

# Delhi Water Supply & Sewerage Project

An Analysis by Parivartan

## History & Context

- ◆ 1998: Delhi Govt approaches World Bank for a loan
- ◆ World Bank provides \$ 2.5 million (about Rs 10 crores) loan for consultancy
- ◆ 2001: Price Waterhouse Coopers (PWC) appointed as consultants
- ◆ 2004: PWC submits Draft Final Report and recommends hiring of several other consultants
- ◆ GKW, Trilegal, CURE etc hired subsequently

## Analysis based on study of following documents:

- ✱ Draft Final Report 3 of Price Waterhouse Coopers
- ✱ Draft Final Report of GWK
- ✱ Reports submitted by CURE
- ✱ Part of Draft managing operator contract prepared by Trilegal
- ✱ Tariff restructuring proposal of DJB
- ✱ Material obtained from DJB's website
- ✱ Correspondence between World Bank & DJB between July 1998 to April 2001

All references to international experiences have been downloaded from the internet

## This analysis is not exhaustive because we have still not received many documents like

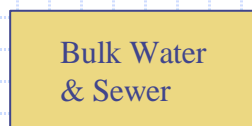
- ✱ Drafts of Bulk Water agreements, managing operator agreement, engineering consultancy agreement, works agreement to be signed between water companies and DJB
- ✱ Correspondence between DJB, World Bank and consultants between April 2001 till date
- ✱ Copy of latest study & recommendations for supplying water to the poor

## What is being proposed?

- ✦ Management of each of 21 zones of DJB to be handed over to a company
- ✦ Company will not invest any money. They will simply manage a zone. This includes distribution of water in that zone, billing, collection, grievance redressal, maintenance etc
- ✦ All DJB employees in that zone would report to that company
- ✦ Water company to receive a fixed "management fee"
- ✦ Company would be given annual targets to achieve
- ✦ Penalties to be imposed if company fails in targets, bonus if it succeeds
- ✦ Water company to supervise implementation of all capital works.

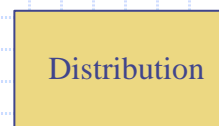
Total O & M Costs in 2003-04 (BE): Rs 534 crores

Rs 371 crores



Part A

Rs 163 crores



Part B

Water companies would handle only this

Total Revenues in 2003-04 (BE): Rs 235 crores

This is collected at Distribution end but is meant to cover entire costs of bulk water & sewage handling and distribution

Our concerns

Tariffs will go up substantially  
because....

## Three types of payments

- ◆ Management fee – to meet salaries of employees sent by companies
- ◆ Operational expenses – to run zones on day to day basis
- ◆ Capital investments – to make improvements

## Management Fee

## Management fee of Rs 5 crores per annum per zone

- ✦ To meet salaries of four experts @ \$ 24,400 (almost Rs 11 lakhs) per month per person
- ✦ Rs 105 crores for 84 experts for 21 zones
- ✦ O & M in 2003-04 for Distribution (BE) : Rs 163 crores
- ✦ Now, 65% of this would go to meet the salaries of experts
- ✦ This is 40% of total revenues of DJB (About Rs 270 crores)
- ✦ Where would the money come for operations? Naturally, to pay such huge salaries, tariffs will need to be increased steeply

### DJB's explanation:

Amount of salaries would be decided through bidding. These figures are not final

### Our concern:

These extra-ordinarily high salaries have been suggested by the World Bank consultants and have not been categorically rejected by the authorities so far.

## Operational Expenses

## Unlimited operational expenses

- Company to submit annual demands for operational expenses
- DJB has theoretical power to vet these demands – company could be free of obligations, if DJB denies/curtains these demands
- Company could seek additional funds any number of times during the year
- No upper cap prescribed

#### DJB's explanation:

Operational expenses provided to the company would not exceed the revenues collected by the company from that zone.

#### Our Concern:

- \* This is not written anywhere.
- \* Company will perform only one function whereas the revenues have to cover several functions
  - > Part A: Bulk Water & Sewage handling, which includes water & Sewage Treatment & transmission
  - > Part B: Water distribution & Internal Sewers
- \* Only Part B would be done by the company
- \* If all revenues would be given to the company, how would DJB perform Part A functions?

