



DEVELOPMENT, CONSERVATION AND PEOPLE'S LIVELIHOOD

AT

CROSSROADS

**The Proposed Sugarcane Project In The Tana Delta, Tana River
District – Coast Province, Kenya**

A TECHNICAL PAPER



**THE EAST AFRICAN
WILD LIFE SOCIETY**

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ACRONYMS

AMREF	African Medical Research Foundation
CBD	Convention on Biological Diversity
CDA	Coast Development Authority
COMESA	Common Markets of Eastern and Southern Africa
EIA	Environmental Impact Assessment
IUCN	The World Conservation Union
KMFRI	Kenya Marine and Fisheries Research Institute
KPLC	Kenya Power and Lighting Company
KWF	Kenya Wetlands Forum
NEMA	National Environment Management Authority
RAESA	Riegos Agrícolas Espanoles SA
WWF	World Wide Fund for Nature

EXECUTIVE SUMMARY

The spectre of conflict between conservation and development has reared its head again in the Tana Delta wetlands. This follows a declaration by the Tana and Athi Rivers Development Authority (TARDA) to undertake a sugarcane growing and sugar production in the Tana Delta.

The Tana Delta wetlands within Tana River district of Coast province is arguably Kenya's largest, most ecologically and biologically diverse, socially and economically important wetland. Covering an estimated area of 130,000 ha, the delta supports a gallery of ecosystems ranging from forests, swamps, dunes, beaches and ocean. It supports exotic plants and animal species, some of which are listed as being endangered. The delta is immensely valuable to the local people who have built an intricate relationship between their lifestyles and the dynamics of the delta's ecosystems.

Such is the immense value of the wetlands that when TARDA declared that it intended to convert an estimated 12,400 ha of the wetlands to a sugarcane growing and sugar production, several varying opinions have been expressed regarding the venture. These sentiments have either been in support of, or contrary to the proposed project. Those in support of the project propagate the argument that the proposed project will act as a factor for development and economic growth, thus leading to alleviation of poverty, which is reported to be high in the area, providing alternative sources of livelihoods, improving quality of life and raising material living standards among the area inhabitants. On the other hand, those with contrary opinion argue that imminent displacement, change of livelihood systems and limited attention to environmental aspects of the delta will have serious immediate and long-term ramifications on the delta, its people and national Kenyans. They believe that this is not the best use of the resources (both social and ecological). They believe that these ventures are short term and will cost the Kenyan Government and the local people great loss in the long term.

It is against the background of these opposing views on the proposed sugar project, that the KWF constituted a team of experts and interest parties in the Tana **to provide a balanced analysis of the project outlining the intricate inter-relationship between economic progress, environmental conservation and social equity.** This report presents the results of this analysis by the team.

The KWF is a multi-institutional consortium that works to promote the conservation, management and wise use of wetlands and wetland resources in Kenya. The analysis work involved review of published literature on the subject of Tana Delta, field visits and group meetings.

While the report details the findings of the analysis work, some pertinent issues stand out prominently.

- **Importance of the Tana delta:** The Tana River delta is a very unique both for its natural and human environment. It has enormously diverse ecosystems, habitats and species, and exceptional local resident communities who are integral to the Delta. It is also one of six deltas on the Eastern African Coast. How are these safeguarded in the proposed venture, especially against the background of a number of former short term investments in the area, most of which have failed to comply to their initial objectives, specifically in relation to the social benefits. Moreover, Kenya is a signatory to a number of international Multilateral Environmental Agreements (MEAs) such as RAMSAR, CDB, CMS etc, hence it would in her interest to show commitment to the ideals espoused by these treaties.
- **Competence of the project proponents:** This project is being fronted by TARDA – owing to its statutory mandate, with Riegos Agrícolas Espanoles SA RAESA- a Spanish Company whose core business is irrigation pipes, as its dominant partner. Historical circumstances demand that the ability of TARDA to competently undertake this project be assessed. The region is

dotted with previous projects, almost similar to the sugar project, initiated by TARDA that have not yet achieved their intended goals. It is also an equally worrying revelation that RAESA has never engaged in irrigation agriculture anywhere in the world?

- **Project financing:** An analysis of the proposed financing mechanism for the project reveals serious gaps that will render the project very expensive and unserviceable in the long term. It is therefore important to ask, who is going to bear the debt burden if things do not work out?

There are also many other issues that still remain unclear in relation to implementing the project. This report is intended to provide some basis for a rational evaluation of the circumstances. It not only reviews the investment, the managerial capacity, the legal aspects and social impact, but also highlights the importance of Kenya's largest deltaic area. It aims to help in the decision making process and would like to ensure that a long-term view is taken at the social, economic and ecological levels. The KWF believe that this is the only way to ensure sustainable development for current and future generations. The following recommendations are therefore made;

- The proposed project be stopped until an independent Environmental Impact Assessment (EIA) is carried out and all development opportunities are explored.
- Other wise-use economic opportunities be explored.
- Proper legislative framework on development processes of mega character be enacted.

