



# Social Protection and Climate Change

## How has the removal of fuel subsidies in Egypt affected its people and the climate?

In Egypt, spending on fuel subsidies was a drain on public finances with benefits skewing toward the rich and exacerbating inequalities. Subsidies were reduced to balance the budget and target wasteful consumption and emissions. Prices increased, and a part of the government savings financed new transfers for the vulnerable.

1

### **Fossil fuel subsidies provide some protection, with considerable waste.**

As a general rule, the social welfare provided by these subsidies skews towards the rich who consume more fuel and capture more of their value. Subsidies also keep prices artificially low, encouraging waste and even the black-market sale of fuel. Increasingly, countries are claiming both the fiscal and environmental benefits from reforms.

2

### **In 2013, Egypt spent more than a fifth of its budget on fuel subsidies.**

The fiscal burden of subsidies in Egypt was particularly acute. As it had with bread and other commodities, the Government sought to remove fuel subsidies through a gradual rationing regime. Instead, it raised prices dramatically in recent years, and paired the increases with new measures to protect the poor who would be most negatively affected.

3

### **Egypt has traded in fuel subsidies for two new cash assistance schemes.**

With some of the savings gained from the subsidy removal, the government introduced two new cash transfer programmes to offset impacts of higher fuel prices. One provides assistance to poorer households with additional benefits available for children, and another provides social pensions for those with disabilities or aged 65 and above.

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### **More needs to be known about net impacts on vulnerable households.**

The government is no doubt keen to tap into the savings from reform and to orient Egypt toward more environment-friendly policies and practices. However, more information about the net effect on households of the price hikes, on one hand, and the cash assistance, on the other, needs to be known in order to evaluate whether these new measures are adequately offsetting.

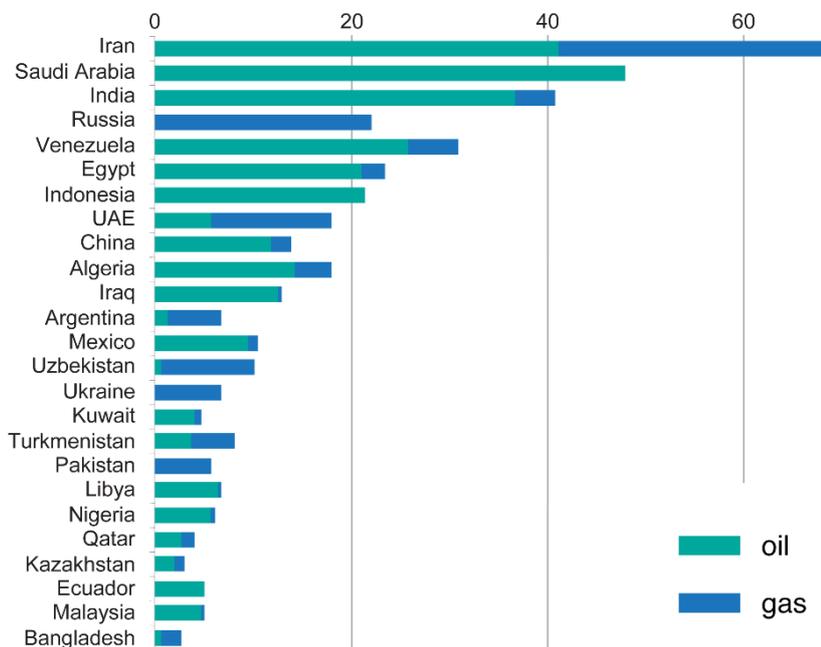
## 1

# Subsidies provide poor protection.

Fossil-fuel consumption subsidies totalled US\$ 548 billion worldwide in 2013. While lower oil prices have contributed to reducing this figure in recent years, fuel subsidies remain prominent in many countries around the world.

## Subsidies are a common feature in many countries as a way to distribute state revenues and stimulate the economy.

Oil and gas subsidy expenditure by country, 2013 (in billions US\$)



Source: IAE World Energy Outlook 2014

Fossil fuel subsidies are often implemented as a form of public and corporate welfare, ensuring affordable energy access for households and stimulating certain, often energy-intensive, sectors of the national economy. As for their protective function, they are one of the costliest and least effective interventions, with large amounts of the public budget dedicated to offsetting global price fluctuations and most of the benefits going to higher earners who consume more fuel and, thereby, capture more of the subsidy value.

