No. 45 January 2010

RIS Policy Briefs

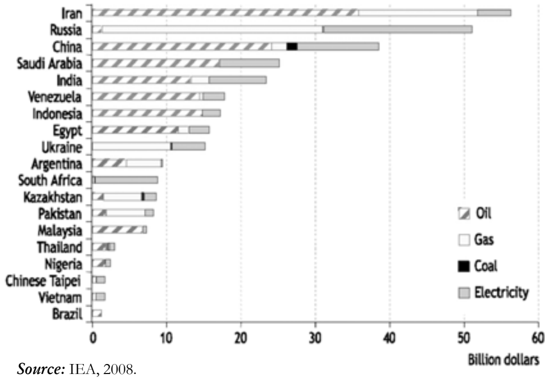
Fossil Fuel Subsidy Reform in India: Addressing the Challenges

1. The Backdrop

The latest issues of both the World Energy Outlook (WEO) and the World Economic and Social Survey (WESS) brought to the fore the importance and urgency of a low carbon revolution in order to align climate and development imperative and digress from the alarming fossil-fuel dependent path. Although both the reports emphasised on enhancing end-use efficiency, massive investment in energy infrastructure and providing incentives for renewable, the WESS further underscored that one of the prerequisites for shifting to a low carbon-trajectory would be to progressively do away with fossil-fuel subsidies. The communiqué of the recent meeting of the G20 nations (which include India), held in 24-25 September 2009 at Pittsburgh, went a step further by thrashing out an agreement between the member nations on elimination of inefficient and wasteful oil and gas subsidies over the medium term. In their communiqué, the G-20 Leaders noted: "Many countries are reducing fossil fuel subsidies while preventing adverse impact on the poorest. Building on these efforts and recognizing the challenges of populations suffering from energy poverty, we commit to …Rationalise and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption."[1]

With the heightened concerns surrounding climate change the list of emerging developing countries that have been increasingly coming under the scanner for providing substantial chunk of fossil fuel end-user (or consumer) subsidy especially on oil includes India. Interestingly, however, the communiqué also recognises the challenges of energy poverty that an emerging country like India confronts where the lion's share of the population especially in rural areas does not have access to electricity and clean household fuels for cooking and lighting.

Figure 1: Energy Subsidy in Non-OECD Countries[2]



Source: IEA, 2008.

2. Fossil Fuel Subsidy: Where are We Now?

Figure 1 delineates a comparative picture of fuel subsidies in non-OECD countries along with their distribution across different fuel sources. As depicted in Figure 1, India comes after Iran, Russia, China and Saudi Arabia in terms of absolute level of fuel subsidy. In terms of subsidies on oil, India comes after Iran, China, Saudi Arabia, Venezuela and Indonesia. In India the lion's share of direct fossil fuel subsidy goes to the oil sector. Thus, this is the very sector that has been at the heart of international policy debate on removing fossil fuel subsidies.

Historically the element of subsidy on the oil sector and its variation has been intertwined with the pricing regime prevailing in the sector. The pricing regime in oil sector since its very inception has been constantly influenced by multiplicity of challenging politico-economic factors and (oft-contradictory) interests of various actors and interest groups involved in the matrix, such as the consumers, particularly the vulnerable sections; the producers; refiners; marketing companies; and the government. In fact, a close look at the pricing regime in the petroleum sector in India reveals that for nearly two and half decades (from 1975 to 1997) the sector was operating in a state of complete protection under Administered Pricing Mechanism (APM). However, since 1998 the sector embarked on a gradual transition and structural shift to a regime of deregulation and open competition.

RIS Policy Briefs are prepared on specific policy issues for the policy makers.

This Policy Brief has been prepared by Dr. Kaushik Ranjan Bandyopadhyay, Senior Fellow, Asian Institute of Transport Development, New Delhi.

Driven by the concerns of vulnerability and a rising international crude prices the government, however, failed to carry out the proposed dismantling of APM fully and four sensitive products continued to be subsidised and insulated from international crude price rise. The products are: petrol (gasoline/ motor spirit) and diesel (high speed diesel) that are primarily used as automotive fuel; and LPG and kerosene (superior kerosene oil) that are primarily used for household consumption. The subsidy on petrol and diesel is implicit in nature and is being exercised through price control. The subsidy on LPG and kerosene, which in the post-APM era came to be known as 'PDS Kerosene and domestic LPG Subsidy Scheme', is explicit in nature. However, both these subsidies are primarily intended to benefit the consumers through reduced prices and are thus essentially consumer subsidies. The government has also decided to phase out the subsidy on PDS kerosene and domestic LPG progressively.

