Theme	5. FINANCE
Торіс	5.2 Pricing Strategies to Ensure Fairness and Sustainability
Main Question	Pricing strategies respond to multiple policy objectives, i.e. the "four sustainabilities: (1) Financial, (2) Social, (3)Economic and (4) Environmental.
	The first questions regard the need to clarify the implications of this fact: What are the trade-offs between these objectives that policy-makers must face when designing pricing strategies? Can these be designed to respond simultaneously to the desired levels that policy-makers and society defined for each them?
	As part of Theme "Finance", the main focus will be on objectives (1) and (2):
	What are the characteristics of water pricing strategies which have been implemented in the field and that manage simultaneously to:
	 Ensure sufficient financial resources to ensure good quality services, maintain the infrastructure and invest as needed over the long term? Achieve fairness between various categories of water-users, promote universal access to water services,
	Please note that, while the challenges in developing countries are especially daunting, the Forum sessions need to cover issues that are relevant for a broad set of different economic and social circumstances.
	While economic and environmental sustainability objectives intersect with Themes 3 and 4, this document will make suggestions for relevant policy questions and session that may explore pricing-related issues concerning their achievement. However, their appropriate placement in the Forum structure will then be discussed in Istanbul.
Related sub- questions	Question 1: <u>Meeting multiple objectives</u> : Is there a pricing mechanism that simultaneously provides or adequately contributes to: financial sustainability, universal access, fairness, equity and efficient water use?
	Question 2: <u>Financial Sustainability</u> : How should one estimate revenue requirements to ensure financial sustainability of WATSAN services? Should revenue requirements be fully recovered through water tariffs? Or should full cost recovery be a long term goal? And if so, how can one ensure financial sustainability in the short run?
	Question 3: <u>Social Sustainability</u> : How do different pricing strategies respond to the intended purpose of fairness and equity? E.g., how to balance the cost of new expansion of water and sanitation systems fairly between those who have and those who do not have access to the service?
	Question 4: <u>The nexus between efficiency and water pricing</u> : When are costs too high and not appropriate for consumers to pay through user tariffs? When should one focus on cost reduction?
	NOTE: Question 4 is strongly linked with question 2 : should they be merged?
	Question 5: <u>Pricing for sanitation/wastewater management</u> : what are the current practices and how to assess the fairness and efficiency of the different pricing systems ?
	Question 6: <u>The political process and tariff reforms</u> : How can governments implement tariff strategies that respond to their objectives and needs?
	Question for which team members expressed lesser interest
	Question 7: <u>Economic efficiency</u> : What is the role of tariffs in inducing the efficient use of water? How do different tariff structures perform in this sense?
	Can this be included in the discussion of question 1?

	Additional questions proposed to be discussed under other Themes?
	P. Question A: <u>Economic efficiency no. 2</u> : The use of pricing and other economic instruments to induce efficient allocation across section
	<i>P.</i> Question B : <u>Water Pricing in Agriculture</u> : What objectives can be assigned to water pricing in agriculture? What are the conditions for a fair and sustainable allocation of costs between farmers and taxpayers?
General introduction	Essential to achieving the water and sanitation targets under the Millenium Development Goals is ensuring sustainable financing to operate, maintain, expand, and upgrade infrastructure for service provision. Financing WATSAN services can ultimately come only from three sources: tariffs from users, taxation/transfers from government or ODA. Other sources of finance can help bridge the gap when these sources are insufficient, but they will ultimately have to be repaid on the basis of their availability. Consumer tariffs for water and sanitation services play a crucial role as a first building block of a sound financing strategy, but policy-makers face the challenge of reconciling revenue sufficiency with other policy objectives, particularly with ensuring affordability of services for all, but also encouraging efficient water allocation and use and protecting the water resource base from environmental degradation.
	<u>Cost recovery vs. other policy objectives</u> : Tariffs for water services that recover the costs of O&M, expansion and replacement investment, as well as financial costs, when possible, are likely to be the best way to ensure the financial sustainability of providers, but their use is far from universal. One of the difficulties faced by policy-makers when trying to define appropriate pricing policies is that of reconciling revenue sufficiency objectives with other policy objectives, in particular the need to ensure affordability of water services and access for all, while encouraging efficient use of water resources, and protecting water-based ecosystems.
