“Infrastructure creates a lot of jobs, but how many really?”

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This presentation is a short teaser to a challenge. This does not reflect the full presentation of the PIDA Job creation toolkit.
Development Challenge: More and more young people seeking for jobs

By the End of the Century, 40% of People Will Be African
World population forecast with Africa’s percentage share

World's Population

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Africa's Population</th>
<th>Accounts for</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>2.5 billion</td>
<td>230 million</td>
<td>9%</td>
</tr>
<tr>
<td>2015</td>
<td>7.3 billion</td>
<td>1.2 billion</td>
<td>16%</td>
</tr>
<tr>
<td>2050</td>
<td>9.5 billion</td>
<td>2.4 billion</td>
<td>25%</td>
</tr>
<tr>
<td>2100</td>
<td>11 billion</td>
<td>4.2 billion</td>
<td>39%</td>
</tr>
</tbody>
</table>

Source: UNICEF

The 20 countries with the fastest growing populations

Africa
Non-Africa

1. Liberia
2. Burundi
3. Afghanistan
4. Western Sahara
5. East Timor
6. Niger
7. Eritrea
8. Uganda
10. Palestinian Authority
11. Jordan
12. Mali
13. Benin
14. Guinea-Bissau
15. Yemen
16. Somalia
17. Burkina Faso
18. Chad
19. Angola
20. Ethiopia
Delivery challenge:
Yes, infrastructure development can create jobs – but how many really?

Data Availability                      Job Estimations                      Data Interpretation

Data Availability                      Job Estimations                      Data Interpretation
Discussion Questions

• How do you obtain infrastructure project data for monitoring and tracking purposes?

• How do you estimate labour market effects of large-scale infrastructure projects?

• How do you sensitize project owners and policy makers to take on the job lens when planning, designing and implementing projects?
THE PIDA JOB CREATION TOOLKIT
PROGRAM FOR INFRASTRUCTURE DEVELOPMENT IN AFRICA (PIDA)

Welcome to the Job Creation Toolkit aimed at maximizing the African jobs resulting from the preparation, construction, and operation of Africa infrastructure projects. Project Owners, technical partners, and government policy makers can estimate the total job impact from their projects (including indirect, induced, and economic spillover jobs) and also think through possible ways to increase the number and quality of African jobs. Click one of the four buttons below to estimate jobs, access the job database, review options to maximize jobs, and telescope into case studies.

- **Estimate Jobs Here**
- **Access Job Projections**
- **Maximize Jobs**
- **Telescope into Case Studies**

**SEARCH/FILTER**

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**Ruzizi III**
This hydro power project creates an estimated average of 2,400 annual jobs.

**Batoka Gorge**
This hydro power project creates an estimated average of 34,000 annual jobs.

**Brazzaville – Kinshasa Toll Bridge**
This rail bridge project creates an estimated average of 3,748 annual jobs.
Estimate infrastructure investment by input category (e.g., construction, equipment, etc.)

Estimate changes in electricity production

Input side

<table>
<thead>
<tr>
<th>Goods/Sector</th>
<th>Inputs</th>
<th>Value added</th>
<th>Gross production</th>
<th>Imports</th>
<th>Volume of goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>End demand</td>
<td>Households</td>
<td>State</td>
<td>Investments</td>
<td>Exports</td>
<td>= Volume of Goods - Imports = Gross domestic product</td>
</tr>
</tbody>
</table>

Output side (use side)

Core Use of African Input-Output Tables (Example of Energy)

- Direct, indirect and induced jobs in project preparation, construction, and operations & maintenance
- Direct, indirect and induced jobs resulting from secondary effects

I-O Tables depict the interdependencies between economic sectors, and are used to estimate the impact of positive or negative economic shocks through an economy (investment in infrastructure is a positive shock).

I-O Tables assumes that some inputs (investment in infrastructure) are used by sectors that produce output (intermediate output), which in turn is sold to another sector for consumption (final output); total output adds intermediate and final outputs.

By using labor productivities, one can calculate job creation from output.
Possible BATOKA GORGE Job Maximization Strategy: 6,700 additional annual jobs IN CONSTRUCTION PHASE

- **Project Preparation** (4 years)
- **Construction** (7 years)
- **Operations** (50 years useful life)

### Number of Average Annual Jobs

- **Project Preparation**: 178 jobs: direct, indirect, induced
- **Construction**: 25,500 jobs
- **Operations**: 40,000 Secondary jobs (direct, indirect, induced)
- **Operations**: 108 O&M (direct, indirect, induced)

### Sources

- Source of raw materials from Africa
- Training of local professional services jobs to meet demand
- Implement national procurement policies and training

Note: All estimates include direct, indirect and induced jobs
Feedback from audience

• What are your thoughts/comments/suggestions on the PIDA Job Creation Toolkit?
• Do you plan similar interventions? If yes, what are your lessons learnt?