11.479: Water & Sanitation Planning in Developing Countries

Objectives:

- Finish up last week's discussion about women as a unique stakeholder group
- The "right" institutional arrangement for W&S service delivery
- Options for service delivery
  - Centralized *versus* decentralized
  - The public-private continuum

Women as a unique stakeholder group

Proposition #1: In general, women should be given particular consideration as a stakeholder group in water and sanitation planning.

Proposition #2: In general, if a W&S project is planned properly, women's considerations will be taken care of in the general planning process.

Ernest's concern

Should W&S projects be used as a vehicle to promote women's empowerment?

Question of intent

2) The "right" institutional arrangement for W&S service delivery

We know that the most efficient production of W&S services will occur in a competitive market setting, so long as market failures don't exist.

What are some common forms of market failure?

- Public goods
- Monopoly
- Externalities

What kind of services are W&S?

	Exclusive	Non-exclusive
Rival	Private goods	Quasi-public
Non-rival	Club good	Public goods
	Exclusive	*Non-exclusive*
Rival	*Cars, houses, your lunch*	*Clean air, grazing land*
Non-rival	*Bridges, swimming pool, movie theatre*	*National defense, public health programs*

Do we have a public goods-type market failure?

Monopoly

- A single firm provides the total supply of a product in a given market ('price maker'),
- There are no close substitutes for the monopolist's product,
- Barriers to entry—monopolist controls a strategic input (*e.g.*, water source), legal barriers (*e.g.*, monopolist has exclusive service rights), or economies of scale—make it very difficult or impossible for new firms to enter an industry.

Do we have a monopoly situation in W&S?

Externalities

- Externality: An uncompensated impact on well-being created by production and/or consumption activities
- The greater the value of an externality, the less accurately the price reflects the ‘true’ value of the good or service—and the less efficiently it will be provided by the market.
- What are the implications for W&S policy and planning?

Social goods?

Water & sanitation are often labeled as being "social goods." What does that mean to you?

Is efficiency our only objective as W&S planners?

State involvement in W&S service provision

- Municipal department: W&S staff are not managed separately from other municipal staff. Accounts from all departments are integrated.
- Utility department: W&S has managerial autonomy, but no budgetary autonomy.
- Public utility: Has managerial, financial, and legal autonomy. Budget and assets are ‘ringfenced’

State involvement in W&S service provision

Advantages?

- Focus on social goals such as universal service
- Possibly better integration of W&S with other sectors (*e.g.*, health and environment)
- Long planning horizon should mean better resource stewardship

Disadvantages?

- Political imperative to underprice: Unsustainable
- Non-service-related goals divert resources
- Few incentives to innovate, cut costs, be responsive
- Planning cycles timed to elections

So…

- Is there any *a priori* reason to prefer a market *versus* a state allocation mechanism for W&S services?
- Instead, let's focus on what we want from our service provider—the institutional arrangement that will be most likely to meet these objectives will vary from case to case.

Trends in institutional arrangements for W&S service delivery in developing countries

- Historically, the W&S sector has been highly centralized and controlled by the state
- Two major changes over the past couple of decades are decentralization and privatization

Decentralization: What are we hoping to achieve?

- Heighten accountability: In what way(s)? Closer to users—social norms and pressures work better
- Better understanding of what users want (still may not provide incentives to provide what users want, however)
- Possibly decrease costs

Does it work? What do the case readings that you've completed thus far suggest? What about your own experience?

What are some of the biggest challenges in decentralized service delivery?

- Capacity
- Incentives

Privatization: A continuum, not an 'either/or' choice

Type of PSP arrangement	*Asset ownership*	*Responsibility for capital investment*	*Commercial risk*
Service or management contract	Public	Public	Public
Lease	Public	Public	Public& Private
Concession	Public	Private	Private
BOT & variations	Public& Private	Private	Private
Divestiture	Private	Private	Private
Independent service providers	Private & Public	Private	Private

Small-scale independent providers: The ‘other’ private sector

Where is private-sector participation (PSP) happening in developing countries? Why?