	Resulting Main Questions:
	(1) What are the trade-offs between these objectives that policy-makers must face when designing pricing strategies? Can these be designed to respond simultaneously to the desired levels that policy-makers and society defined for each them?
	(2) What are the characteristics of water pricing strategies which have been implemented in the field and that manage simultaneously to:
	 achieve fairness between various categories of water-users, promote universal access to water services,
	 ensure sufficient financial resources to ensure good quality service, maintain the infrastructure and invest as needed over the long term?
	Below are specific policy questions around which session could be built
	Question 1: <u>Meeting multiple objectives</u> : Is there a pricing mechanism that simultaneously provides or adequately contributes to: financial sustainability, universal access, fairness, equity and efficient water use?
	Pricing strategies respond to multiple policy objectives:
	 Financial Sustainability: help closing the financing gap in water and sanitation to ensure good service quality, maintain infrastructure and invest as needed over the long term
	 Social Sustainability: promote universal access to water services and achieve fairness between various categories of water-users
	3. <u>Economic Sustainability</u> : provide incentives for efficient allocation of water resources across sectors and efficient water use by each final user
	 <u>Environmental Sustainability</u>: ensure the preservation of basic ecological functions of the water resource base for current and future generations

The definition of an "appropriate" pricing strategy will depend on (i) a prior decision by policy-makers (based on a democratic process) on what constitutes an "acceptable" trade-off between policy objectives, (ii) an understanding of how pricing mechanisms can help meet each separate sustainability objective, and (iii) an analysis of how pricing strategies can be designed to meet a multiple objectives or strike the desired balance between them
How do different pricing strategies respond to each set of objectives? Can they be designed to achieve a desired trade-off between objectives, i.e. respond simultaneously to desired levels of each?
A session on this topic could be structured as follows:
 A short opening presentation on the conceptual framework explaining tradeoffs between the 4 objectives
II. The presentation of country experiences that:
 Explain how trade-offs between policy objectives were identified Describe a consensus was reached among different stakeholders regarding the desired compromise between different objectives Relate how pricing strategies were designed to respond to such compromise Assess the impact of the pricing policies' implementation on its achievement
III. Concluding remarks drawing lessons learned based on policy experiences
Question 2: <u>Financial Sustainability</u> : How should one estimate revenue requirements to ensure financial sustainability of WATSAN services? Should revenue requirements be fully recovered through water tariffs? Or should full cost recovery be a long term goal? And if so, how can one ensure financial sustainability in the short run?
As a costly infrastructural service, WATSAN should be kept financially viable over time and have the capacity to attract capitals, skills and technology by adequately compensating them, while ensuring macro-affordability at system level, and therefore requiring efficiency in the service provision, both in terms of capital expenditure and in terms of operational efficiency.
The key objectives in this area are (i) <u>from the point of view of operators</u> : maintaining the viability of service provision, (ii) <u>from the point of view of national or local governments</u> : attracting funds for investment, and (iii) <u>from the regulatory perspective</u> : avoiding monopoly rents.
Within the now developed countries, water and sewerage networks have been partly funded though long term national tax based subsidies. This is still the case, e.g. in the USA. In most countries, these services have now reached "universal coverage" and a "full cost recovery" status, meaning that they are now globally financed in a sustained way only from user payments (which may include cross-subsidization mechanisms).
In poor countries similar tax-based mechanisms are necessary in many cases to fund at least part of the investment. In 2003 the Camdessus "Financing Water for All" report formalised the concept of Sustainable Cost-Recovery through which user payments are combined with tax-based subsidies to fund the water service in a financial mix that is organised over a period of time that is long enough to allows the water utility to anticipate needs and to invest.