#### DJB's explanation:

- \* Operational expenses would be around Rs 30 crores per zone
- \* Consultants suggest Rs 25 crores per zone for the first year

#### Our concern:

- \* This gives Rs 525 crores for entire Delhi, against Rs 163 crores in 2003-04 for Part B functions
- \* If we include expenses for Part A functions also, total operational expenses would increase from around Rs 700 crores (BE 04-05) to over Rs 1100 crores.



## Our concerns:

- DJB unable to recover present level of operational expenses at Rs 700 crores
- How would it recover Rs 1100 crores?
- Revenues for the year 2004-05 (BE) : Rs 400 crores
- Tariffs will have to be increased almost 3 times to recover increase in operational expenses and to pay huge salaries.

## Capital investments

## How much Capital investment required in a zone?

- Neither known nor estimated
- Given unlimited powers to decide future investments

## Capital Investments

- Every year, company would present capital investment plans
- DJB has theoretical powers to vet it – Company could threaten adverse impact if money not provided
- DJB has to provide the money
- Company would then give out contracts, supervise implementation and certify quality and completion – DJB has neither any role nor any control over any of these processes

## In effect

- No control of DJB on
  - What to spend on?
  - How much to spend?
  - When to spend?
- DJB simply provides money
- No control of DJB on
  - Whether money was actually spent
  - Quality of work
  - Utility of work

## PWC cash flow projections wrong

- Do not account for
- ◆ Management fee
  - ◆ Engineering fee
  - ◆ Increased operational expenses
  - ◆ Increased cost of capital investments

Aren't these series of blank cheques being written by the Delhi Government?

## Our concerns

- Where are the checks and balances on expenditure?  
How are the companies accountable and to whom?
- The company will simply present wishlists.  
**Government will simply write cheques.**
- Since company not spending any money, it will have little incentive to show prudence in expenditure. Costs of operations and costs of implementing capital works would go up substantially

## Water Companies pressurize Governments, which they cannot resist

- The companies repeatedly approach governments with demands for additional funds/ renegotiation of contracts.
- Water being essential to life, governments cannot allow disruption.
- The Governments end up obliging them.

## Puerto Rican experience

- ✦ Vivendi (1996)
  - Operational deficit increased to \$ 240 million by 1999
  - To \$ 680 million by 2001.
  - Central Bank of Puerto Rico had to intervene several times with emergency funding to prevent disruption of services
  - Vivendi had to leave in 2001
- ✦ Suez in 2001
  - Promised to decrease operational deficit by \$ 250 million per annum
  - But demanded additional \$ 100 million as soon as it signed the contract
  - Suez left in 2003

Vivendi & Suez are now coming to Delhi

## PWC & World Bank recommendations

- Remove subsidies
- Full cost recovery
- De-politicize tariff by having water regulator
- Phase out cross-subsidies

Government has already accepted the first three

## Water tariffs would go up

- Almost 6 times
- This includes interest, depreciation, likely increase in operations costs and management fee.
- It does not include likely increase in interest costs on account of increased borrowings as the amounts that would be finally borrowed are not known.

## Internationally, water prices skyrocketed

- In Manila, water prices went up by **700%** within three years of privatization, when the companies had promised no increase in tariffs for the first ten years.
- In Bolivia, water prices increased by **200%** within a few weeks after water utility was handed over to the private water companies.
- Water rates went up **300%** in Nelspruit in South Africa. Connections of those who could not pay were cut off.
- Cost of new water and sewer connections rose to 450 dollars in El Alto in Bolivia, where many residents live on half-dollar per day.

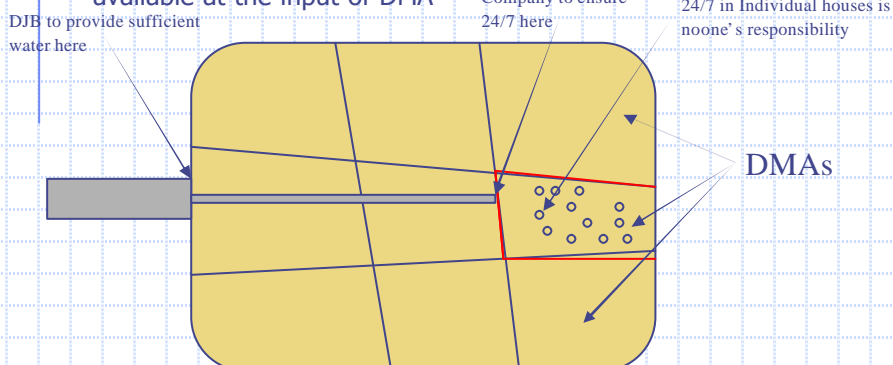
Higher tariffs but no improvement in services....