Despite their high cost and limited impact on poverty, fuel subsidies have proven difficult to remove once in place, not only due to resistance

from those enjoying the lopsided benefits, but from large segments of the poorer population, as well. While it is true that reforms often reduce benefit capture by the rich, many poor and near-poor families actually stand to lose the most from subsidy removal when considering the impact of price increases as a share of their total income. To address this, subsidy removal, whether gradual or accelerated, is often paired with new or expanded social protection programmes for those likely to be most adversely affected.

The transition from price maintenance to direct cash assistance can yield considerable savings for public budgets but also positive environmental impacts, as well. Subsidy removal reduces wasteful consumption from artificially low prices, and lowers overall consumption to reduce greenhouse gas emissions (GHG) that scientists say is the primary driver behind global climate change. The IMF estimates that by removing subsidies for petroleum products, natural gas and coal, countries could cut global carbon dioxide (CO<sub>2</sub>) emissions by 13 per cent. In fact, the link with CO<sub>2</sub> reduction is clear enough that many countries have included subsidy reform efforts as part of their Intended Nationally Determined Contributions (INDCs) submitted to the 21st session of the Conference of the Parties (COP21) to the United Nations Framework

## WHAT YOU NEED TO KNOW

- *US\$ 548 billion was spent on state-funded fossil fuel subsidies in 2013, globally.*
- *The rich often capture more benefits from state-funded price subsidies, as they consume more fuel and related products.*
- *Relative to their income, fuel price increases hit the poor the hardest, so social protection schemes are often twinned with fuel subsidy reforms to offset welfare loss.*
- *Elimination of some subsidies could also cut global CO<sub>2</sub> emissions by 13 per cent.*

Convention on Climate Change (UNFCCC) in December 2015 in Paris.<sup>1</sup>

While there is a clear push to reap both the fiscal and environmental benefits of subsidy reform, there is also a need to consider the negative economic and social effects that accompany some of these policies. In the case of Egypt, the Government requested technical assistance from development partners to help design and implement social protection schemes that would accompany continued subsidy roll-backs in 2015 for gasoline and diesel fuel consumption.

## 2 Lifting a fiscal burden in Egypt.

Egypt is a lower-middle income country of 90 million people, over a quarter of which live in poverty according to national measures. Fossil fuel subsidies have been a mainstay since the 1950s, intended to promote stability and reduce income disparities. Since then, they have grown considerably. As with the case of subsidies elsewhere, in Egypt they had little observable impact on poverty, and diverted welfare resources to higher-income groups rather than those most in need. In 2013, spending on fuel subsidies represented more than a fifth of the public expenditure, with more than half of those monies going to the top two quintiles—and with roughly three quarters going to the top two quintiles when considering urban areas alone.<sup>2</sup>

While the bulk of direct subsidies are captured by top earners, the bottom quintiles do, however, benefit from the indirect subsidy—the lower cost of goods produced using subsidized fuel. But even these tend to skew toward the better-off, whose greater purchasing power allows them to consume more

generally and, thereby, capture more of the indirect benefits, as well.

Still, lifting of subsidies has greater negative impacts upon poorer households in relative terms. In Egypt, according to the results of a 2005 household survey, energy subsidies represented over 12 per cent of household expenditure for the bottom quintile, but only 8.6 per cent for the top quintile.<sup>3</sup> It is also assumed that poorer households have fewer opportunities for substitution, making them more dependent upon the subsidy scheme than their counterparts in higher income categories. For example, an upgrade to more energy-efficient cookers that would require less fuel to run can be prohibitively expensive for low-income households.

Beyond the regressive nature of the scheme and negative environmental impacts of maintaining fossil fuels at well below market price, there is a lucrative black market on which subsidized gasoline in Egypt is bought and then transferred for sale in neighbouring countries where the cost of fuel is much higher. This increased pressure on the public budget even further, and helped make the case against the subsidy for certain types of gasoline.

## Subsidy reform in Indonesia

The Indonesian government decided to reform its fuel subsidies system beginning in 1998, and has raised prices repeatedly since, with single increases occurring between 30 to 100 per cent. Coupled with each increase were social protection measures, either introduced for the first time or expanded, to help households cope with the anticipated, negative impacts on their welfare.

