

## Capacity Building

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## Ayole

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Pointer 1"48'36.75" N 11"07'39.52" E

# Two approaches to the water problem

#### • Group 1:

- What was the original approach to bringing water to Ayole and other villages?
- Group 2:
  - What was the revised approach to Ayole?



### Ayole

- From the extension worker's perspective, why were the pumps failing?
- From the citizens of Ayole's perspective, why did the pump fail?
- How did the government extension workers change their approach with the village of Ayole?



#### The Ayole water support system

- What roles were instituted in Ayole to manage their water source?
- What roles resided in the Togo government?
- And in Togo businesses?
- How did the roles and means of sustaining the pump follow traditional lines?
- How did they differ?
- How did the village's organization for sustaining its water source have impacts beyond clean, safe water?



## Typology of water supplies

#### UN Millennium Project; Task Force on Water and Sanitation; 2005

Table 4.5			Existing service	Proximate explanations		Possible policy		
Typology of unserved	Density			Supply side	Demand side	and planning responses		
and underserved communities for water supply	I	Dispersed (rural)	Little or no Improved Infrastructure: supply from vendors and surface water sources	<ul> <li>Limited public Investment In rural water supply.</li> <li>Perception of poverty.</li> <li>High per capita cost.</li> </ul>	<ul> <li>Poverty.</li> <li>Limited access to credit.</li> <li>Challenges of collective action.</li> <li>Low demand: availability of acceptable alternatives.</li> </ul>	<ul> <li>Capacity building and development of collective-action institutions.</li> <li>Combined agricultural and domestic water projects.</li> <li>Partnerships with civic organizations.</li> <li>Targeted subsidies.</li> </ul>		
Ayole 🗪	н	Dispersed (rural)	Inadequate supply from shared public facilities, such as borewells with handpumps	<ul> <li>Limited Investment In operations, maintenance, and expansion.</li> <li>Perception of poverty.</li> </ul>	<ul> <li>Poverty.</li> <li>Limited access to credit.</li> <li>Challenges of collective action for operation and maintenance.</li> <li>Low demand: availability of acceptable alternatives.</li> </ul>	<ul> <li>Capacity building, and transfer of planning or budgeting authority to local bodies.</li> <li>Capacity building at national level for long-term community support.</li> <li>Partnerships with civic organizations.</li> <li>Targeted subsidies.</li> <li>Programs to</li> </ul>		
http://www.unmillenniumproject.org/documents/WaterComplete-lowres.pdf supply chains.								



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#### Larger non-urban settlements

		Existing	Proximate	Possible policy and planning		
	Density	service	Supply side	Demand side	responses	
	Medium density (small town)	Supply from private household facilities, vendors, and surface water sources	<ul> <li>Limited public and private investment available for small town water supply.</li> <li>Policy vacuum.</li> </ul>	<ul> <li>Limited access to credit.</li> <li>Demand captured by private household investment.</li> </ul>	<ul> <li>Policy development.</li> <li>Development of collective-action institutions.</li> <li>Promotion of small-scale independent providers.</li> <li>Management innovations (franchising, regional utilities).</li> <li>Targeted subsidy and credit programs.</li> </ul>	
IV	Medium density (small town)	Supply from dysfunctional public networks	<ul> <li>Inadequate resources and capacity for operation and maintenance of public system.</li> <li>Policy vacuum.</li> </ul>	<ul> <li>Limited potential for use of voice.</li> <li>Unwillingness to pay higher tariffs for low- quality service.</li> <li>Higher-income households may exit system.</li> </ul>	<ul> <li>Capacity building for operations and maintenance.</li> <li>Policy development.</li> <li>Promotion of small-scale independent providers.</li> <li>Management innovations (franchising, regional utilities).</li> <li>Targeted subsidy and credit programs.</li> </ul>	



#### Differing water technology needs

#### • To deal with

- Surface water
- Ground water
- Wells
- Rainwater
- Saline water



#### Ayole in a broader context

- It is *not* the case that every technological solution needs a committee.
- But each new technical solution requires new social capacity to sustain it:
  - New individual capacities
  - New organizational capacity
  - New community capacity
  - New governmental capacity