## 24/7 – A myth

- Responsibility of supplying sufficient water to each zone remains with DJB
- How much is "sufficient quantity of water" for 24/7 is not disclosed
- Does DJB have that much water?
- Government says 24/7 would be achieved by preventing leakages
- How much water is required for 24/7? How much would be saved by preventing leakages?

## 24/7 – A myth ....

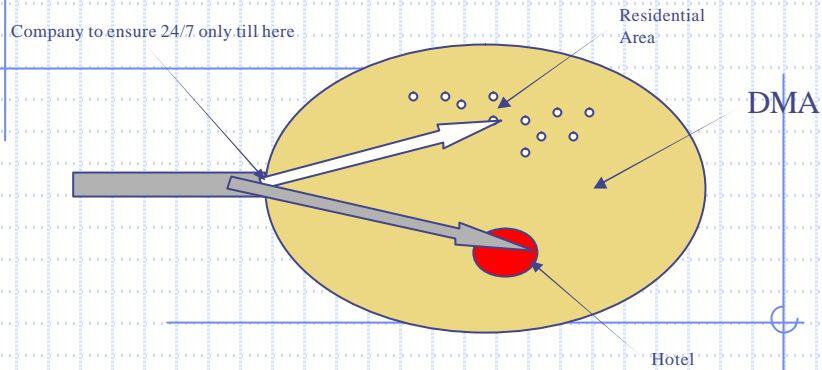
- If 24/7 water available at the input of District Metering Area (DMA), it shall be assumed that all houses in that DMA received 24/7
- Company's performance will be assessed, whether 24/7 was available at the input of DMA





## Possibility of diversion of water

Water could be diverted from residential areas to hotels, swimming pools, amusement parks within the same DMA



This happened in Puerto Rico

## Reduction of Non-Revenue Water (NRW)

### ➤ Present levels of NRW unknown

- ◆ DJB estimates: 24% in South II & South III
- ◆ Price Waterhouse Coopers (PWC) estimates: 48%
- ◆ GWK estimates: 59%

### ➤ Target to reduce NRW from 55% to 34% in 3 years

### ➤ Are NRW targets bogus?

## Internationally, companies failed to reduce NRW

- In Philippines, Manila water Company (which is one of the companies shortlisted for Delhi) promised to reduce NRW to 16 percent by 2001 but was still losing almost 50% water by that time.
- In Puerto Rico, the Rican Office of the Comptroller estimated that six years after handing over, Puerto Rico was still losing almost 50% of its water through leaking pipelines.

## Access to water by poor

## Present sources of supply

- ◆ Water tankers
- ◆ Tubewells
- ◆ Leaking pipelines
- ◆ Community taps

All these sources would be shut. There would be no "free" & "illegal" water

## Project Proposal & our concerns

- ◆ One group connection for five families – won't it lead to conflict?
- ◆ No investments on extending water distribution network to JJ clusters – how would group connections be given?

## Impact on poor in other countries

- ✦ In South Africa, ten million South Africans lost water connections due to their inability to pay. Poor had to use polluted water. Several people lost lives in cholera outbreak.
- ✦ In El Natio and La Paz in Bolivia, the water company failed to provide water to 2,00,000 people in violation of contract terms.
- ✦ In Manila, thousands of families could not afford to pay for one time meter installment costs of 4,000 pesos.
  - Many were "not allowed" to be connected since they were to be evicted in the next "five years".
  - The water company further prohibited those connected to share or sell water to those unconnected.
  - An old faucet, which used to be a free source of water, was also taken over by the water company leaving those unconnected with no water.