Under the 'PDS Kerosene and domestic LPG Subsidy Scheme' subsidised kerosene is distributed through the public distribution system (PDS) and subsidised domestic LPG is sold by distributors in association with state-owned oil companies in India (IOC, HPC, BPC and IBP).[3] The primary objective of providing this subsidy by the government, while carrying out the process of dismantling of APM, was to smoothen the process of transition to complete deregulation and to shield especially the poor and vulnerable consumers post-deregulation (i.e. post dismantling of APM), when the prices of petroleum products became market determined and the petroleum sector got exposed to the fluctuation in international crude and product prices under a new pricing mechanism founded on the principle of import parity. Although the government started to prune the subsidy in a phased manner[4], eventually it was compelled to backtrack and keep its phased pruning on hold ostensibly due to the much larger interest of shielding the consumers from more volatile international crude and products price scenario and more frequent international spikes that were occurring since 2004. This was also coupled with an apprehension of a huge political backlash. The government eventually decided to continue the subsidy till 2010.

3. Arguments against Implicit and Explicit Oil Subsidies in India: A Snapshot

The main criticism that has been levelled against the domestic LPG subsidy is that it is a universal or non-merit subsidy. Hence, instead of catering specifically to the worse-off or worst-off (below poverty line) the subsidy largely facilitated in saving the fuel cost for the relatively affluent and a burgeoning urban middle class. The absence of quantity rationing in LPG consumption further led to unabated increase in its consumption in urban areas. LPG is also used as an automobile fuel but that is not subsidised. Hence LPG cylinders designated for household use often gets diverted for automobile use resulting in safety hazard.

It has also been observed by a number of evaluation studies and reports of government committees that the policy of giving kerosene at subsidised prices under PDS to all consumers regardless of their economic status resulted in wastage, leakage, adulteration and inefficiency. The biggest use of PDS kerosene has been for the adulteration of diesel resulting in more pollution and GHG emission.

Moreover, the lion's share (more than 70 per cent) of the rural poor and more than 20 per cent of the urban poor, who are dependent on direct burning of fuel wood or biomass for cooking, (see Table 1) remains largely untouched by the supply of subsidised domestic LPG, a cleaner fuel for cooking.[5] The subsidy scheme thus largely failed to expedite the access of rural population to this relatively cleaner form of energy for cooking and in the process failed to eliminate their 'energy poverty'. The burning of biomass in inadequately ventilated houses of the poor leads to high indoor pollution; formation of harmful black carbon (or soot); high emission of CO_2 and has serious repercussions especially on the health of women and children who largely remain indoor for cooking and other household chores. Furthermore the dependence on firewood or biomass also fails to provide relief to the poor and especially rural women folks who usually travel long distances to collect firewood from the forest.

As for petrol and diesel, the pricing mechanism had a historical built-in cross subsidy burden on petrol which was always used to keep the price of diesel artificially depressed. This was later substituted by imposing a much higher excise duty on petrol. The consistent implicit assumption of the government behind introducing asymmetry in the retail selling prices of petrol and diesel has been that petrol is the fuel of the relatively better off. However, this price asymmetry has had the unintended consequence of creating an incentive for motorists to opt for diesel rather than for gasoline cars. As a result the number of diesel run

1 Leader's Statement at the Pittsburgh Summit (www.pittsburghsummit.gov/mediacenter/129639.htm)

2 International Energy Agency (2008), *World Energy Outlook,* IEA, Paris.

3 IOC-Indian Oil Corporation Ltd., HPC-Hindustan Petroleum Corporation Ltd., BPC-Bharat Petroleum Corporation Ltd., IBP- Indo-Burma Petroleum Ltd.

4 The amount of subsidy for the first financial year 2002-03 immediately after the subsidy had been introduced was calculated as the difference between the cost price and the issue price per selling unit. The issue price implies the invoice price of the product ex-depot/bottling plant excluding state surcharge, excise duty, sales tax, local levies and delivery charges. In the next financial year, i.e. 2003-04, the subsidy under this scheme was allowed at two third of the rate prevailing during 2002-03. For the subsequent financial years, i.e. 2004-05, 2005-06 and 2006-07, the subsidy was allowed at one third of the rate pertaining to 2002-03. (Source: Petroleum Planning and Analysis Cell (PPAC); website: www.ppac.org.in)

cars on the road increased substantially and diesel gradually became dominant in the Indian automotive fuel basket.

