

COMMENTS ON THE TANA DELTA INTEGRATED SUGAR PROJECT ENVIRONMENTAL IMPACT ASSESSMENT STUDY REPORT

We have undertaken a comprehensive review of the Tana Delta Integrated Sugar Project EIA Study Report. We wish to submit the following comments on key environmental issues which in our view require further consideration as the document provides inadequate measures to address them.

1.0 GENERAL COMMENTS

- (1) The law requires that a project proponent prepares a project report or project document *prior* to undertaking an EIA study. The project report which for all purposes is similar to a feasibility study should outline the intervention in all its technical detail and provide clear budget lines. No such project report was or has been prepared prior to the undertaking of the EIA study which is therefore in contravention of the enabling legislation.
- (2) There are huge gaps in vital information (in particular hydrological, biodiversity data etc. e.g. the list of snake species reads just “snakes” p.171) in the EIA study report thus raising the fundamental question of the report’s scientific soundness and accuracy.
- (3) Significant negative impacts with serious ecological, social and economic ramifications at local, national, regional and international levels have been identified but no serious implementable mitigation measures have been provided.
- (4) The Environmental and Social Management Plan (ESMP) lacks a clear feasibility assessment for all of the proposed mitigation measures.
- (5) There is no budget assigned to or provided for in respect of each of the proposed mitigation measures and nor are the sources of funding to cover those costs to ensure implementation of the said ESMP. *[It is law that a budget be provided]*
- (6) The EIA study report has not established the critical environmental parameters and set benchmarks with quantitative thresholds defined by law upon which a monitoring programme could be anchored.
- (7) The public meetings held in the Tana Delta and elsewhere (Garsen, Witu, Kipini, Ngao and Nairobi) were done away from the actual proposed project site, therefore disadvantaging the participation of the communities who are going to be directly affected by the project.
- (8) The public consultative process was not inclusive as it marginalized the sugarcane farmers in the Mumias sugar zone in western Kenya who are likely to be affected by the decisions relating to the Tana Delta Sugar Project.

- (9) The EIA study report should not be approved as it is deficient in all respects thus not providing a solid basis for any sound decision making.

2.0 SPECIFIC COMMENTS

2.1 Analysis of alternatives of project site(s)

2.1.1 Background

One of the key principles underpinning EIA is analysis of alternative sites for the project development. Under the existing legal framework, consideration of alternative sites within the preferred site or elsewhere is a requirement [*EIA regulations: regulation 18(1) paragraph (j)*]. This is premised on the fact that the project proponent ought to identify several alternatives, including the proposed alternative and no-action alternatives.

During the EIA study stage these alternatives are subjected to an evaluation process to help identify and refine additional reasonable alternatives. The alternatives evaluated should provide the decision makers with different geographical locations for the proposed project and with different technical or planning solutions. Thoroughly assessing a range of alternatives enables project proponent, EIA reviewers like us and decision makers to gain a complete understanding of the potential impacts of the proposed project over the full spectrum of implementation scenarios.

Regrettably, reading through the entire document and more specifically Chapter 8 of the EIA study report, it is very clear that no such alternatives were evaluated. The alternatives discussed under 8.1 of the EIA study report relate to the land use (technical and planning solutions) of the so-called “preferred project site” instead of considering different project sites.

2.1.2 Comments and recommendations

- (1) *The EIA Study did not consider alternative project sites other than the preferred project site. This confirms reservations made by many stakeholders that a decision had been made and the EIA process was intended to legitimize a predetermined decision.*
- (2) *The systematic comparison of alternatives, including the no-action alternative, in equivalent detail and equal weight even when the project proponent preferred alternative has been identified was not done thus defeating the purpose for which EIA study was designed.*

Land tenure/ownership

2.1.3 Background

The inhabitants of the Tana Delta like many other rural communities place great emphasis on land security and land rights. Security encompasses a much broader set of rights and obligations than those bound up with formal regulations relating to landownership.

Land tenure is often a mix of formal legal components and informally accepted normal practices that are well protected in law. Issues of tenure often relate to conflict between what is considered legal and what is considered legitimate and illegitimate at the local level. Just as national law may not recognize local traditions and practices, local people may regard national law as largely irrelevant, which in fact it may be until something like the sugar project forces some kind of decision to be made. Legislation is often used selectively to legitimize the claim of one party while delegitimizing the claims of another.