1. Introduction

The Tana River Delta lies within the semi-arid area of Garsen, Tana River district, Coast Province. It is Kenya's largest deltaic zones. It is also home to some of the country's indigenous and minority peoples and provides the essential resources for their livelihoods. Over 70 experts have identified the Delta as an area of international importance. As a result, the area is global priority within the East African Marine Ecoregion and is proposed to be included on the Ramsar List of Wetlands of International Importance.

The Tana Delta is associated with many unsuccessful multimillion shillings projects and divergent views regarding the real and perceived merits of economic and social development and environmental conservation. Some of the projects either proposed or implemented in the area include: Global Environment Facility – Tana River Primate Reserve Project; Tana Delta (Rice) Irrigation Project; Industrial Prawn Farming; Lower Tana Village Irrigation Scheme; Tana Delta National Wetlands Reserve; Hola Irrigation Scheme; Bura Irrigation Scheme among others. It seems, the government and other development agencies have continually run into trouble when it comes to how to utilise the resources within Tana River district in order to benefit the local people and the country at large.

Currently Tana and Athi River Development Authority (TARDA) is facilitating a Kenya Shilling 24 billion sugar production project called “**Tana Delta Sugarcane Project**” or “**Tana Integrated Sugar Industry and Development Project**”. Already there is opposition to the mega project citing several factors. These range from limited participation and recognition of the interests of the locals in the project development process (at planning decision making and implementation); limited consultation with other stakeholders on competing interests; to limited governmental commitment to discuss and integrate established principles for a sustainable development of the area.

The proponents of the project believe that the Tana River region lags behind in development and records high levels of poverty despite the resource base it is endowed with. Emphasis is placed on development and economic growth with an agenda of alleviating poverty, providing alternative livelihoods, improving quality of life and raising material standards of living. Others however, argue that with an imminent displacement, change in livelihood systems without real alternatives, the proposed project will only impoverish the locals the more. Limited attention to the environmental aspects will also have long-term negative ramifications on the rich Delta with its diverse wetlands, unique and rare biodiversity – recognised internationally. This in turn will negatively impact one of Kenya's greatest assets, for which the Government is mandate to manage responsibly on behalf of all Kenyans.

2. Purpose of Report

The overall aim of the report is to provide a balanced analysis of the proposed sugar project, outlining the intricate inter-relationship between economic progress, environmental conservation and social equity. It also explores the optimum investment opportunities for the Tana River Delta in terms of the economic, environmental and social environment. It is hoped that the report will provide a basis for an assessment of the circumstances therefore help in the decision on the best way forward.

3. Approach and Methodology

The process of putting together this report has been extensive and the following approaches have been followed:-

1. Literature Review
2. Field visits
3. Group meetings at the national and local level

The members from the KWF who were involve in writing the report approached this exercise with the following questions in mind:-

- As the Tana River Delta is one of six deltas along the Eastern Coast of Africa, and one of the most unique due to its cultural, social and environmental benefits, is this the best way to develop the area for the long term interest of the local communities and Kenyans?
- Is the sugar development framework going to take cognisance of the principles of social justice and equity?
- Is the investment sustainable, feasible and viable in view of the recent and current trends of the sugar industry in Kenya and elsewhere in the world?
- What are the other opportunities for long term sustainable development of the Tana River Delta i.e. Tourism opportunities, international recognition of the Delta's unique resources.

Literature Review

There exists a wealth of information and knowledge about the Tana Delta and the sugarcane industry in Kenya and internationally. Much of this information is well documented and easily accessible.

Documents were collated and contents as regard the subject matter and issues at hand analysed. The information was elucidated from published, unpublished and on – line sources. It included government reports, research work as well as various proceedings of previous meetings. A reference list is provided in Appendix 1.

Field visit

In response to the concerns raised by the local people and environmentalists, a multi – institutional team comprising representatives from University of Nairobi, Kenya Wildlife Services (KWS), Kenya Marine Fisheries Research Institute (KMFRI), National Environment Management Authority (NEMA), Coast Development Authority (CDA) and East African Wildlife Society (EAWLS) undertook a reconnaissance to the Delta between December 6th and 10th, 2004. The aim of this visit was to gather information from the local level with regards to the planned project i.e. the perceptions and the issues.

The findings confirmed that there was growing concern that the project was going to have a negative affect on the socio-cultural, economic and environmental environment. The local people expressed their fear of losing access to their livelihoods i.e. pastoralism, land and water. It also became clear that the process followed by the proposed project had not sufficiently captured and addressed the main issues of the local community or the Delta's unique environment.

Group meetings

Following on from the multi-institutional team visit to the Tana River Delta, a number of meetings were convened under the auspices of the KWF by the Tana River Technical Group. Most of these meetings took place at the offices of the East African Wildlife Society (EAWLS), Nairobi – the secretariat of the KWF. A sub-technical group concerned about the institutional and legal issues, met at the World Wide Fund for Nature (WWF) East Africa Regional Programme Office, Nairobi. The dates of the meetings were as follows:

- I. December 30th, 2004
- II. January 7th, 2005
- III. January 27th, 2005
- IV. 17th February, 2005
- V. 3rd March 2005
- VI. 17th March 2005

The meetings focused on the project, the Tana River Delta, the people of the Tana, the importance of the Delta, the issues and the best way forward. It is from these discussions that the report became a reality.