The report of the Working Group on petroleum and natural gas for the Eleventh Five Year Plan[6] recognises the fact and counters the implicit assumption behind introducing this asymmetry by asserting that 71 per cent of non-transport vehicles are two wheelers, which run on petrol. The report mentions that country has the highest population of two wheelers and is also growing at a much faster rate as compared to cars. The report further mentions that these two wheelers essentially provide mobility to the aspiring class, the climbers and the middle class and not to the relatively affluent sections.

In other words, the report makes it crystal clear that the basic rationale for introducing the price differential does not seem to hold sufficient ground. The more recent B.K. Chaturvedi Committee report[7] further asserts that the only consideration for maintaining "significant price discrimination in favour of diesel is that it creates positive externalities in the case of public transport and the trucking industry that carry people and goods, creating an extensive transport network, across the length and the breadth of the country". However, the report points out that this logic does not seem to apply for passenger cars and sports utility vehicles; it does not also apply for substantial consumption of diesel by industrial units and generators.

Furthermore, the government has been bearing only a minimal portion of both the explicit (on domestic LPG and kerosene) and implicit (on petrol and diesel) subsidies. The public sector oil refining and marketing companies had been shouldering a large part of it by not passing the full increase in the international prices to the domestic consumer thereby incurring substantial under-recoveries. The under-recoveries started piling up especially during the frequent oil price spikes since 2004. The companies could only partially recoup their losses on this count after the onset of worldwide recession which led to drop in both oil demand and prices. The government tried to partly assist the oil companies through issuance of oil bonds but that could hardly make up for their huge under-recoveries and instead led to additional wasteful transfer from India's fiscal wealth which could otherwise have been utilised for more productive purposes.

4. Remedial Measures and Alternate Government Schemes: A Brief Review

In view of the problems that have been brought out by plethora of evaluation studies and in keeping with the recommendations of number of committees that that were constituted from time to time to deliberate on pricing of refined petroleum products or on the financial position of public sector oil companies, the government had been undertaking remedial measures in order to ensure that the subsidy reach the poor and deserving beneficiaries. Some of those measures on kerosene and LPG are briefly discussed below.

Kerosene

The ministry of petroleum and natural gas (MoPNG) has undertaken various technological and institutional measures to curb adulteration. Some of the recent measures taken by the ministry in the post-APM era

Table 1: Percentage of Households Using LPG and Kerosene as Primary Source of Energy

Year	Rural			Urban		
	Firewood	LPG	Kerosene	Firewood	LPG	Kerosene
Cooking						
1990/00	75.5	5.4	2.7	22.3	44.2	21.7
2000/01	75.4	7.2	2.4	21.0	47.4	19.4
2001/02	73.4	8.1	2.0	23.3	49.9	15.3
2002/03	74.3	8.5	1.6	21.2	51.2	14.8
2003/04	74.9	9.1	1.9	20.0	55.4	13.0
2004/05	75.7	9.0	0.9	21.5	56.4	10.4
2005/06	74.0	9.3	1.0	20.9	57.1	9.2
Lighting						
1999/00			50.6			10.3
2000/01			47.8			9.0
2001/02			47.2			7.8
2002/03			47.4			8.3
2003/04			46.6			8.3
2004/05			45.6			7.0
2005/06			42.0			7.2

Source: GoI, 2008 (see footnote 7 for detailed reference).

5 LPG is environmentally much more benign as compared to other fossil fuels like coal, petrol, diesel and biomass and could very well be considered as a transitory fuel for the poor in shifting from biomass based cooking to cleaner non-fossil fuel and renewable source of energy which would take sufficient time before the cost of these fuels actually comes down substantially and become accessible to the poor.

6 Government of India (2006), *Report of the Working Group on Petroleum and Natural Gas for the Eleventh Five Year Plan (2007-2012),* Ministry of petroleum and natural gas, New Delhi, November.

