



**ENGINEERS  
WITHOUT  
BORDERS/NZ**

# **Empowering Communities Through Water Supply Projects**

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## **Our Vision**

Everyone has access to the engineering knowledge and resources required to lead a life of opportunity, free from poverty.

# UN Sustainable Development Goals (SDGs)

Between 1990 and 2015, the proportion of the global population using an improved drinking water source increased from 76% to 91%

# 6

## CLEAN WATER AND SANITATION



# Rural Water Supply (RWS)

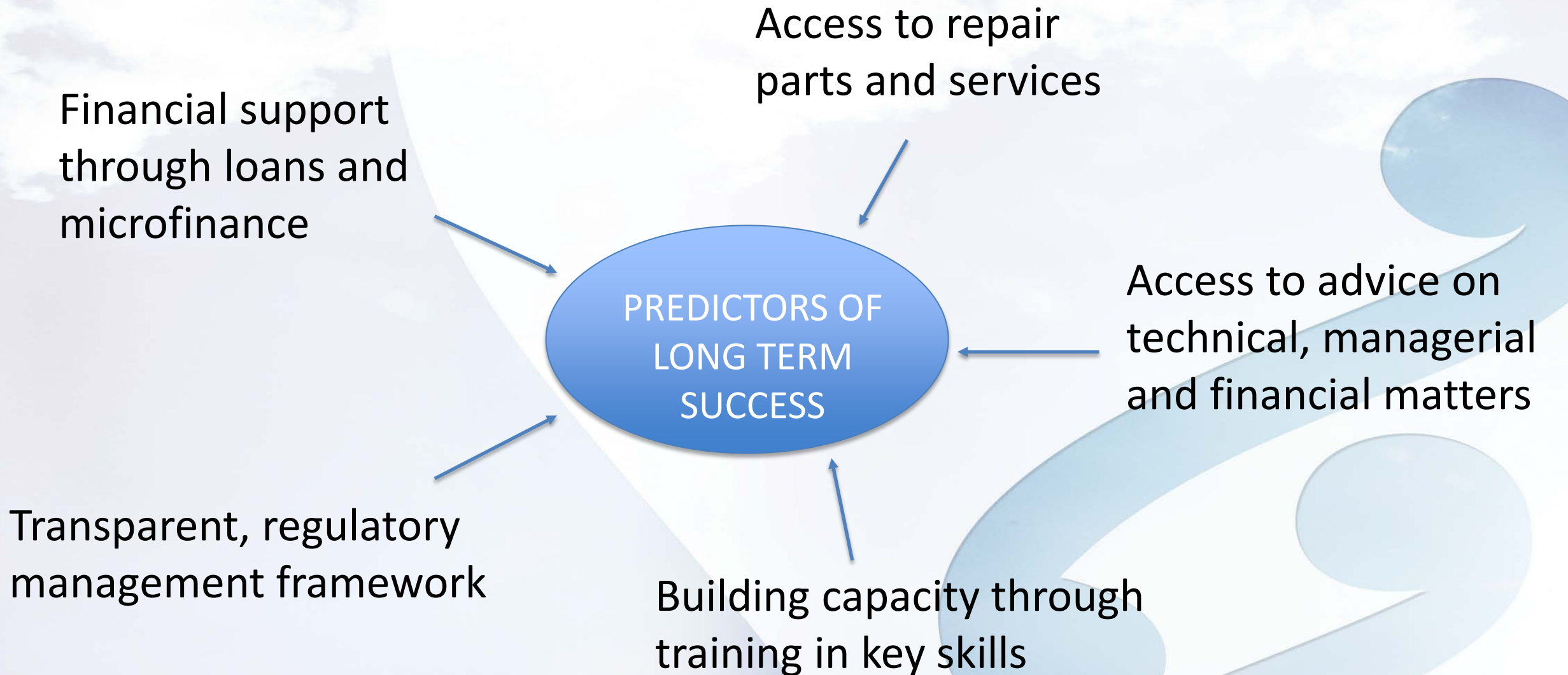
Common causes of failure:

- ▶ Poor design or construction
- ▶ Lack of training in operation and maintenance (O&M)
- ▶ Lack of funds for O&M
- ▶ Lack of organisational capacity to carry out O&M





# Rural Water Supply



(Hutchings et al. 2015)