Therefore, the key question is to what extent tariffs should contribute to help the service provider move along a path of increasing financial sustainability (see Baietti and Curiel, 2005)
The development of these topics should be carried out in close coordination with the discussion under topic 5.1
A session on this topic could be structured as follows:
 A presentation on the concept of sustainable cost recovery and on the different meanings that "financial sustainability" can take (short-term vs. long-term horizon)
II. The presentation of country experiences that:

 Show how the financial sustainability objective was determined and the instruments that were used to achieve it Describe the evolution of cost recovery levels over time Discuss the role of different components of the tariff structure (e.g., fixed vs. volumetric charges) in ensuring financial viability Assess the impact of pricing policies, as part of the overall financing strategy III. Concluding remarks drawing lessons learned based on policy experiences The other side of the medal of financial sustainability is how to ensure that (investment and operational) costs of service provision are maintained at acceptable levels. This issue is tackled under Question no.4 below.
Question 3: <u>Social Sustainability</u> : How do different pricing strategies respond to the intended purpose of fairness and equity? E.g., how to balance the cost of new expansion of water and sanitation systems fairly between those who have and those who do not have access to the service?
Among the policy objectives of pricing strategies is the need to ensure that (i) tariffs are perceived as responding to principles of fairness and equity, (ii) access to and consumption of adequate levels of services remain affordable for all users, and (iii) pricing policies do not restrict access to WATSAN services.
<u>Sub-question 1</u> : What is the legitimacy and effectiveness of WATSAN tariff structures as social policy instruments? Sometimes, in addition to the sectoral objectives listed above, pricing strategies are intended to pursue broader social policy objectives, i.e. to sustain the income of specific income groups or user categories. Their legitimacy and effectiveness in this arena has been recently challenged based on an assessment of their targeting effectiveness and actual impact on income of the poor (Komives et al., 2005)
 <u>Sub-question 2</u>: What is a "fair" tariff structure? What is an "equitable" tariff structure? Before policy recommendations in this area can be made, t is important to distinguish between the concepts of fairness vs. equity. Fairness is a historically and culturally determined concept, based on a societal consensus on what constitutes social justice. "Fairness" can therefore only be the result of complex arbitrations of political nature that are the responsibility of public authorities (not of service providers). Examples of such arbitrations include : Financing expansion of the system through the water tariff (paid by the population connected to the network), or through connection fees (paid by unserved households in exchange of their access) Charging renewal costs on the present generation or leaving it to future generations Charging pollution fees to finance waste water treatment, or leave the pollution problems to the communities living downstream
Equity, on the other hand, appears easier to pinpoint, as it should translate into "treating equals equally". However, the question remains of choosing with respect to what characteristics we define "equals". Should we treat all users imposing the same cost of service provision equally (i.e. charging the same tariff irrespective of income levels)? Or should people be sorted into classes depending on income levels or some other criteria. Only once these two concepts are defined in a specific context will it be possible to determine whether a pricing strategy is "fair and equitable".
<u>Sub-question 3</u> : How should the normative threshold for affordability be defined? "Affordability" appears to be an easier to quantify concept. The idea that WATSAN bills should not exceed a certain percentage of disposable household income or expenditure is widely used.
<u>Sub-question 4</u> : Are affordability and cost recovery/financial sustainability conflicting objectives as often depicted? This notion needs to be further probed, as the financial sustainability of service provision in an area is a collective issue, referring to the whole pool of users in the

area, while affordability tends to be an individual household issue, limited to a subset of such users. Thus, at least in most cases, the question is not whether tariffs should be kept below cost recovery levels in general, but rather whether special systems can be devised to ensure that access and consumption of adequate levels of WATSAN services is possible even for those households that may otherwise have difficulties in paying their bills if average cost recovery tariffs were applied with no other support.
There may indeed be cases where affordability may become a collective phenomenon, e.g. due difficult technical challenges, large investment backlog or the extreme vulnerability of the local economy, These need to be treated separately.
In the majority of the cases, the issues can be articulated as follows:
<u>Sub-question 5</u> : How to identify the groups that actually need support? How to target support systems to them?
<u>Sub-question 6</u> : Should such support take place through special features of the pricing strategy or through separate mechanisms?
<u>Sub-question 7:</u> If cross-subsidization via the tariff structures is chosen, how do different structures fare in achieving the objectives of affordability of access and consumption? (Note: access vs. consumption subsidies should be dealt separately)
<u>Subquestion 8</u> : How can one ensure that cross-subsidies are financially sustainable, are targeted to the intended population, and provide no adverse incentive to extending access to the poor?
