

# **Promoting Skills Formation through Public Investment Projects:**

**Case Studies from ADB-financed Infrastructure  
Projects in Papua New Guinea**

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The ADB logo consists of the letters 'ADB' in a white, serif font, centered within a dark blue square background.

# Purpose of the study

- ADB want to propose options to increase skills development opportunities for PNG workforce
- Focus is on how to use public investments in infrastructure to do this
- Drawing on the lessons from UK, USA, Australia and Switzerland

# Outline

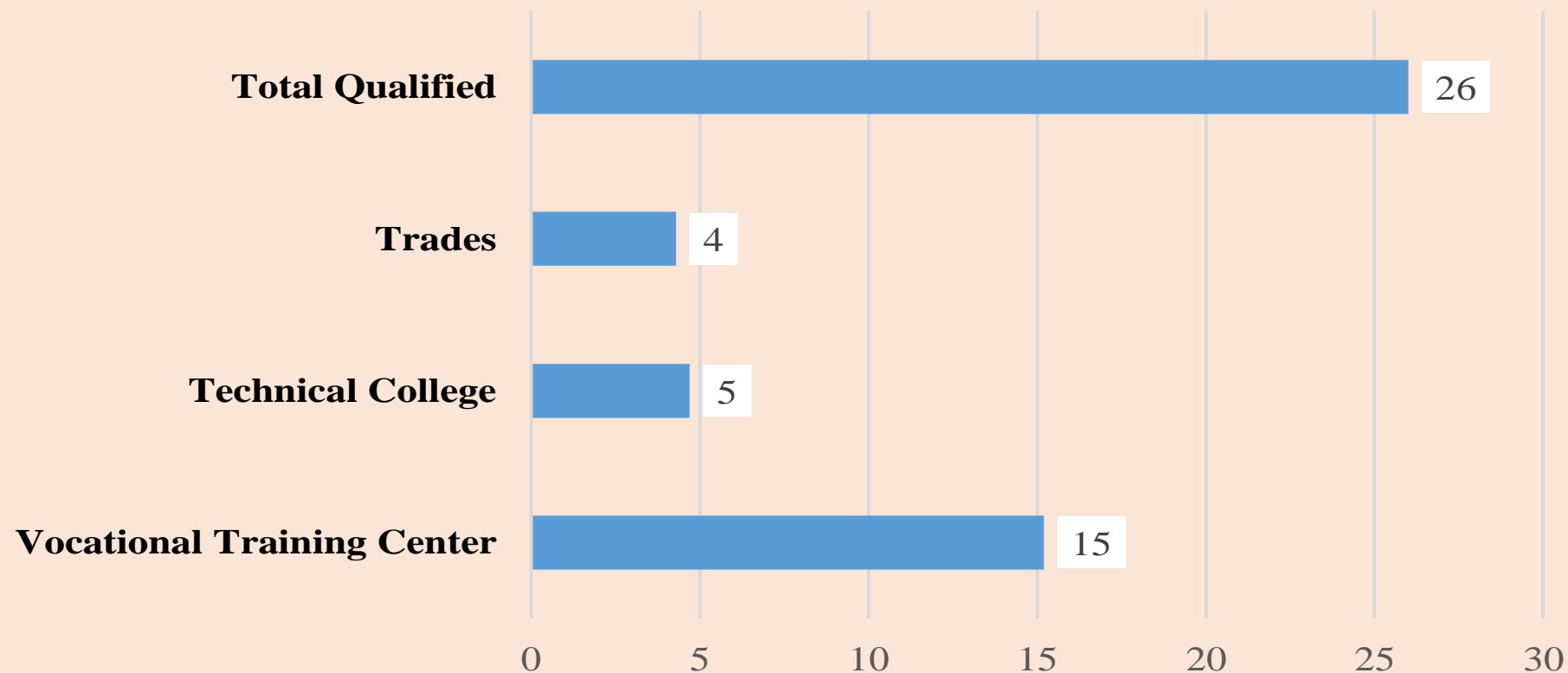
- Start with World Bank 2015 evidence on PNG enterprises need for skilled workers
- Look at data on skills gaps in the construction sector
- Recommend ways to develop the skills of PNG workers working on publicly funded infrastructure projects.

