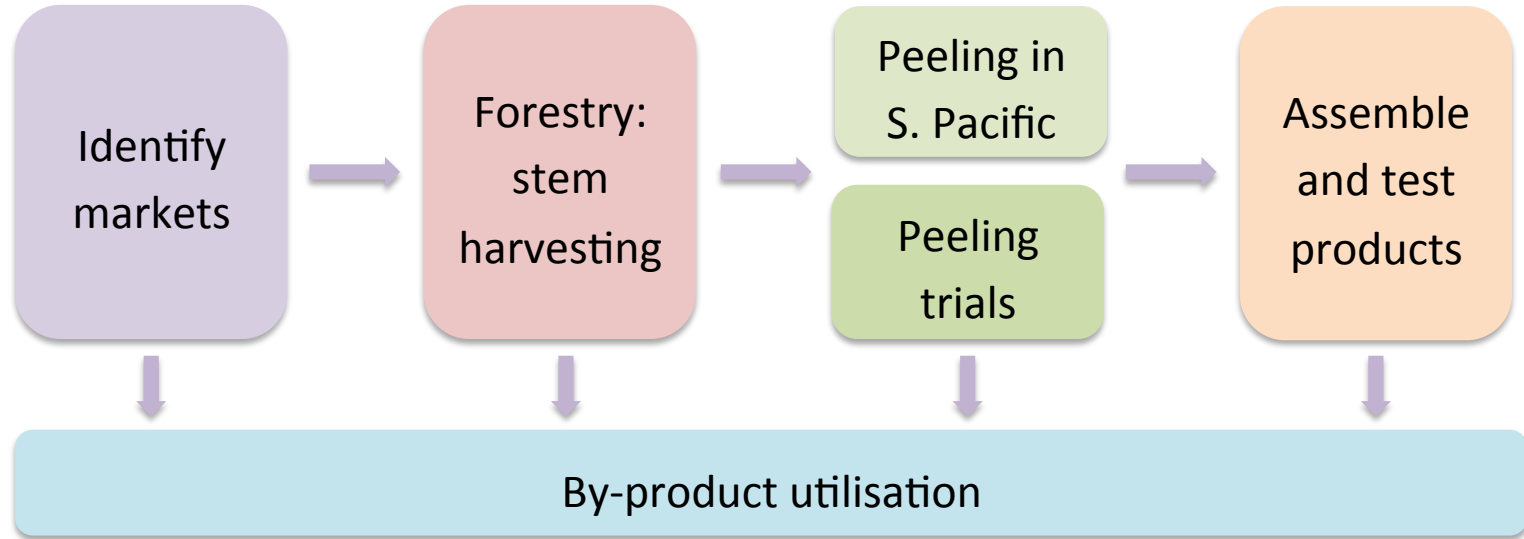


# Objective 3

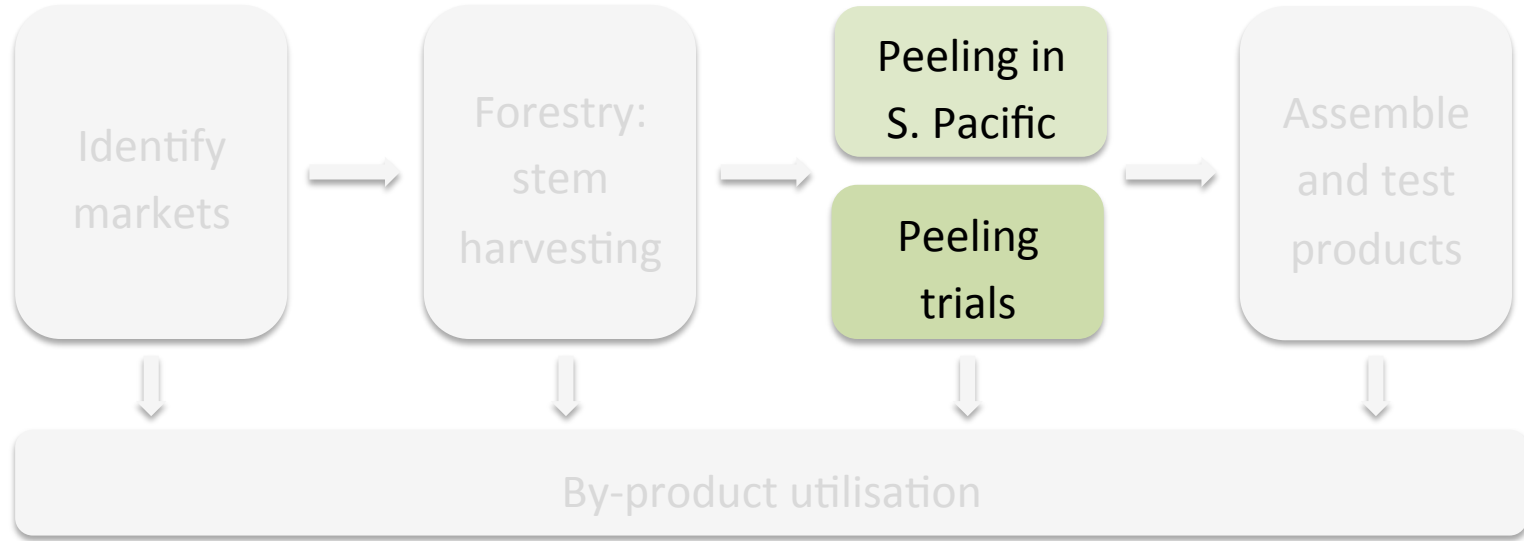


Establish experimental  
veneer-peeling capacity in  
the South Pacific

# Project objectives



# Objective 3 – South Pacific veneer peeling capacity



# Objective 3 – South Pacific veneer peeling capacity

Peeling in  
S. Pacific

Peeling  
trials

## ***Objective 3*** – Establish experimental veneer-peeling capacity in the South Pacific

3.1 – Commissioning a spindleless lathe equipment

3.2 – Assessing the potential of a regional trial and  
demonstration program

# Objective 3 – South Pacific veneer peeling capacity

Peeling in  
S. Pacific

Peeling  
trials

## *3.1 – Commissioning a spindleless lathe equipment*

- Lathe equipment in place in August, 2014.
- Equipment adjustments continuing.
- Latest trial commenced this week.
- Visit TUD for a demonstration tomorrow

# 3.1 Commissioning Spindleless Lathe



## 3.1 Commissioning Spindleless Lathe





# 3.1 Commissioning Spindleless Lathe





# 3.1 Commissioning Spindleless Lathe



# 3.1 Commissioning Spindleless Lathe



## 3.1 Commissioning Spindleless Lathe





# Log sensing



# Skills development





# Skills development



# Objective 3 – Experimental regional peeling

Peeling in  
S. Pacific

Peeling  
trials

## *3.2 – Assessing the potential of a regional trial and demonstration program*

- Feasibility of transporting the lathe suite between regional centres will be assessed
  - Technical
  - Economic
  - Physical



# Modeled trial locations

Three regional trial locations were chosen and four sites investigated :

- TeiTei Taveuni Farmer Association selected location at Taveuni, Fiji.
- Strickland Brothers Ltd facility at Apia, Samoa.
- Two locations at Honiara, the Solomon Islands: The Timol Timber facility and the VATA Timber yard..



# Modeled equipment suites

- Option 1: The existing lathe suite is adapted for travel and relocated.
- Option 2: One additional lathe suite is acquired, adapted for travel to each trial locations and relocated.
- Option 3: Three additional lathe suites are acquired, one for each trial location, adapted and relocated.



# Modeled operational stages

- **Stage 1: Initial training.**
  - An experienced operational staff member from each trial location is trained as a lathe team captain at TUD Nasinu.
- **Stage 2: Infrastructure upgrades.**
  - Local infrastructure is upgraded to operate the lathe equipment suite.
- **Stage 3: Equipment preparation.**
  - The equipment suite or suites are collected, packed and dispatched to the regional trial location.
- **Stage 4: Regional equipment installation.**
  - The equipment suite is unpacked, installed and commissioned.
- **Stage 5: Regional training.**
  - The local lathe team captain and a project officer train a lathe production team at the regional trial location.