<u>Sub-question 9</u> : How can the targeting performance of existing mechanisms be improved? And what factors may impede the use of better targeting mechanisms (e.g. data availability, acceptability of lower-cost technical solutions, etc.)
Particular attention should be given to increasing-block tariffs (IBTs) for a number of reasons: (i), they are very widely used, particularly in the developing world; (ii) they have been widely praised in the past as a tool to achieve fairness and enhance efficiency; (iii) their effectiveness in this areas has recently been strongly challenged.
IBTs are often justified on arguments that praise their capacity to send signals encouraging efficient water use but also their intended objective of providing minimum levels of services to the poor at lifeline tariffs. Their effectiveness rests on a number of assumptions, however, first and foremost that the poor consume less WATSAN services than the rest of the population. This assumption has been challenged on the basis of numerous empirical studies. In addition, IBTs (and other "cross-subsidization" schemes) often provide subsidies to almost all users through the definition of very large first blocks and the setting of higher block tariffs that remain below cost recovery levels. More importantly, the targeting performance of IBTs and other schemes based on consumption subsidies has been questioned due to the fact that lower-income populations in developing countries have far less widespread access to the network than higher income groups.
<u>Sub-question 10</u> : what is the evidence on the targeting performance of IBTs vs. other consumption subsidy schemes? Can such performance be improved by (i) revising some aspects of IBTs, (ii) combining them with administrative targeting methods?
<u>Sub-question 11</u> : Should consumption-based methods be abandoned in favor of access subsidies? And what is the current evidence on their targeting performance?
The 2006 UNDP Human Development Report established that urban people not connected to water networks, and generally the poorest living in peri-urban areas and slums, end up paying significantly more for their water than the people connected to public water networks. This is mainly because un-connected people have to rely on informal service providers. Thus, another fairness issue must be solved: who should pay for funding the new connections to be made, the people already connected or the people to be connected? The most-common practice is to charge the new customer of the service. However in many countries not-connected people cannot afford to pay for the full cost of a new connection to the network. This is why in several cases charging people who are already connected to fund the expansion of the water networks and their connection to new households has been considered as the right

way to go (for example in Buenos Aires). Is it fair? One could argue so since people already connected usually benefit from connections previously funded by others and not by themselves. However many connected people usually complain about what they perceive as abnormal charges. Should access subsidies then be covered by the general budget? (this question then spills into topic 5.3)
<u>Sub-question 13</u> : What is the role of self-selection systems, based on the differentiation of service levels available to users <u>Sub-question 14</u> : Or should one favor income support systems that do not pass
These questions will likely be addressed under topic 5.3 as well, from the point of view of the financing mechanisms that exist to fund such subsidy schemes. Other aspects that can be tackled under topic 5.3 are the other barriers to access that need to be considered: (i) legal land tenure, (ii) the utility's incapacity/unwillingness to extend services to new areas, linked with financial constraints, technical challenges, legal constraints (see above), adverse incentives due to expectations of low revenue or low revenue collection, and (iii) access to funding for connections (microfinance options? Others?).
 A session on this issue could encompass the following aspects (or others chosen from the sub-questions listed above): Discussion of fairness, equity and affordability concepts to frame the issue Field experiences of cross-subsidies illustrating how to identify and target the poorest amongst the connected and the non connected (consumption vs. access subsidies) Evidence of the targeting performance of IBTs and other consumption subsidy schemes Evidence of the targeting performance of existing access subsidy schemes Special issues: e.g. regulation of prices charged by small scale water service providers or use of self-selection schemes (in coordination with Topic 5.3).
 Question 4: <u>The nexus between efficiency and water pricing</u>: What are the determinants of revenue requirements? When are costs too high and not appropriate for consumers to pay through user tariffs? When should one focus on cost reduction? When calling for fuller cost recovery in water service tariffs, it is also crucial to address the issue of efficiency of service provision and resulting unit costs. When financial sustainability is the main objective pursued by tariff policies, pricing determinants will include (i) service objectives and the consequent requirements in terms of technical solutions, (ii) infrastructure planning decisions affecting CAPEX, and operation decisions affecting OPEX and, (iii) financing options and their cost.
