya Commercial Bank, Co-Operative Bank and FirstRand Bank conduct their own environmental and social risk assessments regarding their investments in Centum Investment and Amu Power.

There is no information publicly disclosed by the IFC or its clients that shows that they are taking specific steps to comply with the IFC PS. On the contrary, as we explain below, it is clear that these standards are already being violated. We fear that these violations will only get worse as the project moves forward.

#### B. The Environmental and Social Impact Assessment omits critical project components

The most extensive environmental and social impact assessment released to date is the one prepared by Kurrent Technologies for Amu Power, dated July 10, 2016 (2016 ESIA). This ESIA, however, is woefully incomplete. Among other issues, it fails to assess the impacts of major project components and related facilities, including:

- Coal mining and transportation, including the 15km coal conveyor system;
- Limestone mining activities in Witu; and
- The 9km site access road, which has displaced at least 109 farmers and their families without compensation or consultation.

In addition, almost two years after the 2016 ESIA was published, Centum, Amu Power and GE announced that GE would be supplying *ultra-supercritical* (USC) technology for the coal plant, an upgrade compared to the *supercritical* technology described by the 2016 ESIA. However, they have not published any updated assessments taking into account this change in technology.

These omissions undermine the objectives of the IFC PS and the ESIA process. IFC clients must conduct a complete and comprehensive assessment of the environmental and social risks posed by a project. They must also develop mitigation and avoidance measures that account for the full scope of those impacts. The omissions in the 2016 ESIA have rendered community consultation processes deeply inadequate, as those consultations did not include significant project elements.

### C. Community consultation has been superficial and incomplete

Another critical requirement of the IFC PS is meaningful, informed community consultation. Because the Lamu coal plant will involve "potentially significant adverse impacts on Affected Communities," the IFC PS require an Informed Consultation and Participation (ICP) process:

- ICP involves an in-depth exchange of information incorporating the views of affected communities into the decision-making process.
- The consultation process should capture both men's and women's views, and reflect men's and women's different concerns and priorities.
- The process must be documented, in particular the measures taken to avoid or minimize
  impacts on affected communities, and affected communities must be informed about how
  their concerns have been considered.

Affected Indigenous Peoples must be engaged through an ICP process, and in certain circumstances, projects require their Free, Prior, and Informed Consent (FPIC): see sub-section F below.

Consultations to date have fallen woefully short of these standards.

Meetings about the project were held in early 2015, but abruptly stopped in June 2015. At the time, no detailed or meaningful information had been released about the project, its potential impacts (including major community concerns about health impacts, air and water pollution, ash storage and resettlement) or proposed mitigation measures. A project brochure shared at some meetings was vague, only briefly referred to negative impacts, was not translated into the local language, Kiswahili, and failed to address critical project components. At some meetings, participants received no project materials whatsoever.

The 2016 ESIA provides additional details about the project. However, it fails to genuinely respond to any of the comments and concerns that were expressed during those earlier community meetings. For example, despite concerns raised by communities about the site location, the lack of a proper alternatives assessment, the once-through cooling system, air pollution, the ash yard and other hazardous waste, the project design in the ESIA is nearly identical to the project description presented in those earlier meetings. The 2016 ESIA provides no explanation for the failure to address serious community concerns.

We are only aware of one community meeting held after the ESIA was published. This meeting, which took place on 26 August 2016, cannot be considered a consultation because, following a last-minute location change, it was held in a location that was inaccessible to most residents of Lamu, due to travel distance and costs. Members of the Kwasasi Mvunjeni Farmers Self-Help

Group were not even aware of that meeting; they were not notified nor infored and had no idea at that time that they would be affected by the site access road.

The ESIA public comment and government approval process further confirms that stakeholder engagement was not meaningful. Despite the many deep flaws described in public comments submitted to the Kenyan National Environmental Management Authority (NEMA), that agency approved the EIA License on September 7, 2016, just six days after the close of the public comment period. The approval did not require any changes to the ESIA based on stakeholder feedback.

Furthermore, the project stakeholders identified by the ESIA do not include all groups that will be impacted by the project. For example, as already discussed, the farmers displaced by the site access road were not consulted at all. In addition, the list of project stakeholders does not include Witu residents, even though the 2016 ESIA confirms that a large land concession in Witu was granted specifically for the purpose of project-related limestone mining. Similarly, indigenous communities affected by the coal plant have been excluded.

