

DRAFT EXECUTIVE BRIEF

Policy Study on Impact of Rising Oil Prices on the Poor and their Implications for the Achievement of the MDGs



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Background

Oil prices have climbed to unprecedented heights since late 2002. While their future direction cannot be predicted with certainty, prices can rise even higher if global market and geopolitical uncertainties worsen. Oil-importing Asia-Pacific developing countries are among the most vulnerable to high oil prices due to their lower economic capacity to absorb the ensuing fallouts, such as higher fuel and electricity prices, economic contraction, trade imbalances and inflation. The impacts on the poor will be particularly severe as new barriers to their access to modern energy will diminish their prospects for better living conditions and livelihoods. In turn, this could roll back progress made by many countries towards the MDGs.

Research Questions

The policy study is intended to answer the following questions:

- ✚ What have been the impacts of rising oil prices on petroleum product and electricity prices; macroeconomic indices; agriculture, transport, industry and physical infrastructure; social sectors, particularly health and education; and various components of MDGs?
- ✚ To what extent have currency regimes and fluctuations influenced oil price trends?
- ✚ How and to what extent have rising oil prices supported or slowed energy market liberalization and energy subsidy reforms?
- ✚ Have rising oil prices affected the markets for energy efficiency, renewable energy and clean energy options? How and to what extent?
- ✚ In what ways and to what extent has the poor's access to modern fuels and electricity been affected by rising oil prices?
- ✚ Have there been significant shifts in the poor's energy supply and consumption patterns?
- ✚ What has been the impact of rising oil prices on the poor's incomes, living costs and living conditions, and access to health and education?
- ✚ Have the poor been disproportionately affected? If so, in what ways?
- ✚ What policies and mechanisms are being employed by governments to cope with oil price uncertainties?
- ✚ Do they involve special measures to protect the interests of the poor?
- ✚ How effective have coping policies and mechanisms been at the macroeconomic level and at the level of the poor?
- ✚ What overall energy strategies and policy inventions can best cope with oil price uncertainties in the future?
- ✚ Which specific strategies and policies can enhance the poor's access to energy services?

Approach, Methodology and Coverage

The study consists of a review of developing country experiences during previous oil price crises, an analysis of the factors underlying current oil price trends and an assessment of impacts that have occurred so far. It has four components:

Global assessment

Review recent trends in prices of crude and petroleum products, identify their features and causes, and track major macroeconomic and social variables relative to oil price movements.

Regional assessment

- a) analyse, by sub-region¹, country vulnerabilities to higher oil prices using key energy, economic, social, geophysical and geopolitical indicators;
- b) establish possible correlations between changes in international oil prices and key macroeconomic and social variables; and
- c) review policies on petroleum pricing, economic development, energy security, social infrastructure and poverty reduction/MDGs.

National assessment (in China, India, Indonesia and Lao PDR)


- a) review petroleum sector policies;
- b) track macroeconomic and sectoral variables, public spending on social sectors and sustainable energy development;
- c) in selected oil-intensive sub-sectors, assess impacts on production costs, coping mechanisms and their impacts on producers, consumers and governments; and
- d) consult policy makers on key determinants of oil price impacts and options to safeguard the poor's interests in a climate of oil price volatility.

Micro level assessment (rural and urban case studies in China, India, Indonesia and Lao PDR)

- a) assess local impacts of recent oil price increases at the level of poor communities through household surveys, key informant interviews, focus group discussions with vulnerable groups (particularly women) and energy service providers (especially petroleum product suppliers);
- b) analyse key energy-intensive economic activities critical to the livelihoods of poor communities to assess the direct and indirect impacts on poor households; and
- c) consult local authorities and stakeholder groups on their perceptions of the impacts of oil price increases and the effectiveness of responses from local government agencies, community groups and individual households.

Interim Findings

Highlights of current oil price increases

-  Unlike the sharp and short-lived 'spikes' of 1979 and 1991, prices have risen persistently for more than 3 years since late 2002.

¹ North-East Asia and Mekong, South and West Asia, South-East Asia, and Pacific Island Countries.

- ✚ Nominal price of benchmark crudes exceeded an *all-time high* of USD 75.18 on Friday, 21 Apr 2006 — a 240 percent increase from the average nominal price of USD 22 in 2002.
- ✚ Real prices are, however, still well below the December 1979 peak of USD 97.50, suggesting room for further increases.
- ✚ Supply caps drove past price rises, but a variety of factors are driving the present trend and market sensitivity to them is high.
- ✚ Main threat for global economies is the possibility of oil prices switching from 'cyclical trends' to a 'secular trend' of five to 20 years.