7 Government of India (2008), *Report of the High Powered Committee on Financial Position of Oil Companies,* submitted to the Prime Minister, New Delhi, August. (available at: www.infraline.com)

are: 1) automation of retail outlets; 2) third party inspection and certification of retail outlets; 3) direction to oil marketing companies (OMCs) for monitoring of movement of tank trucks through global positioning system (GPS); 4) introducing marker in kerosene to prevent adulteration; and 5) revision of market discipline guidelines with penal action against erring dealers.[8]

Furthermore, a more refined version of PDS kerosene distribution called Jan Kerosene Pariyojana (JKP) has been introduced in selected blocks of some states. Unlike the traditional system of distributing kerosene, delivery under JKP is made at wholesaler points by OMCs through dedicated tankers fixed with GPS.Under this scheme, OMCs have created infrastructure at wholesaler locations by providing underground tanks, dispensing units, specially painted blue barrels and barred sheds.[9]

A smart card scheme was also proposed on an experimental basis in three districts - Latur in Maharashtra, Nalanda in Bihar and Nainital in Uttaranchal in 2007. In this pilot project, subsidised kerosene was proposed to be made available to below poverty line (BPL) families while all other ration card holders would be given non-subsidised kerosene. OMCs were supposed to ensure adequate availability of PDS as well as non-subsidised kerosene during the entire period of implementation of the pilot project. However, the Ministry encountered stiff resistance from the aforesaid states as they wanted to include above poverty line (APL) families as well. However, MoPNG was opposed to the states' idea as that would frustrate the very objective of introducing the scheme. Thus, the pilot project itself had to be put on hold.

Domestic LPG

One of the primary factors that impeded the access of poor to LPG is the relatively high initial upfront cost of getting a LPG connection. In order to do away with this problem a pro-poor LPG distribution scheme intended primarily for poor women in rural and urban areas called 'Deepam Scheme'[10] had been launched by the state government of Andhra Pradesh (AP) in 1998. Under the scheme the state government provides a subsidy of Rs. 1000 towards the connection but does not subsidise the cost of a refill, which is more than Rs 250 for a 14kg cylinder. An assessment of the scheme undertaken in 2001 indicates that the urban beneficiaries used much more LPG than rural beneficiaries. Most of the rural households failed to afford cylinder refill and fire wood continued to remain as primary fuel for cooking. In the process the oil companies also failed to reach the targeted refill of LPG resulting in substantial losses to them. As a remedial measure the AP government introduced smaller 5kg LPG cylinders requiring an initial deposit of Rs. 500 and a refill cost of Rs. 100 to Rs.150 with the expectation that this would lead to higher consumption of LPG especially by the rural poor and would also reduce the losses of oil companies and the cost to government in terms of subsidies. The revised scheme is, however, yet to be adequately evaluated.

In order to prevent illegal LPG cylinder diversions from the subsidised household sector to the unsubsidised commercial sector the government also instituted random checks and raids in 2005-06 on the basis of widespread reports on illegal diversions. Inspectors were sent around the country to monitor the monthly sales patterns of LPG distributors and dealers to check if there had been any unusual distortions on account of these illegal diversions. However, the action only had temporary impact. The problem re-surfaced again afterwards in the cities where the government started distributing LPG through pipelines resulting in surplus LPG cylinders and leading to diversion.

In order to eliminate diversion of domestic LPG to automotive sector, oil industry initiated measures like refill audit. Moreover, auto LPG dispensing facilities have been set up in select areas to control pollution and to reduce or eliminate diversion of domestic LPG to automotive sector. This measure has yielded results and auto LPG sales have gone up substantially over 2006 and 2007. The Government also approved a scheme for different colour coding of domestic and non-domestic cylinders to prevent diversion of domestic LPG cylinders.

Furthermore, in 2006-07, MoPNG came out with an initiative to sell LPG at market rates to people with permanent account number (PAN) cards issued by the income tax department. However, the initiative also had to be scrapped due to stiff resistance.

The report of the Working Group on petroleum and natural gas for the Eleventh Plan recommended that in order to encourage use of auto LPG, auto LPG dispensing stations (ALDS) should be set up on priority basis in big towns which are not likely to receive CNG (compressed natural gas) in the short to medium term.

Two more measures are also under consideration by the Ministry:

- Rolling back the scheme for distribution of subsidised LPG in every area where piped gas connections are provided
- Drawing up a scheme for focused and direct

[8] Based on answers provided by MoPNG to the Rajya Sabha Unstarred Question No. 672 (available at: http://164.100.47.5:8080/members/Website/quest.asp?qref=121216)

[9] In order to assess the impact of implementing JKP on distribution of PDS Kerosene, the Petroleum Planning and Analysis Cell (PPAC) commissioned a study to National Council of Applied Economic Research (NCAER) in 2007 to undertake impact assessment of JKP. The impact assessment study found that while there has been improvement in awareness of the kerosene consumers about their entitlement and about the monitoring and complaint redressal mechanism entailed under JKP, the benefit from JKP was still lower than the cost of the scheme, without imputing savings from elimination of losses arising from diversion. The study further revealed that while some states fared better, others failed primarily owing to a disparity in the level of involvement of Panchayati Raj Institutions (PRIs) in the monitoring mechanism. NCAER (2007): "Impact Assessment of Jan Kerosene Pariyojana", report submitted by NCAER to PPAC, Ministry of petroleum and natural gas, New Delhi.

subsidization of LPG to consumers living in rural and backward areas which are not covered by piped gas networks and thereby replacing their use of subsidised kerosene.