Finally, a pattern of intimidation by government officials has impeded attempts by local groups to hold information sessions to engage and discuss project impacts as a community. Public officials have repeatedly enacted barriers to prevent the community meetings from taking place and have even acted to discredit the work of civil society groups. Save Lamu has faced serious intimidation in the form of a criminal inquiry, which appears to have ceased after an invasive investigation. Other Lamu-based activists have faced similar threats. A recent report by Human Rights Watch and the Kenyan National Coalition for Human Rights Defenders documents harassment and intimidation against at least 35 environmental activists in Lamu county by police, military, and other government officials between 2013-2018, including activists protesting the Lamu coal plant.

# D. The project documents fail to fully analyse and mitigate air and water pollution, biodiversity, ecosystem and climate impacts

IFC PS 1 creates overarching obligations to take steps to avoid, minimize and compensate environmental and social impacts. Additionally, IFC PS 3 (Resource efficiency and pollution prevention), PS 4 (Community health, safety and security) and PS 6 (Biodiversity, conservation and sustainable management of living natural resources) impose specific obligations to avoid and reduce harm to the natural environment, as well as associated impacts on community health and livelihoods. Among other critical obligations:

- IFC PS 3 requires projects to use best practice pollution prevention techniques to avoid or, where avoidance is not possible, minimize adverse impacts on human health and the environment;
- IFC PS 4 similarly requires that projects establish preventive measures consistent with good international industry practice to avoid or minimize impacts on community health and safety; and
- IFC PS 6 requires, as a matter of priority, that projects avoid impacts on biodiversity and ecosystem services (the benefits that people derive from ecosystems). Obligations are heightened for natural and critical habitats.

The plans for the Lamu coal plant breach these obligations in a number of ways.

#### 1. Insufficient baseline data

The first step in identifying social and environmental risks is the collection of "recent environmental and social baseline data at an appropriate level of detail" (IFC PS 1). The Ecological Impact Assessment Study included in the 2016 ESIA fails to meet this standard.

For example, the section notes that the bird study limited on-site observations to one vantage point for just a few hours, during a time of day when birds are not typically active. This, and other limitations, make it difficult to trust the study's findings.

The mammal study similarly notes that samples were limited to only five days in the field, and as a result some target mammals were not sampled at all. Night-time and wet season sampling was not possible due to security concerns (preventing night-time visits) and time constraints.

The study of coastal freshwater wetlands and marine biodiversity was also flawed. The 2016 ESIA admits that sampling efforts for marine invertebrates, seagrasses, fisheries, coral reefs and mangroves were "low … because there were only ten days of sampling."

These gaps in on-site information gathering severely discredit the baseline's findings.

2. The assessment of biodiversity impacts lacks necessary information

As mentioned above, IFC PS 6 includes stringent requirements to avoid impacts on biodiversity and ecosystem services.

Lamu County is home to a number of legally-protected marine, forest and wildlife reserves, which qualify for additional protection as natural and critical habitats under the IFC PS 6. Most notably:

- To the northeast of the project site lies the Boni-Lungi Forest Ecosystem, including the Boni and Dondori National Reserves. Both reserves form part of the traditional lands of the Aweer (Boni) people.
- Also to the northeast of the project site, the Kiunga Marine National Reserve consists of shoreline and about 50 islands and coral reefs in the Lamu Archipelago. It is a designated UNESCO Biosphere Reserve.
- To the southwest of the project site, near planned limestone mining, the Witu Forest Reserve is known to hold at least nine species of threatened plants, including the critically endangered Euphorbia tanaensis.

