



India's Fuel Subsidies: Q & A

August 2012

In 2011-12 India's subsidies and under-recoveries for fuel totalled INR1.4 trillion (US\$27.7 billion). Total subsidy expenditure (including for fertilizer and food) was up by 27 per cent on the previous year, significantly contributing to the rise in fiscal deficit of 1.3 per cent of the GDP for 2011-12.

The International Institute for Sustainable Development's Global Subsidies Initiative (GSI) is an independent, not-for-profit policy research institute. Since 2005, the GSI has been encouraging governments to undertake unilateral reforms on subsidy policy where these would deliver clear economic, environmental and social benefits. In collaboration with the National Institute for Public Finance and Policy (NIPFP) and The Energy Resource Institute (TERI), the GSI has released three new reports on India's fuel subsidies and the options for reform:

1. *Diesel Pricing in India: Entangled in a Policy Maze* (NIPFP, 2012) analyzes the inflationary impacts of increasing diesel prices on the economy and on key groups. It provides recommendations and actions on how pricing mechanisms and taxation could be changed.
2. *Fossil-Fuel Subsidy Reform in India: Cash Transfers for PDS Kerosene and Domestic LPG* (TERI, 2012) provides recommendations for designing and implementing direct cash transfers in India.
3. *India's Fuel Subsidies: Policy Recommendations for Reform* (IISD-GSI, 2012) summarizes the research from the previous two reports and highlights the key policy recommendations.

This factsheet provides an introduction to the research, highlighting key facts about India's fuel subsidies, and summarizing the main policy recommendations from the research.

1. How large are fossil-fuel subsidies in India?

Three "sensitive" petroleum products—high-speed diesel, domestic liquefied petroleum gas (LPG) and public distribution system (PDS) kerosene—are sold below benchmark international prices, leading to under-recoveries for the downstream oil marketing companies (OMCs). The under-recoveries have only been partly made up in the past by cash compensation from the government and burden-sharing by upstream national oil companies. India actively regulates the prices of the three products by setting the realized price.





TABLE 1: TOTAL COST OF INDIA'S FUEL SUBSIDIES IN 2010-11

FUEL	DESIRED PRICE*	REALIZED PRICE*	FISCAL SUBSIDY		UNDER-RECOVERY		TOTAL SUBSIDY PER FUEL	
			PER UNIT	TOTAL (INR CRORE)	PER UNIT	TOTAL (INR CRORE)	INR CRORE	US\$ MILLIONS
Diesel (per litre)	46.42	33.47	-	-	12.95	34,706	34,706	7,614
LPG (per 14.2 kg cylinder)	721.58	373.43	22.58	1,974	325.56	21,772	23,746	5,210
Kerosene (per litre)	42.31	12.99	0.82	931	28.50	19,484	20,415	4,479
Gasoline†	-	-	-	-	-	2,227	2,227	489
Total				2,905		78,189	81,094	17,792

* Prices as of January 16, 2012. "Desired price" is the sum of refinery gate prices, transport charges and marketing margins paid by OMCs. It is set by a published formula.¹ "Realized price" is the price charged to dealers (depot price) by OMCs. Retail selling prices in each city are calculated by adding excise duty, wholesalers' and retailers' commission and value-added tax onto the "realized price."

† The government "decontrolled" the prices of gasoline and diesel in 2010 to allow OMCs to regularly adjust retail prices, although it retained authority to approve price changes. Gasoline prices changed in line with the formula until December 2011, when the government froze gasoline retail prices in order to avoid pass-through of high international oil prices to final consumers, adding to the under-recoveries incurred by OMCs. The gasoline price was increased again in May 2012. Diesel price increases have been much more strongly constrained than gasoline in the period since 2010.

TABLE 2: BREAKDOWN OF WHO PAID FOR INDIA'S FUEL SUBSIDIES IN 2010-11

		TOTAL	
		INR CRORE	US\$ MILLIONS
Government:	Fiscal subsidy	2,905	637
	Under-recovery	41,000	8,995
	Total	43,905	9,632
Upstream oil companies: Under-recovery		30,297	6,647
Oil marketing companies: Under-recovery		6,893	1,512

2. What has the government said it wants to do in terms of reforming these subsidies?

In 2010 a government committee led by Kirit Parikh recommended that substantial reforms were needed, including full deregulation of diesel prices, and periodic increases of domestic LPG and PDS kerosene prices. The Union Budget sets out the government's intention to maintain total subsidies (including for fertilizer and food) to under 2 per cent of GDP in 2012-13 and reducing to under 1.75 percent of the GDP over the following three years, although food subsidies will continue to be fully provided for. Policy measures—such as better targeting of subsidies and improved transparency—are planned to reduce the total subsidy bill. More recently, in July 2012, the Minister of Petroleum and Natural Gas announced that the government is considering capping the number of subsidized LPG cylinders per household. The government is also considering a "partial decontrol" of diesel prices.²