# World Bank's Papua New Guinea Enterprise Survey 2015

- One in five firms in manufacturing and services in PoM & Lae identify lack of skills as a major constraint on their current operations
- Problem is greater in Lae – one in four firms

# 2011 Census data on skills gap

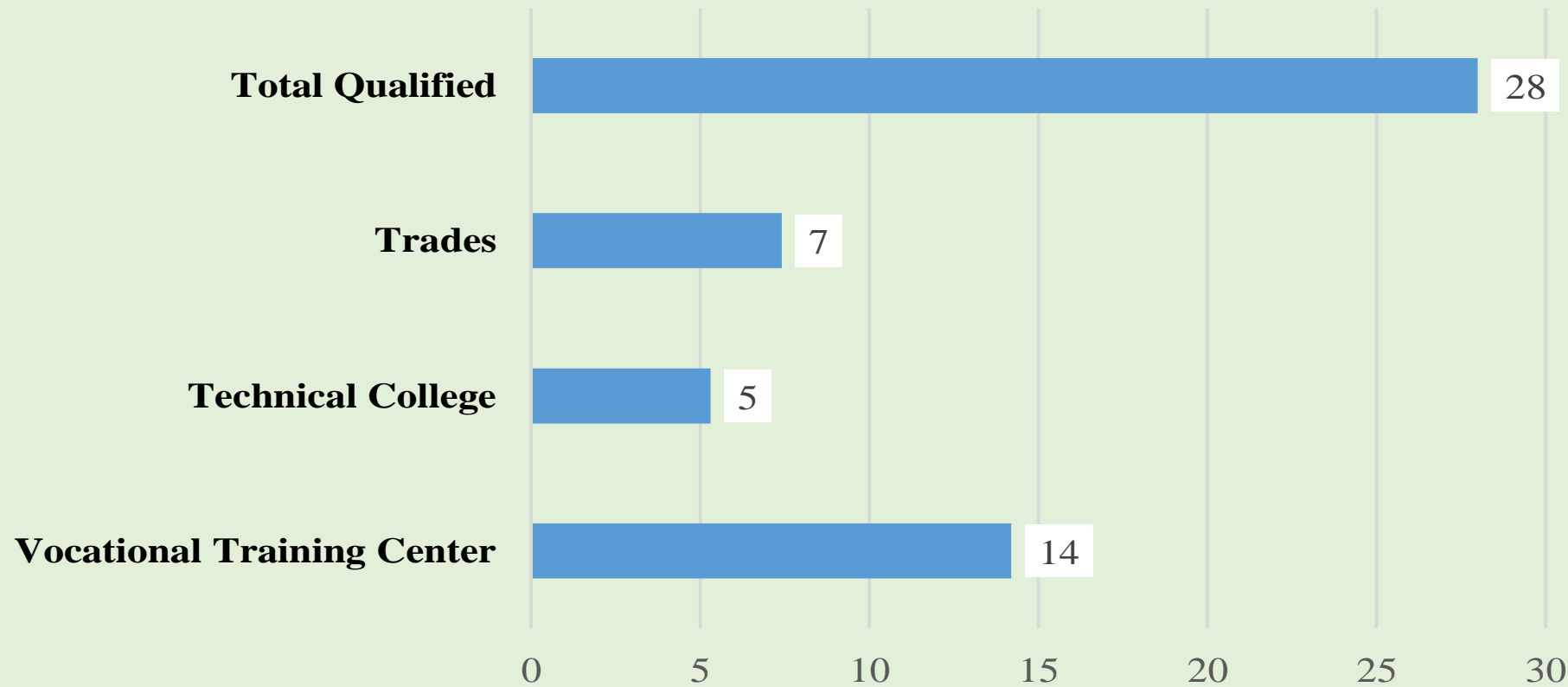
## Carpenters and joiners: per cent qualified