We fear that the proposed Lamu coal plant poses grave risks to these and other ecologically significant areas. However, the 2016 ESIA provides insufficient details to fully measure those impacts. It therefore also fails to identify adequate avoidance and mitigation measures. For example:

- a) The impacts of dredging: The 2016 ESIA admits that "dredging activities during the construction phase are projected to cause significant and serious damage to the neighbouring mangroves, sea grasses and coral reef habitats." However, it fails to provide any site-specific estimate of that damage and its impact on fisheries. For example, the ESIA makes no real attempt to quantify the amount of material that will be dredged or to estimate the likely sedimentation impacts. Mitigation measures (such as limits on timing and routes for dredging) are seriously under-developed.
- b) Trapping of marine life in cooling water intake systems: Despite the availability of less harmful technology, the coal plant proposes to use a once-through cooling system. The

2016 ESIA admits that marine life may become caught in the water intake system and/or on the outer screen of the intake valve. However, it provides no assessment of the extent of that impact (i.e. how many organisms will be affected and related changes to the marine environment). Nor does it propose any avoidance or mitigation measures.

- c) Impacts from the rise in water temperatures: The project's once-through cooling system will release used cooling water back into Manda Bay at a temperature 9 degrees Celsius higher than the ambient water temperature. The 2016 ESIA admits that this thermal pollution could harm marine life and biodiversity. However, the 2016 ESIA fails to provide any site-specific analysis to quantify those impacts, which could be catastrophic.
- d) Impacts from the ash yard: According to the 2016 ESIA, ash waste from the coal plant will be disposed in an ash yard with 15 years' capacity. There are no planned efforts to recycle this waste, as required by IFC PS 3. Ash yards require a significant amount of land and carry major environmental and community health risks, including leakage and air pollution. The ESIA notes that the area is prone to monsoons that may disperse and destabilize the ash. Despite this, it provides no detailed standards for how the ash yard will be constructed or maintained. The ESIA also fails to explain how ash will be stored after the estimated 15-year capacity despite the project's 25-year timeframe or how the waste will be treated when the plant is decommissioned. Finally, the 2016 ESIA does not explain how it will control fugitive air emissions from ash storage discussed further in the context of air pollution below.

Finally, the 2016 ESIA does not address at all the biodiversity impacts of the planned 15km coal conveyor system and the limestone mining in Witu.

Without this information, the project cannot develop effective avoidance and mitigation measures for negative impacts, nor can it accurately establish the value of the biodiversity and ecosystem services that will be destroyed.

#### 3. Destruction of ecosystem services

In addition to standards protecting the environment, IFC PS 6 imposes specific protections for *ecosystem services*. Ecosystem services are the benefits that people derive from ecosystems, such as products or services that support their food security, livelihoods, or culture. The proposed coal plant poses significant risks to *priority* ecosystem services, given that a majority of Lamu communities still depend on nature-based livelihoods such as fishing, mangrove cutting, hunting and gathering, livestock keeping, farming, eco-tourism and many others, that will be negatively affected by the proposed coal plant. Lamu residents explain:

"We as fishermen and mangrove cutters understand that the once-through cooling system that is to be used by Amu Power will endanger the marine life as a result of volumes of water being sucked in from the bay to cool their machinery and returned to the bay as heated water. This cooling system will cause death to countless marine animals by vacuum pressure pulling water in and taking with it large numbers of fish, shellfish, and their eggs which will kill them through heat, physical stress, or by chemicals used to clean the cooling system. We understand that larger marine life may be killed or injured when they are trapped against screens at the intake point. We also understand that the cooling system will endanger our mangrove forests as they will be subjected to the heated wastewater. We

are aggrieved that our coastal ecology will be tremendously affected and we will lose our natural resources, which we use for our livelihoods."

"We, the farmers in Lamu County, are also aware that coal burning creates air pollution that is a mixture of carbon dioxide and other chemicals. We understand that when it rains, this mixture turns into acid rain and can cause loss of plant life and harm to human health. We are afraid of these negative effects, which we understand will cause loss of our livelihoods and also affect our health."

"Our natural resources are ... a magnet for tourism. We have visitors who come to Lamu to experience traditional Swahili culture ... They also come to experience our beaches, swim in our pristine waters and sail on our traditional dhows."

"The mangrove forests are of incredible ecological and economic value to Lamu. Not only are they the nursery for much of the marine life on coastal waters but they also represent economic value."

The 2016 ESIA admits that some ecosystem services may be eliminated or reduced by the project. However, it fails to include any detailed assessment of the degree or scope of those impacts. Further, the ESIA identifies only two planned mitigation measures: (1) support initiatives to create alternative sources of livelihoods for the local community; and (2) support the enforcement of fishery laws to prevent overfishing or fishing in protected areas. No further detail is provided.