Key drivers of current oil price trends

- ✚ Rapid growth in world oil demand, especially in Asian developing countries led by China and India, as also in the US.
- ✚ Despite declining oil intensities of GDP worldwide, steep growth in absolute demand which will likely to continue.
- ✚ Sharply reduced excess production capacity, especially among OPEC countries, from 7 million bpd in 2002 to 1 million bpd currently.
- ✚ Supply constraints due to natural calamities (e.g., hurricane spells in Gulf of Mexico) and geopolitical conflicts (e.g., Iraq war, Iran-US standoff, militancy in Nigeria).
- ✚ Slow growth of new supply capacity due to sustained spell of low oil prices during preceding decade (1992 to 2002), and doubts over prospects for major new discoveries.
- ✚ Surge in speculative demand as oil is now considered a lucrative investment.
- ✚ Fears of a 'hard landing' for the US Dollar which is weakened by poor economic fundamentals and further rise in oil prices which are denominated in US Dollars.

Impacts so far at global level

- ✚ Major macro-economic indicators have not been impacted significantly so far.
- ✚ World GDP declined by 0.7 percent during 2004 to 2005, inflation remained modest till 2005 and no serious decline in oil intensity of GDP.
- ✚ However, these facts could be deceptive as they are prompted by:
 - ◆ insufficient time-lag for full impacts to be reflected yet;
 - ◆ greater resilience of world economies, including developing Asia-Pacific economies, due to better economic fundamentals (e.g., economic expansion, surge in trade flows, foreign reserves);
 - ◆ low interest rates, although rates are now rising with potential inflationary effects in the near-term; and
 - ◆ lack of sufficient 'pass-through' of higher oil prices to end-consumers due to continued government price regulation and subsidies.

Potential future impacts

- ✚ Slowdown in economic growth — past studies suggest 0.25 to 0.50 percent decline in GDP per USD 10/barrel of oil price increase, i.e., a potential GDP decline of 1.25 to 2.50 percent at the current peak of USD 75/barrel.
- ✚ Contraction in trade surpluses among Asian developing countries due to higher costs of exports.
- ✚ Surge in inflation as interest rates continue to rise and impact on production costs of goods and services.

- ✚ Higher unemployment triggered by cost-cutting measures among manufacturers and service providers.
- ✚ Most adverse impacts likely to occur in oil-importing developing countries with low economic resilience.
- ✚ Poor people in developing countries highly vulnerable due to their low capacity to absorb both *direct impacts* (prices of petroleum products) and *indirect impacts* (general inflation, shrinking labour markets, low/no social safety nets).
- ✚ Negative implications for MDGs as weakening of fiscal situations force governments to reduce public expenditure on rural infrastructure, social investment and poverty reduction.
- ✚ *On a positive note, high oil prices will provide an impetus to reduce oil intensities and import dependence through technological innovation and switch to alternative fuels/energy sources.*

Impacts so far on Asia-Pacific region

- ✚ Macro-economic impacts have been modest so far, consistent with global trends.
- ✚ No significant reduction in GDP growth since rapid economic growth in countries like China and India offset growth declines elsewhere.
- ✚ Inflationary effects modest due to limited price pass-through, low weightage of oil prices in consumer price indices, and continued price regulation and subsidies.
- ✚ No serious decline in foreign reserves due to surge in capital inflows into the region.
- ✚ Trade balances not adversely affected due mainly to China's and India's burgeoning exports.
- ✚ *However, Pacific Island Countries, entirely dependent on imported oil and with low domestic industrial development, have registered steep rise in inflation and significant adverse trade balance.*

Country vulnerabilities in various sub-regions

- ✚ In the near term, oil importers and those with high 'oil intensity' will be most adversely affected. Countries with high trade surpluses and foreign reserves, will fare better.
- ✚ Eventually, all countries will struggle to shield their economies if oil prices continue to rise and 'policy space' to prevent their pass-through to consumers shrinks.
- ✚ The poor will be the most vulnerable as their ability to climb the 'energy ladder' (graduating to successively more advanced and efficient fuels and sources of electricity) is eroded.

North-East Asia and Mekong:

- ◆ China's high GDP growth and huge foreign reserves obscure vulnerabilities of smaller countries; Lao PDR, Mongolia and Viet Nam have already experienced high rates of inflation;
- ◆ the closed economies of Cambodia and Lao PDR are especially vulnerable as their potential for exports to pay for oil imports is low; and
- ◆ traditional biomass fuel dependence in Cambodia and Lao PDR is high, therefore capacity for economic growth and poverty reduction will be severely curtailed.

South-East Asia:

- ◆ Relatively stable GDP growth mainly in Malaysia. High trade deficit in Philippines, falling GDP growth in Thailand, negative GDP growth in Timor Leste and high inflation in Myanmar.

- ◆ Myanmar will be most vulnerable due to low economic capacity, high dependence on traditional fuels and lowest per capita energy consumption.

South and West Asia:

- ◆ overall, healthy GDP growth rates in all countries, with Indian economy setting the pace; but high inflation experienced by Iran and Sri Lanka;
- ◆ Afghanistan, Bhutan, Maldives, Nepal and Sri Lanka wholly dependent on oil imports, hence more at risk than others; and
- ◆ Bangladesh, Bhutan and Nepal especially vulnerable due to high dependence on traditional fuels.

