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MULTILATERAL DEVELOPMENT BANKS' ASSISTANCE PROPOSALS

Likely to Have Adverse Impacts on
the Environment, Natural Resources,
Public Health, and Indigenous Peoples

October 2010

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This report does not prejudice the U.S. Government’s position where final versions of projects or policies have not yet been considered by the Multilateral Development Bank (MDB) Executive Boards; rather, it serves as a record of USAID’s environmental and social review and monitoring of MDB projects and policies.

Multilateral Development Banks' Assistance Proposals Likely to Have Adverse Impacts on the Environment

Introduction

This Report to Congress, "Multilateral Development Banks' Assistance Proposals Likely to Have Adverse Impacts on the Environment, Natural Resources, Public Health, and Indigenous Peoples," is submitted in compliance with Title XIII of the International Financial Institutions (IFI) Act, as enacted in Section 537 of Public Law 100-202. These provisions instruct the U.S. Agency for International Development (USAID) to report to Congress on proposed and current Multilateral Development Bank (MDB) projects, and other assistance proposals likely to have adverse impacts on the environment, natural resources, public health, or indigenous peoples.

This report covers a six-month period (March through August 2010) and provides to the Committee on Appropriations, the Committee on Foreign Affairs, and the Committee on Financial Services of the U.S. House of Representatives; and the Committee on Appropriations, the Committee on Banking, Housing and Urban Affairs, and the Committee on Foreign Relations of the U.S. Senate, information regarding USAID's performance of its tasks as assigned by Title XIII of the IFI Act.

Title XIII directs USAID to collaborate with other U.S. Government (USG) agencies to review MDB assistance proposals to determine whether the proposals will contribute to the sustainable development of the borrowing/project country. The reviews address the potential adverse effects of proposed projects on the environment, natural resources, public health, and indigenous peoples. USAID and its partner reviewing agencies have the responsibility for making recommendations, including proposing alternative measures, which could eliminate or mitigate adverse impacts. After evaluating MDB proposals, USAID undertakes an affirmative investigation of selected projects that may have substantial adverse impacts, and ensures that the resulting information is made available to the public. USAID provides its findings from this process to the U.S. Department of Treasury.

USAID/Washington has continued to work with its regional bureaus and field missions and other USG agencies, including the Department of Treasury, the Department of State, the Environmental Protection Agency, and the U.S. Executive Directors' Offices at the MDBs to carry out the following tasks:

- Provide adequate attention to priority MDB projects
- Engage with project sponsors, MDB staff, civil society, and communities affected by MDB projects
- Engage early in the proposal process with project countries, sponsors; and MDB staff

MDB Project Review

MDB projects with the potential for adverse environmental and social impacts are initially identified by USAID field missions, USG agencies, and/or non-governmental organizations (NGOs). The criteria for selecting identified MDB projects for review include consideration of the following project characteristics:

- Potential adverse impacts on the environment, natural resources, public health, and/or indigenous peoples
- Ability to serve as a model within a sector for similar projects
- Potential adverse environmental and social cumulative impacts
- Potential to undermine USAID's sustainable development activities

The MDB projects selected by USAID, in consultation with other USG agencies, for review during the period covered by this report are either candidates for financing or have been approved for financing by the African Development Bank (AfDB); the Inter-American Development Bank (IDB); the International Bank for Reconstruction and Development (IBRD), Multilateral Investment Guarantee Agency (MIGA) and the International Finance Corporation (IFC) – collectively, the World Bank Group (WBG), the Asian Development Bank (ADB) and/or the European Bank for Reconstruction and Development (EBRD). Projects reviewed in this report fall into one of the three following categories:

1. MDB Early Engagement Projects. Projects with USAID engagement during the period of time when project sponsors were developing or revising environmental impact assessments (EIAs) to meet respective MDB standards and safeguard policies. This report includes the following project in this category.

- Panama – Panama-Colombia Interconnection

2. MDB Public Disclosure Projects. Projects for which respective MDB institution(s) have publicly released final Environmental Impact Assessments (EIAs) prior to Board vote, and whose potential adverse environmental and social impacts have been identified by USAID/Washington, USAID field missions, other USG agencies, and/or NGOs. This report includes the following projects in this category:

- Kenya Assessment – Ethiopia's Gibe III Hydropower Project
- Vietnam – Trung Son Hydropower Project

3. MDB Watch List. Projects under discussion with various MDBs, but where a management decision has not been made to bring these projects into the MDB formal appraisal process or the Board date is pending (or not imminent). Projects in this category also include projects identified in previous USAID MDB Reports.

USAID's experience has shown that waiting for final project EIAs to be released by MDBs often results in inadequate opportunities and unsatisfactory results in identifying, averting, or mitigating negative environmental and social impacts. To increase its effectiveness in the oversight process, USAID continues to explore new approaches to earlier engagement in the MDB project proposal process. However, earlier engagement does not obviate the need to engage with relevant stakeholders during the later stages in the project proposal process when all of the environmental and social documentation is available.

MDB Policies, Guidelines, Strategies, and Action Plans. In addition to reviewing MDB projects, USAID takes part in the Treasury-led interagency process of reviewing MDB policies, guidelines, strategies, and action plans. Since these documents ultimately provide the framework for MDB-supported projects, it is important to ensure that they contain adequate provisions to ensure environmentally and socially sound projects.

- International Finance Corporation – Review of the Policy and Performance Standards on Social and Environmental Sustainability and the Policy on Disclosure of Information.
- The World Bank Group’s Framework for Engagement in the Palm Oil Sector

Report structure: This report is divided into the following sections:

- Section 1: MDB Early Engagement Projects**
- Section 2: MDB Public Disclosure Projects**
- Section 3: MDB Watch List**
- Section 4: MDB Policies, Guidelines, Strategies, and Action Plans**
- Annex: Trip Report**

Section I

MDB Early Engagement Projects

Multilateral Development Bank project(s) discussed in this section are identified for early engagement by USAID based on consultations with USAID Missions, USG agencies and/or Tuesday Group¹ participants. Depending on the information available, the scope of USAID's early engagement review ranges from analysis of draft EIAs and site visits, to discussions with NGOs and project-affected peoples, project sponsors, Government officials, and MDB staff. Discussions are intended to raise concerns and recommend changes in project design and implementation to address adverse environmental and social impacts identified before the release of the final EIA. USAID's environmental and social review of the final documentation will consist of: a) a review of EIA adequacy under the Pelosi Amendment, and b) identification of outstanding Title XIII environmental and social issues (environment, natural resources, public health, and indigenous peoples). Following this review, USAID develops recommendations for submission to Treasury for consideration of potential loan conditions and assessment of the EIA under the Pelosi Amendment.

Panama

Panama-Colombia Interconnection

Project Description

The objective of the project is to finance an electric power interconnection between Colombia and Panama which will facilitate the interconnection of the Andean region with Central America. The project consists of a direct current transmission line conducting 300 MW, approximately 614 kilometers in length between the Cerromatoso substations in Colombia and Panama II. Similar plans to connect Panama to the rest of Central America through Costa Rica are not known.



