Agro-Fuels projects in Timor-Leste
Projeitu Agrokombustivel sira iha Timor-Leste

4 December 2008

La'o Hamutuk continues to collect, circulate and analyse information on agrofuels in Timor-Leste to promote accountability and democratic decision-making, as well as to help Timor-Leste adopt the best possible practices for agriculture, energy and guaranteeing the right to food.

We welcome information and commentary from all sources.

Projects discussed below include:

- GT Leste Biotech Sugar-Cane Plantation and Processing Plants
- Carabela Jatropha Biodiesel Facility
- Komor Enterprise Ltd, corn/jatropha project
- Jacobsen Elektro AS jatropha and electricity generation project

We welcome information and commentary from all sources.

Projects discussed below include:

- GT Leste Biotech - Plantasaun Tohu no Fabrika Prosesamentu
- Fabrika Ai-oan mutin Carabela
- Komor Enterprise Ltd, Projeitu batar no Ai-oan Mutin
- Jacobsen Elektro AS Projeitu ai-oan mutin no gerasan eletrisidade

La'o Hamutuk continua halibur, hafabe no halo analiza ba informasaun sira kona-ba agrokombustivel iha Timor-Leste atu promove prosesu foti desizaun ida ne’ebé ho akuntabilide no demokratiku, liu-liu atu ajuda Timor-Lesta adopta pratika ne’ebé di’ak liu ba area agrikultura, enerjia no garante direitu ba aihan nian.

Ami ho ksolek siu simu informasaun no komentariu husi parte hot-hotu.

Projeitu sira ne’ebé atu deskuti iha karaik inklui:

Basic Concepts

'Agrofuels' refers to agriculture for fuel, where agricultural products are grown (often in large-scale monocultures, where only a single crop is planted) specifically for fuel and exported out of the ecosystem.

Two types of agrofuels are currently used:

- Bioethanol, which is produced from plants with a high sugar or starch content, such as sugar-cane, maize and cassava.
- Biodiesel, which is produced from plant oils such as palm oil and jatropha.

These are referred to as first generation agrofuels. Second generation agrofuels include using cellulosic material, and would require less land space. At the moment second generation agrofuels are very expensive, and not yet commercially viable.

Agrofuels can be used in a similar way to other fuels - they can be blended with petrol to run cars, for cooking or to run electric generators.

Agrofuels are often promoted as an alternative to fossil fuels like coal, oil and natural gas. However some agrofuels produce as much greenhouse gases as fossil fuels, particularly when forests which store CO2 are cut down to develop agrofuel monocultures.

Growing large-scale monocultures, as occurs with agrofuels, can also have a high impact on local ecosystems. Unlike biodiverse environments, monocultures lack the safeguards to protect against pests and therefore require chemical fertilizers and pesticides.

Agrofuels are referred to by some people as 'biofuels', which is a term used to describe many different processes. It can also refer to the small-scale use of plant and animal products (such as husks and dung) for energy. The use of these products for energy is often developed with consideration to their alternative uses as animal feed or to provide nutrients to improve soil.

Agrofuels may also be referred to as a biomass. Biomass refers to living and recently dead plant material that can be used as fuel or for industrial production.

Biogas, methane gas produced by the biological breakdown of organic matter, is one form of small-scale conversion of organic matter into energy currently being used in Timor-Leste.

Konseitu Báziku

'Agrokombustivel' refere ba agrikultura ne’ebé orienta atu produz kombustivel, ne’ebé kuda produitu agrikultura sira (dala barak nu’udar monokultura ho skala ne’ebé boot ho ai-horis oin ida de’t) especialmente ba kombustivel no ekspota sai husi ekosistema.

Agrokombustivel ne’ebé oras ne’e uza, iha tipu rua:

- Bioetanol, halo husi ai-horis sira ne’ebé iha masin-midar barak ka iha amidu (starch content), hanesan tohu, batar no aifara.
- Biodiesel, halo husi ai-horis sira ne’ebé iha mina hanesan mina palmeiru no Ai-oan Mutin (jatropha).

Sira ne’e refera ba gerasan primeiru agrokombustivel nian. Gerasan segundu agrokombustivel nian inklui uza material cellulosic, no sei rekere rai ho luan kiik liu. Iha oras ne’e gerasan segundu agrokombustivel nian karun liu, no komersialmente seidauk viabel.