¹ For the formulae and their latest values for fuels sold in Delhi, see: <http://ppac.org.in/writereaddata/Price%20Build%20up%20Sensitive%20Products.pdf>

² Daily News and Analysis, (2012, July 18), Govt looking at LPG subsidy cut, partial decontrol of diesel. Retrieved from www.dnaindia.com/india/report_govt-looking-at-lpg-subsidy-cut-partial-decontrol-of-diesel_1716597



3. Why reform fossil-fuel subsidies?

Subsidies are costly and contribute to the deterioration of India's fiscal balance. Oil companies who bear part of the cost of under-recoveries have less capital to reinvest in exploration, production or infrastructure. The subsidies create market distortions (e.g., more manufacturers producing vehicles that run on diesel) and encourage fuel diversion (e.g., kerosene being used to adulterate diesel, commercial users of domestic LPG) resulting in corruption, black markets and fuel shortages. In addition, subsidies undermine energy efficiency measures and fuel standards, exacerbating local pollution and global greenhouse gas emissions.

4. What are the barriers to reform?

There is a valid concern that raising diesel prices will have a significant impact on inflation and cascading effects throughout the economy, as well as in sensitive sectors such as transport, agriculture and fisheries. In addition, rising food prices in the first half of 2012, which could be exacerbated by India's shortage of rain this monsoon season, could make subsidy reform challenging both in terms of managing the indirect impacts for the poor and overcoming political and public opposition to reforms.

The government has established the Unique Identification Authority of India (UIDAI) to develop the infrastructure for delivering direct transfers to support the poor. But challenges remain, such as identifying and targeting beneficiaries and increasing financial inclusion.

5. Don't government taxes offset the costs of fuel subsidies?

Under-recoveries are significantly larger than the total combined federal and provincial taxes on diesel and kerosene, and LPG is not subject to tax at all. Diesel taxes are almost INR20 per litre less than gasoline taxes, encouraging large passenger cars to use diesel and increasing the dieselization of India's economy.

DESCRIPTION	DIESEL	MOTOR SPIRIT [GASOLINE]	KEROSENE	DOM. LPG
Units	Per litre	Per litre	Per litre	Per cylinder
Retail Selling Price (RSP)	40.91	71.16	14.83	399
Federal Tax				
(i) Customs Duty	1.14	0	0	0
(ii) Specific Excise Duty	2.06	14.78	0	0
Provincial Tax				
VAT (Sales Tax)	4.46	11.86	0.71	0
Effective Date	May 16, 2012	June 3, 2012	May 1, 2012	May 1, 2012
Under-recovery by OMCs	13.64		31.48	480.31

6. What will be the effects of raising diesel prices?

The under-recoveries on diesel are estimated to be 25 per cent of the retail selling price. Increasing diesel prices by 25 per cent would lead to around a 1 per cent increase in general price levels. Some key sectors will be more affected by increased diesel prices; for example, large public transport operators would see an 8 per cent increase in costs,



and a goods/freight transporter's costs would increase by 10 per cent. Rail transport costs would increase by 2.5 to 3.5 per cent, and industry, an average of 0.25 per cent. In the agriculture sector, the costs of cultivating wheat would rise 2.75 per cent and sugar cane, 0.75 per cent.

7. What should the government do to reform diesel prices?

The following outlines the key policy recommendations from our research:

Diesel prices	Reform objective: <i>Eliminate under-recovery</i>
	Short-term actions: Progressively decontrol diesel prices by eliminating under-recovery over a period of around one year. This could be at a fixed rate of around INR1 per litre each month, or could vary with higher reductions in under-recovery when specific conditions are met (for example, decreasing international prices or decreasing inflation). Investigate further options to improve diesel price regulation: remove political influence from the application of the formula; consider whether the current trade policy price should be replaced by export parity price within the formula; discuss at the provincial level whether their <i>ad valorem</i> tax rates should be reduced or their spending increased in response to increased revenues as prices are reformed; start to consider whether the fiscal treatment of oil companies should be revised as prices are reformed; similarly consider reforms to vehicle taxation; reduce volatility by moving to specific taxation at the provincial level.
	Medium-term actions: Refine and implement options investigated over the short term. Discuss and set an appropriate tax rate for diesel.
	Long-term action: Liberalize diesel pricing.
Manage the impacts of diesel price reform	Reform objective: <i>Support the elimination of under-recovery</i>
	Short-term actions: Develop a detailed plan to reduce inflationary impact with reference to the timing and phasing-in of price increases, ensuring the availability of key goods and consumer staples, and reducing simultaneous government expenditure on other programs as possible. Further investigate the impacts and potential mitigation measures for key groups affected by diesel price increases, and how subsidy savings could be redirected to them within the administrative system. Also, investigate compensating poor members of the population for the indirect effects of price increases. Implement these measures if deemed necessary.
	Medium-term action: Further investigate and implement mitigation measures if deemed necessary.
	Long-term action: Prepare structural mechanisms to reduce the impacts of subsidy reform, for example, energy-saving options and retraining the labour force that will be most affected by the reform (for example, freight transporters, farmers and fishermen).

