Developing effective reform strategies: safety nets to protect poor and vulnerable groups from the negative impacts of reform

Increasing the Momentum of Fossil–Fuel Subsidy Reform

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The World Bank
Universal energy price subsidies almost always benefit high income households more than the poor and thus the distribution of benefits is typically regressive.

- The typical finding is that the bottom 40 percent of the income distribution receives only 15–20 percent of the fuel subsidies.
- Social safety nets are much more efficient and equitable: out of 24 countries surveyed in the period 2005–2008, 16 were transferring more than 50 percent of the funds to the poorest 25% of the population.

Income groups differ greatly in their fuel consumption patterns, and the distributional impact of the subsidies is not the same for all types of fuels.

- Subsidies on diesel and gasoline are particularly regressive, as these fuels are used primarily for private transport. Subsidies for kerosene and LPG are generally less regressive or even neutral, as these fuels are used by the poor for cooking, and for lighting in rural areas.

The proportional impact of subsidy removal can be greatest for the poor, even though the rich receive most of the total value of the subsidy.

- Results from PSIA: in Yemen, removal of petroleum subsidies would increase poverty by 8 percentage points; in Morocco this effect was estimated at about 5 percentage points; and in Egypt by 4.5 percentage points (almost 3 million people).
The Effect of Subsidy Removal on Households

- Subsidy incidence, substitutability and materiality determine the scale of impact
- The increase in the cost of living caused by knock-on effects of higher energy prices onto other prices
- Welfare implications from shifts in energy sources as a result of a change in relative prices
- The macroeconomic effects (including on employment and wages) caused by the shift in resource allocation
- Impacts on the government budget and changes in allocation of fiscal resources associated with a package of reform.
## Example of PSIA results

<table>
<thead>
<tr>
<th>Country</th>
<th>Energy Subsector</th>
<th>Effect on real income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>For the poorest 20%</td>
</tr>
<tr>
<td>Armenia</td>
<td>Utilities</td>
<td>- 9%</td>
</tr>
<tr>
<td>Bolivia</td>
<td>Hydrocarbon derivatives</td>
<td>- 5.4%</td>
</tr>
<tr>
<td>Egypt, Arab Rep. of</td>
<td>Fuel, Kerosene, Gas, LPG</td>
<td>- 7.7%</td>
</tr>
<tr>
<td>Ghana</td>
<td>Petrol, Kerosene, LPG</td>
<td>- 9.1%</td>
</tr>
<tr>
<td>Jordan</td>
<td>Fuel</td>
<td>- 5.4%</td>
</tr>
<tr>
<td>Mali</td>
<td>Gasoline, Diesel and Kerosene</td>
<td>- 1.8%</td>
</tr>
<tr>
<td>Moldova</td>
<td>Electricity, Central Heat, Central Gas, LPG</td>
<td>From -2.2 to-6.9%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>Fuel</td>
<td>- 2.9%</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>Electricity</td>
<td>- 16%</td>
</tr>
</tbody>
</table>

Subsidies and suggestions For the g–20 initiative
IEA, OPEC, OECD World bank Joint report, 2010
Cash transfers: feasible alternative

- Scale of impact on households is below typical transfer generosity (10–20% of consumption for recipients)
- Cash transfer replacing the subsidy will improve the distribution
- Costs are also bearable for those who are likely to be excluded from compensation schemes
- But ...
  - Middle class may resist if excluded from compensation (main political economy challenge)
  - Subsidies (or abusing the current system) may generate concentrated private interests while public awareness about the cost of subsidies is typically low (second political economy challenge)
  - Replacing them with transfers is often difficult:
    - Existing cash transfers have low coverage (it means one needs to build new system from scratch)
    - Most transfer schemes imply flat benefit amounts that do not reflect the actual (differentiated) effects of energy prices to different households
    - There is low trust in the Government’s promises to reallocate spending from subsidies to social sectors
    - Can provoke unrest especially where government enjoys little public support
Rationalizing and phase out inefficient fossil fuel subsidies that encourage wasteful consumption requires

Addressing Political Economy Constraints:

- Overcoming the key implementation challenges,
- By removing Internal Resistance for Reforms

Addressing Equity Issues

- Identifying Innovative Options for Targeting providing targeted assistance to poor household

G20 Fossil Fuel Subsidies Report
“Gradual” approach to reform:
- Attempts to “target” the subsidy in a more socially acceptable way (e.g. using self-selection)
- Price reform by stealth (food, but also LPG)
- Attempts to rationing of subsidized goods (vouchers, ration cards, smart cards)