There are serious issues surrounding the ownership of the land in question. It is acknowledged that in 1995 the Government, through the Commissioner of Lands vide Letter of Allotment reference number 106798 of 17 January 1995, offered a grant to TARDA of land measuring approximately 28,680 ha. However, for over a decade, TARDA has not met the requirements as specified in the said Letter of Allotment. In our jurisdiction, rights of tenure are generally vested only after compliance with particular conditions. Given that TARDA has not complied with the requirements as set out in the said Letter of Allotment it follows that it has no claim over the said land.

2.1.4 Comments and recommendations

- (1) Local communities' inalienable rights to their land and resources override subsequent claims by everybody.*
- (2) Given that TARDA has not complied with the Letter of Allotment requirements, it is not proper to marginalize community interests in the said land. It is common knowledge that local communities who have customarily occupied and used this land have gone to court to challenge the allocation.*
- (3) The land in question belongs to the local communities as it is their birthright and therefore the land ought to revert to them. Otherwise, with this venture, the land is likely to be lost to private hands at the expense of the local community interests.*

Water Balance

2.1.5 Background

Whereas it is presumed that the River Tana and the floodplain have a lot of water, irrigated agriculture such as proposed is going to be one of the largest water users. The EIA study report posits that about 28 cumecs of water will be abstracted from the river for irrigation, industrial and domestic use, or about one-third of the river's water. Further, the report observes that such an abstraction level will *"not augur well for the ecosystem, pastoralists, farmers, lodgers and other downstream users of the waters of the Tana particularly during the dry months"* and that *"if all water abstraction permit holders including TARDA were to utilize all the water allocated to them, there would probably be a crisis during the dry months which potentially may lead to conflict."*

The study report acknowledges that the National Irrigation Board has expressed concerns about the number of projects that will use the water of the River Tana (6.4.21) and that there will be competition for water with the sugar project proposed by MAT International (6.4.3). This does not take into consideration the fact that cultivation of sugar cane is going to increase the evapo-transpiration rate, thus increasing the water demand. Demand is likely to rise steeply given that some small scale holders may also increase their small scale irrigation. It should be noted here that the Water Act, 2002 under section 11(3) as read with section 36(2) obligates the Water Resource Management Authority (WRMA) to *"allocate water taking into account the requirements of the reserve."* The term "reserve" under the Act in relation to water resource means:

"That quality and quantity of water required:

- (a) to satisfy basic human needs for all people who are or may be supplied from the water resource; and*
- (b) to protect aquifer ecosystem in order to secure ecologically sustainable development and use of water resources."*

2.1.6 Comments and recommendations

- (1) Given that the EIA study report at page 298 states conclusively that the water demand will be higher than the water resource available it follows that the proposed irrigation option is not viable and therefore the project cannot proceed or be implemented.*
- (2) The mitigation measures proposed can in no way mitigate the acute water problem as acknowledged by the report, given that the reserve amount must be retained.*

2.2 Land under the project and community involvement

2.2.1 Background

The project proposes to establish a nucleus estate covering 16,000 ha with a paltry 4,000 ha as small holder growers. This primarily means that the entire project is skewed against the local communities. For example on page 297, the report states that *“it is not clear how the selection of the outgrowers will be determined. Further unlike in western Kenya where outgrowers have titles to their land, the land set apart for outgrowers belongs to TARDA. TARDA would therefore upon acquiring its own title be required to grant leases or licenses to the outgrowers in the vicinity of the project area... Focus should therefore be on the nucleus estate.”*

In addition, the proposed factory site is not located within the concession area. The EIA study report recognizes this fact and proposes that even though the area is un-adjudicated the said land should be allocated to TARDA. Can local communities’ rights and interests in land be overridden by those of Mumias Sugar/TARDA’s, a private venture?

2.2.2 Comments and recommendations

- (1) *The local communities who have customarily occupied and used the land must be integrated into the project through mechanisms that protect their interests. Being shareholders in the traditional sense will not be of any use as evidenced by the experience in Mumias where farmers have sold most of their shares and literally have no stake in the company.*
- (2) *It appears the project is designed purposely to exclude local community interests. This is exhibited by the skewed nature of the project where the nucleus estate (in which communities would have no interest) will cover 16,000 ha with a paltry 4,000 ha being proposed for outgrower farmers at behest (to be lessees of TARDA) of TARDA. Such an arrangement is unacceptable as it will impoverish the local communities.*

2.3 Relocation of people

2.3.1 Background

The study acknowledges that there are families living within the proposed project area but considers them as illegal occupants. The EIA study report proposes that these families be relocated and resettled outside the concerned area. However, it is imperative to remember that even though land outside the concession area is government or trust land, local communities have interests therein. How will such interests of communities customarily in that area be extinguished? Will that not precipitate or ignite land-related conflicts?