Financing

Financing is proposed from the Inter-American Development Bank. Early estimated project costs are \$210 million.

USAID Preliminary Review

USAID initiated a review of this project; however, at this point, all the project documents are from 2007 and are out of date. From what USAID understands, the Government of Panama is currently evaluating a new terrestrial route since the original maritime route proposed faced opposition by the Kuna indigenous peoples because of the interconnection crossing their land.

¹ Tuesday Group is a monthly meeting of NGOs and U.S. federal agencies, co-chaired by USAID and the Bank Information Center, to address MDB project loans and policies.

The new route is being explored primarily because it is considerably less expensive than the original marine route. However, the project cost has not considered the additional financial resources that will be required to mitigate the environmental and social impacts associated with the project. Additionally, the new route will cut through two indigenous reserves (including the Kuna) as well as through 35 km of preserved forests of the Embera Comarca within the Darien Gap.

USAID is concerned that the consequence of opening the Darien Gap through the new electrical interconnection route will be the beginning of an intensive and rapid degradation of the Choco-Darien ecoregion, and the loss of one of the three main global carbon sinks of the hemisphere. The Darien Gap is one of the world's most species-rich areas of moist lowland-highland rainforest, with exceptional endemism over a broad range of taxa. It has a very wide variety of habitats, outstanding biodiversity and is culturally rich, with two Amerindian tribes living in the Park. It lies within a Conservation International-designated Conservation Hotspot, a WWF Global 200 Marine Ecoregion, a WWF/IUCN Centre of Plant Diversity and in two of the world's Endemic Bird Areas. It is also a UNESCO Biosphere Reserve and World Heritage Site.



Primary forest still remains in the Darien Gap.

USAID believes that the Government of Panama (GoP) should proceed with the original maritime route for the electrical interconnection to avoid the likelihood of a road connection between Colombia and Panama. The original maritime route would cut through a small portion of protected area and already degraded lands. Because the original route would cut through Kuna territory, USAID believes that the GoP should support the Kunas (including financial resources to bring Kunas together from different islands) to discuss the project and the potential benefits they should receive if they were to allow this route through their land. In addition to the increased degradation of the Choco-Darien ecoregion, a road connection would mean the loss of a natural sanitary and phytosanitary barrier. Finally, studies suggest that new infrastructure through forests are followed by illegal activities when sufficient law enforcement is not present.

Current Status

Currently the project is scheduled for Board consideration in January 2011. Project EIA documents were not posted as of August 23, 2010.

Section 2

MDB Public Disclosure Projects

USAID's technical review identifies outstanding Title XIII environmental and social issues (environment, natural resources, public health, and indigenous peoples under Section 1303), and assesses the adequacy of the EIAs according to the Pelosi Amendment (Section 1307). Following each completed review, USAID develops recommendations regarding potential loan conditions in an attempt to prevent and mitigate potential environmental and social impacts and provides an assessment of the EIA to the U.S. Department of Treasury for its consideration.

Kenya Assessment

◆ Ethiopia's Gibe III Hydropower Project

Project Description

Ethiopia's Gibe III hydropower project, located within the Gibe-Omo River Basin, is currently under construction in the middle reach of the Omo River. Gibe III is the third project in a cascade of hydropower development schemes in the basin. The two previous projects are Gilgel Gibe/Gibe I and Gibe II. The Chinese have signed a memorandum of understanding (MOU) for the development of the Gibe IV hydropower project downstream of Gibe III, and adjacent to the country's largest national park, Omo National Park. Gibe III project documentation shows a fifth hydropower project (Gibe V) below Gibe IV, but the status of this project is unclear.



Gibe III is a 1,870 MW facility comprising a 240 m dam creating a reservoir with a surface area of at least 200 km², live storage of 11,750 million m³, underground and inclined penstocks, and a surface powerhouse equipped with 10 power generating units and switchyards. Electrical power generated by Gibe III will be available to cover peak and off-peak demand in the Ethiopian interconnected power systems, as well as exports to Kenya's market. Power produced will be evacuated through a four double circuit 400 kV, 65 km, overhead transmission line. The commissioning of Gibe III is scheduled for 2012. Project construction started in 2006.

As part of Gibe III, an environmental and social impact assessment (ESIA) for the downstream aspects of the project within Ethiopia has been conducted. However, transboundary environmental and social impacts are an important consideration for the project. Lake Turkana is located within Kenyan boundaries and the Omo River provides the Lake with 80-90 percent of its water. There are an estimated 500,000 Kenyans from various ethnic tribes that are dependent upon the Lake resources (e.g., water/pasture for livestock and fisheries). The Lake also serves as a security shield between Kenyan tribes on the western and eastern sides of the

Lake. The Gibe III project downstream ESIA states that the project will benefit Lake Turkana; this conclusion is questioned by stakeholders in both Kenya and Ethiopia.

Financing

The total project cost is estimated at \$1.72 billion. USAID began reviewing the Gibe III project several years ago as it was being proposed for African Development Bank financing. The World Bank (WB) had been approached for financing, but they turned it down since it violated the Bank's procurement policy concerning the selection of the prime contractor.

USAID Review

USAID has reported on this project in previous reports to Congress and provided the January 2009 Ethiopia site visit report in the April 2009 MDB Report to Congress. In June/July 2010, USAID undertook a site visit to Kenya's Lake Turkana to meet with project-affected communities dependent on Lake Turkana. The trip report is in Annex I.

Current Status

In August 2010, the USG was informed that both AfDB and WB decided to withdraw any potential financing support from the project. According to news articles, the Industrial and Commercial Bank of China is considering a decision to provide a loan to the project in lieu of MDB financing.

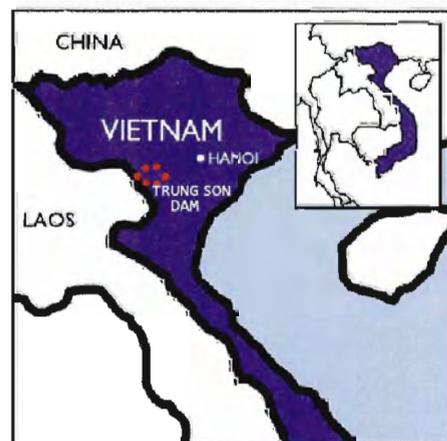
Vietnam

Trung Son Hydropower Project

Project Description

The Trung Son hydropower project is located on the Ma River in Thanh Hoa Province in northwestern Vietnam. The dam site is located at Trung Son commune, which is approximately 9.5 km from the Lao border. It is also surrounded by three protected areas, the Xuan Nha Nature Reserve, the Pu Hu Nature Reserve, and the Hang Kia Pa Nature Reserve, which are characterized by tropical and subtropical evergreen forest with high biodiversity values. IUCN has designated these three areas as "wilderness areas."

The Trung Son Project (formerly called Ban Uon) is a multipurpose project, providing both power generation and flood control benefits. The project involves construction and operation of an 84.5 m high dam with a total reservoir area of 13.1 km² and a volume of 348.5 million m³, a 20.4 km access road, borrow pits, construction camp for 4,000 workers, and a 65 km transmission line. The dam's power plant will have an installed capacity of 260 MW. Annual downstream flooding will be controlled by using 112 million m³ of the reservoir's capacity to regulate floods. Operational date is expected in 2017.