Having introduced a host of regular welfare programmes beginning in 1998, the government complemented these following further subsidy cuts in 2005, 2008 and 2013 with temporary, unconditional cash transfers targeted to low-income households. Eventually dubbed *Bantuan Langsung Sementara Masyarakat*, or “temporary direct cash assistance” in 2013, the government has aimed to improve targeting by using a unified registry employed by its regular programmes. With this move, it hopes to more effectively reach vulnerable households with assistance to offset cost of living increases, including those due to continued fuel subsidy reform.

<sup>1</sup> Morocco and Egypt, among others.

<sup>2</sup> World Bank, ESMAP, 2009, “Consulting Services for an Energy Pricing Strategy: Final Report,” p. 3

<sup>3</sup> Vagliasindi, M., “Arab Republic of Egypt” in *Implementing Energy Subsidy Reforms: Evidence from Developing Countries*, World Bank Publications, Washington, 2009, p. 203

Egypt is no stranger to subsidy reform. In 2014, the Government succeeded in a hard-fought battle over bread subsidies, which had sparked widespread protest in the past. The program was long considered to suffer from waste and fraud, so widely used that Egypt had become the world's largest net importer of wheat. In this case, a gradual phase out of the subsidy was sought through rationing.

To do this, the Government introduced a smart card system allowing each cardholder to purchase a limited number of loaves per day at the subsidized rate. Each loaf sold by a bakery at the subsidized rate is now partially reimbursed by the Government, maintaining a desired amount of affordable bread per individual or household and making it more difficult to game the system.

The reformed system has been rolled out in 17 governorates in which bread consumption is estimated to have fallen by between 15 and 35 per cent. Once nationwide, the new system is anticipated by some Government officials to cut Egypt's wheat import bills by 20 to 30 per cent. The reforms took place with little to no outward opposition, as there had been during previous reform attempts. On the heels of this success, a similar system of ration cards was to be implemented for the purchase of gasoline.

The Government announced its intention to ration the fuel purchased at subsidized prices, however,

this was never done, possibly due to concerns about abuse of the smart card system, including the black market sale of the available units to which cardholders are entitled or of the cards themselves. Unlike bread, with a comparatively low per-unit value and limited shelf life, fuel can be transported and stored for a long time while retaining its value in locations where fuel is not subsidized.

All the same, despite not introducing the rationing system as announced, the price of fuel in Egypt has increased dramatically over the last several years, from US\$ 0.45 per litre in 2012 to US\$ 0.88 per litre in 2014. Along with this increase, two twin social programmes were implemented to offset the increase for those expected to be the hardest hit.

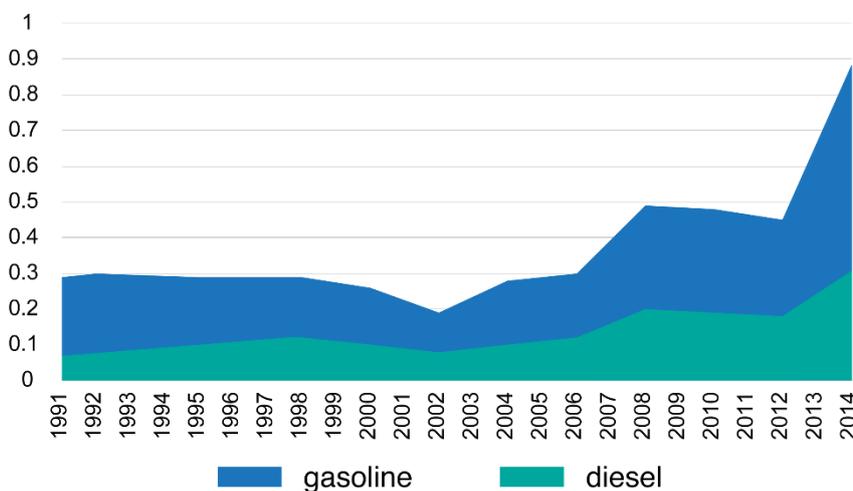
### 3 A greener, more progressive budget.