## Accountability of companies

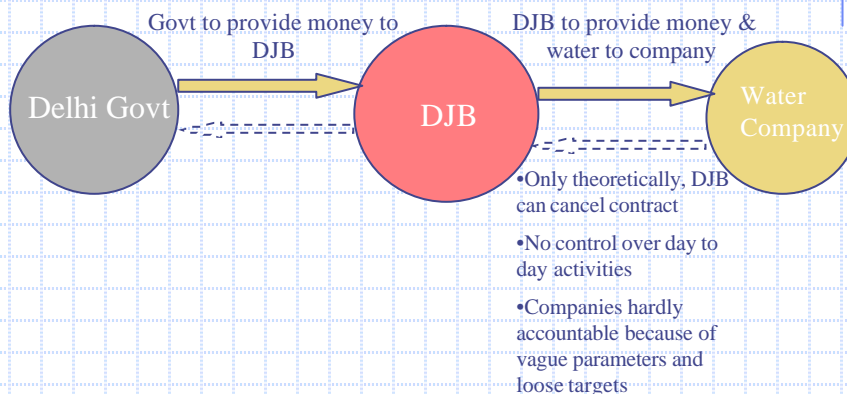
- ✦ Penalty to be imposed if they fail to meet targets
- ✦ Bonus if they exceed targets
- ✦ How much penalty? How much bonus? Procedure for imposition of penalty? DJB refuses to reply.
- ✦ World bank said to some journalists- total penalty not to exceed 30% of management fee in a year. Is this correct? Is this a sufficient deterrent?
- ✦ If a consumer is aggrieved, where would he go? Government would have no controls over day-to-day affairs.
- ✦ International experiences show that with such low penalties companies prefer to face penalties than improve services.

## Control of DJB over companies

- ◆ Short of cancellation of contract, DJB or Delhi Government have no powers to make companies perform if there are day to day grievances or if they violate any terms.
- ◆ Government in extremely weak position to cancel contract because water supply cannot be disrupted

## Role of Delhi Govt and DJB

**Company in complete control of DJB. DJB's role limited to just supplying money & water**



**One way traffic to provide money to the water companies.**

## Why should a water company perform?

- Fixed "Management Fee" – With company failing on all fronts, only 30% could be deducted
- Fixed "Engineering fee" – Noone can reduce or refuse it
- Absolutely no stakes in improvement of DJB – Company loses nothing if DJB does not perform, gains nothing if it does.

### **A farcical system?**

## Impact on Government's finances

Before the project:

- Government provides a subsidy of about Rs 350 crores every year to meet revenue expenditure
- Government provides about Rs 700 crores loan every year.

After the project:

- PWC recommends that Government provide a cash grant of Rs 1000 to 1500 crores every year.
- In addition, the Government will have to pay interest to the World Bank on this loan

So, there would be much greater strain on government finances after this project

## Impact of this project

- ❖ Steep increase in Tariffs
- ❖ Water availability to poor would reduce
- ❖ Water could be diverted from residential areas to commercial areas
- ❖ Overall water availability may not improve because leakage reduction targets bogus
- ❖ Grievance redressal would deteriorate
- ❖ Operational & capital costs of DJB would increase
- ❖ Government finances would be worse off
- ❖ The companies would acquire total control over DJB and its finances without investing a single penny and with no accountability

So, the companies and its experts would gain tremendously

## What is the problem?

- Per capita availability is 220 lpcd. After leakages, 110 lpcd available
- This is said to be more than most Indian and International cities
- Where is this water?

## Leakages?

- 50% leakages claimed i.e. almost 350 MGD water lost
- We do not see so much leaking water daily on Delhi roads?
- Where is all this leaking water going?

## Water scam?

- ◆ Investigate where is all the water going? And make the findings public
- ◆ Only then can we find the solutions



## PWC does not investigate this problem

- ◆ Problem lies at Distribution end – to identify where is the water going?
- ◆ But PWC did not investigate this problem
- ◆ Because it was not a part of their TOR
- ◆ Because the TOR was decided by the World Bank and not by the DJB or the people of Delhi

There is no co-relation between the problems of DJB and World Bank consultants' recommendations

## Track record of companies short listed for Delhi

### Four companies

- ◆ Manila Water led by Bechtel
- ◆ Degremont (subsidiary of Suez)
- ◆ Veolia (also called Vivendi)
- ◆ SAUR

## Bechtel

## Cochabamba in Bolivia

- World Bank made other debt relief to Bolivian Government conditional to their privatizing water.
- Year of contract 1999
- Within weeks, prices became three times (200% increase)
- Water became inaccessible to poor
- Water riots – 175 people injured, one died
- April 2000, Bechtel finally forced to leave.
- November 2001, Bechtel filed a legal demand for \$25 million – compensation for its lost opportunity to make future profits.

