The case for promoting Skills Formation through Public Investment Projects:

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

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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

• Recommendations for policy change draw on the lessons from UK, USA, Australia & South Africa
Outline

• Start with recent evidence on skill shortages

• 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.
• 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
How to Grow Employment in PNG?
Early findings

- Data source: Survey by Deloitte UNDP December 2016
- 230 employers responded (156 Port Moresby)
- Most employers (80%) say skills shortages stops them hiring more workers
- 90 per cent of employers outside main population centres said skills shortages impeded hiring
2011 Census data on skills gap

Carpenters and joiners: per cent qualified

<table>
<thead>
<tr>
<th>Training Center</th>
<th>Total Qualified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational Training Center</td>
<td>15</td>
</tr>
<tr>
<td>Technical College</td>
<td>5</td>
</tr>
<tr>
<td>Trades</td>
<td>4</td>
</tr>
</tbody>
</table>

N = 18,785
2011 Census data on skills gap

Plumbers and pipe fitters: per cent qualified

- Total Qualified: 28
- Trades: 7
- Technical College: 5
- Vocational Training Center: 14

N = 3,128
2011 Census data on skills gap

Building & related electricians: per cent qualified

- Total Qualified: 54
- Trades: 15
- Technical College: 29
- Vocational Training Center: 4

N = 1,503
<table>
<thead>
<tr>
<th>Occupation</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technicians &amp; trade coordinators &amp; supervisors</td>
<td>5,700</td>
</tr>
<tr>
<td>Specialist heavy machinery mechanic or technician</td>
<td>2,337</td>
</tr>
<tr>
<td>Steel fixer</td>
<td>1,743</td>
</tr>
<tr>
<td>Scaffolder</td>
<td>1,022</td>
</tr>
<tr>
<td>Structural steel erector</td>
<td>849</td>
</tr>
<tr>
<td>Construction rigger</td>
<td>722</td>
</tr>
<tr>
<td>Metal fabricator</td>
<td>714</td>
</tr>
<tr>
<td>Building and construction manager</td>
<td>604</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15,797</strong></td>
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</tbody>
</table>
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 requirement specified as input in a contract
  - eg number of training places
- Skills transfer requirement specified as an output
  - eg training in specified skills

Skills transfer specified 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 needed about obligation of foreign enterprises to transfer skills
- Obligation on employer in work permit legislation needs to be specified clearly
- Analyse work permit data to identify long term users of work permits for trade and technician occupations for focus to transfer skills
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,
Recent changes in labor laws now require that South African employers ensure that a skills transfer plan is produced - and kept on the employee's file - for all foreign employees who hold a work visa. This was previously only required for foreign employees who held a work visa in the intra company transfer category.

Next steps
The Department of Labour is authorised to conduct unscheduled site visits of an employers’ premises. It is recent practice for the department to ask for any documents and information that they feel is necessary to verify that the employer remains compliant with statutory labor requirements. Therefore employers who currently employ foreign nationals should ensure that they have the necessary skills transfer plan for each employee on file in order to avoid any penalties that may result from non-compliance.
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Promoting Skills Formation through Public Investment Projects ADB Pacific Studies
https://www.adb.org/publications/skill-transfer-human-development.png
PROMOTING SKILL TRANSFER FOR HUMAN CAPACITY DEVELOPMENT IN PAPUA NEW GUINEA

THE ROLE OF EXTERNALLY FINANCED INFRASTRUCTURE PROJECTS

ASIAN DEVELOPMENT BANK