8. Why reform domestic LPG and PDS kerosene subsidies?

The benefits of subsidies for LPG cylinders largely go to upper-income, urban households because they consume more LPG. The increasing number of double connections (where households do not surrender their LPG cylinders once connected to piped natural gas [PNG]) is increasing the diversion of subsidized LPG for commercial use.

A large volume of subsidized kerosene—over 37 per cent, according to a NCAER study—is diverted to unintended recipients, either for adulterating diesel or selling on the open market. Initial reports from a pilot study in Alwar, Rajasthan, show that replacing PDS kerosene has resulted in savings of between 60 to 80 per cent.



9. What should the government do to reform these subsidies?

These are the main recommendations from our research:

Domestic LPG subsidy	Reform objective: Phase out LPG subsidies
	Short-term action: Small price increase for LPG cylinders in 2012.
	Medium-term action: Infrastructure needed should be put in place so that a cap of eight LPG cylinders per household can be introduced for the calendar year 2013. Develop a roadmap for increasing LPG retail prices and phasing out subsidies (e.g., over a 3-5 year period).
	Long-term action: Implement complete phase-out of LPG subsidies. Provide direct support to lower-income households to transition to cleaner and more efficient cooking fuels.
PDS Kerosene	Reform objective: Replace kerosene subsidies with a direct, unconditional targeted cash transfer for low-income households
	Short-term action: Small price increase for PDS kerosene in 2012. Continue to implement and evaluate pilot projects in more states.
	Medium- to long-term action: Implement a phased transition from PDS kerosene to direct transfers for low-income households, rolling out on a state-by-state basis.
Cash transfers	Reform objective: Develop and implement an unconditional, targeted cash transfer scheme to support the reform of fuel subsidies (includes replacing kerosene subsidies, mitigating the indirect effects of diesel price rises, and supporting low-income households to transition to cleaner, more efficient fuels.)
	Short-term action: Evaluate existing pilot projects and undertake new pilot projects in states where the PDS is underperforming. Pilot studies should be used to test the design and implementation of a cash transfer scheme on different beneficiaries, including in rural/urban areas, poor/middle-income groups and connected/remote areas, and over a period of at least one year to test seasonal variations in fuel demand and price fluctuations within the economy. These programs should be led and administered by district-level authorities, in partnership with the banking sector and the National Informatics Centre (the government's information and communications technology organization). Information and assessments of the pilot projects, including a cost-benefit analysis of national roll-out of a cash transfer scheme, should be made publicly available.
	Medium- to longer-term action: Develop and implement the policy framework for a cash transfer including: <ul style="list-style-type: none"> • Identification and targeting of beneficiaries: creating a unified database of below poverty level (BPL) and Antyodaya Anna Yojana (AAY) households; improving BPL survey methodology; considering inclusion of lower-middle-income groups in early stages to reduce political barriers to reform. • Size and frequency of payments: determine size of payments, for example, redistributing 80 per cent of the kerosene subsidy and under-recovery to all BPL households could provide a direct transfer of INR200 per month; payments should be linked to inflation rates. • Delivery mechanism: continue to increase financial inclusion; plan for regular and timely payments (payments in advance of fuel price rises will cushion negative impacts and help increase popularity of the reforms). • Monitoring and evaluation plans: plan for rapid assessments at key stages of implementation; engage stakeholder participation (e.g., local authorities such as the Panchayati Raj Institutions); refine targeting and delivery mechanisms over time.

10. Where can I learn more?

All of these reports and more, including *A Citizens' Guide to Energy Subsidies in India*, can be found on IISD-GSI's website: www.iisd.org/gsi/fuel-subsidies-india



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About GSI

GSI is an initiative of the International Institute for Sustainable Development (IISD). GSI puts a spotlight on subsidies—transfers of public money to private interests—and how they impact efforts to put the world economy on a path toward sustainable development. In cooperation with a growing international network of research and media partners, GSI seeks to lay bare just what good or harm public subsidies are doing; to encourage public debate and awareness of the options that are available for reform; and to provide policy-makers with the tools they need to secure sustainable outcomes for our societies and our planet.

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