Furthermore, in Convention 169 of the International Labour Organization to which Kenya is a signatory, under the section dealing with land, it is stated that *“governments shall take steps as necessary to identify the lands which the peoples concerned traditionally occupy, and to guarantee effective protection of their rights of ownership and possession”* and in cases where resettlement is being

considered as part of a development proposal, that *“where the relocation of these people is considered necessary as an exceptional measure such relocation shall take place only with their free and informed consent.”*

The problem of development-induced displacement and resettlement poses major risks to societal sustainability. The severity of these risks is encapsulated in the opening lines of the World Bank Group’s policy on involuntary resettlement:

“Bank experience indicating that involuntary resettlement under development projects, if unmitigated, often gives rise to severe economic, social and environmental risks; productive risks are dismantled; people face impoverishment when their productive assets or income sources are lost; people are locate to environments where their productive skills may be less applicable and the competition for resources greater; community institutions and social networks are weakened; kin groups are dispersed and cultural identity, traditional authority and the potential for mutual help are diminished or lost.

The risks of relocation are made worse by the fact that these local communities are considered as illegal occupants. Most important is the recognition that such communities have a right to be at the negotiating table and have their views heard. If the resettlement is to be undertaken, there has to be a series of checks on the responsibility of the state and other actors to provide compensation and benefits.

2.3.2 Comments and recommendations

- (1) *Given that the EIA study report includes social impacts, it is strange that it does not address the issue of relocation effectively. It is imperative that the question of illegality of the occupants is addressed before any resettlement plan is put in place.*
- (2) *Once the said communities have been recognized as legitimate interests/rights holders, there are in our view three types of land-related payment that may accrue from the relocation to pave way for the sugar project: two of these should be designed as a return to ownership – royalties and rental fees. The third compensation payments should be designed to recompensate the local communities for property rights that they have surrendered to the state to make the project possible. These would redress in financial terms the economic impacts of a lost opportunity caused by the sugar project.*

2.4 Development of a Master Plan for the Tana Delta

2.4.1 Background

The Tana Delta and the floodplain of the Tana River is an area of rich natural resources and varied component ecosystems inhabited by different community groups who each have their special interests in those natural resources, and providing ecological services such as water storage and climate moderation to the region and the nation. It is also an area of globally-important diversity,

sheltering globally endangered species and bird and mammal populations of international importance. Such rich, varied and important ecosystems require the development of a planning and management system that satisfies all interested parties. This calls for a planning regime that will ensure that the area is managed according to agreed objectives and along the principles of sustainable utilization and environmental sustainability. Integrated land use planning (Master Plan) is the tool that has been developed to make the trade-offs necessary for the sustainable development. This type of planning system aims to reconcile competing claims and interests, besides recognizing the reality of land use as it exists – including traditional or informal – and the expectations of local communities based on those uses.

2.4.2 *Comments and recommendations*

- (1) *We note that the EIA study report only makes a mention and does not commit the project in any way in the process of developing a master plan for the area; and yet its proposed form of land use has not been evaluated against other potential land uses that would enhance environmental sustainability and contribute towards poverty reduction.*
- (2) *A clear framework ought be outlined in the EIA study report as to how the proposed land use would fit in the Integrated Tana Delta Master Plan with clear responsibilities and budgetary provisions.*

2.5 **Habitat fragmentation and loss of biodiversity**

2.5.1 *Background*

The EIA Study Report clearly documents that the Tana Delta has diverse species, habitats and ecosystems. As a result, the delta is rich in biodiversity some of which are endemic and globally endangered. Further, the report recommends several areas to be protected as nature reserves. Interestingly, the study report lacks any solid information on the distribution and migration of the wildlife species within the delta and the proposed project area.

