



PROJECT PROPOSAL

KiraKira Dental Clinic

March 1st, 2023



BACKGROUND

Makira province is the fourth largest province and has a population of 60,000. The densest population lives around Kirakira, the provincial capital. The rest of the population is dispersed in rural communities predominantly around the coastline.

The Problem



Old unrepairable dental equipment

- The Dental chair is 40+ years old and does not move, has no light
- The compressor does not work, so unable to provide permanent fillings



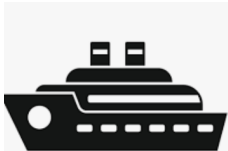
Poor quality dental care

- No autoclave to sterilise instruments, risking spreading disease through dental treatment
- Only temporary fillings, extractions and jaw fractures can be treated



Inadequate work force

- One dentist for a population of 60,000
- Due to dispersed population, outreach tours are conducted, leaving the capital with no dental services



Difficulty accessing dental care in Honiara

- Travelling to Honiara by ship takes 24 hours
- Travelling by air is cost prohibitive for most



Poor retention of dentists

- Due to Inadequate equipment and huge workload
- Over the last 10 years,
 - no dentist has stayed for longer than 18 months (except Dr Lenstar)
 - 3 years with no dentist



OBJECTIVES

- *Kirakira Dental Clinic has appropriate dental equipment that can be maintained and is appropriately serviced*
- *Increase the quality of dental services and infection control*
- *Increase the types of dental services that can be delivered, including permanent restorations, gum treatment and preventive care*
- *Increase the capacity of dental services by enabling a second dental care provider to be posted in Kirakira*
- *Improve the retention of dental personnel in Kirakira*



Output

- *Build a modern dental clinic with two dental surgeries, a sterilisation room, reception, office and storeroom*
 - *Pre-fabrication in Australia will enable the erection of the building within 2-3 weeks, with minimal material waste.*
 - *Treated pine and terminate-resistant particle board, as well as galvanised steel posts and flooring will ensure resilience*
- *Provide quality second hand dental equipment and instruments appropriate for the Solomon Island context*
- *Provide training and ongoing support in equipment maintenance to ensure the longevity of equipment*
- *Provide training in equipment use and infection control procedures*
- *A second dentist or dental therapist to be posted to Kirakira*
- *A second Dental Assistant trained to support the second dentist or dental therapist*



PROJECT BUDGET (IN AUD)

Project Total Budget: \$

NBSI Health and Welfare Trust	Value	Expected Due Date
Building materials and fit out (including lights, air conditioner, cabinetry)	\$50,000	July 2023
Shipping transport from Brisbane to Honiara	\$5000	July 2023
Airfares from Australia to Kirakira for Builder, electrician, biomedical technician, dental assistant	\$6400	Aug- Oct 2023
Airfares from Australia to Kirakira for bioSydney to Kirakira for Bio-medical technician and dental assistant to conduct review and evaluation	\$3600	April 2024
Airfares and accommodation from Sydney to Kirakira for dental assistant to provide training in infection control and equipment maintenance (5 days) and for Bio-medical technician to review (2 days)	\$4000	Aug - Nov 2023 April 2024
Total:	\$69,000	

Charity - C.H.A.T.S (Dr Som-Ling Leung & Dr Ray Khong)	Value	Expected Due Date
2 dental surgeries equipment 2 dental chairs with dental delivery units and light, 1 autoclave, suction unit, compressor - note- no x-ray machine at present	\$27,000	July 2023
Instruments and small equipment for 2 dental surgeries	\$5000	July 2023
Purchase Shipping container	\$4000	June 2023
Dental equipment maintenance training and support	\$-	Nov 2023
Total:	\$36,000	



PROJECT BUDGET (IN SBD)

Central Makira Constituency	Value (SBD)	Expected Due Date
Shipping costs from Honiara port to Kirakira	\$?	Sept 2023
Labour for unloading the shipping container and safe storage of materials until the building starts	\$?	Sept 2023
Labour costs for building construction	\$?	Oct 2023
?accommodation	\$	Oct- Nov 2023
Total:	\$	

Provincial Health Department	Value (SBD)	Expected Due Date
1 return Airfare and accommodation (one night) for the Solomon Island Dental Bio-medical technician to service equipment on a yearly basis	\$3300	April 2024 (recurring yearly)
Budget \$3000 SBD per year for equipment maintenance and repairs	\$3000	April 2024 (recurring yearly)
Accommodation for Australian builder (12 nights), biomedical technician (5 days) , dental assistant (5 days) total: 22 days	\$8050	Oct 2023
Total:	\$14,350 SBD	



TIMEFRAME

PHASE One

- Secure funding and commitment from stakeholders
- Clearly define roles and responsibilities
- Develop and sign an MOU

March - April 2023

PHASE TWO

- Source Dental equipment required
- Source building materials and pre-fabricate dental clinic in Australia

April - July 2023

PHASE THREE

- Transport shipping container from Brisbane to Honiara to Kirakira
- Unload shipping container to safe storage location

Aug - Sept 2023

PHASE FOUR

- Build the Dental Clinic in Kirakira
- Install Dental equipment
- Provide training in equipment use and maintenance