Agrokombustivel bele uza hanesan mos kombustivel sira seluk – sira bele kahur ho petroleu atu uza ba kareta, tein ka hamoris jerador. Agrokombustivel dala barak ema produzu ne’udar alternativa ba kombustivel husi fosil hanesan fatuk anar metan, mina rai no gas natural. Maibe agrokombustivel balu produz gas estufa barak hanesan de’t ho kombustivel husi fosil, particularmente wainhira ai-laran ne’ebé rai CO2 tesi hotu atu dezenvolve monokultura agrokombustivel.

Kuda monokultura iha skala ne’ebé boot, hanesan akontese ho agrokombustivel, mos sei bele lori impaktu boot ba ekosistema lokal. Lu hanesan ho meio-ambiente ne’ebé iha baihodiadisa, monokultura ladu ha protesam ai-tanha hasoru peste tan ne’e presua raimetan kimiku no pestisida. Ema balu refera Agrokombustivel nu’udar “biokombustivel”, termu ida ne’ebé uZA hodi deskreve prosesu barak ne’ebé la hanesan. Ida ne’e mos bele refera ba uza iha skala kiik produsaun husi ai-horis no animal (hanesan foer husi animal ka ai-horis) ba energia. Utilizasaun husi produta sira ne’e ba energia dala barak dezenvolve ho konsiderasaun ba sira nia fansaun alternativa nu’udar ai-han ba animal ka atu sai nutrisia ne’ebé babokur rai.

Agrokombustivel bele dala ruma mos refera hanesan biomass. Biomass refera ba material husi ai-horis ne’ebé moris ka fain mate ne’ebe bele uza hanesan kombustivel ba produsaun industrial.

Biogas, gas methana ne’ebé produz husi “avariaisan biologico" husi materia organika, mak forma ida husi konversuaon ho skala kiik husi materia organika ba energia ne’ebé oras ne’e dadaun uza iha Timor-Leste.

GT Leste Biotech Sugar-Cane Plantation and Processing Plants

In early 2008, the Timor-Leste Minister of Agriculture and Fisheries signed a Memorandum of Understanding with the Indonesian company GT Leste Biotech for a $100 million, 100,000 hectare GT Leste Biotech - Plantasaun Tohu no Fabrika Prosesamentu

Iha inisiu tinan 2008, Timor-Leste nau Ministru Agrikultura no Peska asina Memorandum de Intendimentu ida ho Kompana Indonesia nian GT Leste Biotech ho osan tokon US$100, atu kuda plantasaun tohu ho area nia luun 100,000...
sugar cane plantation, sugar plant, ethanol plant and power generation facility. The project, which will last for fifty years, is planned for Covalima, Manatuto, Viqueque and Lautem districts.

- MOU between RDTL & GT Leste Biotech (15 Jan 2008) (Also Bahasa Indonesia)
- RDTL Government press release on alternative energy and rural jobs (8 July 2008) (Also Tetum and Portuguese)
- GT Leste Biotech PowerPoint presentation (7 November 2008)

Analysis

- Report to the RDTL Prime Minister from the Proveredor for Human Rights and Justice (Tetum, 17 June 2008) and Letter to the PM (Tetum, 23 October 2008) regarding granting of land to GT Leste Biotech
- Centre on Housing Rights and Evictions (COHRE) letter to the Minister of Agriculture and Fisheries (26 September 2008)
- COHRE analysis of action needed to ensure RDTL complies with Timor-Leste’s national law and international legal obligations
- Privatising Land in Timor Leste by Tim Anderson in Global Research (a Tetum version first appeared in Kla’ak Semanal)
- La’o Hamutuk page on land processes in Timor-Leste

La’o Hamutuk Public Meeting on the proposed GT Leste Biotech Sugarcane Plantation

MP3 files with Tetum audio from this meeting, the Minister’s presentation (6 MB), and a radio program (14 MB) from La’o Hamutuk on this topic, can be downloaded from here or are available from our Farol office for a small fee.

On 7 November 2008 La’o Hamutuk held a public meeting on the proposed sugarcane plantation. Presenters included the Minister of Agriculture and Fisheries, Youanto Kenchana Jaya (Timor-Leste Director for GT Leste Biotech), Ecologist Rui Pinto and Ines Martins from La’o Hamutuk.

The Minister announced that a person from the Ministry together with company representatives have been undertaking a viability study. (A viability study examines whether the project is commercially viable). He appeared to confuse a viability study with an Environmental Impact Assessment and Social Impact Assessments of the project, which should be independent and look at community needs, rather than the needs of the company. (The viability study will be carried out by multinational agrofuels company Bronzeoak and a staff member from the Ministry for Agriculture and Fisheries).