In addition, several community group meetings at the Delta took place. TARDA convened a community meeting on 9th December at Tana Delta Irrigation Project site, to discuss the project. Following this and the multi-institutional group visit in December, a large consultative workshop was organised by the community on February 12th, 2005 in Garsen. These meetings with the community and/or focus groups of farmers, herders, leaders, government officers and civil society organizations helped at either presenting or discussing issues of relevance. The meetings were an important tool for information gathering about the project, community and environment.

In addition, on February 10th 2005, a public talk was convened at the African Medical Research Foundation (AMREF) hall, Nairobi. The guest speaker was the Managing Director, TARDA who presented "the Tana Delta Integrated Sugar Industry Development Project" to a wide audience.

It is through the literature research, field visits and formal and informal gatherings that most of the information was gathered for this report.

4. The Tana Delta

The Tana River Delta is a unique natural and human environment located in a semi-arid area of Garsen, Tana River district, Coast Province. It is one of the six deltaic areas off Eastern Africa and is Kenya's largest deltaic zone. It is also home to the indigenous and minority groups including the Orma, Wardei and Pokomo peoples and provides the essential resources for their livelihoods. It is also an area of international importance and identified by over 70 experts as an area of global priority within the East African Marine Ecoregion.

The striking feature of the Tana Delta is the prodigious variety of its wetland habitats and the richness of its biodiversity. The area extends south of the Tana National Primate Reserve to the Shore at Ungwana Bay. The Western boundary is the Malindi – Garsen – Hola Road. The coastline stretch extends from Kipini to Mto – Kilifi at the border of Malindi and Tana River districts. This area is estimated to be about 130,000ha of which 69,000 are regularly inundated (Haskoning, 1994). The area supports a wide gallery of forests backed by floodplain forest with permanent swamps. At the mouth of River Tana there is a wide coverage of mangrove swamps. All the members of the mangrove family found along the Kenyan Coast are represented here. The sand/beach and dunes with associate thicket and scrub are part of the deltaic system. The freshwater flood plains create rich grasslands ringed by stands of doum palm. Permanent Oxbow lakes and ponds also dominate the wetlands ecosystem. The delta supports uncounted plant and animal species, some of them endangered on a world scale. The Tana delta coastline is a stronghold for endangered marine turtles and sighting even more critically endangered and rarely seen dugong. The delta wetlands contain high concentrations of fish and waterfowls, both migratory and resident. The forests are by and large indigenous. It is the home of two endangered primates - Tana River Red Colobus and the Crested Mangabey Monkey. Other wildlife includes bushbuck, buffaloes, baboons, Sykes and Vervet monkeys, waterbucks, topi, zebras, lions, and hyenas, hippopotamus, the Nile crocodile and Elephants.

The Tana Delta is immensely valuable to the local people who have built an intricate connection with it. The production systems and livelihood of the majority of the delta's communities are linked to the dynamics and functioning of the river – wetlands ecosystem. The delta is extensively used by pastoralists who graze their cattle in the areas around the floodplain. It is a dry season grazing fallback area to many pastoral communities some of whom came from other districts such as Ijara, Lamu, Garissa and Wajir. The regular inundation of the delta supports crop farming agriculture and fishing too.

Until now, the Delta's future is undecided, with various institutions and groups proposing and even implementing projects with uncertain consequences. TARDA started to develop the delta's economic potential, Kenya Wildlife Service (KWS) and other groups such as EAWLS have opted to supporting environmental resources conservation, and others are opting for large scale agriculture, industrial aquaculture and tourism. At stake are many competing interests as regards the Delta's best use. A development agenda for the area must take into consideration all these

interests. Significant to any decision-making for this area, especially where mega projects are anticipated is the question of sustainable development within the framework of established standards and practices around the globe. Past options taken by development agencies for the area demonstrate failure of appreciation of certain of these practices.

5. Legal Principles for Sustainable Development

Proposals for development projects, particularly those that are large in scale, present many challenges for decision-makers, including the need to weigh and consider many types of impacts and costs, against the range of benefits that will purportedly accrue from the project. The difficulties are exacerbated by the fact that many of those who are most affected by the proposal will not be able to speak in their own interest. Yet the protection of these interests is one of the ethical and legal mandates imposed on decision-makers.

International law contains a series of legal principles to help guide persons charged with the duty to determine the merits of large-scale project development. The IUCN Law Commission and the International Council of Environmental Law, assisted by the IUCN Environmental Law Centre developed the Draft International Covenant on Environment and Development. A series of legal instruments now exist, which provide decision-makers with necessary tools for fashioning equitable and fair judgments on whether and how to proceed with development projects. Certain of these principles have garnered such universal support that they have been customarily accepted as international law, expounded and clarified in international treaties, declarations, and resolutions. Laws, guidance and practice at the State level can then utilize these refined concepts as essential elements for national decision-makers.