Neither of these mitigation measures would help preserve or restore ecosystem services for local people. Instead, they both indicate a strategy to end or reduce traditional fishing practices around the project site. This would not only represent a loss of livelihoods, but also a loss of traditional knowledge and therefore cultural heritage. A member of the Bajun indigenous community explains that this loss of cultural heritage is already underway: "We used to know how to make dhow boats well, but the knowledge is being lost..." This loss of cultural heritage will get worse as more residents are forced out of their traditional livelihoods.

Further, the measures proposed by the ESIA completely fail to address impacts on non-fishing livelihoods. This analysis is therefore grossly incomplete.

#### 4. Air pollution impacts have not been properly assessed

Like all coal plants, the Lamu coal plant will emit air pollution that is linked to severe health and environmental impacts. Specifically, the plant will emit sulfur dioxide (SO<sub>2</sub>), oxides of nitrogen (NO<sub>x</sub>), particulate matter (PM), and mercury. Despite assertions to the contrary, the Lamu coal plant will cause such emissions even if its technology is upgraded from supercritical to ultrasupercritical technology.

Under IFC PS 3, the Lamu coal plant is required to use pollution prevention techniques best suited to avoid harmful impacts on human health and the environment. However, as discussed below, the air pollution assessment contained in the 2016 ESIA fails to meet IFC standards:

a) Air quality baseline assessment is unreliable: The air quality baseline assessment is deeply flawed, which undermines all impact assessments based on this data. Some of the baseline findings are so difficult to believe that experts have described them as "implausible." For example, after extremely short testing periods, the baseline assessment found concentrations of a certain pollutant (particulate matter with a diameter of less than or

equal to 2.5 micrometres -  $PM_{2.5}$ ) significantly below the concentrations that are typically found in even the most pristine environments. There are also dramatic differences in the results reported for the same monitoring location in different parts of the assessment.

#### b) Inadequate mitigation of air pollution impacts:

Oxides of Nitrogen (NO<sub>x</sub>): NO<sub>x</sub> emissions cause a number of health issues, including respiratory illnesses. The IFC Guidelines on Thermal Power Plants recommend that a plant minimize NOx emissions through low NOx burners, low excess air-firing, and NOx controls for boilers. Although the 2016 ESIA says that the Lamu coal plant will use low NOx burners, it does not mention whether any of the additional measures recommended by the IFC will be incorporated into the design.

Sulphur Dioxide (SO<sub>2</sub>): SO<sub>2</sub> is also linked to respiratory impacts. According to the 2016 ESIA, the Lamu coal plant will mitigate its SO<sub>2</sub> emissions by installing a seawater wet flue gas desulfurization system (FGD). The IFC's Environmental, Health and Safety Guidelines note that seawater FGDs, while effective, have significant negative impacts on the marine environment that need to be carefully examined. The 2016 ESIA does not take into account those marine impacts.

Particulate matter (PM): PM<sub>2.5</sub> causes a variety of health problems in humans. The 2016 ESIA says that electrostatic precipitators (ESPs) will be used to capture PM from flues and smokestacks without detailing the specific technology that will be used and how effective it will be. Further, the 2016 ESIA fails to include the impacts of secondary particle formation (when NO<sub>x</sub> and SO<sub>2</sub> combine with other atmospheric chemicals to create forms of PM<sub>2.5</sub>), even though it is the largest source of PM<sub>2.5</sub> exposure caused by coal plants.

*Mercury:* Mercury is linked to severe health impacts in humans, including neurological impacts. The primary way that humans are exposed to mercury is by consuming fish. This is particularly troubling because fishing is the second largest driver of the Lamu economy. The ESIA for the Lamu plant fails to mention more-effective fabric filter technology for mitigation of mercury emissions. Additionally, seawater FGDs (the type of desulfurization system proposed for the Lamu plant) have actually been shown to emit higher levels of mercury at their discharge location. The 2016 ESIA fails to address this impact.

Fugitive emissions from coal and ash yards: The 2016 ESIA fails to assess the quantity or the potential impacts of emissions from the coal and ash yards, stating simply that there is "insufficient information and lack of quantifiable data" to determine the full impact.

