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Biofuels, Energy and Agriculture

Alexander Downer

Paper prepared for presentation at the “Biofuels, Energy and Agriculture: Powering Towards or Away From Food Security?” conference conducted by the Crawford Fund for International Agricultural Research, Parliament House, Canberra, Australia, August 15, 2007

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Biofuels, Energy and Agriculture

THE HON. ALEXANDER DOWNER MP
MINISTER FOR FOREIGN AFFAIRS

Introduction

It is a pleasure to again open the annual Crawford Fund development conference, a task I have welcomed and enjoyed for many years. I much respect the work of the Crawford Fund, which has been well led and well organised over this time.

You have chosen this year a very demanding but very timely subject, and I'm sure that the conference will have many interesting aspects. Not only is it a demanding and timely subject, but it is a subject in which I think the public has a great interest.

Economic growth

Despite what has been happening in some financial markets recently, global economic growth is still at a very healthy level. In Australia too, growth has been rapid — over 3% per year in recent years, and in a large number of developing countries it has been better than that.

The World Bank estimates developing country growth at 7.2% in 2004, 6.6% in 2005, and 7.0% last year. India experienced growth of 8.7% in 2006 and China a stunning 10.4% in the same year,

THE HON. ALEXANDER DOWNER has been Australia's Minister for Foreign Affairs since the election of the Howard Government in March 1996, and has held the seat of Mayo for the Liberal Party continuously since 1984. Born in 1951, Mr Downer was educated at Geelong Grammar School, Victoria; Radley College, Oxford, United Kingdom; and the University of Newcastle on Tyne, United Kingdom. He holds a Bachelor of Arts (Hons) in Politics and Economics and is a Doctor of Civil Laws (*honoris causa*). Mr Downer is a member of the National Security Committee of Cabinet.

and the expectation is that it could be a little higher this year. Cambodia and Laos — countries that are generally thought to be struggling — have been growing in excess of 7% annually in recent years. Indonesia and the Philippines are growing at close to 6% per annum.

World poverty

Accompanying economic growth is a decline in poverty. The proportion of people in the world living on \$1 a day or less fell from 28% in 1990 to 20% in 2003.

There were 470 million people living on \$1 a day or less in East Asia in 1990. That dropped by about half to 213 million in 2003, and the World Bank predicts that with continued economic growth there will be only (although it sounds a big number) 51 million people in this category of severe poverty in East Asia by 2015.

That is actually a stunning achievement. Unfortunately, when you look at the reporting of the global economy and discussion of the issues that the world faces and is addressing, dealing with or failing to deal with, the happy story of the decline in poverty in East Asia is seldom heard.

Population increases in developing countries, of course, are quite significant; it is estimated that they will raise the population in these countries from the present four billion people to over eight billion by 2050. Quite clearly that, together with the high rates of economic growth and decline in poverty, will place a lot of demand on current energy sources.

This is an edited version of the Minister's speech

The demand for energy

Poverty reduction requires energy and, not surprisingly, demand for global energy is expected to rise by over half from 2005 to 2030. Much of the increased demand will come from APEC countries.

Of the 6.3 billion people on the planet today, 1.6 billion of them do not have access to basic energy sources. In the coming decades we can expect economies to take greater advantage of renewable energies and nuclear power. Coal and gas will also continue to play a vital role in powering development, which is why the Government is placing so much emphasis on supporting the development of lower emission technologies for gas and coal — particularly clean coal technology.

Global use of oil presents a different challenge, given its importance for transport. Australia, like the rest of the world, relies heavily on petroleum-based fuels to meet its transport energy needs. Although this reliance will continue well into the future, fluctuating oil prices and concerns about supply have led to a fresh interest in alternative fuels. Another factor that has led to a fresh interest in alternative fuels is a concern regarding over-reliance on imports from predominantly one particular part of the world — the Middle East — which of course has issues with stability.

With recent oil price increases, some developing countries now spend up to six times more on fuel than they do on health. Others spend twice as much on fuel as they do on poverty reduction, and elsewhere the foreign exchange used to import fuel can be up to five times that gained from debt relief. Pacific Island countries are the most vulnerable to oil price increases. If oil rises by just \$10 a barrel, some face a loss of up to 14% of gross national income.

The global challenge is to power economic development in a way that is reliable, secure and meets the critical clean-development objectives of lowering greenhouse gas emissions and reducing air pollution. Between 1970 and 2004, global greenhouse gas emissions increased 70%, from about 29 to 49 billion tonnes annually. Most of these emissions come from burning fossil fuels — coal, oil and natural gas — to produce energy, the vital energy which powers the societies in which we live.

We know we have to reduce greenhouse gas emissions.

Australia's energy policy centres on energy security, energy sustainability and energy prosperity.

