# Getting the Chisumbanje Ethanol Project Back on Track

# Press Statement

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#### 1. Introduction

1.1The Chisumbanje Ethanol Project is a national project of great strategic importance where ethanol is produced from sugarcane. The project consists of sugarcane plantations in Chisumbanje and Middle Sabi, with the Ethanol plant being located in Chisumbanje. World class irrigation infrastructure has been put in place, and an outstanding ethanol producing plant constructed. The Project has potential to radically improve our fuel security and economics, introduce efficient irrigation

schemes, support smallholder out-grower schemes, create jobs, generate large amounts of electric power, and stimulate major downstream industries.

- 1.2However, several issues and problems at the Chisumbanje Ethanol Project have resulted in the stoppage of production activities at the ethanol plant. To address these matters, there is need for a common understanding of the challenges the project faces. It is within this context that this Inter-Ministerial Committee has done its work and produced the current report. The objective is to provide a holistic solution to the project's challenges in a way that allows production to resume and for the project to realize its full potential in contributing to the economic development of Zimbabwe.
- 1.3Committee members visited Chisumbanje on the 22<sup>nd</sup> and 26<sup>th</sup> of August, 2012 on a fact finding mission, and met in Harare on the 3<sup>rd</sup> and 17<sup>th</sup> of September 2012 to discuss their findings and to start the process of building a portfolio of solutions that will put the project back on its course.
- 1.4The Chisumbanje Ethanol Project is an enterprise of strategic and national importance, which has the potential to be the nucleus for the development of an ethanol industrial cluster. The project currently has issues and problems in two broad areas, which are: social and community related, and, technical and business related. Long term and sustainable solutions should be found to these issues based on a thorough and technical analysis of the problems instead of politicizing the issue. The solutions should balance between three buckets of interests, that is, community, private and national. The solutions should provide a win-win scenario for these three potentially conflicting areas of interests. The resolution of the challenges should be

proffered in ways that protect the integrity of the government while engaging all the stakeholders involved and affected.

## **Summary of Key Recommendations**

There are two sets of problems that the project faces. Firstly, there are community and social issues that have emerged in the course of the establishment of the project and as a result of its operation. Secondly, there are technical and business related issues and problems which have led to low uptake of ethanol fuel blends. All these issues require immediate solutions and action in order for the Chisumbanje Ethanol Project to get back on track.

## 2. Social and Community Issues: Recommendations

With regard to the Social and Community issues, the key suggestion is that all households that were displaced or mishandled must be compensated and resettled. Lessons must be learnt, and going forward an inclusive and consultative approach must be adopted. The following specific actions are recommended for the issues and problems that have been identified:

2.1The Chipinge Rural District Council should immediately regularise all land acquisitions to the project in accordance with the law by completing the appropriate lease agreement with ARDA in compliance with the Communal Land Act (Chapter 20:04). Specifically, the outstanding lease agreement for 2663 hectares that have already been ceded to the Ethanol Project, together with Council decisions enabling this particular land acquisition, should be reviewed and harmonized in order to align them to the recommendations contained in this report. Thereafter, the lease agreement must be completed and signed.

- 2.2Out of the total 1754 households displaced from their communal lands in Chisumbanje (1060) and Chinyamukwakwa (694) communal lands, only 516 have been resettled. The Company should immediately relocate the outstanding 1238 households who have not been relocated on irrigated land. The 0.5 ha one size fits all is inadequate. An asset audit (i.e., land, livestock, crops, buildings, equipment and family size) for each displaced household must be conducted so that the compensation and resettlement is meaningful. Consequently, the size of irrigated land provided must range from 0.5 ha to 2 ha. Where the household becomes an out-grower the irrigated land will be much more. In addition it must be ensured that each household has land for housing and livestock. Certainly 619 ha of irrigated land will be inadequate to accommodate the 1238 households. Furthermore some of the displaced households must be accommodated as sugarcane out-growers, and producers of other products and services, to the Ethanol Project. These adjustments to the resettlement strategy must be applied retroactively to the resettled 516 households. Other social safety nets and facilities designed to accord the displaced households sustainable means of livelihood must be developed and provided. These should include feedstock schemes, general infrastructure provision, schools, and clinics. The Ministry of Agriculture in consultation with other relevant ministries must develop a detailed smallholder resettlement model that takes into account the elements articulated above.
- 2.3The Company should immediately compensate and resettle the 117 households that had offer letters and were displaced from ARDA estates. With Government and ARDA supervision, the Company should engage the farmers directly and pay the compensation in lieu of the land user rights that were lost, and negotiate terms for the farmers to continue to live on the estates as out-growers and producers to the Ethanol Project. Of the 117 farmers who held sub-leases in ARDA estates, 116 have stayed on as out-growers of sugarcane to the Project. Their major