At its full supply level, the project reservoir will cover 1,313 hectares of which about 1,000 hectares consist of a luong bamboo (*Dendrocalamus Membranacea*) plantation and 69 hectares of natural forest. It inundates less than one hectare of the Provincial Xuan Nha Nature Reserve. The project will have indirect impacts due to the increased access and population in the area. Without proper mitigation measures, natural resource use and hunting in the Xuan Na and Pu Hu nature reserves nearby, as well as other natural habitats (e.g., Ta Poi Area and Hang Kia Pa Co Nature Reserve) where species may be gathered or hunted will be negatively impacted.

Most of the local population belongs to Thai, Muong, and H'Mong ethnic groups, all minority groups in Vietnam, but dominant in the local areas. The majority of the resettling households are of these three ethnicities, with the remainder being from the Kinh group, the national majority. Excluding the transmission line, the project will affect about 1,656 households (approximately 6,000 people). In addition, the presence of a large number of construction workers (~4,000) and camp followers has the potential to cause significant environmental and social impacts.

Since the Ma River originates in Vietnam (Dien Bien province) and travels through Lao PDR (Houaphan province) and then back into Vietnam (Thanh Hoa province), the Lao People's Democratic Republic (PDR) was notified, as required by the policy – Projects on International Waterways. The reservoir is designed to inundate (including backflow) land up to the border, but not including land in Lao PDR.

Financing

This is the WB's first hydropower project in Vietnam and is the country's first planned investment from the IBRD. The total project cost is estimated at \$386 million, of which \$24.6 million has been allocated for compensation and resettlement purposes, \$2 million for livelihood development, and \$2 million for implementation of the Environmental Management Plan. Electricity of Vietnam (EVN) has requested a total of \$330 million in financing from the WB.

USAID Review

USAID's preliminary review of the project's environmental documentation raised the following issues:

- The Supplemental EIA and Environmental Management Plan documentation states that a number of topic specific Impact Assessments were done, including for protected areas, terrestrial biodiversity, and fish biodiversity. However, the original EIA and none of these assessments (to USAID's knowledge) are available online, and as such, it is not possible to evaluate the adequacy of baseline data collection, and effectiveness of the proposed avoidance, mitigation, and monitoring measures.
- The absence of a cumulative impact assessment that takes into consideration the additional proposed dams on the Ma River.
- The absence of an EIA for the 65 km transmission line.

Current Status

The Board date for this project is currently scheduled for September 2010.

Section 3

MDB Watch List

USAID continues to monitor the status of the following projects included in previous MDB Reports. Updated information is provided when available.

October 2010

Bulgaria – Ada Tepe and Chelopech mines

EBRD – Chelopech Mining - estimated Board date September 2010.

Laos – Nam Ngum 3

ADB – estimated Board date May 2011.

Laos – Nam Ngum 5

MIGA – earliest estimated Board date second quarter of 2011.

April 2010

Indonesia – PT Weda Bay Nickel Project

MIGA – Board approval – July 13, 2010; A complaint submitted by NGOs concerning the environmental impacts to forests and water, which communities in the area depend upon, was deemed eligible by the Office of the Compliance Advisor/Ombudsman in August 2010.

Mozambique – Regional Transmission Project

WB – estimated Board date March 2011.

Nepal – Kabela Transmission and Generation Project

WB – estimated Board date May 2011.

April 2009

Guinea – Alumina Refinery Project

IFC – Project is still on hold.

October 2008

Cambodia – Environment and Protected Areas Management Project

WB – Project dropped.

Laos – Nam Ngiep I

ADB Private Sector Operations Department may be interested in participating in this project. However, to-date, an agreement between the developer and the Electricity Generating Authority of Thailand on the tariff has not been reached.

Section 4

MDB Policies, Guidelines, Strategies, and Action Plans

In addition to reviewing MDB projects, USAID takes part in the Treasury-led interagency process of reviewing MDB policies, guidelines, strategies, and action plans. Since these documents ultimately provide the framework for MDB-supported projects, it is important to ensure that they contain adequate provisions to guarantee environmentally and socially sound projects.

International Finance Corporation – Review of the Policy and Performance Standards on Social and Environmental Sustainability and the Policy on Disclosure of Information

The IFC is currently undertaking a review of its Policy and Performance Standards on Social and Environmental Sustainability and Policy on Disclosure of Information, collectively referred to as the sustainability framework. The current policies, adopted in 2006, reflect IFC's orientation towards an outcomes-oriented approach, which allows for greater flexibility and private sector client-orientation. In September 2009, IFC launched a review and update of the framework. Board decision on a new sustainability framework is anticipated for spring 2011.

USAID Review: USAID continues to engage in the interagency review process. A number of USAID concerns were provided in the April 2010 MDB Report to Congress. USAID will provide a final up-date in the April 2011 MDB Report to Congress.

The World Bank Group's Framework for Engagement in the Palm Oil Sector

The World Bank Group has recently issued its palm oil strategy consultation draft for public comment. This strategy is a direct result of the WBG decision to temporarily suspend any new investments in the palm oil sector following the findings of the IFC's Office of the Compliance Advisor/Ombudsman as a result of a complaint from community groups and civil society about IFC's investment in support of the Wilmar Group (one of the world's largest producers of palm oil, based in Indonesia) and a complaint to the World Bank's Inspection Panel regarding a World Bank small holder oil palm program in Papua New Guinea.

USAID Review: USAID's preliminary review of the strategy has highlighted possible concerns in the following areas:

- Whether there are sufficient incentives for countries to request policy/regulatory assistance from WB since IFC may invest in oil palm plantation operations and other palm oil sector companies, even if the public sector legal/regulatory enabling environment is less than ideal, if IFC is convinced that the project will have strong, measureable development impacts and risks can be mitigated through other government or non-government programs.
- Whether the strategy's objective is sufficiently broad enough to include biodiversity

conservation since the key concern is conversion of natural and critical habitats to plantations.

- Whether the framework/strategy provides sufficient guidelines for baseline collection and clear standards and indicators in order to measure whether the objective has been achieved.
- Whether IFC's revised Performance Standards will provide the safeguards necessary for ensuring that critical habitat and high value habitat are protected and supply chains are adequately analyzed, or provide the necessary safeguards for indigenous peoples.
- Whether there is adequate analysis for the IFC's Advisory Services to play a role in addressing issues related to the environmentally and socially sustainable enabling environment.
- Whether the strategy provides adequate guidance to determine appropriate locations for plantations that would look at the landscape level planning and assess the need for connectivity between critical habitat/high conservation value areas. This guidance could require restoration of degraded areas and determination as to whether these areas are owned/used by customary law communities.
- Whether the strategy provides adequate mechanisms to ensure that the Roundtable on Sustainable Palm Oil (RSPO) or any other independent certification scheme is upheld.