Oct - Nov 2023

PHASE FIVE

- Evaluation of equipment and service by Australian Bio-medical technician
- Dental Assistant review practice protocols (equipment maintenance, infection control)

April 2024



Team members



Dr Som-Ling Leung, Australian Project manager

- Collaborate with builders to design the dental clinic
- Coordinate shipping from Australia
- Source suitable dental equipment
- Develop and oversee budget
- Project implementation, monitoring and evaluation
- Mentor Dr Lenstar in project management



Dr Lenstar Hagatea, Solomon Islands Project manager

- Oversee execution of the project in Kirakira
- Conducts risk identification and oversees risk mitigation strategies
- Develop and oversee a daily, weekly, monthly Equipment maintenance schedule
- Maintain an inventory log of instruments and equipment
- Develop infection control procedure manual and oversee the implementation



Hon. Nester

- Coordinate shipping from Honiara to Kirakira
- Coordinate unloading of the shipping container and safe storage of materials
- Source appropriate labour from Makira Province



Jack Vissner, Australian Builder

- Design dental clinic
- Source building and fit out materials and pre-fabrication of dental clinic
- Oversee packing of shipping container
- Provide required extra tools for building the dental clinic
- Support John Marshall, lead builder, in Kirakira



John Marshall, Solomon Islands Lead Builder

- Oversee and manage the building from start to completion in Kirakira
- Ensures safety of all workers during building phase
- Ensures quality of workmanship



Team members



John Harara, Provincial Health Director

- Budgeting for yearly Dental equipment servicing (including airfares, accommodation and repair parts)
- Support and mentor for Dr Lenstar to achieve objectives and activities
- Land allocation of 22.4m x 7.35 m. Building is 14.4m x 7.35m. An extra 8m will allow for future additional surgeries if required.



Dental Health Services Victoria Bio-medical technician

- Install dental equipment and provide training to Solomon Island's bio-medical technician
- Provide ongoing consultation support for equipment issues



Kylie Clark, Australian Dental Assistant

- Provide training in equipment use, daily, weekly and monthly maintenance schedules
- Provide training in infection control



Fox, Solomon Islands Dental Assistant

- Oversees infection control procedures and provides training to new dental personnel
- Maintains equipment as per schedule developed by Dr Lenstar



RISK ANALYSIS & MITIGATION STRATEGIES

Risks associated with Building	Risk level	Risk Mitigation Strategies
Building material lost in transit		? allocate a person to travel with items on the boat
Building material missing during storage		Dr Lenstar and Hon Nester to ensure safe storage. Dr Lenstar to visit storage location on a weekly basis to check items
Inadequate tools for building		John Marshall to communicate with Kirakira Lead Project manager in Kirakira to determine what tools are required by June 2023, then communicate with Jack Vissner, who will organise sending of materials
Unexpected weather events		Budgeted for John Marshall to stay an extra week. Provincial Health Department willing to pay for extra accommodation if required.
Injuries during the build		John Marshall to ensure all workers adhere to safety protocols and have sufficient safety equipment. A lack of safety equipment should be communicated with Jack Visnner by June 2023
Quality of building not meeting expectations		Jack Vissner to travel to Kirakira to ensure quality control. John Marshall has been trained by Jack Vissner and has a good reputation.
Insufficient funds for labour		
Delay in shipping container arrival		



RISK ANALYSIS & MITIGATION STRATEGIES

Risks associated with Dental Equipment	Risk level	Risk Mitigation Strategies
Kirakira dental personnel not understanding how to use dental equipment		
Kirakira Dental personnel not performing required daily, weekly and monthly maintenance		
Unexpected problems with dental equipment		
Catastrophic breakdowns in equipment		
Higher rates of wear and tear due to hot and humid conditions		
Unable to do minor repairs resulting in major repairs		
Equipment or instrument losses		



RISK ANALYSIS & MITIGATION STRATEGIES

Risks associated with Providing extra dental services	Risk level	Risk Mitigation Strategies
Unable to get a second dentist posted to Kirakira		There is a surplus of dentists and dental therapists in Honiara. The enticement of a good dental clinic should be an attractive option. The National Dental Department has the power to post someone. A letter from the National Dental Department should be obtained to verify posting is possible.
Unable to get funding for a second dental assistant		A letter from the National Dental Department should be obtained to verify funding is possible.
No staff housing for second dentist		Dr Lenstar is willing to move to his home community, to allow the dentist to reside in the staff housing provided.
Inadequate material to provide dental services specified		\$1000 AUD of materials will be provided through Strong Island Foundation to supplement materials. Dr Som-Ling Leung will continue to liaise with DFAT and National Dental Department to improve material procurement.
Dental Assistant unable to support dental services required		?
Expectations of dental assistant greater than capacity		?



MONITORING & EVALUATION

- Dr Lenstar and John Harara to provide feedback on the design and functionality of the dental clinic after 6 months.
- An Australian Bio-medical technician is to visit Kirakira Dental Clinic six months after opening to review equipment and maintenance schedules.
- An Australian Dental Assistant is to visit Kirakira Dental Clinic six months after opening to review infection control and equipment maintenance manuals and procedures.
- Based on these evaluation reports, CHATS charity will organise follow up.
- Dr Lenstar to provide monthly reports on procedures completed and number of patients seen. We hope to see an increase after the dental clinic is built.