grievances have been non-payment of compensation for land user rights and slow payment for cane delivered to the project in the 2010/2011 season. Of the total, US\$196,800 due to the farmers for that season, US\$161,800.00 had been paid and US\$35,000 was outstanding and was only paid on 14th September, 2012. All payments to these farmers are effected through ARDA. With Government and ARDA supervision, the Company should go into direct arrangements for payment of these farmers, and should avoid delays in paying for crop deliveries.

- 2.4In addition to enabling displaced households to be sugar cane out-growers and producers of subsistence crops on irrigated land, they must also be enabled to grow other cash crops such as cotton and wheat, which were the bed-rock of commercial agriculture in Chisumbanje area. The Company must play a facilitative role in this extra endeavor, which is not part of the sugarcane out-grower scheme, but rather an effort to address the broader social and commercial concerns of the community.
- 2.5The company should immediately compensate households that lost crops in the process of developing the Project's dams and canals in accordance with the assessments of crop damages that were carried out by Agritex officials and further enhanced and adjusted by information obtained directly from the affected communities. It is unfortunate that some of these crops were insensitively ploughed down by the Company. This is completely unacceptable. A total of US\$80 500.00 is due to these households according to the combined reports from Agritex, traditional leaders and the victims. This compensation must be paid immediately. So far, only US\$39,142 has been paid as compensation for crop damages broken down follows: (1) US\$19,419 for crop damages to number of households whose land was taken from an area under Headman Chisumbanje known as DRC. (2) US\$9,690 that has been paid in lieu of crops that were destroyed from among another set of households displaced from Headman Chisumbanje's area, and

- (3) US\$10,033 for crops destroyed from a few village households displaced from Chinyamukwakwa communal lands. The rest of the compensation that has not been provided must be paid immediately.
- 2.6Verified reports from the displaced communities indicate that livestock was lost through being shot, drinking contaminated water, or by the levying of undue and oppressive fees for trespassing. A total compensation of US20 000.00 must be advanced to the affected communities.
- 2.7There are few individuals who were victims of violence, and unsafe working conditions. contaminated water. Rehabilitation of, and compensation to, these people amounts to about US15 500.00 must be immediately effected. The Company must swiftly install a water purification system for the contaminated water from the plant before it is recycled for human and livestock consumption. Care must be taken that drinking sources for people and livestock are not linked or exposed to the fertilizer rich by-product water from the ethanol plant, which is recycled for irrigation. The Project must take cognizance of the fact that households will have livestock and thus mechanism of coexistence with this reality must be put in place.
- 2.8 In order to avoid future acrimonious community relations, Government and ARDA should maintain an effective oversight of the implementation of the Project. Specifically, the current Inter-Ministerial committee should continue to supervise and monitor the process assisted by its Working Party of officials. At the local level, the District Joint Implementation Committee should be broadened to include the Council Chairperson, all local chiefs, the local Member of Parliament, two Councilors, two workers union representatives and four representatives of

the displaced and affected households (two from Chisumbanje and two from Chinyamukwakwa).

- 2.9The grievance that not enough local people are being employed must be addressed. As illustration Greenfuels employs a total of 975 workers. Out of that number 202 workers are from the Chipinge District translating into 20.7 %. This is too low. Out of an overall employment of 3237 people only 1099 are from the Chipinge District, meaning 34%, which is clearly unacceptable. The company must strive to raise their overall local employment equity. In particular, all the low skill jobs must go to locals. Of course we need to balance our resolution of this grievance with desire to promote national cohesion and integration.
- 2.10 The allegations of racism at the Company were not fully substantiated. However, the fact that they were made by a number of stakeholders is sufficient basis to encourage the Company to improve its racial harmony by treating all employees with equality and dignity, irrespective of race. This must be reflected in all employment and management practices including hiring, pay, benefits, appraisals, promotion, and shop-floor treatment
- 2.11 The disputed figures on the numbers of workers (4500 vs. 3237) that the project employs notwithstanding, it is clear that the project has a substantial number of employees and has a potential to employ even more as it expands. Going by the minimum number as reflected in NSSA records, the 3237 jobs at stake requires that Government takes urgent action to save the Project.