# Approaches to Development

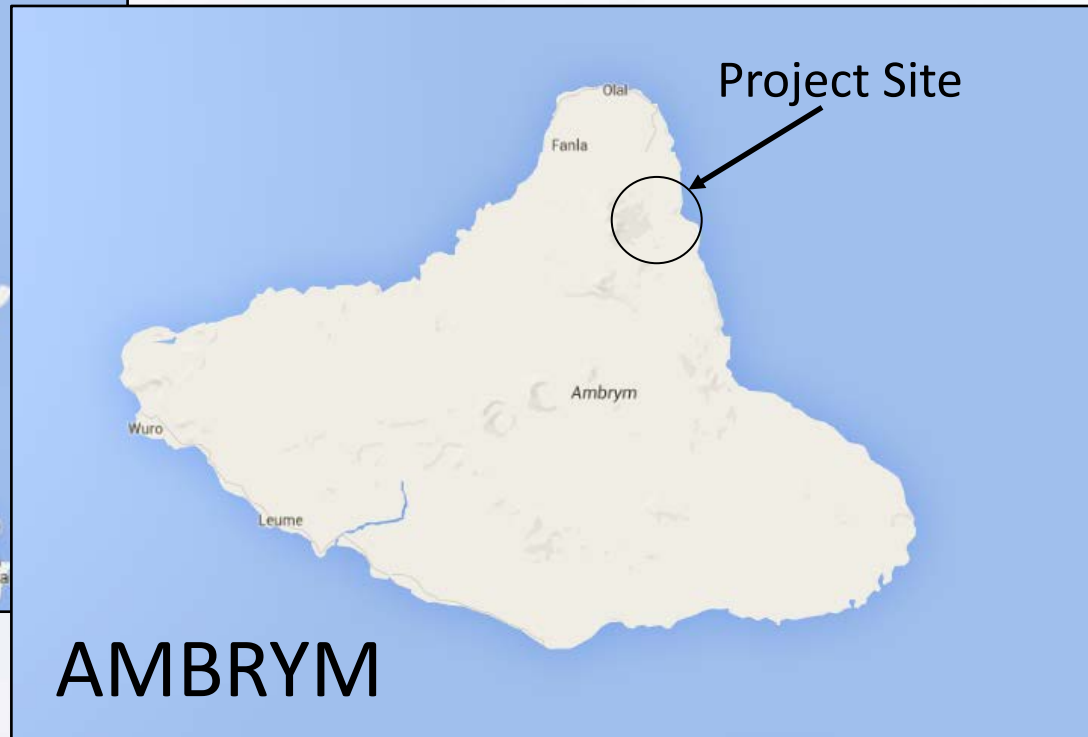
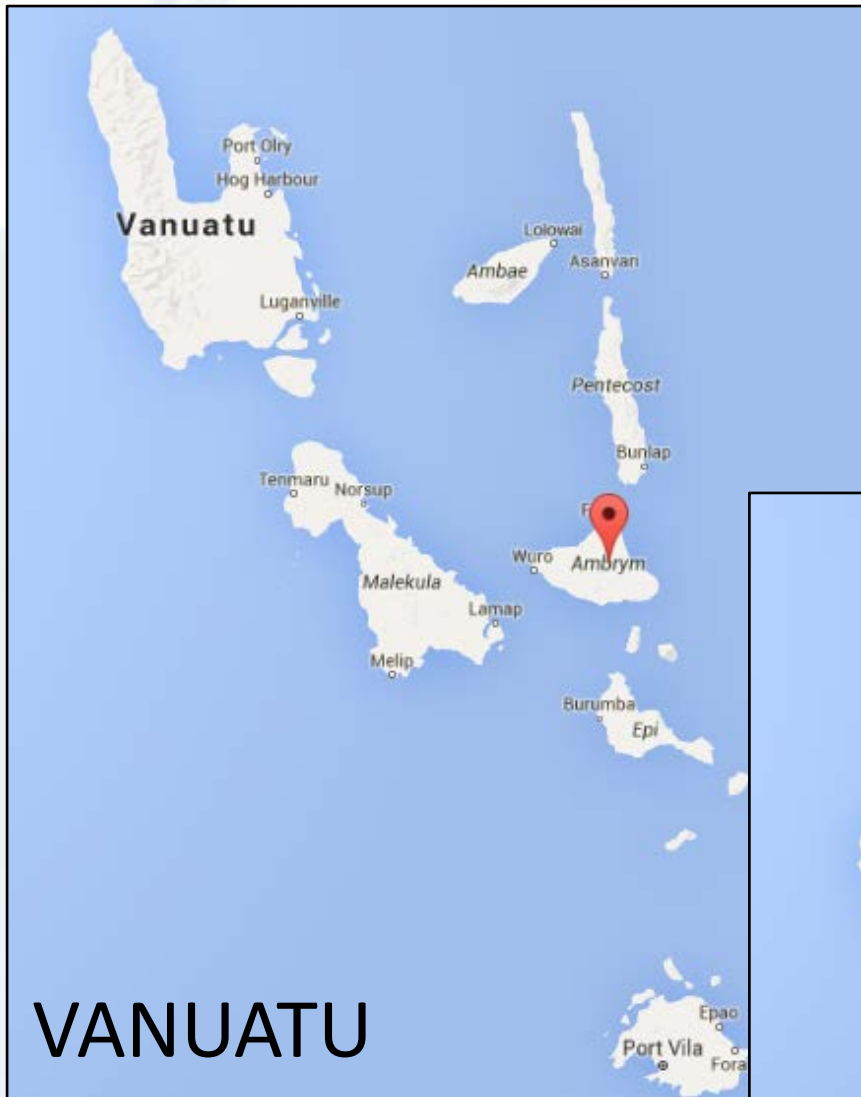
## Needs-based

“What **problems** do you have that we can solve?”