N = 18,785

# 2011 Census data on skills gap

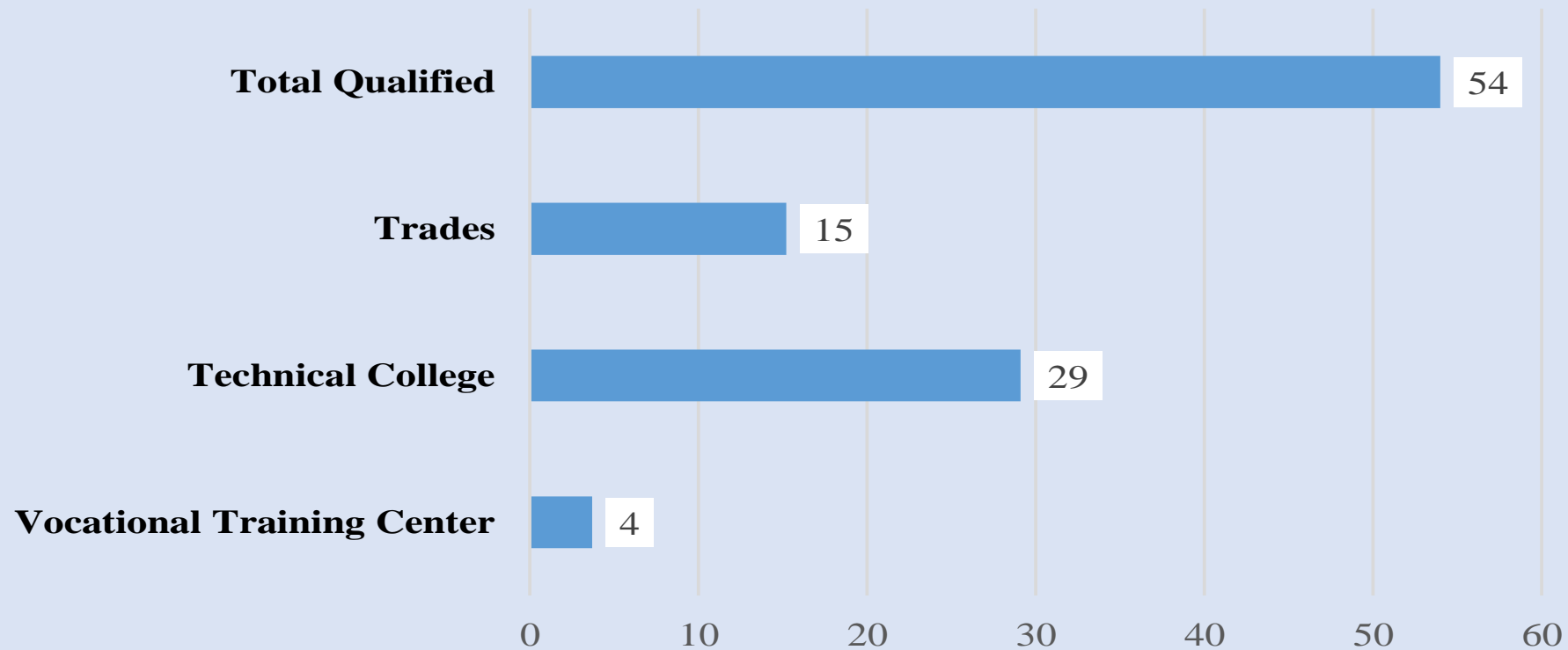
Plumbers and pipe fitters: per cent qualified



N = 3,128

# 2011 Census data on skills gap

Building & related electricians: per cent qualified



N = 1,503

## Occupations of foreign worker permits approved 2013 & 2014

	N
<b>Technicians &amp; trade coordinators &amp; supervisors</b>	<b>5,700</b>
Specialist heavy machinery mechanic or technician	2,337
Steel fixer	1,743
Scaffolder	1,022
Structural steel erector	849
Construction rigger	722
Metal fabricator	714
Building and construction manager	604
<b>Total</b>	<b>15,797</b>



# Recommendations

- Need positive incentives for enterprises
- Need to involve different stakeholders
- No single solution will work
- Need to consider a range of options
- Feedback welcomed

# Recommendation 1: Identify type of skills to be transferred

- Identify the skill sets to be transferred using census, work permit & project data on occupations
- Four types of skills:
  - Basic skills
  - trade & technician skills
  - professional & managerial skills
  - organisation-wide systems eg quality control systems

## Recommendation 2: Make contract changes

- Skills transfer as input in a contract
  - eg number of training places
- Skills transfer as an output
  - eg training in specified skills
- Skills transfer as performance-based outcome
  - Eg training in specified skills to an assessed quality standard

## **Recommendation 3: Use framework agreement to provide incentives for firms**

- Concept of 'creating shared value'
- Seeking ways to solve social problems as a means to strengthen license to operate
- – see Oil Search Foundation Annual Report 2015 – eg working in partnership with PNG Health Dept to deliver better health services - train & mentor staff

## Recommendation 4: Need for government to act

- Policy statement about obligation of foreign enterprises to transfer skills
- Obligation in work permit legislation but not at beginning and not monitored systematically
- Analyse work permit data to identify long term users of work permits for trade and technician occupations

## **Recommendation 5: promote role of professional associations as skills intermediaries**

- Contracts are of limited duration
- Need to fund professional associations to support individuals to continue their skills development in other workplaces
  - eg Institution of Engineers PNG; Institute of Architects, Surveyors Association, PNG Human Resource Institute,

Further contacts

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- Promoting Skills Formation through Public Investment Projects: Case Studies from ADB-financed Infrastructure Projects in Papua New Guinea Consultants' Reports | July 2016