 <u>Appropriateness of sector development objectives</u> Is it possible to reduce the cost of service provision for part of the population by offering differentiated service levels at different prices? How can this be done so that the preferences of local populations are fully considered? (link with Question 3 and Topic 5.3 as well as with discussions under Theme 2) <u>Cost-effectiveness of investment decision/options</u> Are legal requirements on technology or other technical specifications too stringent? (e.g. deep-burial of pipes where it may not be needed) Are environmental requirements appropriate to the environmental and economic context? Could a pricing strategy provide distorted incentives leading to gold-plating? <u>Cost-effectiveness of utility management: role of operational efficiency in reducing pricing requirements</u> What is the potential impact of reducing technical losses? Does their reduction at different levels in the system have different implications on tariffs?

 And of reducing O&M costs? (With a focus on energy efficiency given the main Forum focus?)
 Cost effectiveness of financing decisions/structure Access to and information regarding appropriate funding mechanisms and their effective combination (optimization of blending options, Responsibility and response often outside the realm of action of local policy-makers – donor community Does the absence of a steady and sufficient revenue stream lead to higher costs later? (i.e., does the absence of an appropriate financing strategy for the sector lead to higher costs, thus widening the financing gap even further?)
In many countries, data on the cost of service provision are not easily available, making it difficult to come to any conclusion regarding the "appropriateness" of costs to be covered by tariffs. Data need to be collected regarding unit costs and lessons need to be learned regarding governments' and relevant sub-sovereign entities' capability to obtain relevant information that is needed to meaningfully regulate service provision under natural monopoly conditions.
A session on pricing determinants and the link between pricing strategies and efficiency in service provision could be based on some of the questions listed above.
Question 5: <u>Pricing for sanitation/wastewater management</u> : what are the current practices and how to assess the fairness and efficiency of the different pricing systems ?
 Within the framework of the International Year of Sanitation, the sewerage issue has to be considered separately. Among the key aspects that distinguish this area are the following: (i) the willingness to pay is lower than for drinking water , but the investments required are often bigger (ii) the solidarity / fairness issue may include different stakeholders (including downstream users) (iii) the service may be provided by a different entity than the one providing drinking water
It is important to distinguish between wastewater collection and wastewater treatment services. The latter in particular have also public good nature and therefore may need to be treated separately. In some instances, government may decide that environmental objectives or other aspects linked with such public good nature are more important from a societal perspective than the attempt to minimize the cost of service provision. Imagine a case where users in a poorer upstream catchment area are required to adopt expensive wastewater treatment technologies to preserve water quality for downstream richer areas. In these circumstances, should users in the affected areas bear the full brunt of the costs of providing a public good?
The discussion then moves beyond pricing strategies alone and should involve the definition of financing strategies aiming at overall financial sustainability of service provision, considering also the possibility of capital and operating subsidies paid by taxpayers (at national or local/river basin level). This could be addressed under Topic 5.1 if its coverage were extended slightly.
Question 6: <u>The political process and tariff reforms</u> : How can governments implement tariff strategies that respond to their objectives and needs?
The practical implementation of tariff reforms is a difficult subject that could be either addressed under each Main question above, or addressed in a separate session that would really focus on the "how to" and on the
• Reform: components, timing thereof, stakeholder involvement under different institutional, economic, infrastructural (etc.) circumstances?
• The process for setting and updating tariffs: Rules and responsibilities
 The role of value perception in ensuring the acceptability of tariff levels and structures - How to address the value perception of water?

	 How to work on this with MOF, MOW, local governments, users/public in general?
	Cost (capital O&M and transaction) of improving collection:
	An additional question for which no one on the 5.2 topic team expressed strong support:
	Question 7: <u>Economic efficiency</u> : What is the role of tariffs in inducing the efficient use of water? How do different tariff structures perform in this sense?