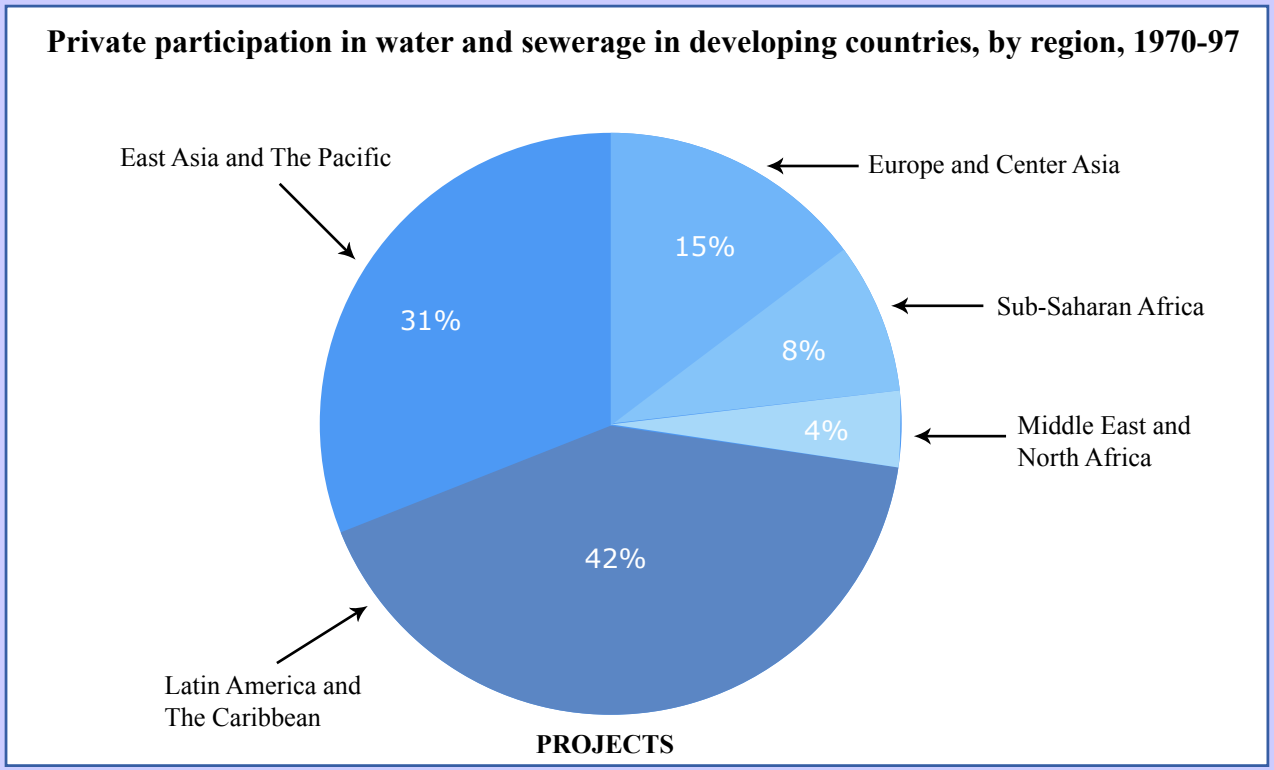

Figure by MIT OCW.

Projects *versus* investment

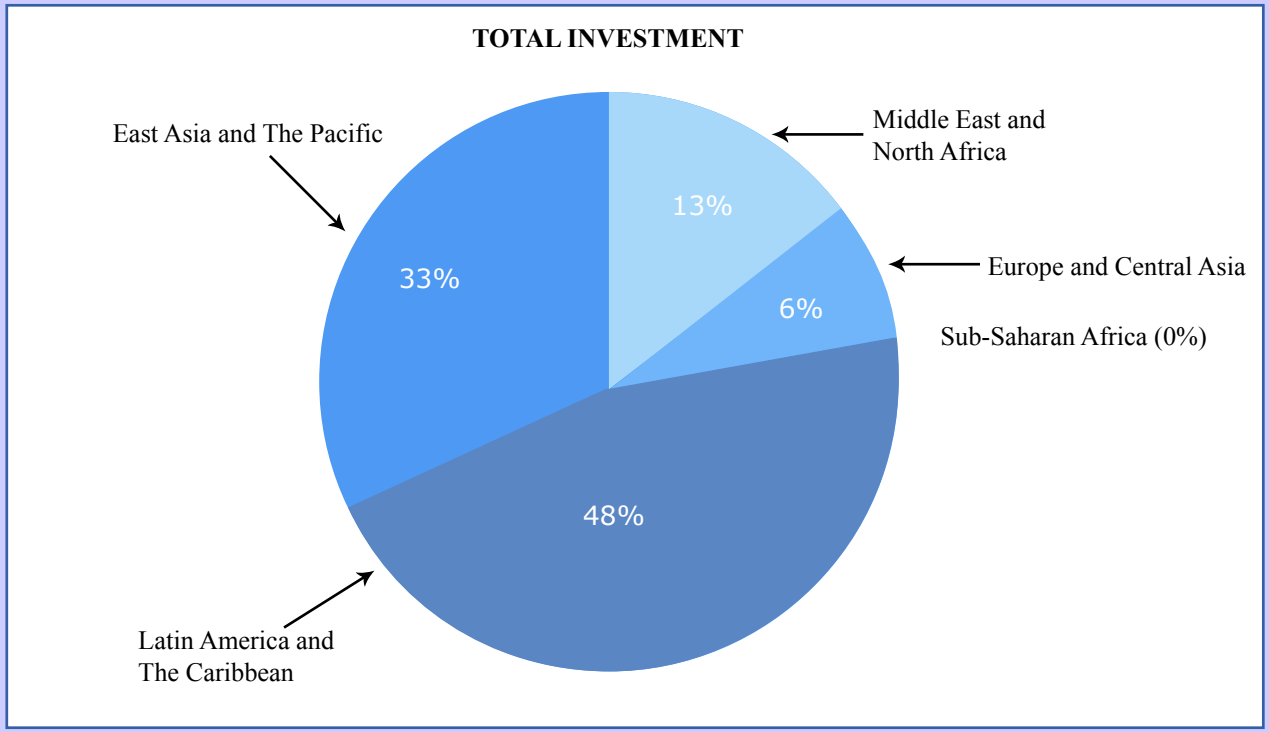

Figure by MIT OCW.

Why might we want to increase private-sector participation in W&S service delivery?

- Access to capital markets
- Technical know-how/capacity
- Attention to efficient use of funds
- More accountability / responsiveness to households (?)
- Get out of the ‘low-level equilibrium’ (Spiller & Savedeoff)

What's the evidence on whether these objectives have been met with PSP?

Location	*Year & form of PSP initiated*	*Indicator*	*Values*
Buenos Aires, Argentina	1993 Concession	Unaccounted-for water*	1992: 44% 1998: 34%
		Employees per 1000 connections	1992: 6.4 1995: 3.3 1998: 1.7
Santiago, Chile	1989 Concession & service contracts	Unaccounted-for water	1990: 28% 1994: 22%
		Employees per 1000 connections	1993: 2.1 1994: 1.9
Manila, Philippines	1997 Concession	Unaccounted-for water	1997: 58% 2001: 52%
		Employees per 1000 connections	1997: 8.5 2001: 4.1