## East Manila, Philippines

- ◆ World bank/ ADB loan
- ◆ Year: 1997
- ◆ Promise: No increase in rates for next 10 years. Rates increased several times within 3 years
- ◆ Promise: To reduce NRW to 16 percent by 2001 but by that time was still losing 50% of its water.
- ◆ Promise: 24/7 within three years. Failed to do so.

Suez

## El Nato & La Paz in Bolivia

- ✱ **World bank Loan**
- ✱ **Year of contract:** 1997
- ✱ Failed to provide water services to 2,00,000 people in violation of contract terms.
- ✱ Many of the residents of El Alto live on the equivalent of half-dollar per day, but cost of new water and sewer connection rose to 450 dollars
- ✱ Large scale public protests and unrests with blockades and marches in January 2005
- ✱ In January 2005, President Mesa decreed an end to the contract
- ✱ It refuses to withdraw.
- ✱ World Bank justified failure of the company by saying that adequate financial incentives were not made available to the company.

## Puerto Rico

- ✱ **Year of contract:** 2001
- ✱ Promised to cut expenses by \$ 250 million per annum, but asked for an additional \$93 million citing "economic realities very different from initial projections"
- ✱ Solicitor General Carlos Lopez stated "Although a multimillion dollar contract exists between the government of Puerto Rico and Ondeo they have made no improvements in the most basic needs..."
- ✱ Suez left in 2003

## West Manila Philippines

- ✱ **World Bank/ ADB Loan**
- ✱ **Year of contract:** 1997
- ✱ Promised to reduce (NRW) from 56 to 32 percent. NRW increased to 66 percent.
- ✱ Promised uninterrupted 24-hour water supply within three years to all connected customers - Failed
- ✱ Cholera and Gastroenteritis outbreak (as of 11 Nov. 2003).
- ✱ Promised not to raise water tariffs for the first ten years. However, tariffs increased by 700% within three years.
- ✱ The one time meter instalment cost went up so high that many urban poor could not afford that. Many others were **not allowed** to connect to water services.
- ✱ An old faucet, which used to be a free source of water, was taken over by Maynilad leaving those unconnected with no water.

## West Manila Philippines (Contd..)

- ✱ Only 200 of a total of 5,400 employees remained. Rest laid off.
- ✱ December 2002, Suez pulled out of contract when Government denied further raise in tariff.
- ✱ The company sued the Philippino government for over \$ 300 million.

## Other countries

- ◆ Company performed miserably. So, contracts terminated in
  - Buenos Aires, Argentina – IMF/World Bank
  - Potsdam, Germany
  - Nkonkobi, South Africa
  - Brazil
- ◆ Campaign against privatisation going on in Jakarta, Indonesia – World Bank Loan

SAUR

## Abidjan, Ivory Coast, Africa

- ◆ Water rates soared.
- ◆ The rates became unaffordable to even the middle class families.
- ◆ People had to wash their clothes at the local streams and rivers.
- ◆ Those with indoor plumbing could flush their toilets only few times a week in order to save the high priced resource.

## Dolphin Coast, South Africa

- ◆ World Bank Loan
- ◆ The contractual agreement states no increase in water charges for the first five years but steep hikes in tariffs in violation of agreement.
- ◆ 300 people died in a cholera outbreak due to poor quality water
- ◆ Campaign against privatisation ongoing.



## Lesotho, South Africa

- ◆ Alleged to have bribed officials with as much as US\$733,404 in order to receive beneficial treatment in contract.

Vivendi

## Tucuman, Argentina

- ✦ **Year of contract:** 1994
- ✦ The contract included 95 per cent tariff increase in first year and gradual decrease later. However, prices doubled
- ✦ Quality of water fell. Water supply turned brown
- ✦ The quality of maintenance went down. The main water source, the reservoir of El Cadillal, contained high concentrations of dissolved manganese coming from the walls of the dam.
- ✦ Consumers boycotted payment of water bills
- ✦ The company asked government to pay US \$ 250 million for losses due to payment boycott.
- ✦ Claim of US \$ 300 million from the government in the ICSID (World Bank's dispute settlement body) in 1996
- ✦ In 1998, contract terminated

## Puerto Rico

- ✦ **Year of contract:** 1995
- ✦ PRASA had serious problems with its performance and hoped a private company would have the ability to improve services. These hopes quickly turned hollow.
- ✦ Puerto Rican Office of the Comptroller produced two reports severely critiquing Vivendi's services
- ✦ It noted "deficiencies in the maintenance, repair, administration and operation of aqueducts and sewers, and required financial reports that were either late or not submitted at all."
- ✦ Puerto Ricans complained that Vivendi workers didn't know where to find aqueducts and valves in need of repair, but that they were always able to find a way to bill their customers for unconsumed water.

