

# Alternative Fuels

## Issues and Concerns

### As Agricultural Products

Deforestation  
Slash and Burn  
Funding for Replanting of Coconut Trees  
Development of Other Feed Stocks  
Available Agricultural Areas  
Irrigation  
Fertilization  
Funds for Farm Implements

### Processing, Storage, and Stock Piling

No Funding for Large Bulk Storage Facilities (Rotterdam Type)  
Funding for Biofuel/Biodiesel Processing, Production, Blending  
No Program for Stock piling  
No Distribution and Storage Infrastructure  
No Modern Underground Storage Tanks (UST) E85  
Establishment of New Fuel Filling Pumps for Higher Blends B20 B100 E 85  
Lack of Incentives for Fuelling Infrastructure  
Standardized Fuel Refilling Station Design

### Vehicle Technology Interaction

Fuel Quality Must Meet International Standards for Vehicle Use  
Introduction of Compatible Parts, Components, and Elastomers  
Parts and Components Upgrading Program  
Prohibition of Sale and Use of Incompatible components/parts  
Fuel Rebate Incentives for Vehicles Capable of Higher Blends  
Funds for Vehicle Fleet Testing of Higher Blends B20/100  
Study on Effects on Deposit Formation and Lubricant Life  
Fuel Quality Effects on Fuel Injection Equipment  
Use as 2 Stroke Substitute for Petroleum based Lubricant

### Vehicle Emissions/Environment

No Emission Testing Laboratory Using Type Approval Equipment  
Incentives for Lower CO2 Emission  
Incentives for Lower Vehicle Emissions  
Implementation of I / M Program as required by RA 8749  
Periodic Evaluation of Vehicle Emission Performance/Durability  
CDM Incentives and Fuel Use Rebates  
Biodegradability Requirement

# Agricultural Products as Feedstock for Biofuels

## Issues and Concerns

The issue being raised against the use of agricultural products and crops as feedstock for biofuels is timely. There are ongoing debates worldwide between FOOD SECURITY, RENEWABLE ENERGY, ENERGY SECURITY, and GLOBAL WARMING. Let us concentrate on our national situation and start with the available data we have on hand more particularly with regard to the two lauric oils we produce and use for food consumption including for biodiesel blends. For food, these are coconut and palm oil, and as diesel fuel blend, coconut methyl ester (CME) from crude coconut oil. At present, it is only coconut methyl ester or CME which is locally sourced from coconut oil that is helping the oil companies meet the requirements of the Biofuels Act at a 1% biodiesel blend and yet no new funding has been provided to the coconut industry unlike the other biofuel feedstock. There is even no mention of the coconut industry when it comes to funding assistance for agricultural and technology development for the biodiesel industry. Memorandum Circular 55 which was signed by President Gloria Macapagal Arroyo requiring all government vehicles to use a 1% blend of biodiesel was based on CME and it was intended to revitalize a so called "sunset industry" in order to help the coconut farmers. With the Biofuels Act however, it now has become a resurrected and new "sunrise industry."

Philippine average annual crude coco oil production

1,488,000 mt

Philippine average annual crude palm oil production

48,000 mt

Philippine average annual palm oil importation

67,000 mt

## **Total lauric oil available for food use**

**1,603,000 mt**

Philippine average annual food use requirement

225,000 mt

Philippine annual lauric oil requirement at B1

54,000 mt

Philippine annual lauric oil requirement at B2

108,000 mt

**Food use + B1 requirement (17% of annual lauric oil inventory)**

**279,000 mt**

**Food use + B2 requirement (21% of annual lauric oil inventory)**

**333,000 mt**

The above figures clearly illustrate that even at B2; biodiesel from coconut is not a threat to our country's food security since it will only take up 7% of our average annual lauric oil inventory. Before the use of lauric oils for biodiesel blends, 70% of what was produced was exported. There was never any issue of food security then and should not be now. In the event of a crisis, this can always be retained for domestic consumption and other uses provided; bulk storage for the stock piling of the oil is in place which we do not have at the present time. This is where new funding for the coconut industry should be directed, the creation of storage facilities for the stock piling of lauric and other vegetable oils. When fossil fuel from below the ground dries up, we can only rely on what grows above the ground and other indigenous resources. That's the inevitable because fossil fuel is not infinite. Petroleum is fossil fuel, from dead animals and plants, not like biofuels which come from live organisms.

The other food security issue regarding biodiesel feed stock that is made to appear as taking away land from our primary food staples like rice and corn does not apply to coconut.

The coconut farms we have right now have been around for more than one hundred years. No farmer or investor will ever clear land that produce cash crops like rice or corn in order to plant coconut trees since these take eight years to bear fruit and ten years to be economically viable. Coconut trees are only planted in lesser accessible areas that have contours and terrain unfavorable for rice or corn. Coconut is also not a mono crop since other agricultural plants can be grown beneath it including other biofuel sourced crops.

It should be of great interest to note that biodiesel is turning out to be the “magic bullet” that we have long been searching for to economically empower our countryside. No longer are our coconut farmers shackled to the subsistence pricing of a limited use product.

With the advent use of biodiesel, a new and higher value market has been opened to our prime agricultural produce.

What was, as late as a year ago, dismissively called a “sunset industry” is now being called the “sunrise industry” that could champion our nation’s need for energy security. Last year, copra averaged at P25/kg and during this month of January 2008, it hit a historic record price of P31/kg. With biodiesel, copra prices of P4/kg are a thing of the past. The key to our country’s RURAL DEVELOPMENT, FARMER EMANCIPATION, ENERGY SECURITY, and consequently PEACE and ORDER is in our hands. Let us nurture and develop the biodiesel industry, the key to a prosperous and peaceful countryside and an environmentally friendly and energy secure nation.