

## **THEME 4: TECHNOLOGY**

### **WHAT SHOULD A SUSTAINABLE WATER AND WASTEWATER UTILITY STRUCTURE WITHIN THE PACIFIC ISLANDS LOOK LIKE?**

- ?? Types – ‘public works’, ‘semi-autonomous utility’ (government agency), private or ‘contract management’
- ?? Major components of a successful utility structure

### **ISSUES, CONCERNS AND CONSTRAINTS**

What are your constraints in achieving sustainable services?

- ?? Standards: Consistency appropriate; long term planning
  - ?? Money /Financial: Political interference
  - ?? Limited Water Resources
  - ?? Human Resources, Lack of Utility/Government Manpower
  - ?? Land Issues
  - ?? Geographical Site & Isolation
  - ?? Government Support (lacks) / No Political Will
  - ?? High Costs of Services
  - ?? Water Quality
  - ?? Water Conservation
  - ?? Lack of enforceable rules, regulations, and appropriate Legislation
  - ?? Lack of Education/Awareness training for existing staff (to pass to customers, too)
  - ?? Lack of Utility Institutional Management Structure
  - ?? Unreasonable Donor Restraints
  - ?? No value given to water (meter) or the establishment of a proper tariff
  - ?? Lack of Vision – No Master Plan or Capacity building
  - ?? Lack of Appropriate Technology
  - ?? Lack of Consumer Support
  - ?? Poor Public Relations
  - ?? Political Instability
  - ?? Lack of Long Term Planning & Commitment
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## MEASURES TAKEN TO MANAGE WATER WASTEWATER UTILITIES

What are the actions you have undertaken to improve service delivery / reliability?

- 1) Developing appropriate standards regardless of whether on island/off; same tools; rules;etc.
  - 2) Metering (also conservation)
  - 3) Corporatism or draw contract for very specific services
  - 4) Not the same as privatization because access are not for sale / Policy decisions remain with govt. policy makers. (UNELCO)
  - 5) Conditions - Improved Customer Services via Complaint Books (PNG) - Improved reliability (standby; back up capacity) PNG - Inadequate investment
  - 6) Limited Water - Leak Detection & Repair (FSM: Kosrae)
  - 7) Human Resources - ASPA: 12 young students 9 come back, recognized that even if gone for a while or if costly, still saves money and saves long term action because of proper thinking (local view points that are accepted by customers); after training; salary not enough; work conditions not good enough in Samoa v. New Zealand (therefore— recognize for talents and abilities and pay them for being special). Long Term Human Resources Development (ASPA) - Need to look for good / proper case studies
  - 8) Customer Apathy
  - 9) Land Issues - (ownership access)
  - 10) Geographical Site & Isolation - also climate/rust
  - 11) Government Support (lacks) / No Political Will - Educate & Maintain good relationships w/ opportunity people (PNG), and keep communications frequent; donor surveys; statistics; compliments
  - 12) High Costs of Services - GIS Systems to improve O&M (decrease costs)
  - 13) Water Quality -Sydney: Clean Waterworks Program / computer models
  - 14) Water Conservation - meters/ Project WET
  - 15) Lack of Legislation - Corporate Library of Good Water Legislation, and Visits with Legislation and constant communications
  - 16) Lack of Education - Training for existing staff (to pass to customers, too)
  - 17) Lack of Management Institutionalized / Trained -Master Planning (Fiji) - O&M Program: prediction of service replacement, Pumps/well head standards, etc. (ASPA) “Proper”
  - 18) Unreasonable Donor Restraints
  - 19) No value given to water (meter) - correct tariff established
  - 20) Lack of Vision - Master Plan & Capacity building
  - 21) Lack of Appropriate Technology
  - 22) Lack of Consumer Support
  - 23) Poor Public Relations - Hire PIO/ Vision / Project WET Training w/ existing staff
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- 24) Political Instability - Use Independent Resources cross boundaries Training for each new political group
- 25) Lack of Long Term Planning & Commitment - Sydney: Clean (clear?) Waterways Program / computer models constant play: FLOW (Vanuatu )
- 26) Demand management measures

## FUTURE NEEDS

What are the future actions needed to address the problems of the water sector as a whole?

- 1) Improved & Consistent Customer Education
    - i) Water Education Materials (Kids; Hydrology; Political Leaders; Community Groups; Civic Groups; highest educational levels)
  - 2) Community Consultation
    - i) Improved participation within utility by community
  - 3) Utility Donor Aids Programs:
    - i) Design w/ local interest in mind; sustainable; protects investment of local islands
    - ii) Learn from previous mistakes to make sustainable, looking from a donor side, look at the long term interest—customer receiving end of how it will be maintained in order for the donor to be paid in long run, even if donor has to do the program differently than it is accustomed. Lifecycle costs: can't walk away.
    - iii) "Increased stakeholders consultants ensuring sustainability." (ADB TO UTILITY; or other donors that deal ONLY W/COUNTRY, whereas OMIP, as an example, talks directly with utility)
  - 4) Increased Transfer of Training & Training (within education levels; utility levels; from consultants or contract workers to indigenous)
  - 5) Question from Donor:
    - i) Too much studies; not fast enough to the end product.
    - ii) No examples of "parts in the ground." Stop studies; Do it.
  - 6) Utilities agreed; but they asked: "How?"
    - i) Get engineers and utilities together, fewer accountants / political people, even consultants that simply want to continue to have a job; write another report. Keep Foreign affairs / high-level people out of the contractual process.
  - 7) Legislative Interference:
    - i) Can legislate action if there is interference
    - ii) Have donor agencies provide grants/funding only if legislators/politics stay out of the process; stay out of rates or disconnections, etc.
  - 8) Sustainable Leakage Management:
    - i) Allied member asked why utilities complain about leaks, yet, never do anything or never follow through later?
    - ii) Answers are: money / costs / employees (or write entire package)
    - iii) Answer is that YOUR UTILITIES and YOUR POLITICIANS never get your agendas pushed when the outside agencies and organizations come to your countries. Therefore; this points to WHY the utility must speak early and often
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with Each and Every Legislature (it's small island, and basically, you're related to all politicians anyway, says Mr. Neil, PWA).

9) High Level Advocacy / access:

i) Fisheries, Agriculture; Tourism; Health; Education

(a) 3 of 4 hospitalisations due to water-borne disease, then money comes to you, more regularly.

10) National Task Force for Water

i) Develops the Plan for Advocacy

11) Strong Legislation that is enforceable: by utility w/ fees to utility

12) Greater Forcibility of Loan Packages:

i) Bank Policies: Why loan money for Studies; if no money is given for the follow up / implementation, sustainable.

## **FURTHER INFORMATION**

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