The Minister said he would be happy to cancel the MOU if the viability study was not positive, but that he alone could not make decisions of the project but other Ministers must be involved. He said the project would need approval from the Council of Ministers and the land-use contract would be prepared by Land and Property. He said that the government would respect the role of Parliament to annul any decision on a GT Leste Biotech contract, and the decision could be taken to Parliament if Parliament asked. He emphasized that farmers could not only grow food, but that the country needed to facilitate investors to develop jobs.

Iha 7 November 2008, La’o Hamutuk organiza enkontru publiku ida kona-ba planu plantasaun tohu iha Timor-Leste. Orador iha Enkontru Publiku ne’e inklu Ministru Agrikultura e Peskas, Direktur GT Leste Biotech iha Timor-Leste, Youanto Kenchana, ekologista Rui Pinto no Ines Martins husi La’o Hamutuk.

Ministro fo sai katat ema husi ministeriu ne’e nian hamutuk ho reprezéntante husi kompaña hala ona esduna viability. (Estudu viabilidad evalua se projeitu ne’e viabel komersialmente). Iha konfuzau uitoan kona-ba esduna viability no Asesmentu ba Impaktu Ambiental no Impaktu Social husi projeitu ne’e, ne’ebeb tenki independente no haree ba komunidade nia presizia, duke kompaña ne’e presizia. (Estudu viabilidad se hala’o husi kompaña ninasional ba agrokombustible naran Bronzeoak no funsionarui husi Ministeriu Agrikultura no Peskas nian).

Ministru dehan katan nia sei kontente atu kansela MoU ne’e karik estudu viabilidad la posizia, maihe katat nia mesak labele hala desiziaun ba projeitu ne’e, no Ministru seluk mos tenki involve iha laran. Nia dehan projeitu sei prezisa aprovasun husi Konsellu Ministru no kontratu kona-ba uza nia nai sei prepara husi parte Terras e Propriedades nian. Nia dehan governu sei respeita poder Parlamentu Nasional anu ata anu tiha desiziaun saida de’it kona-ba kontratu ho GT Leste Biotech, no desiziaun ne’e bele lori ba Parlamentu karik Parlamentu husu. Nia enfatiza katak agrikultores labele kuda ai-han de’it, maihe nasan ne’e prezisa fasilita investor atu kria servisu.

Youanto Kenchana diskute kona-ba benefisiu ekonomiku husi projeitu ne’e ba Timor-Leste (Aprezentasaun iha Power Point husi GT Leste Biotech (7 November 2008)

Análiza:

- Relatorio ba Primeiru Ministru RDTL husi Provedoria dos Direitos Humanos e Justiça (Tetum, 17 June 2008) no karta ba PM (Tetum, 23 Outubru 2008) kona ba fo rai ba GT Leste Biotech
- Karta husi Centru Direitu ba Direitu Uma no Eviskaun (COHRE) ba Ministru Agrikultura no Peska (26 Setembri 2008)
- Analiza husi COHRE kona-ba asaun ne’ebeb presiza atu asegura katat RDTL la’o tuir lei iha Timor-Leste no mos obrigasaun legal interacional nian.
- Privatiza Rai iha Timor-Leste husi Tim Anderson iha Global Research (Versaun Tetum primeiru publika iha Kla’ak Semanal)
- Pajina La’o Hamutuk kona ba Prosese Kona-Ba Rai iha Timor-Leste

La’o Hamutuk nia Enkontruu Publiku kona-ba Proposta Plantasaun Tohu husi GT Leste Biotech

Bele download dokumentu elektroniku iha MP3 no audio husi enkontru ne’e nian, aprezentasaun Ministru Agrikultura nian (6 MB), no Programa Radio (14 MB) kona-ba asuntu ne’e bele hetan iha ami nia servisu fatin iha Farol, Dili.

Iha 7 Novembru 2008, La’o Hamutuk nia Enkontru publiku ida kona-ba planu plantasaun tohu iha Timor-Leste. Orador iha Enkontru Publiku ne’e inklu Ministru Agrikultura e Peskas, Direktur GT Leste Biotech iha Timor-Leste, Youanto Kenchana, ekologiasta Rui Pinto no Ines Martins husi La’o Hamutuk.