Annex

Kenya Assessment – Ethiopia’s Gibe III Hydropower Project Trip Report (June - July 2010)

Trip Report – June 18 – July 7, 2010

Prepared by Leslie Johnston

USAID/Washington, EGAT/ESP

USAID/Washington traveled to northern Kenya to meet with stakeholders potentially affected by Ethiopia’s Gibe III hydropower project. This visit is part of USAID’s due diligence efforts under the International Financial Institutions Act, Title XIII, Section 1303(a)(3), to review multilateral development bank (MDB) projects with potential adverse environmental and social impacts.

This report summarizes information obtained from meetings with stakeholders in northern Kenya, including meetings with elders and indigenous tribal groups – Gabbra, El molo, Turkana, and Rendille; local government authorities and NGOs. The meetings focused on the relationship of livelihoods to Lake Turkana and their understanding and participation in any other meetings concerning Gibe III.

Comments included herein are based on these meetings or documents in the public domain and do not reflect the views of USAID or the United States Government (USG). Not all comments have been substantiated by USAID.

General Background Information: Ethiopia’s Gibe III hydropower project, located within the Gibe-Omo River Basin, is currently under construction in the middle reach of the Omo River. Gibe III is the third project in a cascade of hydropower development schemes in the basin. The two previous projects are Gilgel Gibe/Gibe I and Gibe II. The Chinese have signed a Memorandum of Understanding (MOU) for the development of the Gibe IV hydropower project downstream of Gibe III, and adjacent to the country’s largest national park, Omo National Park. Gibe III project documentation shows a fifth hydropower project (Gibe V) below Gibe IV, but the status of this project is unclear.

Facing the challenges of regional energy shortages, in 2005 the countries of East Africa established the Eastern Africa Power Pool (EAPP). Ethiopia has one of Africa’s greatest hydropower potential, second only to the Democratic Republic of the Congo (DRC). Hydropower is a key component of Ethiopia’s development path since it is the country’s only economically exploitable resource, offering the potential for generation of more than 30,000 MW. Ethiopia’s planned hydropower projects through 2015 will deliver an additional capacity of 3,600 MW, a substantial increase compared to its currently installed



capacity of 810 MW. The export of hydropower to other countries will enable Ethiopia to earn foreign exchange, improving the economic basis of the country. It has been deemed more politically, socially, and economically feasible to develop hydropower projects in basins other than the Nile River Basin.

The Gibe III hydropower project is a 1,870 MW facility comprising a 240 m dam creating a reservoir with a surface area of at least 200 km², live storage of 11,750 million m³, underground and inclined penstocks, and a surface powerhouse equipped with 10 power-generating units and switchyards. Electrical power generated by Gibe III will be available to cover both peak and off-peak demand in the Ethiopian interconnected power systems and also export electricity to Kenya’s market. Originally, the commissioning of Gibe III was scheduled for 2012, but that date may be pushed back due to financial constraints.

To USAID’s knowledge, no formal agreement about the project exists between Ethiopia and Kenya, although high-level discussions have reportedly taken place between the two governments.

Multilateral Financing Options. USAID began reviewing the Gibe III project several years ago, when it was being proposed for African Development Bank (AfDB) financing. The World Bank (WB) had been approached for financing, but they turned it down due to violation of the Bank’s procurement policy concerning the selection of the prime contractor, Salini. Under Title XIII responsibilities, USAID undertook an affirmative investigation of the project in Ethiopia in January 2009; the resulting trip report is available upon request.

In August 2010, the USG was informed that both AfDB and WB decided to withdraw any potential financing support from the project. According to news articles, the Industrial and Commercial bank of China is considering a decision to provide a loan to the project.

Transboundary Impacts of Gibe III – Lake Turkana

Transboundary environmental and social impacts are an important consideration for the project. Lake Turkana is located within Kenyan boundaries, and the Omo River provides the Lake with 80-90% of its water. An estimated 500,000 Kenyans from various ethnic tribes are dependent upon the Lake resources (e.g., water/pasture for livestock and fisheries). The Lake is perceived by a number of stakeholders as a security shield between Kenyan tribes on the western and eastern sides of the Lake. The Gibe III project downstream Environmental and Social Impact Assessment (ESIA) states that the project will benefit Lake Turkana; this conclusion is questioned by stakeholders in both Kenya and Ethiopia.

Lake Turkana is already being impacted by climate change. Estimates of the level of the Lake dropped dramatically between the 1890s and 1970s due to reduced rainfall over the Omo highland catchment area. Satellite imagery shows that the Omo delta expanded by 500 sq. km during the 1980s and 1990s, which implies that the Lake level and river flows were decreasing at least up to that point. The Lake’s water elevation has dropped 25 meters from the 1890s to 1970s.

The two biggest issues associated with potential impacts on the Lake are the loss of livelihoods and increased conflict between Kenyan tribes, with the potential of conflict spilling into Ethiopia and possibly Sudan. The southern part of the Omo River and Delta lies within the Ilemi Triangle, where a long-standing border dispute continues unresolved among Sudan, Kenya, and Ethiopia. Furthermore, oil and mineral exploration are increasing in the area. If the resources provided by the Omo River, such as access to water and pasture, are degraded, conflicts may arise.

Historically, Lake Turkana, the largest permanent source of water in northern Kenya, has been a vital resource for pastoralists during times of drought. Additionally, there are many communities that live

along the Lake and depend on it for not only water and pasture during drought, but also for livelihoods dependent on fisheries. There are communities that stay at the mouth of the Omo River (primarily Dasenach) and depend on agriculture and fish. The El molo people near Loiyangalani depend primarily on fisheries. Over time, the Lake has also become an economically important center for fisheries, as members of various ethnic tribes switch to fishing as their main livelihood activity.

Pastoralists’ Use of Lake Turkana

Gabbara: The Gabbara are an Eastern Cushite people related to the Somali-Rendille in their historical origins in the southern Ethiopian highlands. The Chalbi desert of northern Kenya, located between the eastern shore of Lake Turkana and Moyale and Marsabit, extending into the Bura Dera plain east of the Moyale-Marsabit road, and the escarpment in southern Ethiopia is home to over 40,000 Gabbara pastoralists.

The Gabbara, who are nomadic pastoralists, live in three types of settlements: in villages, adjacent to villages, and in the bush. The well-being and wealth of a household (HH) is dependent on the number of livestock owned. Under most circumstances, the Gabbara are self-sufficient, selling stock for money to buy maize/beans or slaughtering animals for meat and oils. However, if livestock mortality is high, this results in the decline of HH wealth, which translates into an inability to buy necessary food and/or cover other costs such as medical or school fees. Government of Kenya (GoK) food relief is provided during times of drought although the provisions are usually not enough for the average-sized HH. Camels are Gabbara’s safety net, as they will produce enough milk for consumption, even during dry periods, and can be used for transportation and meat, if necessary.



Gabbara camel herd day of Sorio ceremony.