Pertinent Guiding Principles

- ***Environmental human rights:***

Decision makers must recognize that the enjoyment of basic human rights is dependent on the continued existence of a salubrious and ecologically sustainable natural environment. Most indigenous peoples and minorities who suffer marginalisation from mainstream economies are likely to have their human rights violated because of the intricate relationship between their social, economic and cultural livelihoods and the environment.

- ***Inter-generational & Intra-generational equity:***

“The environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn.” Decision-makers must ensure that the needs of the present do not compromise the basic needs of the future. Basic needs, in a biological context, may clearly include the maintenance of life form populations at levels sufficient for their healthy survival, providing special protection for rare and endangered species; utilizing natural resources in a manner which optimizes their use while minimising damage from that use, and controlling consumption. Moreover, the principle of intergenerational equity emphasizes that the value of biological resources cannot be calculated simply in terms of present uses and expectations but possible invaluable use in the future should be considered. Decision-makers must also ensure that their decisions do not disentitle the current generations of their right to livelihood. Thus ensure that there is social justice in all development projects.

- ***Right to development:***

It is a means through which every individual may improve his livelihood and support his family and for every community to find mechanism to sustain itself and its people. Sustainable development therefore is essential both as a means of enhancing environmental principles and ensuring that the right to development has meaningful long-term benefits for people it was designed to protect. Under the Rio Declaration, all states have the obligation to cooperate in eradicating poverty, as an indispensable requirement for sustainable development, in order to reduce the disparities in standards of living and better meet the needs of the majority of people of the world.

- ***Fair & Informed Decisions:***

Decisions must be fair to all affected persons, and based on sufficient knowledge to ensure that they represent a rational determination of the benefit, costs, risks and outcomes, and properly respond to all known and knowable factors. The requirement for an EIA ensures that decisions reflect the best and most appropriate choices. No project should be implemented before its impacts are taken into account. It is also the obligation upon decision-makers to ensure that affected persons have an opportunity to voice their concerns. Decision-makers must utilize whatever resources to obtain a clear understanding of the proposed project and its possible effects prior to giving any binding permission that would allow the project to go on. Where full scientific certainty is lacking, it should be decided whether approval should be delayed, or conditioned on additional protective measures to avoid/minimize the threat to people and the environment.

- ***Polluter-pays Principle:***

That the polluter should be liable for the various kinds of harm he causes including the responsibility to undertake measures to minimize or eliminate harm, and the principle that all those who cause damage must restore the environment to its former state.

- ***Right to Participate:***

Three critical objectives of this principle include: giving affected individuals a forum for learning about potential changes affecting their lives, and for presenting their positions and information concerning those impacts; ensuring proper legal procedures are undertaken to ensure that no harm to individuals or their basic rights and property occurs unwittingly, or without proper consideration of these impacts and/or compensation where appropriate; and providing decision-makers with the widest possible informational basis for their decisions, by encouraging participation by a broad range of impacted or interested parties, who can share specialized knowledge and concerns. Recent cases of basic environmental human rights indicate that any person representing children, and the unborn, even animals and other impacted species has a legal right or permission to participate in decision-making process. The government has an obligation to encourage public participation going beyond mere public comments.

- ***Meaningful Consultation:***

A kin to public participation is the principle of meaningful consultation with reference to EIA issues. At a minimum, to ensure that all those who are affected have been consulted in a meaningful way, decision-makers should find means of testing whether their consultation with affected people (both direct and through the EIA process) has been genuinely meaningful. Legal procedural principles can help in this context to ensure that, as in judicial proceedings, decisions on EIA are only taken based upon a transparent record, at which all sides have had a chance to review, and where they request to pose questions.

6. Development Projects and indigenous peoples and minorities

Indigenous people can be identified in particular geographical areas by the presence in varying degrees of the following characteristics: A close attachment to ancestral territory and to the natural resources in these areas; self identification and identification by others as members of a distinct cultural group; an indigenous language, often different from national or other languages; presence of customary, social and political institutions; and primarily subsistence oriented production.

When one reviews these characteristics of indigenous peoples as recognized by International Protocols and Conventions, it is evidently clear that the pastoralists, hunting gathering and fisher communities of Tana River (i.e. Orma and Wardei; Malakote, Munyoyaya) meet all the five conditions of indigenous people.

Existing International standards on Indigenous People and even the World Bank's Operational Directive 4.20 are living testimonies of efforts made to protect the traditional property and governance rights of indigenous communities. Specifically, the World Bank manual provides that projects that adversely affect and negatively impact or are seen to affect the well being of

indigenous people in their ancestral lands should not be funded or supported. Further the principle of 'prior consent' and "free and informed participation" are obligations imposed on the international community by ILO Convention 169 in relation to development processes that have a bearing on indigenous communities. In addition, *Articles 20 and 22* of the African Charter emphasizes that all peoples shall have the right to existence and to the social, economic and cultural development of their own choice and in conformity with their own identity. An indigenous community without a home, and culture will soon lose its language and become extinct.

7. The Current Investment

Sugarcane farming draws heavily on natural resources to create significant social and economic benefits. If the industry is to prosper in Kenya it must respond to both medium and long term risks and threats to viability.