Ministro fo sai katat ema husi ministeriu ne’e nian hamutuk ho reprezéntante husi kompaña hala ona esduna viability. (Estudu viabilidad evalua se projeitu ne’e viabel komersialmente). Iha konfuzau uitoan kona-ba esduna viability no Asesmentu ba Impaktu Ambiental no Impaktu Social husi projeitu ne’e, ne’ebeb tenki independente no haree ba komunidade nia presizia, duke kompaña ne’e presizia. (Estudu viabilidad se hala’o husi kompaña ninasional ba agrokombustible naran Bronzeoak no funsionarui husi Ministeriu Agrikultura no Peskas nian).

Ministru dehan katan nia sei kontente atu kansela MoU ne’e karik estudu viabilidad la posizia, maihe katat nia mesak labele hala desiziaun ba projeitu ne’e, no Ministru seluk mos tenki involve iha laran. Nia dehan projeitu sei prezisa aprovasun husi Konsellu Ministru no kontratu kona-ba uza nia nai sei prepara husi parte Terras e Propriedades nian. Nia dehan governu sei respeita poder Parlamentu Nasional anu ata anu tiha desiziaun saida de’it kona-ba kontratu ho GT Leste Biotech, no desiziaun ne’e bele lori ba Parlamentu karik Parlamentu husu. Nia enfatiza katak agrikultores labele kuda ai-han de’it, maihe nasan ne’e prezisa fasilita investor atu kria servisu.

Youanto Kenchana diskute kona-ba benefisiu ekonomiku husi projeitu ne’e ba Timor-Leste (Aprezentasaun iha Power Point husi GT Leste Biotech (7 November 2008)
Youanto Kenchana Jaya discussed the economic benefits of the project for Timor-Leste. (Powerpoint presentation) He highlighted that the company was happy to follow the government’s requirements as to how they should operate. He said the project would create employment and infrastructure (such as roads, irrigation and electricity). GT Leste Biotech would fund and undertake dam construction, which would be maintained and managed by government, with the company accessing part of a dam’s resources. Youanto said that community support was important if the project is to go ahead and outlined plans for a training facility and hospital.

Mr. Jaya outlined a factory site would need to be close to a port, water source, road access and flat. He tried to allay fears, saying that the project would not use places of importance such as forests or historic sites and would not use land where people currently lived. He defined ‘unproductive land’ as land not currently being farmed. He did not know how much land the company would use, or how much sugar or ethanol GT Leste Biotech would produce.

Ecologist Rui Pinto spoke about the environmental impacts of sugarcane plantations, particularly the risks to community access to water; waste and pollution; and the impacts of pesticides and chemicals. (Tetum synopsis of presentation) He said that the land the company was going to use would not be ‘unproductive land’, but good land that was important to wetland ecosystems. He asked the government and GT Leste Biotech for a map of the areas where the proposed plant will be in order to analyze the possible impacts and speak to communities. He also outlined important elements to include in an Environmental Impact Assessment.

Ines Martins discussed her visit to workers in sugarcane plantations near Sao Paulo, Brazil. She said that although companies said they offered good working conditions, good wages, health programs and pensions workers did not receive these benefits. She said that some workers used drugs in order to work long hours, and that there were many health impacts such as cancers, respiratory illnesses and birth defects from the use of chemical pesticides.

Moderator Yasant Lujina also noted that machines can be used in sugarcane plantations, which creates very few jobs. If the plantation is to create a lot of jobs, the cost of workers must be less than using machines which often led to poor conditions for workers.

Carabela Jatropha Biodiesel Facility

The November 2008 La’o Hamutuk Bulletin includes an extensive article on this project.

On 14 July 2005, Enviroenergy Developments Australia (EDA, from NSW, Australia, a subsidiary of the MPI Group) and Daba-Loqui, a Timorese company, entered into a partnership to develop jatropha plantations in Timor-Leste and other territories. They also planned an oil extraction plant in Timor-Leste, to extract oil from seeds of the jatropha plant and convert it into biodiesel fuel.

On 13 February 2008, EDA signed a Deed of Agreement with the Secretary of State for Energy Policy on behalf of the Democratic Republic of Timor-

Fasilidade Biodiesel Ai-oan Mutin Carabela

November 2008 La’o Hamutuk Bulletin nian inklui artiku boot ida kona-ba projeitu ne’e.

Iha loron 14 Jululu 2005, Enviroenergy Development Australia (EDA, husi NSAW, Australia, subsidiariu ida husi MPI Group) no Daba Loqui, kompaña Timor nian ida, komesa parseriadade atu dezenvolve plantasaun Ai-oan Mutin iha Timor-Leste no teritoriu sira seluk. Sira mos planu ba planta ekstrasun mina nian ida iha Timor-Leste, atu hasai mina husi ai-oan Mutin nian musan no konverte ba kambustivel biodiesel.