## Puerto Rico (Contd...)

- ✦ Despite the higher bills, Vivendi had already put PRASA's operational deficit at \$241.1 million, and the Government Development Bank had to contribute emergency funding on multiple occasions.
- ✦ It charged Vivendi with 3,181 deficiencies in infrastructural administration, operation, and maintenance.
- ✦ The report estimated that approximately half of PRASA's water was wasted because of leaky aqueducts.
- ✦ The operational deficit had also increased almost threefold, to \$685 million.
- ✦ Vivendi was made to leave in 2001 due to bad performance.

## Indianapolis, USA

- ◆ Lawsuits have been filed complaining not only about the treatment of workers but also about the legality of the contract itself, and a coalition of Indianapolis citizens is aiming to nullify the contract and bring the system under public management.

## Our Concerns:

- With this track record, why are these companies being allowed in Delhi?
- Has the DJB satisfied itself about the background of these companies?
- Have these companies been successful in any developing country?

## Level of World Bank intervention

What do the papers reveal?

## World Bank has final say in

- ◆ Adding/ deleting names in list of pre-qualified bidders
- ◆ Deciding entire agenda of reforms
- ◆ Seek cancellation of bids
- ◆ Over ride the decisions of Governments and elected reps

## Did we need PPF loan?

- Loan amount is just Rs 10 crores.
- But the World Bank has dictated entire agenda
- Shouldn't we have first done our own study of problems and solutions with our own money and then approached Bank for necessary funds?

## Cost of loan in foreign currency

- ◆ IBRD lends at commercial rate, roughly 0.5 to 0.75 % above LIBOR
- ◆ LIBOR ~ 3%
- ◆ So, interest in dollar terms ~ 3.75%
- ◆ Foreign exchange fluctuations ~ 3-5%
- ◆ Therefore cost ~ 8%
- ◆ No tax flowback

## Cost in domestic market

- ◆ Can easily raise this amount at lower cost
- ◆ 2.4% flowback as tax
- ◆ So, net cost is less than 5.6%
- ◆ No strings attached

## Do we need the final loan?

- Loan amount less than Rs 700 crores for six years i.e. about Rs 120 crores per annum
- Govt invests close to Rs 1000 crore every year
  - Rs 350 crores subsidy
  - Rs 700 crores as loan
- Do we need such a small amount at such high costs in terms of interest payouts and stiff conditions?

## When is such a loan taken?

- ◆ One is broke and needs money
- ◆ One needs foreign exchange
- ◆ One needs certain technology and one is forced such a tied loan

None of these conditions exist here.  
This is a tied loan and all tied loans  
come with heavily padded project costs

## Our Demands

- ◆ Withdraw loan application to World Bank for this project
- ◆ Hold this project
- ◆ Initiate water sector reforms in consultation with people.

## What should be done – some suggestions

- ◆ Appoint an independent agency to investigate where is all the water going?
- ◆ Identify solutions to address problems thrown up by these investigations
- ◆ New Tariff structure
- ◆ Metering problems
- ◆ Sign an MOU with an EXEN – Give him the independence and hold him accountable.



## Suggestions for tariffs

Total annual expenditure (including depreciation and interest) divided by total Revenue Water (RW) is Cost of Water (COW).

- Water to NDMC and Cantonment areas at COW, as laid down in DJB Act.
- Water to domestic sector in MCD areas: No fixed charges.
  - ◆ Below 20 KL, at Rs 2 per KL.
  - ◆ Above 20 KL: The entire consumption at COW.
- Water to commercial sector at twice the COW.
- Water to Industrial Sector at thrice the COW.

Advantages:

- ✦ At higher consumption levels, people will be forced to invest in water saving or water recycling technologies.
- ✦ Automatic targeting of subsidies to the poorest.

Thank You