Legal and Institutional Framework: The proposed sugarcane project is to be undertaken by TARDA and RAESA. Although there are other players, they are not viewed as lead agents in this project. Below is a brief assessment of what these two entities are.

Tana and Athi River Development Authority, TARDA: TARDA is a public, statutory body formed under an Act of Parliament (the Tana and Athi River Development Authority Act (Cap. 443 of the Laws of Kenya). The Authority is a body corporate that is capable of suing and being sued. It is mandated to carry out its activities on an area of land measuring approximately 100,000 km² of the Tana Basin and 38,000 km² of the Athi Basin. This area has a population estimated to be over 11 million people.

TARDA's functions are enumerated under section 8 of the Act and include: to advise the government and respective ministries on all matters affecting the development of the area drained by, and bounded by, the water sheds of the Tana and Athi Rivers and their tributaries including the apportionment of the waters; to draw and keep up a long-range development plan for the Area; to carry out studies, surveys and assess alternative demands on the resources e.g. land, electricity, irrigation, wildlife and other resources and to recommend economic priorities; to co-ordinate the various studies and schemes within the area so that human, water, animal, land and other resources are utilised to the best advantage, and monitor the design and execution of planned projects within the area; to monitor project performance in the Area, improve performance in the future; to set up effective monitoring of the abstraction and use of water; to establish data on the use of water and other resources in the Area for efficient planning of the area; maintain liaison with government, private sector and foreign agencies in the matter of development of the Area; to assist operating agencies to secure loan funds required; and finally, to cause the construction of any works necessary for the protection and utilisation of water and the soil of the area.

Analysts observe that by change of Government policy in 1988 and subsequent power sector reforms, TARDA lost some of its core functions and assets. Power distribution was assigned to Kenya Power and Lightening Cooperation (KPLC) and power generation assets to KenGen. The problem later was compounded by the enactment of the Water Act 2000, which did not make reference to TARDA in terms of water use within Tana and Athi River.

An internal analysis of TARDA indicates some major weakness ranging from inadequate technical staff; weak administrative procedures; weak financial base; to weak monitoring and evaluation as well as limited reporting and feed back system. All these challenges have put into question TARDA's relevance and continued existence.

Reacting to these challenges, TARDA's management, in June 2004, put in place a 10-year Strategic Plan 2004 – 2009. Looking at the strategic objectives 4, 6, 7 and 8 TARDA states that it will seek to rationalise existing projects; incorporate community participation; put emphasis on programmes, which address and benefit the vulnerable and disadvantaged groups. However,

among the activities envisaged in the Strategic Plan the sugar project does not feature notwithstanding the fact that the investment opportunity surfaced at the same time when the strategy was being designed.

TARDA's Development Projects

Since its inception over 30 years ago, TARDA has planned and implemented many projects, including but not limited to the following:

- i. Masinga Multipurpose Reservoir
- ii. Kiambere Reservoir and Irrigation Project
- iii. Masinga Irrigation Project
- iv. Tana Delta Irrigation Project

Projects specifically targeted for Tana Delta by TARDA included: -

- Tana Delta Irrigation Project for paddy and establishment of raw rice mill and marketing systems.
- Protection of water sources, wetlands and biodiversity program, including endangered species such as rare birds, turtles and monkeys.
- Delta wetlands ecotourism project to promote sustainable development, conservation and provide income-earning opportunities for the local communities.
- Water resources development through water wise use awareness and advocacy.

The majority of these projects have either stalled or raised a lot of human and environmental concerns.

Riegos Agricolas Espanoles SA (RAESA), Spain: RAESA is a private entity with Spanish origin. Its core business is manufacturing and supply of irrigation technological systems and equipment. It has 2 factories in Spain and 3 in Argentina, Mexico and Brazil, one in each country. (Tana Delta Sugar Cane Pre-Project August 2004). It sells the irrigation equipment in more than 50 countries including Guatemala and Chile. RAESA does not seem to have any direct involvement in sugar cane production, management and marketing. It does not have the technical capacity and competence to undertake the field production, (agronomy and cane production, mill operations, management practice and marketing). The company's focus is in capital improvement of irrigation equipment and technology.

8. The Proposed Sugarcane Project

The project is to be located at Garsen, Tana River district of Coast Province. The proposed project will cover an area of 12,400 ha of estate sugarcane farming and a further 4,000 ha (later) of smallholder sugarcane blocks all under controlled farming. Initially (October, 2004), the proposed project was called "**Tana Delta Sugarcane Project**". However, by February 2005 it was changed to "**The Tana Delta Integrated Sugar Industry Development Project**." This was in anticipation of another multimillion Livestock project. The objectives of the Project include:-

- i. To provide new source of revenue to TARDA and communities resident in the area.
- ii. To provide new employment opportunities (25,000 jobs will be created).
- iii. To save the country foreign exchange through import substitution on industrial sugar.
- iv. To earn foreign exchange through involvement of smallholders.

The proponents of the Project take cognisance of the Kenya Government Economic Recovery Strategy for Wealth and Employment Creation 2003 – 2007.

