

# **Restructuring the water tariff to achieve cost recovery**

**The case of Nablus City, Palestine**

**Dr. Amal hudhud**



# Introduction

- 4 million inhabitants are living in the West Bank and Gaza Strip
- Ground water is the main water resource in Palestine
- major challenges in Palestine is managing water sources.



# Nablus City- WSSD

- WSSD provides its services to about 200,000 inhabitants
- Challenges:
  - **the limited water resources**
  - **High Expenditure for Pumping and Supply**
  - Consumers are not able to pay their bills
  - **The current tariff can't cover the operation and maintenance costs**
  - City expand



# General Constraints

- *Political*
- *Financial*
- *Socio-economic*



# THE WAY FORWARD

- *New Groundwater Wells*
- *Wastewater Reuse*
- *Demand Management*
- *Water Saving and Conservation*
- *Support the Public Participation*



# Water budget

- Quantity of water production = 8.9 Mm<sup>3</sup>/y
- Quantity of water sales = 5.9 Mm<sup>3</sup>/y
- UFW = 2.9 Mm<sup>3</sup>/y (33.4%)



# Unit cost \$/m<sup>3</sup> without depreciation

<b>Production cost</b>	<b>0.64</b>
<b>Distribution and operation costs</b>	<b>0.42</b>
<b>Administration cost</b>	<b>0.40</b>
<b>total</b>	<b>1.46</b>



# Previous tariff structure

<b>Consumer categories</b>	<b>Tariff Blocks ( \$ )</b>				
	<b>0-10 m<sup>3</sup></b>	<b>10.1-15 m<sup>3</sup></b>	<b>15.1-20 m<sup>3</sup></b>	<b>20.1-40 m<sup>3</sup></b>	<b>&gt;40 m<sup>3</sup></b>
<b>Domestic</b>	1.0	1.5	2.0	2.1	2.7
<b>Food Industrial</b>	1.4	1.7	1.7	1.7	1.7
<b>Non Food Industrial</b>	1.4	1.7	1.7	2.1	3.3





# Restructuring water tariff

- Elaboration of an appropriate tariff to secure cost recovery from tariff revenues through socially accepted tariff structures, taking into account local operating expenditures, consumption pattern and affordability aspects



# New Tariff Structure -objectives

- The actual operating expenditures should be covered by tariff revenues
- The level of water tariffs should allow low income households a reasonable standard of water consumption



# New Tariff Structure -objectives

- The structure of tariffs has to considered the potential of internal cross subsidization. Furthermore water consumption levels beyond basic needs should be charged with progressively increasing rates, thus promoting saving of scarce resources.



# New tariff structure

Consumer Categories	Tariff Blocks ( \$ )						
	0-5 m <sup>3</sup>	5.1-10 m <sup>3</sup>	10.1-15m <sup>3</sup>	15.1 – 20 m <sup>3</sup>	20.1-30m <sup>3</sup>	30.1 – 40 m <sup>3</sup>	>40 m <sup>3</sup>
Domestic Old tariff	1.1	1.1	1.8	2.4	2.4	3.1	3.1
	1.0	1.0	1.5	2.0	2.1	2.1	2.7
Commercial	1.6	1.8	2.2	2.7	3.1	3.1	3.1
Food Industrial	1.6	1.6	1.6	2.2	2.2	2.2	2.2
Non Food Industrial	1.6	1.6	2.2	2.2	2.7	2.7	3.2
Bulk	0.8						

# Affordability

- The average monthly family income is **540 \$** and the average bill amount for domestic consumers about **24 \$ per month** , so the percentage of bill amount from the income is **4.5%**.



# Financial Autonomy

- Currently Nablus Municipality starts the first steps toward financial and administrative autonomy for WSSD. The water and sanitation accounts are separated from the other municipality services accounts
- This step will enable the Water and Sanitation Department (WSSD) to determine the actual costs of water service and sewage away from the other municipality costs.



# Financial Autonomy

- Therefore, WSSD can determine the tariff that is covering the actual costs incurred by the WSSD to provide water and sanitation services in high efficient manner.



# Public awareness campaign

- The restructuring of the water tariff does not necessarily increase the fees collection ratio. In this regard, NM is conducting a public awareness campaigns





# Public awareness campaign-objectives

- conducting public awareness about water conservation. The main aim:
  - To raise public awareness and education about water conservation
  - encourage the willingness of people to pay water bills
  - To strengthen the relationship between the municipality and the communities and.



# Activities

- Many activities were conducted in the period 2006-2011, which targeted children at school and at summer clubs, teachers, women at home and at women's centers, religious leaders and the public in general.



# outcomes

- The most important outcomes of the awareness program are: 1) the collection ratio of water bills has increased, 2) many customers have shifted to the lower consumption categories in the tariff structure.



# Conclusion and recommendation

- Fulfilling the Palestinian water rights and controls there resources.
- Conservation water for current and future generations.
- The resources of energy must be available at suitable prices.



# Conclusion and recommendation

- More efforts for reducing the high UFW.
- Continuing the financial and administrative Autonomy.
- Raising awareness for consumers showing the importance of economical
- water consumption.



**Thank you**