The Egyptian government had suggested it would set aside between ten and 15 per cent of the estimated savings from structural subsidy reforms for new, targeted social investments to offset impacts of the subsidy removal for poorer households. With this goal in mind, the Government launched in June 2015 its corresponding twin cash transfer programs called Takaful and Karama, or solidarity and dignity.

The Takaful program is a means-tested, conditional, flat cash transfer with variable top-ups based upon the number of children in a given household and their age. The programme uses a proxy-means test, taking into account household assets such as the number of rooms in the house itself, whether there is a washing machine or refrigerator and similar measures. A qualifying family receives EGP 325 (US\$ 40.5) per month, while the presence of a child of primary-school age adds a supplement of EGP 60 (US\$ 7.5), one of secondary-school

#### Egypt opted for a rapid reduction in subsidies, raising fuel prices sharply and requiring swift implementation of offsetting measures.

Pump prices for gasoline and diesel fuel in Egypt (in US\$ per liter)



Source: World Development Indicators using International Energy Agency (IEA) data, gaps between data points have been bypassed.

**With savings from the overhaul of fuel subsidies, Egypt introduced two new cash transfer schemes, including a social pension.**

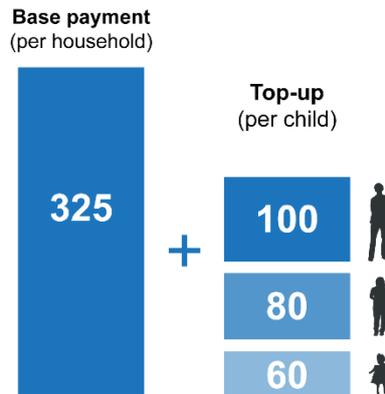
Transfer amounts of the Takaful and Karama schemes (in Egyptian pounds)

age a supplement of EGP 80 (US\$10), or preparatory-school age a supplement of EGP 100 (US\$ 12.5) per child. Compliance such as checks-ups for children and appropriate vaccinations is required, as well as proof of school enrolment and a minimum attendance rate of 80 per cent for qualifying children.

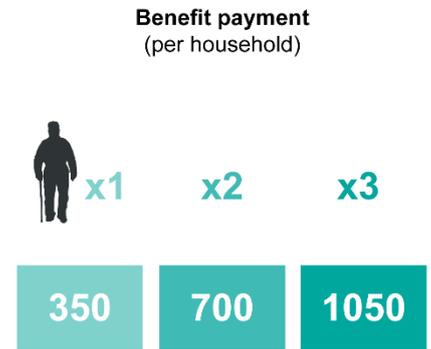
Meanwhile, the Karama programme is an unconditional categorical cash transfer for those aged 65 and above and for persons living with disabilities. Disabilities are validated by a process led by the Ministry of Health. A qualifying individual in a household receives a monthly benefit of EGP 350 (US\$ 43.5), while two individuals in a household provides EGP 700 (US\$ 87) and three—the maximum per family—provides EGP 1,050 (US\$ 131) per household.

The twin programmes were partially rolled out in June, with piloting first taking place in the governorates of Assiut (Asyut) and Sohag. Households wishing to enrol must provide national identification cards and birth certificates (parents and children) for all qualifying individuals, as well as an electricity bill from the enrolling household. Registration at designated centres is facilitated by the use of computerized, handheld tablets, operated by staff of the Ministry of Social Solidarity charged with implementing the programmes.

**Takaful**



**Karama**



Source: Presentation of the Arab Republic of Egypt, Ministry of Social Solidarity, November 2014.

person per day. Meanwhile, Karama provides an old-age pension benefit of US\$ 5.70 PPP a day on average.

But to examine the more immediate efficacy of these new protections, measures must take into account the higher prices for fuel and associated products beneficiaries are confronted with when trying to meet daily needs.

In designs submitted to officials for determining the appropriate value of the transfers, benefit levels were calculated using a principle of leaving the beneficiaries “no worse off” than they were under the subsidy regime. And by using a flat transfer amount, rather than progressively smaller transfers as a function of higher income levels, many could even be better off than before. This means that Takaful and Karama could constitute an expansion of social protection in the country, rather than simply a transitional offsetting measure during the subsidy removal process. Additional analysis of

## 4 Examining impacts on people and planet.

Barring subsidies, Egypt has not traditionally had social protection provisions that would serve as an effective protection mechanism against poverty. The subsidy reform effort presents the country with an opportunity to begin establishing a nationally-defined social protection floor.