The budget for the investment is estimated at 24 billion Kenya shillings (USD 320 million). The financing of this project will largely come from the RAESA group. Other financial institutions, which have not appeared in the briefing documents, including the Cooperative Bank of Kenya (allegedly) will meet the other costs.

Project Summary

The following is a summary data of the intended project:

- *Total area: 12,400 ha*
- *Number of sub areas: 35 ha*
- *Size of the sub areas: 340 ha*
- *Average number of plots / sub areas: 18 ha*
- *Water source: river canal*
- *Maximum water flow requested: 42.700m³/3 hour*
- *Number of pumping stations: 35*
- *Daily maximum irrigation necessities: 4.85mm*
- *Irrigation system: sprinkler*
- *Layout: triangle (12 x 8) frame*
- *Area around Garsen is excellent for sugar growing offering 303 SCD's*
- *Feasible (if proper fertigation and maturation techniques used) to have 3 good crops every two years.*
- *Planting can be carried out at anytime of the year.*
- *Tana sugar delta will grow day and night.*
- *Sugar mill factory with capacity for 10,000 tonnes per day of sugarcane.*
- *Sugar mill using Brazilian know- how.*
- *Project output: white sugar 100,000 tons and industrial sugar among others.*

9. The Dynamics of Sugar Production and Trade

Global Level: About 120 to 130 countries in the world produce sugar. The annual production is 145 million out of which 60% to 70% is produced from sugarcane.

Brazil is the world's largest sugarcane producer; however the majority of the cane is diverted to ethanol production rather than sugar production. Its sugar production potential remains high.

Thailand's sugar production was projected to grow 22% over the period 1994/95 to 2003/04. However poor weather and insect problems have hindered cane yields in recent years.

Cuban sugar production has continued to fall since 1994/95. Between 1990 and 1994/95 there was a fall of 60%.

Sugar production in the European Union and China has continued to drop. The USA sugar programme is a classic case of concentrated benefits and diffused costs. A small number of sugarcane growers receive enormous benefits while the costs of providing those benefits are spread out across the U.S. economy. The sugar lobby in the U.S has been a major financial contributor to incumbent politicians. It is argued that the U.S sugar programme has always been a wasteful and unfair taxing to the American consumer and sugar-using businesses to protect relatively well connected growers.

National Level: Currently Kenya's sugar production capacity stands at about 400,000 tonnes a year against a consumption volume of 600,000 tonne. The deficit of 250,000 is imported mostly from COMESA region (The Daily Nation 15th March 2005). This is crippled with low efficiency and productivity for example cane production in Nzoia Sugar Belt has reduced from 60 tonnes an acre to about 15 tonnes (The Standard, 14th March 2005). On the average the sugar yield in Kenya is very low, it stands at about 35 tonnes of sugarcane/ha. Compared to COMESA countries sugar price in Kenya is high. COMESA countries sugar is 40% cheaper than local grown and produced sugar. Currently the Government of Kenya has imposed a 4 year COMESA sugar import regime. This regime safeguards Kenya's sugar from external competition. However, the import regime expires in October 2007. The Proponents of the Tana Sugar Project argue that the Tana Sugar would be much cheaper than the COMESA sugar as such it is envisaged that the project once

implemented will prevent the influx of cheap sugar in the country once the COMESA safeguards are lifted in year 2007. Will the Tana sugar be cheaper and prevent influx of cheap sugar given the trends of both production and trade globalisation mentioned earlier? Like many others, the sugarcane project must be subjected to the principles of sustainable development.

10. Emerging Issues

Many stakeholders are raising concern over the proposed project. Proponents look at the project from a purely economic point of view while their opponents ask whether the project is the most viable considering principles of sustainable development. The issues raised range from:

- The sugar investment itself; its interest and sustainability in terms of economic benefits and technological input.
- Environmental concerns: technology, biodiversity, wetlands, water supply, and Environmental Impact Assessment e.t.c.
- Social justice, land ownership and human rights.

Sugar Investment

Sugar industry is at a major junction in its on going development throughout the world, and TARDA bears the burden to convince that its goal is to apply its know how to get the maximum yield and best returns on this form investment. There is already a limited protection from international trade and what is purported to be a “corrupted price” for world sugar markets. Currently, COMESA countries sugar is far cheaper than local sugar. The challenge posed by the proposed project is one to consider carefully at what might happen when, for instance, the current safeguards end in 2007. Will the Tana Delta sugar save Kenya from such free trade competitions? This must be done in light of the experience with the sugar belt of Western Kenya and Nyanza respectively. Will the project survive in the medium and long term to such market risks and threats?

It is acknowledged in the sugarcane producing countries that the sugar industry must accept that potentially the most important rule of the game is that it must have the community’s consent and acceptance of its performance because without that the industry will surely not survive (independent Environmental Audit of the Sugar Industry – Pty Ltd, June 2004).

Environmental concerns

Like all investments in the Tana, the sugar industry is dependent on the Delta’s resources. For it to be considered a successful investment the project must have a sound understanding of the environmental issues. Issues raised relate to soil, water, plant and animal species among others. Similarly, being an area of high biodiversity and an area recognised nationally and internationally for its unique and outstanding flora and fauna, the environmental issues must be assessed in terms of what benefits and losses the proposed project might bring.