#### 3. Technical and Business Issues: Recommendations

In terms of the technical and business related issues and problems, the solution matrix consists of converting the entire project into a JV, making the pricing of ethanol competitive, engaging in comprehensive marketing of ethanol blends, while gradually adopting mandatory blending. The following specific solutions and actions are recommended in order to enable resumption of the Ethanol plant operations in as short a period as possible:

- 3.1The Cabinet decision to convert the Project from a BOT to a JV must be upheld and implemented within the proposed timeline of two months. It must be noted that Ethanol plant is not on ARDA land, and was not part of the BOT, which means this BOT arrangement was actually detrimental to the national interest. In doing the BOT conversion to JV due diligence and investment/project valuation there is need for rigour and creativity. The veracity of the claim that US\$600m has been invested must be established, including the source of the financing. There must be robust and creative valuation of the State's asset contributions to the Project, such as the land (40 000ha), equipment, intellectual property, institutional memory, other state assets usable as security for loans, the partnership with government as an asset, and value enhancing instruments such as mandatory blending. In fact, the State can easily bring to the Project assets that will enable it to achieve 51% ownership of if not higher. The work on converting the Project from a BOT to a JV must proceed speedily. In fact once concluded this conversion to a JV will make most of the other technical and business issues easily resolvable.
- 3.2Mandatory blending should only be considered within the context of a JV. We cannot have mandatory blending for one private producer of ethanol. If there were several producers it might make sense. As a starting point, the mandatory blending should be at the 5% level. This should be implemented immediately, on the assumption that the conversion from the BOT to a JV is now

irreversible. The legal instrument required and other supportive measures must be put in place. This mandatory E5 fuel specification would increase the uptake of ethanol fourfold to 2.3 million from the current 0.6 million litres and result in 3% lower carbon emissions. E5 is also the ideal starting point because none of the car manufacturers and sellers has a problem with that level of ethanol, whereas there were complaints about certain vehicles's compatibility with E10. For the abundance of caution, Greenfuels design an acceptable insurance policy framework that will compensate motorists in the event of any damage to vehicles due to the use of E5.

- 3.3For now blending at 10%, i.e., E10 should continue as voluntary and optional until measures to mitigate adverse impact on non-compatible vehicles are in place. Once this is achieved, the mandatory blending can graduate to 10%.
- 3.4As mentioned in the National Energy Policy launched recently the government targets to reach levels of mandatory blending of 20% by 2015. To achieve this, research work should start now. Government, through its various agencies, can start engaging experts on bio-fuels to look into the best ways to achieve the 20% level of blending. In summary we are proposing a gradual adoption of mandatory blending from 5%, through 10%, right up to 20%.
- 3.5For now, the blends E10, E20, E85 and E100 must continue as optional products on the market for vehicles that are compatible with them.
- 3.6The logistics and infrastructure for all the blending levels must be developed quickly. Blending should be done from Msasa and at oil companies' outlets until alternative sights are in place, in

particular modifications at Feruka. In fact, blending logistics must be rapidly developed for fuel coming through all the different entrance points into the country, be it by road, rail or pipeline.

- 3.7The government should direct car manufacturers/ assemblers/ dealers/ agencies to immediately start importing vehicles which take ethanol blends. Policies should be developed that encourage individuals to import vehicles which take ethanol blends. Such policies can take different forms but Government should be the main driver of the efforts to increase the fleet size so that there will be increased uptake of ethanol blends. In addition, where feasible, gadgets which adjust vehicles and make them compatible with high levels of ethanol must be procured.
- 3.8The issue of pricing of ethanol should be based on the best practice formulae and be regulated. It must reflect regional and global pricing of ethanol, and take cognizance of the low caloric value of ethanol. It must take into the cost build up involved in producing a litre of ethanol in Zimbabwe (Greenfuels and Triangle) and the landed cost build of landed fossil fuel (unleaded petrol). On the basis of the analysis done, with the motivation to encourage consumers to use ethanol blends, while jump-starting the Company, the generous price of 85 cents per litre of ethanol is suggested. The actual price should be 69.2 cents per litre. The price of 85 cents a litre, will mean the prices of the blends will be as follows; E5 (US1.47), E10 (US\$1.43), E20 (US\$1.37), E85 (US\$0.95), E100 (US\$0.85), as compared to unleaded fuel going at the rate of US1.50 a litre.