The agreement allows the company access to 59 hectares of 'industrial land' on the waterfront at Carabella, near Baucau (120km east of Dili). This access will either be through outright purchase or a 30 year lease, with options to renew for an additional 60 years. According to the agreement this was to be arranged by 1 June 2008.

The site will be developed to process jatropha seeds from Indonesia, the Philippines, Malaysia, Thailand and India, as well as from Timor-Leste, intended for markets in Australia, the USA and Europe. A Bio-Diesel Extraction and Refining Facility, Jatropha Pellet Facility and Jatropha Pellet Plant will be developed here, with an estimated capital investment of $550 million dollars over 10 years, with EDA receiving "concessionary tax treatment."

The government will provide land to the project, and also act as an 'arbiter' in any land disputes between private owners and the company.

- **Surat Popular Fabrika Ai-oan Mutin iha Carabela** (Maiu 2009)
- **In-depth La’o Hamutuk Bulletin report on the Jatropha project** (November 2008)
- **Deed of Agreement between the RDTL and Enviroenergy Developments Australia** for the Carabela Jatropha Biodiesel Facility (13 February 2008)
- **Daba-Loqui Energy Ltd Shareholders Agreement** between Daba-Loqui Energy Ltd and Enviroenergy Developments Australia (14 July 2005)
- **RDTL MOU with Komor Enterprise Ltd** (21 August 2008)
- **RDTL MoU ho Komor Enterprise Ltd** (21 Agostu 2008)
- **MOU between the Secretary of State for Energy Policy and Jacobsen Elektro** (4 June 2008)
- **MOU entre Sekretariu Estadu Polítića Energétića no Jacobsen Elektro** (4 Juñu 2008)

---

**Jacobsen Elektro AS jatropha and electricity generation project**

In June 2008 the Secretary of State for Energy Policy signed an agreement with Jacobsen Elektro from Norway for the company to build jatropha curcas oil extraction facilities and a power plant which would use locally produced biofuel/agrofuel and imported heavy oil for local energy needs. The jatropha seeds would be provided by local cooperatives.

According to Jacobsen Elektro, the company previously installed electricity meters in Timor-Leste and they specialize in heavy fuel plants. Bio-diesel from jatropha would be far more compatible with normal diesel fuel than with heavy oil. The agreement would see RDTL pay Jacobsen to Build and Operate the Jatropha oil extraction and power plant, eventually transferring it to RDTL.

---

**Jacobsen Elektro AS Ai-oan Mutin no Projeitu Generasaun Elektrisidade**

Iha Juñu 2008 Sekretariu Estadu Polítića Energétića asina ekordu ida ho Jacobsen Elektro husi Norwegia atu harri fisadidade atu halo estrausan ba Jatropha Curcas no gerador ida ne'ebé sei uza agrokombustivel ne'ebé produz iha rai laran no oleu todan importadu atu hatan ba nesessidade energia iha rai laran. Fini Ai-oan Mutin nian sei prepara husi koperativa lokal sira.

Tuir Jacobsen Elektro, kompañia ne’uluk instala meteran elektrisidade nian iha Timor-Leste no sira espesializa iha planta kombustivel todan. Biodiesel husi Ai-oan Mutin sei kompativel liu ho diesel kombustivel normal duke ho oleu pezadu. Akordu ne’e se harri RDTL selu Jacobsen atu harri no opera estrausan mina Ai-oan Mutin nian no mos Fabrika Enerjia, eventualmente transfere ba RDTL.

---

**Komor Enterprise Ltd. corn/jatropha project**

On 21 August 2008, the Secretary of State for Energy Policy signed an agreement with South Korean company Komor Enterprise Ltd to support the company's project to develop 100,000 hectares of corn and jatropha for agrofuels in Lautem, Bobonaro, Baucau, Same and Viqueque for export markets. The MOU does not specify whether land will be leased from the government, although it raises the possibility of partial financing from a Timor-Leste 'agriculture fund'.

- **RDTL MOU with Komor Enterprise Ltd** (21 August 2008)
- **MOU between the Secretary of State for Energy Policy and Jacobsen Elektro** (4 June 2008)
- **MOU entre Sekretariu Estadu Polítića Energétića no Jacobsen Elektro** (4 Juñu 2008)