Previous projects in the area have not only caused the reduction of water volume in the Tana River but resulted in the change of the river course from one point to another over a period of time thus interfering with the flood plains and the riverine forest habitats critical for the unique biodiversity in the area. The area is also home to two rare and endangered primate species, the Crested Mangabey and the Red Colobus. These two primate species have been the focus of protection under the World Bank biodiversity protection project. They are thought to have built a close relationship with human existence and their concentration is high where for example the Pokomo community lives. Pokomo’s oral literature demonstrates that they have lived with the monkeys since time immemorial. With an imminent displacement of the peoples and interference with the rich ecosystem the endangered species will soon be lost.

Technology:

A study around the world conducted by CABI – WWF to determine the environmental impact of sugar particularly related to irrigation technologies raised a number of pertinent issues. The use of irrigation technology produces environmental impacts through the loss of water. For instance,

the study states that overhead sprinklers and surface flood furrow are the most inefficient. It also states that only 30% to 35% of the water withdrawn for sugarcane farming reaches the crop and the rest is lost from irrigation. In the Amaravathy river basin, India the water application in sugarcane cultivation was 28% higher than the recommended level. In Mackay Australia the study states that irrigation of sugarcane resulted in additional runoff and deep drainage. This amounted to 29% of the irrigation water applied. In the Indian state of Maharashtra, sugarcane covers just 3% of the land yet covers around 60% of the state irrigation supply and is a cause of substantial ground water withdrawals; the water table has dropped in places from 15metres to around 65metres in the past 20 years.

The study revealed that the cultivation and processing of sugar produces severe environmental impacts through the loss of natural habitats, heavy use of agro chemicals, discharge and runoff of polluted effluents. All these lead to the degradation of soil, water and air resources as well as the degradation of downstream ecosystems.

Further, irrigation causes soil salinization and inadequate drainage while use of fertilisers increases soil acidification. At farm level, sugarcane estates have caused species and habitats loss. On landscape, irrigation impacts have been felt on downstream ecosystems particularly through runoff of polluted effluents and by the alteration of natural river flow regimes.

Environmental Impact Assessment:

Crucial in addressing environmental issues is having an Environmental Impact Assessment. A good EIA is one that is in tandem with proper planning and decision-making process in terms of timing and content. The timing of EIA often determines its purpose, scope and outcome. TARDA has not carried out an EIA to be fully convinced that this is a viable project. TARDA's proposal anticipates that the EIA will be conducted as separate and apart from the planning process. If so done, then there is a likelihood that the EIA will fail the test of impartiality/objectivity and may not be considered by many as having contributed meaningfully in any way to the planning and decision-making process.

International Obligations:

Kenya is signatory to some of the most important international treaties on the environment including the Ramsar Convention on Wetlands and the Convention on Biological Diversity among others. As a result of which it is under obligation to carry out activities that comply with the respective provisions. Tana Delta being a wetland of international importance (or so proposed) places the State of Kenya under international scrutiny on how it intends to promote and protect the Delta for degradation. It is a pity that Tanzania, learning from Kenya in 1997/98 when Rufiji delta was threatened has now declared the Rufiji delta a Ramsar Site, giving it a unique international recognition and enhancement for its conservation and sustainable use.

In the face of the Sugarcane project, this should be treated as a serious matter. With the perceived serious environmental concerns to be occasioned by the project, alternatives must be given consideration so as the State of Kenya fulfils its obligation to protect the environment/Tana Delta and ensure sustainable development of the area. Critics now observe that TARDA's current proposal for sugar has neither identified other options nor is it facilitating any alternative choices – either to utilise the land with a more favourable project or relocate the sugar project away from the Delta. Apparently, the industry has not demonstrated environmental sustainability and has by and large not been able to demonstrate a commitment to and a continued improvement in environmental performance.

Social Justice and Equity

Issues of social justice and equity are multi-faceted. From the content of highlights below, one will appreciate issues of historical injustices with regard to land ownership, exclusion in the development process, failure to recognise international standards with respect for minority and indigenous peoples' rights etc. The question of poverty emerges as a result of many other violations whose effects may outlive the current generation.

- **Land question:** The land in question measures approximately 29,000 ha. TARDA claims legal ownership of the land having been granted a 45-year lease by the government of Kenya in January 1995 through Letter of Allotment Reference No. 106796. The land is still not surveyed. The letter of Allotment was made under the provisions of the Government Lands Act (cap. 280 of the Laws of Kenya) and title was to be issued under the Registration of Titles Act (cap.281) or the Registered Land Act (cap.300). The land was set aside for agricultural purposes of which TARDA started by establishing an irrigation scheme. A larger position of the land was government land with a small part of it being trust land but set aside for government use under section 118 of the Constitution.