Acid rain: The 2016 ESIA admits that the Lamu power plant may also have indirect effects on the environment due to acid rain. However, it fails to consider the impact on the delicate lime and coral buildings in nearby Lamu Old Town, a UNESCO World Heritage Site. Acids react with the calcite in these materials, dissolving it.

For all of the above reasons, the analysis of air pollutant impacts in the ESIA is wholly inadequate to meet the stringent anti-pollution obligations imposed by IFC PS 3, 4 and 6.

### 5. Climate Change Impact Assessment

IFC PS 3 also requires the client to consider alternatives and implement feasible cost-effective options to reduce greenhouse gas (GHG) emissions, to minimize climate change impacts.

The Climate Change and GHG Specialist report states that the Lamu coal plant will increase the country's GHG emissions by between 6% - 10%. This is in direct contradiction of Kenya's National Climate Change Action Plan and Kenya's commitments under the Paris Agreement.

Despite this, the report fails to truly evaluate the climate change impacts of the project or renewable energy alternatives to the coal plant.

#### E. Displacement impacts have been ignored

In addition to the severe environmental risks, thousands of people face displacement as a result of this coal plant. From our own research, we believe that the resettlement impacts from the proposed Lamu coal plant fall into four categories, all of which include members of indigenous communities:

- 1. Displacement of approximately 675 farmers from farmland at the project site;
- 2. Displacement of hunters, gatherers, beekeepers and mangrove harvesters and other resource users from the project site;
- 3. Displacement of at least 109 farmers from farmland crossed by the site access road;
- 4. Economic displacement of fisherpeople and tourist operators due to environmental degradation, shipping lane restrictions and other substantial interruptions to the character and quality of the Lamu archipelago.

IFC PS 5 (involuntary resettlement) applies to the full range of these impacts. In recognition of the severe impacts of displacement, IFC PS 5 insists that involuntary resettlement should be avoided. Where involuntary resettlement is unavoidable, it should be minimized and appropriate mitigation measures should be carefully planned and implemented. This should be done with meaningful consultation and participation of those affected. These requirements apply even if the resettlement process is government-managed. If government resettlement measures do not satisfy PS 5, a Supplemental Resettlement Plan must be prepared to fill those gaps.

The 2016 ESIA barely mentions the displacement impacts of the project. It indicates that the Resettlement Action Plan (RAP) will be limited to farming communities, ignoring the other communities that will be economically displaced. It also underestimates the scale of displacement, describing acquisition of 880 acres of land, when other documents indicate that at least 975 acres will be acquired for the project. Furthermore, the ESIA provides no further information regarding the number of people who will be resettled, nor the eligibility criteria or methods for compensation.

Ordinarily, the development and publication of a RAP or a Livelihood Restoration Plan might overcome these weaknesses. However, not in this case. To our knowledge, no comprehensive RAP or Livelihood Restoration Plan has ever been published or shared with affected people. Instead, a summary RAP is available online. The summary RAP is more informative than the 2016 ESIA, but still lacks crucial details:

- It does not detail the eligibility criteria for the various categories of people displaced by the project. The treatment of farmers who lack title deeds, but have customarily used the land at the coal plant site, remains uncertain. The position of Kwasasi farmers displaced by the site access road also remains unclear. The impacts of this uncertainty are severe. Opportunistic settlers have taken advantage of the situation to claim land in the hope of receiving compensation, further displacing the rightful owners/users.
- It does not acknowledge that some affected people lived seasonally on the land in temporary structures.

- It underestimates the displacement of fisherpeople. It says that displacement is limited to "3 BMUs" (beach management units), totalling 124 fishers. It provides no maps or reasoning to support this figure. We believe that this grossly understates the number of fisherpeople who will be affected. Fishing is the second largest driver of the Lamu economy, after tourism. We estimate that at least 4,700 artisanal fisherpeople will be directly and indirectly impacted by the coal plant (similar to the number identified as impacted by the High Court of Kenya, in a case about the Lamu Port and LAPSSET more generally). These fisherpeople use the waters in and around Manda Bay and will be impacted by the deterioration in the marine environment and restrictions on fishing and access to shipping lanes.
- It does not acknowledge any negative livelihood impacts on tourism operators. Tourism is the largest contributor to Lamu's economy. Tourism operators face grave impacts on their livelihoods due to dramatic alterations to Lamu's culture and environment.
- It does not recognize the full range of impacts on indigenous peoples and other traditional
  and vulnerable communities, as discussed further in sub-section F below. Orma, Sanye,
  Giriama and Swahili people are not acknowledged at all. There is no suggestion that
  indigenous communities have given FPIC for the project's use of land customarily used by
  them.