We set the world's first renewable energy target, we lead the world in the development of clean coal and carbon capture and storage technologies, and we have announced and implemented many relevant domestic policies. We have committed more than \$700 million to promote renewable energy and invested \$500 million in the Low Emissions Technology Development Fund. This has leveraged over \$3 billion in private-sector investment and will continue to support the development of clean energy technologies.

Earlier this month in Queensland, finance ministers from APEC members agreed that their economies need to expand the use and transfer of new, more efficient technologies that favour lower carbon emissions. It is important, however, to get these changes right. We can't dive headfirst into adopting new technologies without fully understanding the implications.

With uncertainty over oil availability and cost, and the negative impacts on climate change, there is a need to diversify energy sources.

The role of biofuels

Biofuels have become an attractive proposition. They offer the prospect of domestic energy generation and a reliable, renewable source of fuel. They have the potential to reduce greenhouse gas emissions, and to generate new industries, employment prospects and incomes.

Many countries are putting in place measures to stimulate biofuel production for domestic and international markets. The challenge is to increase biofuel supply while ensuring that biofuels are developed in a clean, sustainable and competitive fashion.

Developing countries are already launching biofuel programs based on agricultural feedstocks — sugar and grains for ethanol, and rapeseed and soyabean for biodiesel. Low-cost biofuel crops like sugar cane and palm oil grow in abundance in many developing countries in the tropics.

Biofuels in the right place under the right circumstances could be the answer for many communities. For instance in Solomon Islands, AusAID supports the development of two small processing units that produce virgin coconut oil

that can be mixed with diesel for use in generators. There is no need for any mechanical modifications, and the fuel can also be used as a kerosene substitute in lanterns.

But nothing is simple or straightforward. There are tough choices to be made about the approaches to sources of energy. Perhaps the greatest challenge of the current 'first' generation biofuels is that they compete for the same land that is used for food production. At the moment this competition is mild, but food security could be compromised if food crops are pushed out to make way for biofuel crops.

Fuel or food?

The UN Food and Agriculture Organisation estimates there are already 854 million undernourished people in the world. Most are in developing countries and most are in rural areas, and there is a great deal of international work underway to improve food security. East Timor, for instance, traditionally has a wet season, a dry season and a hungry season, when there is simply not enough food to go around.

ACIAR — the Australian Centre for International Agricultural Research — and other institutions are working with the Government of East Timor on the Seeds of Life program to introduce higher-yielding varieties of rice, maize, cassava, sweet potato and peanuts. This will increase domestic food production and reduce vulnerability during the hungry season. This work will become all the more important if, as some predict, the biofuel revolution increases the cost of imported food staples.

Net food importing countries, such as East Timor, could be seriously affected by any global move towards growing crops for biofuels instead of basic food. Where agricultural producers receive higher incomes from biofuel crops, the downside could be an increase in the price of food and of feedstock needed to feed animals.

There is also a real danger that land with high conservation and carbon sequestration value, such as rainforests, could be turned over to mono-cropping for biofuels or that peatlands could be converted to large-scale oil palm plantations.

Both of these outcomes would result not only in loss of crucial habitat, but also in higher greenhouse gas emissions from deforestation. This could perversely do far more damage to the environment and our climate than using petrol. Deforestation in developing countries is already responsible for one-fifth of global greenhouse gas emissions. About half of these emissions come from Asia. With energy demand set to soar in these countries, we have to work collectively for international action on climate change. We want something better than the flawed Kyoto Protocol which does not cover the fastest-growing source of emissions in large developing countries, and does not attract the support of the world's largest emitter, the United States of America.

We have built up an international strategy that recognises different country circumstances, that brings together industry and government to improve energy efficiency, that encourages action from APEC members, that better manages forests, and that is finding practical ways of responding, in general terms, to climate change.

Conclusion

The Government believes that there is not one, single answer to the world's energy problems.

Tomorrow I am going to launch the aid program's environment strategy¹ which will guide activities that directly target environment challenges, including climate change. We know we have to reduce greenhouse gas emissions and we know that our energy has to be cleaner and sustainable; biofuels will certainly contribute to the mix of energy sources. For some communities they might be the answer to their energy problems, but for others the growing of crops for biofuels could lead to further impoverishment. As in all things, a balance needs to be struck between economic development, environmental impacts including greenhouse gas emissions, and the livelihoods of local communities.

Australia is investing heavily in poverty reduction. In a few years the aid budget will reach \$4 billion — it is already \$3 billion. We are carefully targeting our funding so that it helps accelerate economic growth, fosters effective states, increases

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http://www.ausaid.gov.au/media/release.cfm?BC=Speech&ID=1225_3892_1742_7515_4726

people's knowledge and skills, and promotes regional stability and prosperity. Each of these, in its own way, depends on countries having access to reliable and affordable sources of energy.

There is a lot of research and discussion underway in our region into the agricultural and ecological impacts of biofuels; I am sure your deliberations today will add a great deal to this important debate.