Due to these measures subsidised LPG would more likely reach targeted people, instead of just catering to middle class and more affluent sections of society in urban areas.

The Planning Commission also suggested in the Integrated Energy Policy that any surpluses in LPG cylinders that may arise on account of introduction of piped gas could be supplied to rural areas for cooking or lighting purposes to replace subsidised kerosene.[11]

However, the first measure may not be without problems. It is quite obvious that due to expansion of gas grids LPG distributors in urban areas would lose their business. Thus, concerns have also been raised that the government might face strong resistance which could even amount to sabotaging of the piped gas network itself.

For improved governance and better targeting of items that include kerosene and LPG, the government is planning to issue a unique identification (UID) to every citizen.[12] In line with the suggestion given in the plan document of the Eleventh Five Year Plan the subsidy amount would be directly credited to individuals with UIDs. The subsidy amount could be redeemed at authorized suppliers like fair price shops, kerosene or domestic LPG dealers, etc. According to the plan document, the smart card would have a memory partitioned into distinct modules representing different entitlement groups to whom subsidies are given.

Petrol and Diesel

Any discussions on pricing of petrol and diesel would be incomplete if one precludes the price distorting excise and customs duties and state level recoverable and irrecoverable sales taxes that are usually imposed on these products. Much of the discrepancy between the prices of petrol and diesel is attributed to these taxes. Considering Delhi as a benchmark, nearly 49 per cent of the retail price of petrol and 25 per cent of the retail price of diesel are comprised of these taxes. Thus, the prices of both petrol and diesel could be rationalised through rationalisation these taxes and duties rather than forcing the oil companies to bear the burden. A number of government committees have also deliberated on this issue from time to time. In view of the recommendations of these committees, since 1 April 2002 (i.e. post partial dismantling of APM), the central government has reduced customs and excise duties on petrol and diesel four times. From March 2005 onwards for petrol and diesel excise duties had been reduced from 30 per cent and 14 per cent respectively to 8 per cent plus Rs. 13/litre and to 8 per cent and Rs. 3.25/litre while customs duties were reduced from 20 per cent to 10 per cent for both products. Again from March 2007 onwards the ad valorem component of excise duties on both petrol and diesel has been reduced from 8 per cent to 6 per cent and the custom duties on both products were reduced from 10 per cent to 7.5 per cent. From July 7, 2009 onwards the basic excise duty on branded petrol and diesel has been revised from 6 per cent plus Rs 5 per litre and 6 per cent plus Rs 1.25 per litre to Rs 6.5 per litre and Rs 2.75 per litre respectively. In other words, the basic excise duty has been altered from a combination of specific and ad valorem to specific duties. However, the state sales taxes on petrol and diesel could not be reduced concomitantly despite repeated requests from the central government to state governments for doing so. The most important reason for states reluctance lies in the fact that these taxes and duties constitute major revenues for the central and state governments. In fact, in view of India's perverse social and economic challenges which vary regionally as well as state-wise, such an inelastic revenue source has always been considered as crucial by the government both at the centre and state in financing their policy objectives. Thus, rationalisation of prices of these fuels also faces a really tough resistance and is indeed a great challenge.

5. Ways Ahead

Subsidies may be justified in some cases as an instrument to combat poverty. However, they ought to be appropriately targeted, affordable and pro-poor, easy to administer, transparent and have an in built system of accountability. Besides, they should be able to deliver quantifiable benefits in terms of increased welfare of the vulnerable sections of the population.