Access to pasture and water is an important concern for Gabbara, as they are seeing their historical territory being encroached upon by other ethnic tribes (e.g., Dasenach), land converted to settlements and agriculture (Marsabit Mountain, Huri Hills), land designated for Leakey’s archeological sites and Sibiloi National Park and the Turkana moving in from the southern part of the Lake (Cherigolo/Jarigole). Most of the time, problems arise because rainfall is either not reliable or, after 3-5 years of good rainfall, the land is overgrazed and degraded due to livestock and the grass seed bank being washed away. Due to the scarcity and temporary nature of water sources and pasture, the Gabbara may move their livestock up to 10 times a year. Water is usually the constraining resource, since the small livestock cannot be more than 3-4 days from a water source. It was suggested that boreholes could be established in these areas, but grazing patterns would have to be monitored so the land does not end up being overgrazed. One interviewee summed up the situation by saying “we are just living by chance.”

The Gabbara refer to Lake Turkana as Galanboy. The Lake serves as a safety net, a source of medicinal treatment (worming) for small livestock, and a defensive shield against attacks by other tribes. The

geographic range of Gabbra dependency on Lake Turkana’s water and pasture is from Kolkai (near Sibiloi National Park) to Arbijan in Wajir District. There are 12 Gabbra locations (administrative centers with a chief and counselor) and of these 12, only four are not dependent on Lake Turkana. This translates to 60% of the approximately 1.5 – 2+ million livestock (goats/sheep) and at least 50,000 Gabbra who are dependent upon Lake Turkana for their survival during periods of drought.

Gabbra dependency on Lake Turkana varies upon the environmental conditions. We were told that Gabbra livestock not taken to the Lake all died during the two-year drought that started in the mid-late 1990s. However, for security reasons, camels are not taken to Lake Turkana and, during the latest drought they were only taken as far as Guss. In North Horr, the depletion of forage is high and it is only during the two-month period of the rainy season that livestock has access to forage. Following this period, at least 80% of the livestock is moved towards Ileret, located approximately 120 km from North Horr and close to Lake Turkana. Communities around Maikona will only go to Lake Turkana under severe drought situations because there are watering points in the area. However, if there is a lack of pasture, they will be forced to move. Under these conditions, the livestock are usually very weak and a number end up dying along the way. While USAID was visiting Maikona, there were discussions about moving to Lake Turkana since the pasture was depleted and the people had heard that there was pasture at North Horr and at the Lake. If the rains come in time, then they will not have to move.

Security concerns were raised as a strong disincentive against taking livestock to Lake Turkana. In fact, Gabbra rarely, if ever, take their camels to the Lake for fear of raids by the Turkana. One village will not take their livestock to Lake Turkana without the presence of a GoK Anti-Theft Livestock Unit.

Rendille: The Rendille, semi-nomadic pastoralists, inhabit the arid region of northern Kenya. Similar to other tribes, they are classified under the broad Eastern Cushitic peoples. Ethiopia is their original homeland. They were compelled to migrate south to northern Kenya due to increased rivalry and conflicts with the people of the Oromo tribes, mainly over pasture and water for their livestock. The Rendille settled in the Marsabit District, largely in the Kaisut Desert that is located east of Lake Turkana and west of Marsabit town. This desert is bordered by the Chalbi Desert, Mount Marsabit, and the Ndoto Mountains. In this region, they are neighbors to the Borana, Gabbra, Samburu, and Turkana tribes. Their staple food consists of meat and a mixture of milk and blood, known as "Banjo." In addition to small livestock, camels also comprise a HH’s wealth, as they are the best suited for adaptability to the arid conditions of their territory. Camels are considered extremely valuable property since they provide an economic safety net (milk/meat) during periods of drought.

The Rendille go to the Moite region for Galgulime, which is a cultural ceremony. During this time they bring their camels to drink Lake Turkana waters. When asked whether they had problems with raids they responded “no,” since they “prepare themselves as warriors.”

Rendille who live near Lake Turkana have become involved in the fishing industry. This change came about when Rendille started to settle down around Lake Turkana because of the good pastures. Consequently, they had to learn how to use the resources around where they settled. They started fishing about 20-30 years ago and fishing now provides part of their daily income. They now get 10-20 ksh (Kenyan shillings) per fish and they believe that with time, the income from fish will increase. They only keep enough livestock as can be kept on the available pasture, without moving. Meat has traditionally been a greater proportion in their diet than fish although with the present generation it is about equal. Apart from livestock, there are more livelihood opportunities based on the Lake. They cannot depend on agriculture because of the soil and rainfall patterns. The Rendille do not want to be nomads their entire lives and want to be able to settle and have access to education, health, and business opportunities.

The Rendille have high rates of illiteracy and few have access to media, so many development decisions are done without their knowledge. They believe that locals are being taken advantage of and decisions are made in locations far away without any consultation.

Turkana: The Turkana are Kenya's third-largest tribe and the second largest group of nomadic pastoralists (after Maasai). The majority live in the Turkana District of the Rift Valley in the arid northwest of Kenya. They migrated from Uganda approximately 400 years ago.

Turkana North District which contains the Lake and Ilemi Triangle has a population of 140-150,000 and Turkana West District has a population of 150,000-200,000. Turkana pastoralists do not seem to be as dependent on Lake Turkana as the Gabbra. Pastoralists within 20-30 km will use the Lake. There is less dependence on the Lake because the surrounding area dries up quickly, leaving poor pasture and the presence of a large number of livestock already in the area. Turkana living further out from the Lake have access to other water sources. The Ilemi Triangle experiences more rainfall than the western side of the Lake since part of it is composed of the Lorient and Lokwana Ranges so there are natural springs and pasture. In the dry season, they will use the Ilemi Triangle, where they have also built rock catchments to harvest rainwater. Most of the Turkana are in the Lapurr range during the wet season and move to the Lake in the dry season. Turkana in the Kukiro area will go to the Lorientum range and also to Kibish, which is in the Ilemi Triangle.

Ethiopian Nyangatom are present in the Ilemi Triangle, so pressure from this tribe and Dasenach on the other side, drive the Turkana, who are normally closer to the Lake, further south, which is increasing pressure on the available pasture.

Lake Turkana – Fisheries

Lake Turkana is the only large body of water within Kenya that is not shared by other countries (e.g., Lake Victoria). It is the second supply source of fish to Kenya following Lake Victoria. However, due to fishing disputes with Tanzania and Uganda, over time there could be a reduction in the amount of fish coming from Lake Victoria.

Both sides of Lake Turkana have robust fishing activities. The Lake has at least 68 fish species, of which three main species are caught for the commercial market – tilapia, Nile perch, and labelo. Fish catch has declined over the years. A variety of factors were raised during the course of discussions to explain the decline – these include overfishing due to an increase in the number of Ethiopians fishing (Dasenach) and the fact that the Lake is getting smaller. One fisher said the decrease had been gradual over the years and the Nile perch catch has noticeably decreased. In Loiyangalani, tilapia is the dominant species caught.



Truck being loaded with salted fish for market.

Fish are distributed from the mouth of the Omo River to 1 km downstream into the Lake where there is fresh water and grass for breeding. Near Ileret (east side of Lake), there is also a large wetland that is productive for fish spawning.

