Explanation of Draft Scheme of The Project for Upgrading of Kukum Highway

Ministry of Infrastructure Development
JICA Preparatory Survey Team

Objectives of JICA Preparatory Survey

1. To survey the project site conditions
2. To propose the components of the project
3. To design the project component works and estimate the project cost
4. To propose the project implementation plan
5. To submit the report to the both governments for the decision of the project implementation with grant aid assistance of the government of Japan

(The draft scheme of the project explained today will be discussed with JICA HQ, then draft final report including outline design will be prepared and submitted to MID in August 2014.)
Major Problems of Kukum Highway

High Priority and Measures

<table>
<thead>
<tr>
<th>High Priority</th>
<th>Measures</th>
</tr>
</thead>
</table>
| To repair seriously damaged section of Kukum Highway | ➢ To reconstruct pavement  
➢ To install roadside ditches and repair cross drains |
| To mitigate traffic congestion in the city center section | ➢ To take countermeasures against traffic congestion around the Central Market  
➢ To improve City Council Roundabout  
➢ To widen New Mataniko Bridge (2-lane to 4-lane)  
➢ To replace Old Mataniko Bridge (1-lane to 2-lane) |
Proposed Work Components of the Project

1. Upgrading of Kukum Highway (between City Council Roundabout and around Fishing Village Market)
2. Countermeasures against Traffic Congestion around the Central Market
3. Improvement of City Council Roundabout
4. Widening of New Mataniko Bridge
5. Replacement of Old Mataniko Bridge

1. Upgrading of Kukum Highway

**Proposed Major Works:**
- Reconstruction of pavement
- Installation of ditches and repair of cross drains
- Installation of sidewalks, median and bus bays
- Installation of road markings
- Repair of broken street lights

Proposed Typical Cross Section
Major Cause of Traffic Congestion around the Central Market

- Chaotic bus stoppings occupy the carriageway which disturb through-traffic
- Frequent road crossings of pedestrians which disturb through-traffic and endanger pedestrians

2. Countermeasure against Traffic Congestion around the Central Market

1. To relocate and improve/widen bus bays: 2-lane bus bay for White River bound (8 berths) and KG & Kolaridge bound (8 berths)
2. To install a wide crosswalk: with a traffic control officer
3. To re-open underpass: furnish lighting, cleaning and a security guard every daytime. Gate is closed nighttime.
4. To install barrier fence along median: to prevent free road crossing
3. Improvement of City Council Roundabout

- To increase lanes of ring road (2 to 3)
- To provide left turn lane for E to A
- To reduce connected roads (5 to 3)
- To utilize land of MID

4. Widening of New Mataniko Bridge

Existing New Mataniko Bridge (2-lane steel girder bridge)

Proposal: Construction of additional 2-lane steel girder bridge at upstream side
5. Replacement of Old Mataniko Bridge

Existing Old Mataniko Bridge (1-lane wooden deck bailey bridge) (Bridge will be closed during the construction)

Proposal: Replacement of Old Mataniko Bridge with 2-lane steel girder bridge

Supplemental Explanation

**Interview Survey at the Central Market**

The Survey Team interviewed 308 pedestrians and 153 drivers regarding the road crossing facility:

Q1: How do you think about existing road crossing facility for pedestrians around the Central Market?

- 89% of pedestrians and 97% of drivers selected the choice of “some road crossing facilities should be provided”.

<table>
<thead>
<tr>
<th></th>
<th>Need to change</th>
<th>No need to change</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver</td>
<td>97%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Pedestrian</td>
<td>89%</td>
<td>10%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Q2: What is desired improvement of the underpass to be used?

Q3: If barrier fence is installed all along median, do you use the underpass with improvement of the underpass?

✓ 60% of respondents selected the choice of “provide policeman always” to use the underpass.

✓ 91% of respondents selected the choice of “if underpass will be improved, I will use the underpass”.

Q4: Which type of road crossing facility is desired around the Central Market?

Q5: Where is desired location to crossing facility which is selected above?

✓ More than 70% of respondents selected the choice of “crosswalk with traffic signal or policeman as the desired facility.”

✓ 50% of respondents selected the choice of “around the Central Market” as the desired location to install the road crossing facility.
Q6: What do you think about installation of barrier fence along median with installation of road crossing facility?

✓ 93% of pedestrians and 79% of drivers selected the choice of “the fence should be installed”. And the main reason is “for safety”.

Q7: What improvement do you want around the Central Market?

✓ 36% of pedestrians selected the choice of “Widening of bus passenger waiting space” and 23% of them select “Safety measures”.
✓ 29% of drivers selected the choice of “Car parking space” and 23% of them select “Mitigation of traffic congestion”.
Concept of Bus Bay Improvement/Widening

Plan

Cross Section

Vura Junction Improvement Scheme (draft)
**Major Undertakings to be taken by the Governments**

<table>
<thead>
<tr>
<th>Solomon Islands</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Environmental and social consideration</td>
<td>- Detailed design</td>
</tr>
<tr>
<td>(EIA, Land acquisition and compensation)</td>
<td>- Construction</td>
</tr>
<tr>
<td>- Provision of temporary yards for works</td>
<td>- Construction supervision</td>
</tr>
<tr>
<td>- Utility relocation from construction area</td>
<td></td>
</tr>
<tr>
<td>- Provision of aggregate and soil sources</td>
<td></td>
</tr>
<tr>
<td>- Provision of disposal area</td>
<td></td>
</tr>
<tr>
<td>- Operation and maintenance</td>
<td></td>
</tr>
</tbody>
</table>