Backtracking of reform
- Often energy pricing reforms shy away from automatic adjustments to market prices, leaving discretionary power to authorities and potential to break the link to international prices and perpetuating the subsidy

Recent activation of reforms agenda
- MENA: 3 years ago the discussion was stalled, since then Egypt, Morocco, Tunisia, Iran, Syria and Yemen have announced plans for reform or launched them
- The agenda is also moving in sub-Saharan Africa
- Eastern Europe is continuing mostly gradual reforms (through pricing of services from utilities)
- LAC has recently made a lot of progress

Difficulties in developing credible strategies leads to:
# Case studies of energy subsidies reform by the World Bank

<table>
<thead>
<tr>
<th>Region</th>
<th>AFR</th>
<th>ECA</th>
<th>EAP</th>
<th>LAC</th>
<th>MENA</th>
<th>SAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Income</td>
<td>Ghana</td>
<td>Nigeria</td>
<td></td>
<td></td>
<td>Yemen</td>
<td></td>
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<tr>
<td>Lower-Middle Income</td>
<td>Armenia</td>
<td>Azerbaijan</td>
<td>Moldova</td>
<td>Indonesia</td>
<td>Egypt</td>
<td>Iran</td>
</tr>
<tr>
<td>Upper-Middle Income</td>
<td>BiH</td>
<td>Turkey</td>
<td></td>
<td>Malaysia</td>
<td>Argentina</td>
<td>Dominican Rep.</td>
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<tr>
<td>High Income non OECD</td>
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<td>Chile</td>
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From joint G20 report
Several options to address the negative impact on the poor/near poor:

- It is possible to set up a new safety net cash transfer program in a matter of months
  - Indonesia BLT, Morocco CCT
- It is possible to use the existing safety net, or reshape/strengthen / consolidate programs
  - Armenia Family Poverty Benefit, Brazil Auxilio Gas/ Bolsa Familia
- Sometimes it is possible to re-target the subsidies themselves, possible use of technological innovations
  - Malaysia smart cards (but very limited success so far)
- It is necessary to combine targeted pro-poor and broader measures broadly aimed at “vulnerable”
  - Jordan’s public sector wage hikes (but costly limiting fiscal savings)
Phasing out subsidies and replacing them with more direct transfers can work. The choice of program design features and institutional arrangements should be consistent with the administrative context and capacity in the country.

Use of safety nets to compensate the poor could be not enough at the time of reform. Complementary measures to compensate the near-poor or middle income groups were used in most of the cases.

But to be manageable / politically justifiable targeting compensation is unavoidable.

The design and implementation of targeted transfers can be challenging.

- Quite wide range of targeting mechanisms: Means test, proxy–means test, categorical, geographic, sectoral, etc. Most programs don’t use a single method, but a combination of methods.
- Administrative capacity requirements and performance vary across targeting methods: Means test, proxy–means test perform better but also require a higher administrative capacity. During recent years proxy–means test started to be implemented successfully in lower income countries (sometimes in combination with geographic targeting).
- Leakages to the non-poor (errors of inclusion) can never be totally eliminated, but targeting is needed to minimize leakages and ensure that the poor are compensated for a reasonable portion of their losses.
- Full coverage of the poor is difficult to achieve. Under–coverage of the poor (errors of exclusion) is likely to happen (as shown by Indonesia, Armenia, and others).
- Vulnerable to low-level corruption of the administration

Household take-up depends on good public information service.
Key Lessons from International Experience – 2

- Political willpower is the main pre-condition.
  - The credibility of the government’s plan to compensate vulnerable groups is important for public acceptance, as is also its plan to use the funds freed from subsidy reform for social and economic benefits.

- Communication is essential part of the reform
  - Explaining the need for change and the compensating measures that will be taken, before the changes are introduced, reduces uncertainty and can persuade the public that the effects will not be as deleterious as might otherwise be feared.
  - Increasing the availability and transparency of energy subsidy data is essential in overcoming some of the challenges related to reform.
  - Using a household expenditure survey to provide information on those benefiting from the existing subsidy and the impacts on the various groups from subsidy removal provides an important reference for assessing the adequacy of compensation measures.
  - Compensation to poor needs to be visible and sufficiently material to offset a good part of the adverse effect in the early years of the change.

- PSIA to inform reform is an indispensable tool (careful assessment of who will be affected and by how much).
Consideration should be given to alternative policy tools to protect the poor, including cash and non-cash transfers, lifeline rates, and volume differentiated tariffs, and subsidies to investment in assets to improve energy efficiency at household level.

