The Tripartite Cook Islands/China/New Zealand Water Project in the Cook Islands – A New Zealand perspective

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Presentation structure:

Project overview

The ‘Triangular Partnership’

Implementation experiences
Rarotonga’s existing water supply

Gravity system

• 12 stream intakes in the hills
• Basic sand filtration
• Little network storage
• Gravity flow into two ring mains around the island
• Consumption is not metered or charged
• Multiple unregulated connections
Rarotonga’s water supply network
Challenges

Ageing infrastructure
- 40+ years old
- Occasional sinkholes in the road due to main failure
- Asbestos cement pipes
- No backflow prevention

Compromised service
- Intermittent supply in dry weather
- Turbid water in wet weather
- Low pressure in elevated & remote parts
- Occasional hydrogen sulphide odour
- Little data to quantify supply, demand & losses
Need for action

Not a significant public health concern, but:
- Supply quality & reliability not meeting public expectations
- Old infrastructure in poor condition, with significant leakage (estimated at 70% of inputs).

NZ & ADB funded concept design (2009) estimated NZ$60m to upgrade the network
The ‘triangular partnership’

**Background**
- Cook islands-led initiative
- Cook Islands agreed a NZ$22.8m concessional loan from China
- New Zealand offered a NZ$15m grant
- Cook Islands will fund the balance & cover contingency

**Announcement**
- Triangular partnership announced at PIF (August 2012)
- Reconfirmed at the formal project opening (February 2014)
Announcing the Water Partnership at the Pacific Islands Forum (30 August 2012)
Joint statement by China’s Vice Foreign Minister Cui, Cook Islands PM Henry Tuakeu Puna, & NZ Prime Minister John Key
Establishing the partnership

Communication
- Extensive liaison between Rarotonga, Wellington & Beijing
- Chinese Embassy in Wellington was the focus for communications

Commitment
- Financial
- Political
- Development principles (partner-led, partner systems)
Structure

Cook Islands Cabinet
- Determines overall policy

Governance Group
- Chaired by CIG:
  - PSG oversight
  - Partner liaison
  - 6-monthly meetings

Steering Group
- Chaired by CIG:
  - Project oversight
  - Partner liaison (NZ, CCECC, CIG)
  - Endorsements/approvals
  - Consultation/mediation

Project Management Unit
- CIG contractor:
  - Project management
  - Legal, consents & compliance
  - Communications
  - Contract award & management
  - Design
  - Construction, testing, commissioning
  - Delivery on project KPIs (time, scope, cost)
  - Liaison with PSG
  - Asset management

Contractors
- CIG procurement systems for:
  - International engineering consultancies
  - Local tradespeople
Funding

**China**
NZ$22.8m loan

**New Zealand**
NZ$15m grant

**Te Mato Vai**
Water Partnership

**Cook Islands**
balance & contingency

NZ$60m
Official opening ceremony for the Te Mato Vai Water Partnership (Rarotonga, 20 February 2014)
Proposed upgrade

Same basic network configuration, with

• Improved filtration
• More storage
• Option to add disinfection
• Metered connections
• Backflow protection
• Improved hydrant access (for fire fighting)
• Asset management regime
Complementary approach

Ring main (China & Cook Islands)
- EXIM Bank provides NZD22.8m concessional loan
- Chinese contractor (CCECC) to design & replace ring mains

Other network components (NZ & Cook Islands)
- NZ provides a $15m grant
- CIG Funds balance of all other network upgrade components, plus project management & supporting work
Progress to date

Completed
• Network model
• Master Plan
• Detailed design

Progressing
• Ring main (30% done)
• Construction tendering
• Domestic leak assessment
• Water Policy
Preparing for electro-fusion welding of ring main joints by CCECC workers
Partnership experiences

Similarities
• High level commitment to success by all partners
• Shared reputation (despite the 2-pronged approach)
• NZ & China have past experience in Rarotonga
• Chinese Embassy in Wellington serves NZ & Cook Islands

Differences
• Chinese design ready to build on signing (Chinese labour & materials)
• NZ & CIG planning & design followed signing
  - international tendering
  - use of local contribution where appropriate
Challenges
• Aligning partner understanding & expectations
  – Construction timelines
  – Clear definition of roles & responsibilities
  – Clarity of specifications (e.g. pipe jointing)
  – Quality standards (e.g. pipe inspection & testing)
  – Need for technical assistance

Opportunities
• Mutual interest in further development collaboration
• Timely focus on ‘quality’ in Beijing
Development Outcomes

Partnership outcomes encouraging at all levels

• Governance group
• Project steering group
• Operational

Too soon to judge outcomes

• Upgraded network will be operational in 2017
• Long term outcomes dependent on infrastructure asset management arrangements
Conclusions: Partnership precursors

High level of political commitment

Established bilateral relationships
• Creates trust & understanding
• Enables prompt resolution of issues

Relatively low risk initiative
• Established technology solutions
• Small scale
• Low profile
Conclusions: Critical Factors

Leadership by the developing country partner
• Overcomes different operating styles & cultural contexts

Mutual trust & respect
• Overcomes different operating styles and cultural contexts

Focus on outcomes
• Avoids preoccupation with the engagement process

Consistent with conclusions of the DAC Brainstorming Meeting on Triangular Cooperation (Lisbon, 2012)
Extract from the Te Mato Vai promotional video