Southeast side of the Lake

Loiyangalani’s economic activities are centered on fishing. With at least 1,000 fishers in the area, all of the surrounding communities are either directly or indirectly involved in the fishing business. Loiyangalani’s fishing cooperative employs up to 70 women and 90 men for packing and loading the fish onto trucks. One truck load contains approximately 50,000 fish. Women living in Loiyangalani usually do not go out on the boats but will buy fish from the fishers. The commercial fish are prepared for the market – either salted or sundried – and sold to the cooperative. Fishing is their “farming,” rather than agriculture. If 200 fish are caught, 10 will be kept for food and the rest will be sold. The women also keep some small stock (goats) which they buy from the money earned selling fish. The rest of the money is used for school fees and purchases from the food bank.

The salted fish goes to DRC/Rwanda with one fish selling to middlemen for 30 ksh. At the Ugandan border another truck is hired with the appropriate documents to take the fish across the Kenya border. Reportedly, one fish sells for \$1 (~80 ksh) on the black market. The sundried fish stay in Kenya and go to the Kisumu market. The fish are sold from the cooperative at a flat rate and then sorted/graded at Kisumu and priced on the basis of quality and size. Sundried fish can sell for at least 30 ksh. Several trucks come every week and there is always enough fish for each lorry. All the fish leaving Loiyangalani are dried or salted since roads for refrigeration trucks for transporting fresh fish are too difficult to drive. Fresh fish sold in Loiyangalani fetches more money than either salted or sundried fish.

According to the fishers interviewed, in the 1970s and 1980s, fish were so abundant in the Lake they could be easily speared. Now, boats and nets are required. In the Loiyangalani area, there are about 14,000 to 15,000 people, of which the largest population is the Turkana with about 7,000 people. Most of these Turkana have ceased practicing a nomadic lifestyle. Because fishing is now commercialized, it is becoming more difficult to catch fish for subsistence and if the people in the Loiyangalani area have no livestock, they are dependent on food relief.

The El molo: It is reported that the El molo tribe is the smallest tribe in Kenya. El molo people live in small villages on the southeastern shore of Lake Turkana. It is estimated that their population is about 4,000 people but there are very few “pure” El molo people due to intermarriages with neighboring Turkana and Samburu people. The name El molo came from a Maasai phrase meaning “Those who make a living from sources other than cattle.” The Samburu name for El molo is “loo molo onsikirri,” which means “the people who eat fish.”



El molo village, formerly located at the edge of Lake Turkana.

Although the El molo have small livestock, they depend primarily on fish from Lake Turkana for their livelihood. The day we visited one of the El molo villages, a boat was bringing in the morning catch. There were only 50 fish, which is not considered a good catch. The reasons given were the full moon and the rising Lake level (due to the rains). The fish catch is communal and will be shared with the village. There are 70 HH (with approximately eight family members each) so at least 200 fish are needed to feed the entire village. When there are plenty of fish, they sell to the local market and buy food provisions (e.g., maize). A small HH will consume about two fish per day and a larger HH about five.

Many species of fish are caught for consumption – not only the commercial species. The Lake edge has been receding, resulting in El molo Bay being almost dried up (see photo). The Bay was a significant source of fish for everyone, as women and children were also able to fish from the shore. This fishing opportunity is no longer available, and is having a negative impact on the village. Some El molo have livestock and will migrate to/from Moite depending on grazing conditions. However, from their perspective, there are no other livelihood options than fishing. The soil is not suitable for farming. “The Lake is us and we are the Lake,” they say.

Women will be the ones most impacted as the Lake continues to recede as they will not be able to fish or take herds to pasture, since they need to remain with their house and children. There is concern that there will be conflicts among communities because of resource scarcity and people will be internally displaced. One educated El molo told us that villagers cannot comprehend the impact and that future generations will be impacted more greatly than the current generation.



El molo Bay, previously fished by women and children.

Western side of Lake

Most Turkana are fishers from the southern end of Lake Turkana to the western shore. Although initially dependent on livestock, they lost a substantial part of their livestock in raids and from the droughts and had to find alternative livelihoods. They initially started fishing for subsistence but now they are involved in commercial activities.

Fishing and associated commercial activity is supporting the development of Kalokol. “Money is in the Lake,” they say. The population of Kalokol is approximately 40,000, with almost half the population comprised of fishers. In smaller surrounding communities, the population is exclusively fishers. Seven in 10 HHs consume fish on a daily basis.

Ferguson’s Gulf (Kalokol) is highly productive for fish and supports the breeding of tilapia along with other common fish. The viability of the Gulf depends on the high rains in Ethiopia; when the level of the Lake goes down this translates into reduced fish catch and economic activity.

Socio-economic studies conducted by GoK have shown that 2 million ksh are brought into Kalokol every week. At least three refrigerated trucks per week supply the Nairobi fresh fish market and several trucks a day supply sundried, salted, and smoked fish for the Kisumu, Kenya, and DRC markets. Recently, a private investor has started to rehabilitate an old, non-operating fish processing plant in Kalokol.

There is fishing all the way north to Loitaung. If the Lake changes and the distribution of fish also change, then people will move to where the fish are. This could translate to fishers moving as far north as the mouth of the Omo River, which could lead to increased conflict with Ethiopia’s Dasenach tribes. The Turkana are already fishing further north, where the fish are plentiful and, as a result, conflicts between Dasenach and Turkana over both fish and livestock raids occur.

Changes in Lake Turkana

Everyone USAID interviewed had something to say about the changes in the level and floods of the Lake they have seen and how it has impacted them.

Gabbra: The Gabbra have seen a difference in the Lake’s water level – a decrease of at least 1 km of the Lake edge. In the 1960s, the Lake water level was high with a lot of vegetation. For example, Kenya Wildlife Service built their houses in Sibiloi National Park on the edge of the Lake; since then, the Lake edge has moved 3-4 km inward. From what they can remember, these changes started in the early 1990s. This is becoming more of a problem since rain patterns have been changing, droughts are becoming more severe, and there is an increase in livestock diseases. In the past, a large population of livestock would stay at the Lake from May to October since as the Lake receded from the flooding, grass would grow and provide for additional pasture areas. In recent times, the Lake does not flood, so grass is not as reliable and its growth is dependent on rainfall.

Changes in the Lake’s water level directly impact the mortality rates of livestock, which are usually in a weakened state from the drought. Normally, livestock would fatten up (and gain strength) on the grassland after the floods receded. Now, lower Lake levels create muddy areas and difficult terrain where weak animals cannot easily have access to the water. This is compounded by the fact that it is a very long distance back to pasture areas. As a result, livestock mortality rates are very high. Previously only 10 animals out of 300 would die; now, at least 60. The impact of this loss is substantial, since the 60 animals are usually the younger ones, and the herd is left with older, less reproductively viable animals. Then, out of the remaining herd, another 40 animals are sold/slaughtered, which reduces the herd to 200 older animals.

As rainfall decreases, borehole and shallow wells water levels go down. In some areas, most of the shallow wells are hydrologically linked to the Lake and when the Lake levels decline the water in the shallow wells also declines. This leaves the Lake as the only source of water where money is not required to buy pumps and fuel to pump the water out. Sometimes the Gabbra have to bring water tanks for their livestock, which is very expensive.