Notwithstanding the proposal to establish nature reserves, it is difficult to reconcile clearing the area for sugarcane farming with the setting aside of the biodiversity hotspots within the project area given that the habitats are interconnected. Furthermore, disruption of complex webs of biotic interactions in species-rich systems as is the case in the delta may initiate cascade effects not seen in simple systems and, where there is tight coupling and reductions in biodiversity will lead to reduced ecosystem stability and resilience.

2.5.2 *Comments and recommendations*

- (1) *Given that the EIA study report recognizes the area as rich in biodiversity and proceeds to make recommendations that biodiversity hotspots in the area should be declared nature reserves is an acknowledgement that the proposed land use is most optimal. Instead conservation, seasonal livestock use and ecotourism are the optimal form of land use.*

- (2) *Whereas the EIA study report proposes establishment of fragmented nature reserves to mitigate loss of habitat and biodiversity, it is important to remember that any successful ecosystem conservation endeavour must emphasize protection of large, interconnected landscapes instead of fragmented habitats that lack interconnectedness. Consequently, fragmented small nature reserves in a deltaic ecosystem will not be useful at all.*
- (3) *There is need to collate information on distribution and migratory routes of wildlife in the area so as to make an informed decision on the appropriateness of the proposed areas to be set aside as habitats for wildlife and migratory birds.*

2.6 Seawater influx/saline water intrusion

2.6.1 Background

Until the last century, the River Tana used to drain into the Indian Ocean via the old courses of Mto Tana and Mto Kilifi. But the construction of the Bellazoni canal, to link the original River Tana with the River Ozi, led to the present main course with the mouth at Kipini. These changes have had far-reaching consequences to the drainage system of the area. As a result, the freshwater flow into the delta has been reduced to the extent that there is evidence of upstream intrusions of seawater. The seawater intrusion provides suitable habitat for mangrove establishment and accounts for detection of brackish water at least 20 km upstream from the river mouth, which is an indicator of the level of seawater influx upstream from the mouth. This has contributed to the die-offs observed on some of the riverine trees in particular *Ficus sycomorus*.

2.6.2 Comments and recommendations

- (1) *There were no simulations undertaken during the EIA study to establish the extent and magnitude of seawater influx. Given that seawater influx is happening now even before the adverse impacts of irrigation and climate change, in particular sea level rise, are considered, it is clear that if the project is implemented there will be massive seawater influx from the seaside and through underground aquifers, with devastating effects to local communities and the deltaic ecosystem.*
- (2) *The mitigation measures proposed in respect of saline water intrusions presented in the ESMP are unrealistic to say the least and would seem to be an afterthought that is not founded on any data.*
- (3) *Given the multiple water uses in the area, the EIA Study must undertake simulations of the various scenarios at different water abstraction rates in order to establish the optimal levels for each use taking into account the water that ought to remain in the river as reserve as required by the law.*

2.7 Eutrophication and chemical use

2.7.1 Background

Water resources in Kenya are increasingly becoming polluted from both point and non-point sources due to agriculture, urbanization and industry. In this particular instance, agricultural fertilizers, herbicides and pesticides are going to be the main sources of high nutrient inputs into the River Tana system. High nutrient levels lead to excess growth of nuisance weeds which impede transport, block water intakes, impede water collection and fishing and deplete oxygen levels when they die and decompose. Eutrophication may become a serious problem.

The EIA study acknowledges eutrophication as a likely problem to occur and proceeds to propose some mitigations which *inter alia* include (1) reduction of input to and release of nutrients from cane fields and (2) use of organic instead of chemical fertilizers. These mitigations are not in line with section 4.2.12 of the report which acknowledges that various agricultural inputs will be used in the production of sugar cane and livestock. These are fertilizers, chemical ripeners, pesticides and herbicides. For example, about 7,600 tons of urea and 8,400 tons of TSP will be needed annually.

2.7.2 Comments and recommendations

- (1) *Rich nutrients input will pose a major problem to the deltaic ecosystems with deleterious effects such as harm to living resources and hazards to human health being inevitable. Regrettably, the mitigations being proposed are unrealistic and do not address the challenge likely to be posed by the high nutrient load from sugarcane fields.*
- (2) *The EIA Study Report has not established the critical environmental parameters and set benchmarks with quantitative thresholds defined by law upon which a monitoring programme could be anchored.*

2.8 Displacement of livestock

2.8.1 Background

The EIA study report acknowledges that livestock production is the mainstay economic activity of the pastoralist communities living within and around the Tana Delta. The report clearly states that at any one given time, over 20,000 heads of cattle are permanently in the delta with the number increasing to over 60,000 heads of cattle during the dry season. This is likely to be an underestimate of the number of cattle in the dry season, but nevertheless confirms that the delta is an important grazing refuge during the dry season.