The package of measures should go beyond price/compensation logic into quality dimensions.

- E.g. in the power sector where the quality of service may be low, possibly because of the financing difficulties caused by subsidies, improving service ahead of increasing changes lends credibility and improves willingness to pay. Steps such as improving bill collection and making the metering system more effective may allow other changes to be introduced that could be linked to the general tariff increases required to reduce the fiscal burden further.
Case Studies
Indonesia 2005 Fuel Subsidy Reform

- Fiscal Sustainability of Policy
  - Building macro-pressures in 2005
  - 1998 increases in fuel prices were associated with political crisis/regime change

- Fuel Subsidy Was Pro-Rich
  - Incidence Analysis through National Socio-Economic Household Survey (SUSENAS)
  - 60% to top 40%

- Notable Fiscal Leakages due to fuel smuggling abroad
  - Reports by Supreme Audit Board (BPK) on order of USD 0.9 billion

- But poverty impacts of fuel subsidy reform still significant
  - Pressures to rapidly design & implement massive unconditional cash transfer program (UCTP), i.e., all bottom 3 deciles
  - Governance & Capacity Issues
    - History of challenges, e.g., social safety net programs
Fuel subsidies were taking funding away from pro-poor sectors

Source: APBN 2004 and APBDI+II realized budgets for 2003 consolidated.
Moreover, they primarily benefited the non-poor

Source: SUSENAS 2003
But Still Significant Impacts on Poor of Fuel Subsidy Removal

Figure 3  Impact of October 1, 2005 Fuel Price Hike by Decile

As % of average per capita spending in decile

- Inflation
- Transportation
- Diesel
- Gasoline
- Kerosene
Policy Actions

- Government Communicated
  - Media & public dialogue
  - Analytical work to demonstrate pro-poorness of hikes
    - Key contributions by WB DfID supported Indopov team
  - Bank careful to take limited public profile

- Fuel Price Hikes Implemented
  - May 2005
    - 29 percent weighted average (not kerosene)
  - October 1, 2005
    - 114 percent weighted average (286 percent kerosene)

- Large Scale Rapid Compensation Program
  - Cash Transfers immediately after second price hike plus other social programs
Fuel subsidy was reallocated to fund programs that benefit the poor

1. Social Protection: Unconditional Cash Transfer (BLT)
2. Education: Operational Aid to Schools
3. Health: Basic Health Care and Hospital Insurance Poor
4. Infrastructure: Village Infrastructure
Unconditional Cash Transfer (BLT)

- Cash transfer to 15.5 million poor and near-poor families to compensate them for inflationary effects of the fuel price increase
- Quarterly payment for 1 year period (Oct 2005 to Sep 2006)
- Main design features
  - Rp100,000 ($10) per month (equivalent to about 17% of per capita consumption of the poorest decile)
  - Disbursement to 15.5 million families, equal to around 62 million people, or 30% of the population
  - Designed and implemented in 3 months
- Implemented through Post Offices
  - Averted going directly through government bureaucracy
- Rapid External Appraisal
  - Two NGOs/research institutes
  - Significant media scrutiny
  - Not perfect, but working
- Targeting – use of geographic targeting (small area poverty map) and proxy means testing
- Loose targeting – Given the concentration of people just above the poverty line, the government decided to target the cash transfer not just to the 16% who fall under the poverty line, but to the near poor also. The cash transfer program thus reached 19 million poor and near poor households, or 28% of the population
QUALITATIVE ASSESSMENTS
1. HEALTH  
2. EDUCATION  
3. VILLAGE INFRASTRUCTURE

Household Level Survey  
- Susenas  
  Focus on Health, Education and UCT

Household and Facility Level Survey  
- GDS

Quantitative and Qualitative Results Combined

Line Ministries Program Monitoring Reports
Follow up and other countries

- Indonesia: the authorities set a goal to reduce spending on energy subsidies by 40% by 2013 and fully eliminate subsidies by 2014.

- Malaysia: the authorities announced reductions in subsidies for petrol, diesel and LPG.

- India: the authorities abolished gasoline price regulation in June 2010 and plans to do the same for diesel. The price of natural gas more than doubled in May 2010.

- China: natural gas prices rose by 25% in May 2010. Plans have been made to remove preferential power tariffs for energy-intensive industries.
A pivotal moment in Armenia’s electricity sector reform was a tariff increase in January 1999:
- the increase was the most radical to date: it was the biggest, and it was a shift from an increasing block tariff to a single rate, removing the subsidy regime.