El molo: El molo villages were built on the Lake’s edge. With Lake waters receding, the villages are at least 1 km away from the water. As mentioned earlier, El molo Bay is almost dried up, which is having a significant impact on the women and children who used to fish the Bay for food and to sell the catch for school fees.

Western side of Lake Turkana

Similar to what was reported on the southeastern side of the Lake, there is a reduction of water flowing into the Lake. There have been stretches of time when the water level in Ferguson’s Gulf is low and fisheries are not very productive.

Reportedly, the Dasenach are using wind pumps on the Omo River for small-scale irrigation, resulting in leach water reaching the Lake, which is thought to impact flow into the Lake. It seems that only when it rains the Omo River is recharged enough for adequate flows into the Lake.

Development Issues

Gabbara:

- **Livestock diseases:** Livestock diseases are a major problem, since there is no/limited education on the treatment of diseases (tsetse flies, ticks).
- **Deforestation:** In some areas, trees are cut three times a year to be used for fencing when livestock is brought into the villages for ceremonies. There is a need for an alternative material used for fencing and for fuel, combined with an effort to plant and sustain more trees. One interviewee stated that since wood is a major source of fuel, in 10 years time there will be no more trees.
- **Access to markets:** The Gabbara do not have adequate storage facilities or access to markets for their meat and milk. In the rainy season, their camels produce a lot of milk but it can only be sold locally and at a very low price – even lower than tea leaf. Some Gabbara will go to Ethiopia to sell their products but that is not a safe alternative.
- **Lifestyle:** There were different thoughts about the ability of the Gabbara to change their lifestyle. One line of thought was that as long as the rains continued, and the people could continue with their current lifestyle, it would take ~200 years to change. However, if there was suddenly no rain for a period of time (e.g., 10 years), the change could happen sooner. Even a few rains would have the effect of continuing the Gabbara pastoral lifestyle. Although school enrollment is up, educated Gabbara are not changing their lifestyles to farming or fishing. The only way they will be able to change is through formal employment. Change comes with interaction from the outside, but this interaction is very low at the moment. There is also the traditional Gabbara governance which has tremendous influence on whether and how change will occur. It seems that Gabbara who move to towns still retain their customary lifestyle, even if they are employed in formal jobs. A current problem is that it is difficult to find money for university fees so advancement beyond high school is not possible and youth end up hanging around with no livelihood prospects. This does not provide a positive example about attending school for others.

Turkana:

- During the severe drought in the 1970s, which decimated livestock, several irrigation schemes were developed along the Turkwel River which flows into the Lake. As a consequence, some Turkana were taught how to farm, and they were also introduced to fishing.
- The newest activities Turkana are engaged in are small-scale trading in livestock and running small kiosks selling foodstuffs – maize, sugar. The Turkana use their livestock as money, trading them for goods from town that vendors bring to the bush. The livestock are then sold to towns-people for cash.

Conflict

The patterns of conflict among northern Kenya’s pastoralist tribes, such as raiding and cattle rustling, are complex, have a long history, and have to some extent become an aspect of traditional pastoralist culture. These pastoralists live primarily in arid or semi-arid areas and historically depend on livestock (cattle, sheep, goats, and camels) for their livelihood. They rely on access to pasture and water for livestock’s survival. Such resources are scarce and under increasing pressure. Conflicts involving pastoralists are associated with a complex interrelationship of a number of factors, including resource competition; cattle rustling; wide availability of small arms; inadequate policing and state security arrangements; diminishing role of traditional governance systems; competition over control and access to natural resources such as pasture and water; land issues; political incitements; ethnocentrism; increasing levels of poverty; and idleness amongst the youth.

Violent conflicts have had very negative and severe impacts on the communities involved. Loss of human life and property, displacements of large segments of the communities, and disruption of socio-economic activities and livelihoods are among some of the main negative impacts of conflicts in northern Kenya.

Although historically, conflict was centered around pastoralist livelihoods, there is an increasing pattern of conflict surrounding the fisheries in Lake Turkana.

The potential of Gibe III impacts on Lake Turkana contributing to conflict has not been adequately analyzed. One elder stated “can’t plan about peace when the dam is threatening their livelihoods.”

Below are perspectives of conflict from the tribal groups that USAID met:

Gabbra: Peace in this region is fragile and conflict is easily triggered. During the British reign, only Gabbra and Rendille were using the natural resources on the eastern side of the Lake. Conflict between the various ethnic tribes is a common factor in Gabbra livelihoods resulting from livestock raiding to access to resources (water and grazing land). Conflict is seen as the biggest problem for development. When there is no conflict, people can take care of themselves but when conflict arises and livestock raids occur, a HH can become poor overnight and unable to take care of itself. Youth want to take revenge on the attacking tribe and the cycle of conflict continues. The only way to reduce conflict is to safeguard sources of permanent water. Good pasture is left unused due to fear of raids (see photo to the right). All interviewees felt that there is a great chance that Lake Turkana will become a major source of conflict – both internally and internationally – with Ethiopia if the Lake’s water level continues to drop. The other problem identified was that the GoK has a policy of disarmament but Ethiopia and Sudan do not. In relation to Gabbra territory, the



Ethiopian border is only 45 km away so the availability of firearms is very unbalanced. The area is so insecure that the Gabbra will rarely take their camels to the Lake for fear of raids.

There have been recent negotiated peace mission agreements between Ethiopian (Hammer and Dasenach) tribes and Kenyan (Gabbra) tribes to reduce livestock theft and maintain the peace. The reciprocal agreement provides for penalties, compensations and use of shared resources.

In the north, there is a grazing boundary between the Gabbra and Dasenach. The Dasenach keep small numbers of livestock but primarily use the Omo Delta for agriculture and the Lake for fishing. The Gabbra can only go as far north as Kolkai; if they go any further north (to Ilkigimire and Lage Tula Borr) they need to request permission from Dasenach. Conflict between the Gabbra and Dasenach is low at this time so both groups can go to Lake Turkana.

In one village visited, we were told how the HHs had been wealthy but in the last three years their wealth has disappeared due to raids by Turkana and some Samburu. One older man we met had 600 animals in 2008 and after a raid he was left with only four. This same raid left the village with livestock ranging from a high of 300, to a mid-range number of 50-70, and the lowest of 10-12 per HH. The frequency of Turkana raids was high enough that in 2009, Gabbra living in the bush 10-30 km from the village decided to move into the village. The GoK sent in an Anti-Theft Livestock Unit, which has stopped the raids. The security team accompanies them when they need to go to Lake Turkana. This village had about 10 Turkana families who moved to Loiyangalani out of fear of retaliation attacks due to the Turkana raids. There used to be high numbers of cattle, but now most of them are gone, due to the raids, coupled with the distance and the reduced access to the lake.

The incidence of conflict with the Turkana has increased within the past seven years. Interviewees told about incidents where Turkana had come with as many as 1,200 armed men and attacked a radius of 50-100 km for a period of 3-5 days. In one raid, 19,000 livestock (38 Gabbra owners/~ 500 animals each) were stolen. There is an underlying impression that some of these attacks are politically motivated.