## Strengths-based

“What **assets** do you have that we can strengthen?”

# Wawan Water Supply



# Wawan Community Assets

## Community

- Tools
- Construction skills
- Willingness to contribute time
- Local resources
- Fundraising experience

## Wawan Fonhal Development Council

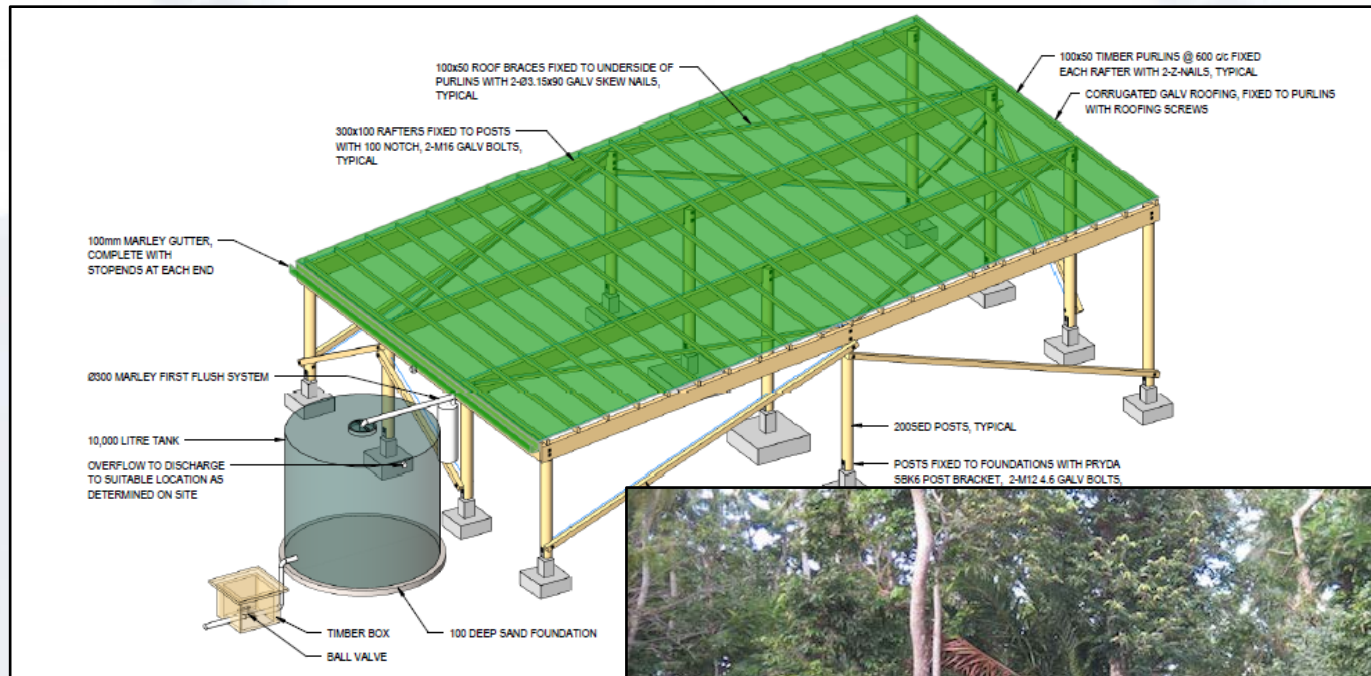
- Experience in water projects
- Financial skills
- Regular meetings
- Funding relationship with Rotary

## Village chiefs

- Respect
- Enforcement authority
- Organisational abilities



# Wawan Water Supply



# Barriers to Success

“I informed the community the water fee would likely be 400V/h/m. I asked all households to sign a statement saying they acknowledge and accepted the proposed water fee...

...It was not until a few weeks later I was informed by my host mother that she told the community to agree to anything I said because she thought I was depressed and did not want me to worry too much.” (Cleary 2013)



# Barriers to Success

- ▶ Communication
- ▶ Organisational capacity
  - Financial management
  - O&M management
- ▶ Long term engagement



# Successes

- ▶ Operational water supply
- ▶ Improved resilience
- ▶ Access to technical support
- ▶ On-site training
- ▶ Recycling of skills









# Conclusion

Can we call the Wawan Project a success?



Questions?



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