In addition, neither the 2016 ESIA nor the Summary RAP demonstrate that displaced people will receive the type and quality of resettlement benefits required by IFC policy. The summary RAP is focused on compensating, in monetary terms, a specific loss (the calculations used are not disclosed) and does not focus on what is necessary to restore livelihoods. A RAP or Livelihood Restoration Plan, required by IFC PS 5, should do both. For example:

- The Summary RAP says that mangrove cutters will be compensated for loss of livelihoods for a period of one year while they adapt to other sources of income, without promising any assistance or support to develop those new livelihoods.
- Similarly, the Summary RAP says that the fisherpeople who will lose their fishing grounds will be compensated for a year for loss of livelihoods as they look for other sources of livelihoods. They will also be provided with modern fishing gears and boats to enable them fish further offshore. The document contains no detailed analysis, however, of the how fisherpeople will be trained and supported to successfully change to offshore fishing, nor whether one year of income is sufficient.
- For Aweer people (traditional users of the project site), the Summary RAP says that they "will be considered for unskilled job opportunities in the project during construction and operation phase." This is a wholly inadequate response for traditional communities who are facing a range of threats to their cultural heritage, as well as livelihood impacts from the project.

Given the limited publicly accessible information about the resettlement impacts and planned mitigation measures, and the obvious gaps in what little documentation exists, any further development of the Lamu coal plant will breach IFC PS 5.

#### F. Assessments ignore indigenous peoples

Throughout the IFC PS, there are requirements to identify and take account of the specific interests of indigenous peoples. In addition, IFC PS 7 (indigenous peoples) imposes heightened obligations on any project that adversely impacts indigenous communities, including:

- Obligations to carry out an Informed Consultation and Participation (ICP) process that includes indigenous peoples' representative bodies and organizations, as well as members of the indigenous peoples themselves;
- Obligations to avoid and minimize the amount of land proposed for the project and other adverse impacts on natural resources;
- Additional resettlement obligations, including a requirement to create an Indigenous Peoples' Plan (IPP), to provide culturally appropriate compensation and sustainable development opportunities, and, in the event of relocation or adverse impacts on critical cultural heritage, to comply with the principles of Free, Prior and Informed Consent (FPIC).

Lamu County is home to a number of indigenous communities including the Bajun, Swahili, Sanye, Aweer (also known as the Boni), and Orma, as well as the Giriama, Mji kenda and Kore Masai among others. The Bajun will be deeply affected by the loss of traditional fishing grounds and mangroves. All of the groups will also lose access to traditional livestock grazing, hunting and gathering and farming areas in and around the project site, and face impacts on their cultural heritage. Impacts from the coal plant will exacerbate losses already suffered as a result of the Lamu port development.

The traditional territory of the Aweer is located in the northeastern area of Lamu County, including the Boni and Dodori Forest Ecosystems. "This area has been our home from time immemorial. ... We also hold the forests with high regard as we have numerous sacred sites protected within." They will suffer severely from any deforestation, as well as displacement from traditional hunting and gathering areas.

The Orma are semi-nomadic pastoralists, who move their cattle throughout Lamu mainland looking for good pasture. "We identify the wetlands and grasslands in the western part of the county as our traditional pastoral lands. From Witu we move both north towards the forest areas and south to the Tana Delta."

Members of the Bajun also "have communal farming areas on the mainland where we live seasonally. During the planting season, we travel to the mainland and plant maize, sesame and millet, among other crops."

The Sanye use the forests to gather honey, fruits, and roots. They are also small-scale farmers. Traditionally, they lived in the southern forests and grasslands of Lamu between Lamu Island and Witu town on the mainland. However, they have been forcibly displaced by government settlement schemes, leaving them scattered in urban areas and small villages without land security.