Gabbra conflict with the Turkana includes not only livestock but also fisheries. A group of Dasenach, Gabbra, and Borana (DASGABO) members established a fishing cooperative near Moite Mountain in 1994. Initially, the business was very good and they were able to sell fish to Kisumu. Their project collapsed in 2003 after a conflict with Turkana who took their fishing boats and nets and have now settled there.

Interestingly, recent incidents seem to indicate that due to reduced fisheries, Turkana have started raiding livestock and taking them across the Lake. It was speculated that this could be a coping mechanism to counter the impacts of reduced fisheries.

There is now more peace due to the Anti-Theft Livestock Unit based in Guss and Moiti. There are also periods of time when conflict subsides. For example, during the drought last year (2009), the Gabbra, Samburu, Rendille, and Turkana all went to the Lake for water and available pasture. Since there was a common problem, everyone cooperated. However, when the rains came, the Samburu left with 40 Gabbra livestock, Gabbra left with 1,000 Turkana livestock, and Turkana left with 700 Gabbra livestock.

Lake Turkana is seen as a natural defense shield to separate Gabbra and Rendille on the east side of the Lake from Turkana who are considered more aggressive. In the past, it was difficult for Turkana to cross the Lake in very large numbers to make livestock raids. As the Lake level decreases, the Turkana are better able to cross over, raid livestock, and transport them back to the west side of the Lake. The Turkana move in very large numbers (700+) and are perceived to not have community structures/safety nets like the Gabbra, so they are very poor and will resort to anything for food. The perception of the

Gabbara is that if the Lake dries up, they will be in danger because they have so many enemies. One Gabbara said: "If the Lake goes, so will the Gabbara."

In addition to conflict with other tribal groups, conflict also arises due to other external factors.

- Sibiloi National Park (SNP) was raised in a number of discussions as a sensitive conflict area. Prior to the creation of SNP, the Gabbara were able to graze/water their small livestock along the Lake. With the creation of the SNP, Gabbara were no longer able to graze their animals or take them to water. It is critical for them to use SNP as a water corridor since they cannot move back towards Illeret because the forage is usually depleted. This has resulted in at least a couple of deadly altercations with Kenya Wildlife Service (KWS), of which one incident was recounted to us by an elderly Gabbara who had been involved. KWS has designated three water corridors for Gabbara and two for Dasenach to pass their stock through. Even with this arrangement, Gabbara feel that they must go through the corridors at their own risk. They still feel harassed by KWS and are upset that GoK will not do anything about the situation. Although tentative agreements have been made with KWS, they are never upheld. The problem was perceived as the Gabbara can never get their problems addressed since KWS is a GoK institution.
- The Gabbara also end up in conflict situations with the Turkana Basin Institute (Leakey's research sites). The problem arises when the Gabbara try to take their livestock to water going through the archaeological sites. Gabbara feel that Leakey research is pushing them out of their original territory. Reportedly, research planes have been used to drive livestock away from the sites.

Conflict issues raised on western side of Lake Turkana

The Omo Delta is rich in fisheries. Because both the Turkana and the Ethiopian Dasenach are relying more on this resource, violent conflict is increasing. The Turkana living along the Lake are becoming more dependent on it. As both Turkana and Dasenach become less dependent on a pastoralist livelihood, the Lake becomes their alternative livelihood. Dasenach need to move from the delta to the Turkana area during the flood season and also need to use Turkana's territory for pasture during the dry season. Because of the need for cooperation with the Turkana, conflict is not always present but it does flare up. There is conflict on the Lake between the two tribes when boats meet, which has resulted in a number of deaths.

Tongenyang was initially a fishing camp for the Turkana. When conflict increased with the Dasenach, they moved 30 km to the interior. They have only recently, because of the peace initiatives, moved back to the area, with the assistance of the Catholic Church. The church encircled the town with a fence in which the Turkana reside. Peace building efforts now cover both land and fishing resources.

The increased competition for the resources increases the potential for conflict to flare up. Ethiopia has a fishing cooperative that buys fresh fish from the Delta for the Addis market. Additionally, Somali traders buy fish which are sold in the Somali market. Kenyan fishers are linked with the Somali traders.

Gibe III Impacts

All discussants were aware of the Gibe III project and expressed deep concern over its potential impacts to exacerbate the already declining waters of Lake Turkana. Lake Turkana is considered their lifeline since it is a source of water and pasture during drought, fisheries, and a defense shield. There is fear that the project will seriously impact future generations of pastoralists and fishers in the region.

The majority of the discussants did not have details of the project. They were primarily getting information by word of mouth from other pastoralists when they traveled to Ethiopia or at gatherings.

Some information was obtained through media reports and local demonstrations on the Lake shores. The local government officials appeared not to have an informed position based on information from the central government, and the GoK has not visited the area to discuss the project.

Some discussants were aware of the AfDB public consultations on the project conducted by Tanzanian consultants in 2009. They were not aware of the findings of the consultants and had not received a report. A Lake Turkana hydrological report commissioned by AfDB concluded that developments in the Omo Basin will impact the fisheries resources of Lake Turkana; the impacts of the proposed regulated flows that have not been scientifically quantified; and water removed for consumptive use; e.g., irrigation abstraction will severely impact the Lake through reduced inflows, potentially by 40 meters, with an associated reduction in the water table.

USAID understands that the GoK recently funded a study to assess the impact of the dam on Lake Turkana. By way of comparison they are also looking at the impacts resulting from the Turkwel Dam. The results from this study were not available at the time of this writing.



Aerial view of Turkwel River.

Recommendations:

Prior to any additional financing for the project, the following actions are needed:

- A more comprehensive analysis of the environmental and social costs that will likely be associated with this project in Kenya and Ethiopia.
- A cumulative impact assessment to determine the impacts of Gibe III, IV, and V, and other developments (e.g., water extraction for industrial agriculture) and the impact of proposed regulated flow sequence on water quality and nutrients, sediment transport, fisheries, and recession agriculture.
- A detailed assessment of alternative energy sources available to Kenya (solar, wind power, geothermal) and comparison with the environmental and social costs of the proposed Gibe III prior to any decision made to accept energy from Ethiopia’s Gibe III.
- Recognizing Ethiopia’s need for both foreign exchange and increased capability to meet internal energy demands, alternatives should be considered that could also support these identified needs and be analyzed independently of one another. This would allow for additional options to be pursued including re-evaluating the operation of Gibe III to avoid the most severe impacts on downstream populations in Ethiopia and Kenya.

- If the project goes forward, both Ethiopia and Kenya should request multi-year support from the World Bank to develop and implement a robust livelihood and cultural mitigation plan specific to each ethnic group impacted. This plan should be implemented prior to the completion of Gibe III and its resultant impacts. As part of this effort, an Independent Panel should be established to provide oversight of the process and a grievance mechanism and to ensure effective implementation of each plan.
- A conflict vulnerability assessment should be conducted for: 1) the indigenous ethnic groups that depend on the Omo and have already a history of conflict and 2) the Ilemi Triangle region entities that are dependent on the traditional resources of the Omo River and Lake Turkana.
- Ethiopian and Kenyan governments need to identify what each government's contingency plan will be should the impacts of the project be greater than currently predicted.

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