The report further acknowledges that the implementation of the proposed project will lead to displacement of upto 6,000 heads of cattle grazing area. Given that the project area has about 31,000 heads of cattle, it shows the magnitude of the problem if the project is implemented. It would appear that the study does not recognize pastoralism with free movement of livestock

depending on the availability of water and pasture, as a sustainable form of livestock production given that there is free movement of livestock depending on the availability of water and pasture.

Some of the positive impacts on livestock production listed in the EIA study report *inter alia* include (1) increasing area available for grazing through reducing the area under flooding (*cf that cannot be true given that the cleared areas will be planted with sugar cane and therefore unavailable for grazing, also seasonal flooding is necessary to sustain the deltaic pastures and a reduction in flooded area will therefore reduce the area available for grazing*), (2) by providing by-products for use for feeding livestock (*cf is it feasible to provide feeds for close to 100,000 heads of cattle given that the local communities practice pastoralism as their form of lifestyle?*), (3) provision of water in the hinterland (*cf this is unavailable and unrealistic at the moment*), and (4) opening up Galana Ranch for grazing (*cf apparently this was the sweetener to persuade pastoralists into supporting the project. Unfortunately this proposal is untenable given the likely resource use and grazing rights conflicts that will arise from it, moreover the dryland grazing in Galana is confined to the wet season and cannot replace the dry season grazing that is the characteristic function of the delta*).

Furthermore, under 4.9.2.2, the report states that *“in the long run, the project is likely to reduce the number of people who are reliant on livestock and this will reduce conflicts.”* This statement contradicts one of the main objectives of the project which is to enhance quality livestock production. How do we reconcile this contradiction given that livestock production is equally or more important to the local people and the national economy as sugar cane production is?

Regarding livestock feedlot, the study recommends maize silage as the appropriate roughage and proceeds to propose that the *“feedlot operator should plan to grow maize which will require at least 73 hectares of land.”* Regrettably no serious analysis and evaluation has been made of this proposal so as to be in tandem with the objectives of the Integrated Sugar Project.

2.8.2 Comments and recommendations

- (1) *It is very clear that livestock production has not been fully integrated in the overall project. For example, there are no measures proposed to provide suitable grazing areas for the displaced livestock especially the 31,000 heads of cattle currently in the project area or the more than 60,000 that use the Delta as a dry season refuge. Galana Ranch is suggested, but water points are not yet available there, and it is not suited for intensive dry season grazing.*
- (2) *The EIA study report makes a very dangerous assumption that with the introduction of sugarcane, the pastoralists will abandon their traditional lifestyle and instead adopt zero grazing. This is a fallacy and it may lead to serious resource use conflicts among the various communities within the delta. It is common knowledge that the communities in the delta have had such resource use conflicts before in particular between the Pokomo (farmers) and the Orma/Wardei (pastoralists).*

2.9 Introduction of exotic species, especially oil palm

2.9.1 Background

The EIA study report discusses the threats likely to be posed by invasive exotic species and several species are reviewed. In the same breath, the Study Report proceeds to recommend the introduction of oil palm farming in the area as an economic activity. Unfortunately, no in-depth analysis and evaluation is undertaken on that proposal and neither is it founded on the local needs and aspirations. Whose interest and purpose is this proposal serving?

Furthermore, there is overwhelming evidence worldwide including Malaysia on the negative impacts of oil palm farming on biodiversity. There is no evidence in the report to show that any literature was reviewed or the proposal was subjected to in-depth analysis and evaluation.

We are aware that for several years now Mumias Sugar has been trying to entice farmers in the Mumias sugar zone in western Kenya to adopt oil palm farming. The attempt has failed and it would appear that they now consider this an opportunity to introduce their dream project of oil palm farming in the delta through the back door.

2.9.2 Comments and recommendations

- (1) *The EIA study report has not provided a basis for the introduction of oil palms in the delta. Consequently, the proposal relating to oil palm farming should be expunged from the document.*
- (2) *In the alternative, if the oil palm is to be considered, then the proposal must be subjected to an objective screening backed with sound scientific data instead of basing a decision on generalities.*

January 2008

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