# Modeled operational stages

- Stage 6: Regional research.
  - Peeling experiments are conducted with local coconut resources.
- Stage 7: Regional demonstration.
  - Regional demonstration program is held for community, government and business groups.
- Stage 8: Repack and despatch.
  - Lathe decommissioning, repacking and relocation to the next centre.
- Stage 9: TUD Reinstall.
  - At the completion of the program, the equipment suite is left at the chosen location or returned to TUD for recommissioning.
- Stage 10: Central planning and coordination



# Modeled demonstration program

Critical path activity	Option 1	Option 2	Option 3
• Order manufacture and deliver equipment	• -	• 4 months	• 5 months
• Modify equipment	•	• 2 months	• 3 months
• Pack and prepare equipment	• 2 months	• 2 months	• 2 months
• Dispatch and operate in Taveuni.	• 3 months	• 3 months	• 3 months
• Dispatch and operate in Samoa	• 3 months	• 3 months	• 2 months
• Dispatch and operate in the Solomons	• 3 months	• 3 months	• 2 months
• Return to TUD and reinstall	• 2 months	•	•
• Slack	• 1 month	• 1 month	• 3 month
• Total	• 14 months	• 18 months	• 20 months

# Activity risk profiles

Activity	Taveuni	Samoa	Solomons
• Stage 1: Initial training.		• Low	
• Stage 2: Infrastructure upgrades.	• Very high	• Medium	• Medium
• Stage 3: Equipment preparation.		• Low - medium	
• Stage 3: Equipment preparation - Dispatch	• Medium	• Low	• Low
• Stage 4: Regional equipment installation.	• Very high	• Medium	• High
• Stage 5: Regional training.		• Medium	
• Stage 6: Regional research.		• Medium	
• Stage 7: Regional demonstration.		• Medium	
• Stage 8: Repack and despatch.	• Very high	• Medium	• High
• Stage 9: TUD Reinstall.		• Medium	
• Stage 10: Central coordination		• Low - medium	

The major significant risks are the level and cost of modification needed to any additional lathes and a suitable site, a power supply and transport for a Taveuni trial.



# Estimated total cost

Project cost summary (\$)	Option 1	Option 2	Option 3
• Personnel	• \$100,997	• \$102,636	• \$105,534
• Supplies and services	• \$34,093	• \$29,193	• \$23,217
• Travel	• \$48,293	• \$47,337	• \$47,337
• Capital items	• \$39,898	• \$153,398	• \$378,148
• Contingency	• \$50,238	• \$74,827	• \$124,703
• <b>Total</b>	• <b>\$273,519</b>	• <b>\$407,391</b>	• <b>\$678,939</b>

Option 1 leaves one peeling research facility in the Pacific.

Options 2 & 3 establish satellite joint production/research facilities.

A single organisation may fund Options 1 & 2.

Organisations in association may fund Options 2 & 3.



## Objective 3 – Experimental regional peeling

The final report highlights:

- The costs of equipment and training.
- The technical and infrastructure demands of establishing a basic facility.
- The need for robust transport services and trade support near the facility.
- The difficulty of establishing remote facilities without established support mechanisms.

# Objective 3 – South Pacific veneer peeling capacity

Peeling in  
S. Pacific

Peeling  
trials

## ***Key completion dates –***

<b>Activity</b>	<b>Planned</b>	<b>Actual</b>
Lathe suite relocated to Fiji	March 2014	July 2014
Lathe suite commissioned in Fiji	March 2014	August 2014
Lathe suite adjustment in Fiji	November 2014	August 2015
Assessment of potential regional peeling program – verified.	June 2014	August 2015

# Questions



Australian Government  
Australian Centre for  
International Agricultural Research



Queensland  
Government



SPC  
Secretariat  
of the Pacific  
Community