In the governorates where it is active, Takaful provides a family of five with an equivalent of around US\$ 10 PPP a day, or US\$ 2 PPP per

**WHAT YOU NEED TO KNOW**

- *Fossil fuels subsidies totalled over 20 per cent of public expenditure in Egypt in 2013.*
- *The Government abandoned a plan for rationing in favour of accelerated subsidy removal, with some targeted assistance.*
- *More analysis is needed to determine the impact on CO<sub>2</sub> emissions and whether cash benefits are fully, or only partially, mitigating the effects of price increases.*

household consumption and income data would be necessary to determine whether cash benefits are fully, or only partially, mitigating the effects of price increases, or if they provide protection further.

Together with the United Nations Environmental Programme, the Government of Egypt has outlined a series of environmental measures to combat the effects of climate change by shrinking its own carbon footprint. The benefits of subsidy removal efforts, together with agricultural and water-use efficiency initiatives, could reduce CO<sub>2</sub> emissions from within Egypt by 13 per cent, according to officials. While the subsidy reform project was largely conceived to deal with a bloated public budget, this primarily fiscal policy is also favoured by many policymakers for its potential to contribute to a reduction in GHG emissions. As such, Egypt is pairing the subsidy removal not only with new social programs, but also with significant investments in renewable energy sources, including solar and wind infrastructure designed to increase the renewable energy share within Egypt's overall energy mix.

In Paris, governments recently sought to outline protections for the environment and for people as countries make the move towards more sustainable paths of development. While principles of a “just transition” for workers adversely affected in the move as well as of “loss and damage” resulting from adverse events clearly attributed to climate change are present in the Paris Agreement, mentions of other transitional needs are absent. For example, the potential hardship created by an elimination of subsidies, and particularly by an accelerated elimination, is considerable. And yet, only informal principles or recommendations exist for coupling these efforts with meaningful social protection measures.

New tools for measuring the welfare effects of climate-related policies are needed to facilitate the transition to greener societies in the spirit of

## ILO Guidelines for a “just transition”

In October 2015, a tripartite meeting of experts adopted a series of guidelines to ensure a just—or socially and economically equitable—transition towards greener economies and societies. Among the key policy areas covered in the guidelines is social protection. In particular, they mention, “when designing and reviewing social protection in the context of the adoption of clean energy measures, consider compensating low income households which spend a significantly higher proportion of their income on energy and on goods and services that have large amounts of energy embedded in them.”

These guidelines were adopted by the ILO's Governing Body in November 2015. The case of Egypt documented in this brief provides an example to illustrate how the ILO guidelines can be applied and social protection policies used to ensure a “just transition.”

international agreements. Clearer guidance on offsetting measures, whether a “no-worse-off” or other method for benefit calculation, for example, could also be considered, if not in a global normative instrument then simply in the business practices of those providing assistance to governments seeking greener, more sustainable development paths.

### SOURCES

- World Bank, ESMAP, 2009, “Consulting Services for an Energy Pricing Strategy: Final Report”
- UNEP, 2015 “Green Economy Scoping Study”
- Clark K., IISD-GSI, 2014, “Energy Subsidy Country Updated: Assessment Egypt's Energy Subsidy Reforms”
- Perdana, A., “The Future of Social Welfare Programs in Indonesia: From Fossil-Fuel Subsidies to Better Social Protection,” International Institute for Sustainable Development (IISD), Briefing Note, March 2014
- Al-Monitor, 2015, “Egypt government to require use of fuel subsidy cards,” June 7, 2015
- Vagliasindi, M. “Arab Republic of Egypt” in *Implementing Energy Subsidy Reforms: Evidence from Developing Countries*, World Bank Publications, Washington, 2012
- ILO, 2015, *The Decade of Adjustment: A Review of Austerity Trends 2010-2020 in 187 Countries*
- ILO, 2012, Social protection assessment based national dialogue: Towards a nationally defined social protection floor in Indonesia
- ILO, 2015, “Outcome of the Tripartite Meeting of Experts on Sustainable Development, Decent Work and Green Jobs,” Geneva, 5–9 October 2015

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