It is evident from the foregoing discussions in sections 2, 3 and 4 that in India there is a strong case for doing away with universal price subsidies on domestic LPG and kerosene and targeting it especially for the rural poor. Given the fact that cleaner renewable and non-fossil fuel energy resources would take sufficient time for being affordable and widely accessible for end-use, LPG and kerosene could be considered as transitory fuels. The biggest problem, however, is to devise an effective subsidy mechanism for distribution of these fuels especially in the context of a country like India with unique diversity in challenges and interests involved, which are often contradictory to each other. Moreover, subsidies usually tend to be more effective in case

[10] The primary objectives of Deepam Scheme are: 1) to provide relief to women from the drudgery of cooking; 2) to improve their health; 3) to prevent health hazard; 4) to reduce dependence on forests for firewood; and 5) to improve the environment by felling of trees. (Available at: www.aponline.gov.in -/Quick Links/ Representations/ Programmes/ deepam)

[11] Anupama Airy, 'Double Benefit troubles piped gas', *The Financial Express*, August 19, 2008.

[12] Rajeev Jayaswal, 'Unique Ids to deliver goods from December 2009', *The Economic Times*, November 10, 2008.

of energy services that are provided through fixed networks like electricity, natural gas, etc. and are really challenging to devise in case oil products that are freely traded and are difficult to target.

Although the modified Deepam scheme, based on distribution of 5 kg LPG cylinders and lower upfront costs, might lead to increased uptake of LPG by rural poor, it may not be without challenges and may still not be able to capture the lowest rung of the rural and urban poor who would continue to use freely available biomass and firewood as a main cooking fuel. The idea of unique identification UID, which is already on its way to be introduced, is a key instrument of good governance that would largely help the poor in enjoying the benefits of subsidised fuel through smart cards that are being or would be allocated to them. But such a governance oriented measure alone would not be enough and essentially needs to be complemented with mass supply of efficient and cheap biomass based cook stoves and increased use of biogas not only to reduce the problem of emissions and black carbon but mainly to combat the serious repercussions that continued use of biomass by the lowest rung of rural poor (especially women and children) would have on their health. In this context, with the available affordable alternatives like biogas and efficient cook stoves for biomass in place, making the poorer households sufficiently aware of the health implications of using biomass would also help in the uptake of these alternatives by modifying households' requirements and demand orientation. Furthermore, it also needs to be kept in mind that any technological alternative to freely available biomass would be widely adopted only if the incremental costs are affordable and offset by the tangible non-monetary benefits perceived by the user. In this context, the recent announcement by the government for producing cheap and efficient biomass based cook stoves in India on a large scale is indeed heartening.

As far as kerosene is concerned, the JKY scheme which is technologically more advanced than the usual PDS kerosene distribution ought to be strengthened by a more stringent decentralised governance, delivery and monitoring mechanism. Besides, the unique identification UID would also facilitate in launching the smart card system for kerosene as well, although the initial pilot projects faced stiff resistance.

As far as the pricing of petrol and diesel is concerned, there is clearly a need and there are scopes for more rationalisation and removing the asymmetry that exists in the price of diesel and petrol.

It also needs to be underscored that given the subsidy framework in India, it would be relatively easier for the government to phase-down subsidies or remove price control when international crude prices are on the lower side. This is because the subsidy component could be pruned down more smoothly during the downturn without any price shocks to the consumers. This essentially was the programme of the government when international oil prices were on the lower side but had to be kept on hold due to price spikes afterwards. However, the Finance Minister has recently proposed that government would soon get back to its proposed deregulation of the petroleum sector and the first two products to fall in line would be petrol and diesel.

The recent agreement arrived at Pittsburgh by leaders of G20 nations, albeit political in nature, would invariably keep the pressure on developing countries like India to revert back to its proposed plan of progressive deregulation and phasing out both the implicit and explicit subsidies on sensitive petroleum products in India.

However, it has clearly been evinced in the preceding section that the government has been constantly trying to address the problems that arose out of incomplete deregulation and has been making repeated effort towards creating a conducive atmosphere to carry out its proposed programme. In this light, it also deserves to be mentioned that the timeline (post-2010) that the India government had already set domestically (much before the G20 meeting) for doing away with LPG and Kerosene subsidy is rather way ahead of what the G20 communiqué underscores on as medium term. Rather, the Indian government has a much bigger domestic challenge to stick to its own set deadline for the sake of its own crucial interest.

*****

— *Policy research to shape the international development agenda* —

RIS Reports, Discussion Papers, Policy Briefs, New Asia Monitor and *RIS Diary* are available at RIS Website: www.ris.org.in

RIS
Research and Information System for Developing Countries

Core IV-B, Fourth Floor
India Habitat Centre
Lodhi Road, New Delhi-110 003, India.
Ph. 91-11-24682177-80
Fax: 91-11-24682173-74-75
Email: publication@ris.org.in
Websites: http://www.ris.org.in
http://www.newasiaforum.org