The Swahili are also farmers, fisherpeople and livestock keepers, in addition to traders of the agricultural products produced by the other groups.

"Within our community in Lamu, we have a number of different livelihood groups that are linked and intertwined. The ethnic groups within Lamu often share livelihoods – and because of this, communities live in peace as they are intertwined with an interdependency that has been crucial for survival."

The loss of livelihoods will not solely have an economic impact, but also a loss of traditional knowledge and cultural heritage. If not practiced, traditional methods are lost.

"Farming is not simply our livelihood – we have cultural and spiritual traditions that are integrated into our farming practices."

These communities also fear the loss of access to culturally significant sites. The Sanye "have already lost some of our ancestral burial grounds and we have a real worry that we will continue to lose more."

Finally, the groups fear the impacts associated with population influx, including environmental degradation, disruption of cultural values and practices, and further marginalization within society.

Neither the 2016 ESIA nor the Summary RAP adequately acknowledges these indigenous communities. There is no evidence that meaningful consultation, let alone FPIC, has been undertaken for these communities. While the Aweer and Bajun communities are mentioned briefly in the ESIA and the Summary RAP, no adequate measures have been put in place to protect them from disproportionately suffering the negative impacts of this project. This dismissive treatment of indigenous peoples by the project developers exacerbates their existing vulnerability and marginalization in Lamu County.

## G. Cultural heritage under threat

In addition to the specific threats faced by indigenous peoples, the Lamu community at large faces negative impacts on its priceless cultural heritage. We share concerns raised by UNESCO about the impacts of LAPSSET and the coal plant on this cultural heritage. In relation to the coal plant specifically, UNESCO lists the following risks:

- Loss of traditions associated with the loss of livelihoods from fishing;
- The threat posed by air pollution to delicate coral stone constructions in Lamu Old Town and elsewhere:
- Impact of higher population densities (including unmanaged development, insecurity, health implications) and changes to the Swahili character of the local communities; and
- Aesthetic impacts from the coal plant infrastructure.

UNESCO points out that the 2016 ESIA does not adequately address these risks. The 2016 ESIA proposes a series of rules and regulations on its staff and contractors, for example to report "chance finds" and to dress modestly. However, these regulations lack all proportion to the dramatic and irreversible impacts on cultural heritage posed by the project. The 2016 ESIA fails to address more significant questions such as the placement of worker accommodation and the demographics of workers (including age and ethnicity). As UNESCO says, "[the ESIA] underestimates the impact of higher densities and changes to the Swahili character of the local communities. ... It is the social and cultural life of the day-to-day activities that will be strongly affected, and this issue needs to be studied and better understood before effective mitigation measures can be developed."

The ESIA also fails to address potential impacts on historical sites near the coal plant, including two mosques as well as a graveyard and wells, that could be harmed during construction. These types of sites are key symbols of and ways to preserve of community's cultural, history and identity.

This shallow and superficial assessment of cultural heritage impacts violates the requirements of IFC PS 1 and 8 (cultural heritage). The distinct, conservative and preserved culture of Lamu Old Town and its surrounds, as an internationally-recognized and legally protected cultural heritage site, constitutes "critical cultural heritage" for the purpose of IFC PS 8. As a result, the project must avoid impacts on that critical cultural heritage. In exceptional circumstances when impacts

on critical cultural heritage are unavoidable, a project must show a documented outcome from good faith negotiation process with affected communities. External experts must be retained to assist in the assessment and protection of critical cultural heritage. The 2016 ESIA provides no evidence that those requirements have been met.

#### H. Alternatives assessment is based on false assumptions and flawed reasoning

As discussed at length in the complaint, it is well-known that coal-fired power plants pose grave human health and climate-related risks. It is for this reason that the World Bank Group will only provide financial support for greenfield coal power generation projects in rare circumstances. The IFC PS also requires consideration of alternatives to the project and to the project design, to try to avoid negative environmental and social impacts. The alternatives analysis conducted for the Lamu coal plant fails to meet these critical standards:

## 1. The ESIA does not provide sufficient justification for rejecting cleaner energy sources

The alternatives assessment for the coal plant relies on flawed reasoning to reject alternative, less polluting energy sources. For example, the ESIA asserts that neither solar nor wind power can be stored or used as base load. It further claims that neither type of power generation should exceed 10% of the average electricity demand "otherwise the grid may become unstable." These claims are false, as documented in a recent study published by scientists with Stanford University.