<b>Price of Ethanol</b>	<b>Unleaded Petrol</b>	<b>E5</b>	E10
1	1.5	1.475	1.45
0.85	1.5	1.4675	1.43
0.8	1.5	1.465	1.43
0.7	1.5	1.46	1.42

- 3.9From the analysis of the impact of the price of ethanol on the price of the blends it is clear that only competitive pricing will make the blends attractive. In fact, with the correct pricing of ethanol and effective marketing there might be no need for mandatory blending. Consequently, the price of 85c a litre of ethanol being suggested is just a starting point. The objective is to eventually adjust the price to 70c a litre. This will be possible as the company will now be enjoying volume driven economics, while the different ethanol blends will be very attractive at E5 (US1.46), E10 (US\$1.42), E20 (US\$1.34), E85 (US\$0.82), E100 (US\$0.7) compared to unleaded fuel going at the rate of US1.50 per litre.
- 3.10 Fuel prices will not remain at the current levels. They could rise, in which case the ethanol company would have a windfall in profits; but prices could equally fall and that would make the production of ethanol uneconomic and hurt sugarcane farmers. There is need to consider the idea of a 'cushion fund'/other mechanism to take advantage of high crude oil prices and to establish a floor price/other mechanism for ethanol prices were international crude oil prices to drop drastically. This would require the involvement of Treasury in these discussions given the linkage with duties and other taxes that can be used as incentives.

3.11 Once all these technical and business decisions are made and the community issues are resolved, it is important for the Company and the government to carry massive marketing campaigns for Ethanol fuel blends. Some of the consumers' negative attitudes to ethanol are based on sheer ignorance and fear of the unknown. In fact, from a review of the history of fuel blending before independence up to 1992, there is no evidence of vehicle damage due to the use of ethanol blends. Furthermore ethanol technology and quality has improved since then, and so has car technology towards compatibility with ethanol blends. The benefits of ethanol blends and the associated personal, community, national and environmental advantages must be clearly articulated in a massive branding and marketing campaign.

## 4. Concluding Remarks

4.1The two sets of recommendations must be implemented concurrently and immediately. All the recommendations to resolve the social and community issues must be implemented with urgency. The Committee rejects the conditional approach that says these challenges can only be addressed when the plant is running, after the business and technical issues are resolved. This is completely unacceptable. In fact, some of the community issues were supposed to have been addressed before the Project started. Furthermore, the quantum of resources required to address these concerns are quite insignificant compared to the financial scale of the project. While we appreciate that resolving the business issues leading to the running of the plant will make it easier, and less financially burdensome for the Company to address the social

concerns, it is our unyielding conviction that not only has the company got the requisite resources, it has a legal and moral obligation to address the concerns of the communities, immediately. Community buy-in and ownership are critical for such an important national and strategic project.

- 4.2In embracing the redress to communities, beyond compensation for assets/land lost, it is important to leave them with an arrangement that secures their incomes as out-growers and sellers of produce to the company. It is also possible here to revisit the BOT so that its terms are reworked/revised in such a way that the company hands over the assets to a Community Trust rather than to ARDA, and it should be possible for the Community Trust to enter into management contract with the Company or any other competent management entity.
- 4.3The government must quickly mobilise all the concerned stakeholders in order to expeditiously implement the technical and business recommendations presented in this report. This will enable the Chisumbanje Ethanol Project, a national and strategic project to start running.
- 4.4Once the issues raised in this report are addressed, and the plant is fully operational it might be possible for Government to explore the possibility of a motor manufacturing plant using Brazilian technology so that a few models that use high ethanol content can be assembled locally. In fact, we can think in terms of an ethanol industrial cluster, with many products and services

driven by ethanol. As we address the problems that have led to the derailment of the Ethanol Project, we must not miss the forest for the trees. This Project is a national and strategic asset with a potentially huge impact on our economy, through radically changing our fuel economics, power generation (supplying the entirety of Manicaland), multiple downstream industries, new dependent projects such as Kondo Dam, and a potential car manufacturing industry, alluded to above.

4.5This full report outlining the work and recommendations of the Inter-Ministerial Committee was adopted by Cabinet on the 18<sup>th</sup> of September 2012. This presentation encapsulates the collective and considered position of an inclusive set of Ministers who set out to address some tough matters. In doing its work the Committee consulted and involved all the stakeholders and engaged the entire ethanol ecosystem. The two sets of recommendations, seek to balance between community, private and national interests, as we strive to bring this strategic project back on course.