	Efficient water use within each sector
	 Is this always synonymous with reduction in water use? Is such reduction always a policy goal? (e.g. what if have overcapacity in the system? it may not be beneficial to reduce demand until you get closer to the capacity limit)
	 If prices are high enough to reduce water use what are the implications of the need to recover cost on a shrinking customer base (e.g. if larger users opt out of the system) or on a smaller sales base
	2.1 for the service provider2.2 for final users (especially the poorest if these cannot afford more efficient appliances or have leaking pipes)
	 Effectiveness of scarcity value of water in water tariffs as tool to induce reduction in use
	3.1 Evidence of impacts of water pricing on demand
	3.2 Metering penetration and impact : decision to apply metering is based on perception about optimal pricing structure (essential for MC pricing) and on cost of metering (e.g. meters sensitive to water impurities)
	Questions that may be addressed under other themes:
	P. Question A: <u>Economic efficiency no. 2</u> : The use of pricing and other economic instruments to induce efficient allocation acorss section
	A WRM issue – more appropriate under other themes?
	A more specific question regarding irrigation water pricing was proposed:
	P. Question B : <u>Water pricing in agriculture</u> : What objectives can be assigned to water pricing in agriculture? What are the conditions for a fair and sustainable allocation of costs between farmers and taxpayers?
	(i) Is there a chance of improving demand management in irrigation schemes (where the potential savings are far higher than in domestic water use) if appropriate pricing mechanisms are not set up? And what is the evidence in terms of impacts of appropriate pricing mechanisms where these exist?
	(ii) What are the investments required for the improvement of the efficiency of irrigation infrastructure (in terms of water savings, but also of manpower requirements) ? Can they be financed without farmers' contribution ?
	(iii) What are the interesting experiences that can be shared
	(iv) How does the issue of balance between the economic and social aspects of water pricing differ in agriculture? Irrigation water is an input for an economic production; the social side of the problem cannot be presented in terms of affordability for an essential service, but rather in terms of income distribution impacts, employment, fair remuneration, conservation of "way of life, etc.
(Types of) Organizations to be	National Governments (min of finance/economic affairs/ infrastructure/public works)

involved in	National regulators: from developing and industrialised countries
topic	Local governments
	Service providers: private, public, local, international
	Users: Consumer associations
	Organised civil society: associations, NGOs, international and local
	Bilataral denara
	Bilateral donors
	Private financiers: Banks, specialised funds
	Foundations: Gates, Rockefeller
	Micro-finance institutions:
	Research Institutions:
	International Agencies: UN network
Process of	1. Draft 1 of topic scoping paper to be sent to key institutions for comments
paper and	2. Improved draft to be placed on website
development:	 Improved draft with comments received to be discussed at the February coordinators meeting to:
	a. Agree on key questions
	 Agree on the topic document so that it can be placed on the Forum web- site
	c. Agree on key stakeholders to take part in the development of the topic
	d. Agree on consultation process: relevant meetings with key stakeholders
	e. Agree on the process and actors to develop the forum session.

For Reference: Example elaboration of one question (Session Development level)

Question 3	How do you estimate revenue requirements to ensure financial sustainability? What are key impediments to this process? It has been argued that full cost recovery can be a long term goal – but how do you ensure financial sustainability in the short term
	[clarification of the issue, statement of facts and trends, expectations for the future, main prospects and concerns (to be expressed in statements for session debates)]
Statement 1	
<u>Statement 2</u>	
Statement 3	
Statement 4	
(Types of) Organizations to be involved in session consultations	National Governments (min of finance/economic affairs/ infrastructure/public works) National regulators: from developing and industrialised countries Local governments Service providers: private, public, local, international Users: Consumer associations Organised civil society: associations, NGOs, international and local Multilateral donors: WB, EIB, EBRD, AfDB, ADB, IADB, IDB, Bilateral donors Private financiers: Banks, specialised funds Foundations: Gates, Rockefeller Micro-finance institutions: Research Institutions: ERM International Agencies:
Process of session development:	 Draft 1 of session description to be sent to key institutions for comments Improved draft to be placed on website/included in announcements Call for session participation (March 2008) and selection of candidates Collaborative work to develop sessions, with or without resource base assistance