### 2. The alternatives assessment does not adequately justify the project location

The further assessment of site alternatives only takes into account cost and ignores social and environmental factors. For example, it rules out the option to select an inland site that would reduce coastal environmental impacts, as well as pressures on nearby Lamu Old Town, in just two sentences, citing prohibitive costs with no consideration of other factors. This falls far short of the IFC PS requirements to avoid involuntary resettlement and impacts to critical and natural habitats wherever possible.

#### 3. The ESIA does not assess cleaner alternatives to critical design components

The 2016 ESIA also fails to properly assess cleaner design components, including the boiler design, cooling system, and ash storage. For example, the decision to use a once-through cooling system is explained in one sentence, stating that this is the most efficient option for cooling, without acknowledging its significantly higher risks to the marine environment. The report does not assess in any detail environmentally-safer alternatives such as recirculated wet cooling. This brief analysis is wholly inadequate to properly evaluate the possible environmental and social advantages of alternative designs.

#### I. Cumulative impacts of LAPSSET have been ignored

In addition to the direct impacts of the project, the IFC and its clients are required to take account of the "Cumulative impacts that result from ... other existing, planned or reasonably defined developments."

The 2016 ESIA's Cumulative Impact Assessment (CIA) acknowledges that a number of projects are "envisaged" in the area, including LAPSSET project components. However, it does not include them in the CIA because it claims that the timeline for their development is unknown.

This omission is unjustified. The LAPSSET project components relevant to Lamu County are currently in various phases of development, with some in early preparation while others are already under construction. The ground-breaking for the development of Lamu Port took place in 2012, and since then, various infrastructure facilities have been built. Improvement works for the Manda Airport are already complete, having begun in 2011. Other LAPSSET components were in advanced stages of planning at the time the ESIA was published.

Each of LAPSSET's components comes with unique risks and impacts, from the environmental impacts associated with multiple construction works in a small town to the many social impacts that will accompany the large increase in population. Together, these projects are likely to have sweeping implications for the people and environment in Lamu County. This is precisely the type of scenario that the IFC's CIA requirements were designed to address.

# J. Affected people will not adequately share in project benefits – resulting in a lack of broad community support

The IFC PS recognizes that both broad community support and benefit-sharing are critical to the comprehensive management of environmental and social risks. For projects involving significant negative impacts on affected communities, the IFC is obliged to investigate whether broad community support exists. The IFC PS also requires that affected communities have opportunities to share in project benefits: without which broad community support is unlikely.

Amu Power has made little to no effort to ensure that communities harmed by this project will be able to share in the project's primary potential benefit: electricity. Amu Power has made no commitments to ensure that local Lamu communities will receive power hook-ups. Further, we understand that project benefits from employment are overstated, as 40% of jobs will be reserved for Chinese workers.

## IV: A summary of the efforts to raise these issues with Amu Power, its investors and other authorities

Members of Save Lamu have attended stakeholder consultation meetings to raise these concerns. Our questions were not answered or were answered dismissively, with misleading information. Members of Save Lamu have also tried to participate in additional meetings but have been excluded and were made to feel unsafe. In addition, we have provided comments in writing, directly to Amu Power, its shareholders (Gulf Energy and Centum), its investors (including the IFC) and relevant government authorities, and indirectly through official consultation processes. The Kwasasi Mvunjeni Farmers Self-Help Group have also raised concerns and (unsuccessfully) requested information in letters to government authorities.

Despite these good faith attempts to engage, we have never received a substantive, detailed response to our concerns.

Accordingly, the complaint seeks urgent compliance review by the CAO to investigate the IFC's and its clients' compliance with relevant environmental and social principles, standards and regulations. We expect that the CAO will find significant and *irreparable* non-compliance with those standards. Accordingly, the IFC must take immediate steps to restrict its clients' participation in this disastrous project and to review any new investments in the Kenyan financial sector closely to avoid any further contribution.