Pacific Island Countries:

- ◆ high overall import dependence of all countries, especially oil imports;
- ◆ poor prospects for substantial scaling up of economic growth due to narrow range exports and high dependence on tourism revenues, with only Fiji and Papua New Guinea having any economic diversity; and
- ◆ all countries vulnerable due to high reliance on traditional fuels and low development of modern renewable energy alternatives.

Case study of India: macroeconomic impacts

- ✚ No impact on GDP, including agricultural and industrial GDP.
- ✚ Increase in trade deficit. Modest impact on inflation due to partial pass-through of oil price increases to consumers and low weightage given to petroleum products in consumer price index.
- ✚ No effect on public spending on physical infrastructure and social sectors (education, health and poverty alleviation).
- ✚ No decline in consumption of crude and petroleum products.
- ✚ 12 percent increase in natural gas prices for power and fertilizer sectors, and 136 percent for other industrial consumers.
- ✚ 60-70 percent increase in petrol prices and 80-90 percent increase in diesel prices — with potential serious impacts when prices are allowed to filter through to end-consumers.
- ✚ No significant increase in electricity prices, with future increases constrained by economic, social and political concerns.
- ✚ Increase in public spending on renewable energy development.
- ✚ Reasons for subdued impacts so far:
 - ◆ two to three year time lag before full impacts steepest oil price increases 2004 onwards are reflected;
 - ◆ greater resilience of economy due to export-led growth;
 - ◆ domestic oil prices kept below international prices due to government intervention;
 - ◆ competition pressures prevent firms from passing through higher costs to consumers; and
 - ◆ fiscal policies have kept inflation in check, so far.

Case study of India: impacts on the poor

- ✚ At the level of poor communities (including both poor and non-poor households):
 - ◆ widening income disparities, with poor family incomes rising only 25 percent as compared to 61 percent in non-poor families;

- ◆ declining share of energy expenditure, especially among poor families, due to reduced diesel and kerosene consumption;
 - ◆ 50 percent increase in transportation expenditure;
 - ◆ 25 percent increase in expenditure on fertilizers; and
 - ◆ 30 percent increase in expenditure on pesticides.
- ✚ At the level of poor households:
- ◆ 45 percent absolute increase in energy expenditure due to higher prices of kerosene, LPG and diesel;
 - ◆ 39 percent of poor urban households have stopped using LPG/kerosene for cooking;
 - ◆ 44 percent of poor urban households have reduced consumption of these fuels to less than 50 percent;
 - ◆ resultant increase in biomass fuel consumption and ensuing rise in health hazards and time expenditure on fuel gathering;
 - ◆ many households left in darkness for longer hours due to reduced use of kerosene for lighting;
 - ◆ near-doubling of cost per trip by public transport to schools, health centres and market places;
 - ◆ health care most affected due to distance to nearest hospital;
 - ◆ children in some families withdrawn from better quality schools to lower quality schools closer to villages; and
 - ◆ poor households affected more due to longer travel distance (caused by locational disadvantages) and higher reliance on public transport.
- ✚ Urban poor more acutely affected by higher oil prices due to their greater reliance on oil products, fewer energy alternatives and higher reliance on transportation.

Ongoing Work

- ✚ Data from case studies carried out in China, Indonesia and Lao PDR being analysed.
- ✚ Time-lag effects being assessed more closely using shorter time periods, and relating impacts to years immediately following steep oil price increases.
- ✚ Social indicators (wages, employment, access to basic services, including energy) being analyzed in tandem with analysis of economic indicators to shed greater light on poverty/MDGs impacts/implications.
- ✚ Four major scenarios being constructed to identify potential future impacts and policy options up to 2025:
 - ◆ a business as usual scenario with oil prices declining and stabilizing in the USD 50 to 60 range;
 - ◆ a high energy security scenario with oil prices declining over time to a USD 30 to 40 range due to use of more efficient technologies, fuel-switching and renewable energy;
 - ◆ a 'shock' scenario with oil prices reaching or exceeding USD 100 due to global conflicts, leading to a 'disaster preparedness' set of policies; and
 - ◆ a more graduated supply decline scenario with oil prices continuing to increase in the USD 60 to 100 range over time due to an irreversible plateauing of global reserves (Hubbert's' Peak).
- ✚ A policy options matrix being developed to identify priorities for different sub-regions/countries depending on their economic and energy vulnerability profiles.

Timeline and Follow-Up

The study commenced in early November 2005 and will be completed by end of June 2006. Its final outcomes will be reviewed by the Technical Review Committee of the policy studies, with close attention to the methodologies developed and employed since the issues addressed by the study— crucially, the assessment of impacts on poverty and the MDGs — have insufficient precedents in past studies of energy policies.

Follow-up actions will be determined through internal cross-practice consultations within UNDP and external consultations with national governments and donors. Tentatively, these could consist of a regional policy forum, sub-regional and national policy dialogues, replication of in-depth case studies in other countries (especially those most vulnerable), and capacity-building and advocacy in pursuit of medium to long-term coping strategies.

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