On this land, local indigenous and minority communities too have been deriving their livelihoods since time immemorial. They have established villages, namely, the villages of Sailoni, Kulesa, Vumlee, Hewani and Bandi (land here is earmarked for the revival of the rice project); the villages of Galili, Onkolde, Gomesa, Nyangoro, Moa and Dida; and the villages of Garusuota, Kifua, Hemani, Arithi, Odhole (land here is earmarked for the Sugar project). Their socio-economic and cultural activities – pastoralism, hunting gathering, fishing and small-scale farming, are closely linked to the land and its abundance. As matter of fact, the communities believe they own the land. However, none of them has ever received legal title either as an individual or group. Their interests therefore are based on the principles of equity.

One of the special conditions in the Letter of Allotment was that TARDA meets “all necessary compensation in connection with the displaced squatters on the piece of land as has already been agreed.” The squatters referred to herein simply means the persons (in this case the indigenous peoples) who do not have the legal title to the land. The question that arises is whether compensation was ever made (which is denied) to these peoples. If any compensation was made, was it adequate compensation taking into consideration the social economic and cultural practices of these peoples?

- **Human rights:** As indicated earlier, the land under TARDA’s ownership was largely government land and a small bit of its trust land. Government land could be either **alienated or un-alienated**. Un-alienated land means land vested in the government of which no title has been created to a private person or any other entity. Alienated land on the other hand means government land which has been reserved for the use of government institution or set aside for the use of the public or leased to an individual.

Trust land is on the other hand land vested in county council and used for the benefit of people ordinarily resident in that county council. In so doing, regard is given to the African customary law of the tribes, groups or individuals as practiced by them in the use of that land. Contrary to the concept of trust land under the Constitution, the Government Lands Act does not oblige the government to consider community rights/interests when alienating the land to other parties (multimillion project investors) much less adequate compensation and effective consultation.

While the government may have a clear legal distinction between trust land and government land, the communities in the area are governed by customary law for access and use of the land. *Their equitable interests and rights remain regardless as to whether the land in question is trust land or government land or even alienated to a private person.* Failure to give consideration to the interest and rights of minorities and indigenous communities dependent on the land at the time of allotment to TARDA amounted to breach of international human rights standards for these vulnerable communities.

Further, the locals have been excluded from the development process for along time. TARDA and the government of Kenya are determined to implement the proposed sugar project despite the fact that no formal consultation with the communities has been done.

Although TARDA has been heard to say that consultations have been made, it has become obvious now that the same does not pass the test of *meaningful consultation*-a violation of a peoples' right to participation.

- **Right to Development:** In appraising the social context in which the proposed Tana Delta integrated sugar development project is to take place one is left to wonder if sustainable livelihoods and poverty reduction will be promoted. First and foremost, the choice of development (sugarcane production) and the technology which will influence the operational and maintenance requirements will never be matched by the level of skills and needs of the local people within and around the Tana Delta project area. Within and around the project land are human settlements. Previous projects by TARDA, for instance the Kiambere Dam and the Bura Irrigation project, have shown an increase in poverty among communities within those areas. Pushed away from the immediate resource base of their survival, the generations present may be victims of utter poverty. The ultimate failure of the project will have adverse ramifications on future generations too. TARDA has so far not given any scientific evidence to prove the contrary of these facts.

A compromise of a peoples' quality of life means violation of their human rights. A degraded environment means poor health and poor quality of life. Due to interconnectedness of human rights, a violation of one may automatically result into the violation of the other.

11. Conclusion

This report presents an objective approach to the suggested project and development of the Tana Delta. The report has considered both the pros and cons of the project. It has become obvious that certain fundamental issues are yet to be addressed by the proponents of the project. Failure of which, the legality, viability and sustainability of the project are much in doubt. There is an obvious neglect of the legal principles of sustainable development. There is no justification for the lack of an EIA considering the speed at which the project has moved. Human rights issues have not been addressed effectively. TARDA and the Government of Kenya bear the burden of ensuring that any development proposed for the Tana Delta measures up to the already established standards.

12. Recommendations

From the findings the KWF suggests the following:

- i. The suggested project must be stopped now until an independent environmental impact assessment is carried out, and all development opportunities are explored.
- ii. Other 'wise-use' economic opportunities must be explored including Tourism, Wetland protection and conservation, pastoralism.
- iii. Proper legislative framework on development processes of mega character should be enacted. In other words, incorporate the established legal principles for sustainable development within the national framework.

13. The opportunities for Kenya

- The 9th conference of parties of the Ramsar Convention will be held in November 2005 for the first time in Africa. It will be in Kampala, Uganda. Kenya could take the lead here, gain further international recognition for designating sections of the Tana Delta as a Ramsar Site. Such a designation will not only encourage adequate planning decision making and management for the area but also ensure multiplicity of sustainable wetlands resource use. By being responsive to the issues of local needs within the realm of sustainable livelihood equity and justice the local residents will have the voice and empowerment to make choices.

- Kenya is also hosting the International Conference on Lakes and Freshwater. It will gain enormous credibility to change direction, listen to the people, supporting long term development but not at the cost of the people and the environment for which they are dependent upon.
- March 2005 is the decade for water. Issues of efficient and sustainable water use will be a global focus.

Should the Tana Wetlands be made a Ramsar Site financial and technical support will be made available from a number of donors to develop a comprehensive management plan for the Delta. This will consider all the issues emerging from this report and elsewhere.

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