To minimize the impact on the poor:
- Reshaped the safety net, and introduced the Family Poverty Benefit (FPB), targeted at the 28 percent of households living below the poverty line.
- To target the FPB, it was decided to use the so-called “Paros” household poverty and vulnerability scoring formula, which had been used since 1994 to target humanitarian assistance.
Armenia Electricity Sector Reform (2)

- Only 55 percent of the poor received the cash transfer, meaning that 45 percent of poor households were faced with a 47 percent increase in their electricity tariffs and no mitigating cash transfers.

- FPB coverage among the bottom consumption decile improved to 61 percent by 2006. The FPB program is well targeted. In 2006, approximately 45 and 55 percent of Family Poverty Benefit resources went to the poorest 10 and 20 percent of households, respectively.
Case of MENA
Why for so long MENA countries have not reformed?

- Energy producers/ food importers
- Previous attempts (1980s–90s) to reform subsidies have led to violent protests and bloodshed
- Latest episodes of reform were repelled by public unrest (Yemen, Morocco)
Key obstacle
Key excuse for not to touch it
Key opportunity

Most MENA countries have not had existing safety net programs in place onto which a policy response could be grafted.
Citizens and interest groups often support the retention of subsidies for a range of reasons that include:

- Self interest – individuals or households benefit directly from subsidies
- Perceptions of inequity – benefits of a country’s growth seen as accruing to only a (small) minority of citizens
- Sense of entitlement – often strengthened by the longevity of subsidy regimes
- Concerns over citizens’ living standards and the structure and level of compensation – wage levels may be low
- Inability to perceive how alternative systems of social protection may work
- Changes to subsidy regimes sometimes perceived to be at the behest of outside interests / organisations
- Lack of legitimacy and trust between governments and citizens
Prior to 2003, Jordan received cheap oil from Iraq. When it ended subsidy reached 6% of GDP in 2005.

In 2005 a plan has been developed for eliminating fuel subsidies. There was a major price increase in 2006 followed by a price adjustment in 2008 (doubling for electricity, 50% for LPG and 70% for diesel) eliminating energy subsidies.

The social risk mitigation package included:

- Compensations through wage increases (Additional JD50 per month for civil servants, military and security personnel whose (base) pay is less than JD300. Additional JD45 per month for civil servants, military and security personnel whose (base) pay is more than JD300.)
- Increase in pensions
- Increase in social assistance payments (Additional JD 10 per family member per month for NAF beneficiaries, monthly aid will increase from JD26 to JD36 per family member with a maximum of JD 180 for a five-member family.)
- Stepping up the National aid fund capacity to cover and target the poor (move from a categorical targeting to a proxy means test). The new targeting includes the working poor, the unemployed and the able bodied who are not participating in the labor force.

Compensating measures cost 1/3 to ½ what the fuel subsidies cost for a year.

But there is a widespread concern that overly generous compensation offered to civil servants were not targeted and were not warranted by the situation, SP reform is lagging behind the schedule.

Food subsidies were stepped up in the wake of food crisis and are now among the largest in MENA.
Emerging good practice: Morocco

- Gradual approach
  - Information campaign
  - Scale up or launch of new social programs
    - In education, reproductive health, health insurance
    - Focus on rural area, where 70% of poor in Morocco live.
    - These are regarded as valuable interventions on their own right
  - Careful planning and consultations with industrial groups, retailers.
  - Some subsidies are not eliminated – the objective is to cap it at certain % of GDP and make the system flexible enough to absorb and pass-through price shocks.
A comprehensive subsidy removal bill was passed in parliament in January 2010. The government’s plans to implement the phasing out of subsidies starting from October 2010 and continue through March 2015. A significant portion of the resources saved under the reform program (about 50 percent) will be transferred to low-income families as flat cash payment and expanded social services (housing, health). With the cost of subsidies as high as $100 billion, the government aims also to achieve savings in the annual budget and reduce domestic fuel demand and the vulnerability to international sanctions.

Since the plan announcement earlier this year, the number of applicants and registered households has escalated dramatically (to 80% of population), raising concerns among the authorities that the subsidy reform will result in a net budgetary losses. The government now needs advice on how to maintain the targeted household compensations within the intended limits.

Despite the media campaign to soften opposition to the reforms and the promise of steps to take further measures to strengthen the social safety nets, the reform plan is not expected to be implemented with ease in the months ahead.