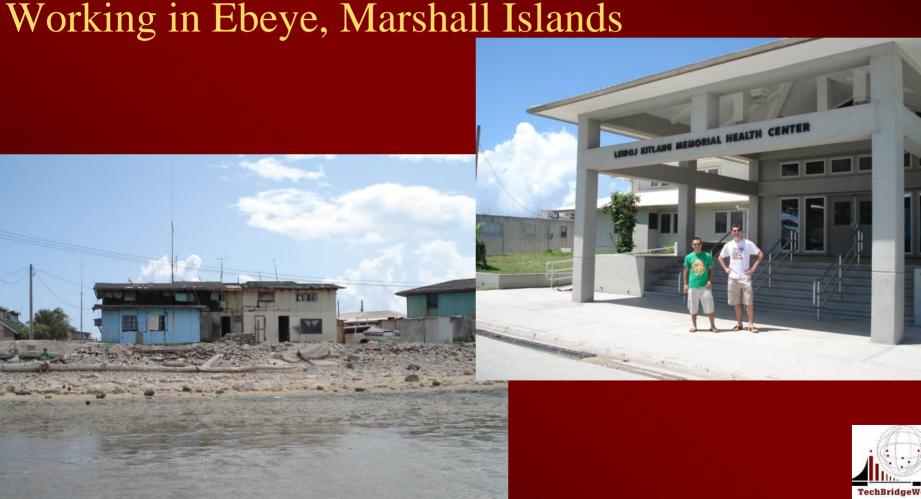
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Technological systems live within social systems



#### Not just Ayole, not just water Conrad Woodring (E'06) Danny Dvinov (SCS'06)



## Blog entry, "What Pump?"

#### By Conrad: 6/21/2006

Almost every morning during the first 30 minutes of work (after we boot up the system and get everything running) while Danny and I plan our day and discuss things, I am reminded of "The Waters of Ayole" video... As I am thinking about this post, I think I will watch it again, because the parallels between what Danny and I are doing, and what happens in that short video are astounding....



Well in the clip they talk about the difference between giving the villagers a pump, and giving them a sustainable water source. Of course these two deliverables do a fairly good job of symbolizing what one can give to an organization. But in working in this environment, I feel like pumps they have been given in the past are of a distinct type, a new third type of deliverable: a pump that is buried under 20 feet of dirt with a sign over it.



#### • • •

I know, that sounds a bit awkward, but consider this: in the video, the pump at least worked, and they knew how to operate. Sure they didn't have increased capacity. They simply saw how it worked, and used it until it broke.



But there are many things here, that they don't even really know are here. They have a kind of idea that this may or may not be able to do this, or that someone that volunteered last year said this could be done. But they have never seen any of these things in action! There are great resources here lying just below the surface that have never done the organization an ounce of good because frankly, they didn't realize they were there! All it would have taken was for someone to go digging around, but no one did!



Now of course, Danny and I are unearthing this invaluable resources. It's like discovering gold, or better yet oil in the place you'd least expect it. Hopeful we can get the pumps pumping, and then teach them how to keep them going.



#### Community-Based Participatory Research (CBPR)

- Not just a set of methodologies, but an attitude or approach to working in developing communities
  - Humility
  - Respect for the community's knowledge and ways of knowing
- CBPR is reflexive, flexible, and iterative, not rigid and linear
- Focus on "knowledge for action" rather than "knowledge for understanding"
- Shifts location of power from researcher to community (hopefully power becomes equally dispersed)



#### Principles of CBPR

 What are the principles of Participatory Research?



#### Principles of CBPR

- Truly collaborative—all parties equal
- Research is relevant to community
- Direct benefits will be seen, hopefully in the form of social change
- Enhances capacity of participants
- Everybody learns
- Knowledge is disseminated within community
- Community members receive credit for work
- Steps taken to ensure that research is "ethical"



# Contrasting modes of participation

• What are the degrees of participation?



# Contrasting modes of participation

- Contractual people are contracted into the researcher's project
- Consultative people are asked for their opinions
- Collaborative researchers and local people work together on projects designed, initiated, and managed by researchers
- Collegiate researchers and local people work together as colleagues with different skills to offer, in a process of mutual learning where local people have control over the process



#### **Difficulties of CBPR**

- CBPR is very hard to do well, especially under time and resource constraints in the communities you will be working in
- Also may be seen by the organization that contracted you as unnecessary because they already "know" the solution to the problem
- Must get Institutional Review Board (IRB) approval for any research that involves "human subjects" (people).



#### Potential pitfalls of CBPR

- Vapor-Participation: The CBPR methods are done mechanically without the attitude of participation such that you merely do what you planned to do in the first place
- CBPR can become a feel-good exercise that has no practical value
- CBPR can reproduce existing power relations
- Marginalized peoples are not necessarily empowered to speak their minds



### Beginning steps toward CBPR

- Decide to work collegially
- Network to build partnerships
  - Look for "hybrids" or cultural translators
- Work with existing organizations
  - Community organizations
  - Government agencies
  - NGOs
- Take building relationships seriously

