REDEVELOPMENT OF INLAND WATER TRANSPORT FOR POST-CONFLICT REHABILITATION IN SOUTHERN SUDAN

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Harnessing Natural Resources for Peacebuilding: Lessons From U.S. and Japanese Assistance
Washington D.C.
20 July 2011
1. Inland Water Transport and Disaster
2. IWT and JICA project in South Sudan
3. Conclusion
Inland Water Transport: Neglected Mode

I. Background

1. Transport Rehabilitation: Crucial in transporting goods, people, IDPs in post-conflict period

2. IWT is a neglected mode of transport. Even at normal times, main support for roads, and limited for IWT.

II. Objective

To propose planning method of transport rehabilitation at post-conflict period

1. To review IWT’s roles of reconstruction in South Sudan

2. To examine capacity development
History of IWT in Japan

Nihonbashi River (c. 1830)
Source: Edo-TOKYO MUSEUM
IWT’S Decline in Japan

Traffic Volume in Tone Channel
Source: Goto (2008)

Number of River Ships
Source: River Front Development Center (2003)
- Through applying lessons learned from the Kobe Earthquake, developing jetties to prepare earthquakes
- Issues: promoting utilization at normal time
Rescue and Rehabilitation at 9.11 World Trade Center in 2001

1. Evacuation
   - by ferry: 160,000
   - 200-300,000 by Coastal Guard and private boats

2. 2000 injured persons to Jersey, Triage Center

3. Debris transport: 1.6 million tons for 10 Months
Conflicts in Sudan

1. Conflicts began after its independence in 1956
   - Islamic dominated northern government in Khartoum
   - and the Christian animist south
2. Comprehensive Peace Agreement signed in 2005
3. JICA started cooperation projects in 2006
4. Independence in July 2011

- 2 million people died, 4 million refugees
- Southern Sudan
  - area: 597,000 Km²
  - population: around 8.5 million
  - GDP per capita: US$184
- Juba City
  - Virtual ghost town,
  - Population: 250,000 (2005), 400,000 (2009)
Transport in South Sudan

1. Juba City: Southern terminus along River Nile, and roads to Kenya, Uganda, and Congo

2. Advantages of IWT
   - Small investment can resume transport function.
   - Security: Landmine, small conflicts

3. Average transport volumes per month:
   5,000 ton (2005) 6,750 ton (2008) increased by over 30%

<table>
<thead>
<tr>
<th>mode</th>
<th>Share (%)</th>
<th>fee (US$/ton)</th>
<th>average duration from Kosti (day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>61</td>
<td>400</td>
<td>20</td>
</tr>
<tr>
<td>Road</td>
<td>23</td>
<td>475</td>
<td>10</td>
</tr>
<tr>
<td>Air</td>
<td>16</td>
<td>2,500</td>
<td>-</td>
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Capacity Development in Post-Conflict Rehabilitation

Low operation because of limited capacity of Gov.

Additional JICA support from 2008 to 09: JICA expert & Training

1. **Society Level**: coordination among concerned organizations, private sector, and loaders union
2. **Organization Level**
   - establishment of operation unit
   - operation rules, financial plans
3. **Individual Level**
   Staff Training in safety and operation in Japan, Kenya, North Sudan

In 2009, Average monthly volume increased to 3,600 tons, over facility capacity
Conclusion

1. IWT play crucial roles in post-conflict reconstruction easily start operation with small inputs. roads
   - major transport mode at normal times, but require huge investment and long periods for rehabilitation
   - Security issue, demining

2. Capacity development
   - New government agencies have quite limited capacities of managing infrastructures

3. Recommendation
   - roles of IWT be properly evaluated in reconstruction and disaster management
   - feedback systems between domestic activities and ODA in Japan be established