The Project for Capacity Development on Road Maintenance Phase-2 (CDRM 2), the Independent State of Papua New Guinea

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Directly operated maintenance of gravel roads in the target provinces is implemented in a proper manner by the DoW's in-house workforce and equipment.

DoW's capacity (institution, management, techniques) for implementing gravel road maintenance by the in-house workforce and equipment is strengthened in the target provinces.
Two (2) Main Pillars of JICA Technical Cooperation in Road Sector

1. Road Asset Management

The purpose of the concept is to implement strategic management so as to minimize life cycle cost of the road assets through the following activities: properly to check situation, to predict degradation, to repair or reinforce them at best timing.

2. Road Traffic Safety
Features of the Project

1. Phase 1 implemented in other 4 Provinces previously
2. Engineers who had training in Phase 1 are taking part as trainers in the Phase 2, the Project.
3. Budget Management is one important subject in the Project. To ensure maintenance budget, their equipment are rented to others including private sector in idling time.
4. Construction Equipment

Some construction equipment donated by Japanese Government besides the Project
Project Purpose and Outputs

 ✓ Output 1: PTDs of target province are set up to be capable of planning and implementing maintenance works of gravel roads under 'Day Labour' concept.

 ✓ Output 2: Workforce of the target PTD obtain sufficient knowledge, understanding, field experiences and practical skills necessary for gravel road maintenance works from identified trainers from CDRM I.

 ✓ Output 3: Management method in CDRM I is improved for further efficient use for heavy equipment.

 ✓ Output 4: Function of PTD is strengthened to support target provinces for gravel road maintenance.
**Summary of the Outputs and Activities**

☑ **Output 1:** PTDs of target province are set up to be capable of planning and implementing maintenance works of gravel roads under 'Day Labour' concept.

- Understanding road condition in the target provinces
- Confirmation of road ledger, road maintenance status, and plan of target provinces
- Improving road maintenance in target provinces under Day Labour policy
- Public relations of project activities
Output 2: Workforce of the target PTD obtain sufficient knowledge, understanding, field experiences and practical skills necessary for gravel road maintenance works from identified trainers from CDRM I.

- Ability of staff in the target provinces
- Training plan and teaching material development for operators, mechanics and civil engineering staff
- Selection of pilot project site, OJT preparation and workshop holding
- Conducting OJT in pilot project
- Questionnaire survey of residents around the pilot project site
- Confirmation of construction cost in pilot project
### Pilot Project

#### Example of CDRM 1

<table>
<thead>
<tr>
<th>Step of the pilot project</th>
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<tbody>
<tr>
<td>1. Site Inspection and <strong>Road Inventory</strong></td>
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<tr>
<td>2. <strong>Topographical Survey</strong> ex. centre-line and cross-section and mapping about project stretch for one year work</td>
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<td>3. <strong>Sub-soil CBR testing</strong> each 500m for mountain section and 1km interval for flat section</td>
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<td>4. <strong>Flood point and other disaster point survey</strong> along the pilot project</td>
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<td>5. <strong>Typical Cross-section and Right of Way survey</strong></td>
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<td>6. <strong>Design of Road</strong> Alignment, Earth Work, Cross Culvert and Pavement</td>
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<td>7. Practical Training and <strong>Trial Construction</strong> for civil engineers, works supervisors, operators and mechanics</td>
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<td>8. <strong>Preparation of Construction Plan</strong> and other related plans</td>
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<td>9. <strong>Awareness meeting and Inauguration Ceremony</strong> of Pilot Project</td>
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<td>10. <strong>Mobilization</strong> <em>has been completed but the PCE and the PE for pilot site were transferred in Sep.–Nov. 2016</em></td>
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<td>11. <strong>Implementation and OJT Site Training</strong></td>
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<td>12. <strong>Inspection and Quality and Quantities Control</strong></td>
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<td>13. <strong>Project Financial Control</strong></td>
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<td>14. <strong>Progress and Final Report</strong> including Conclusion and Recommendation</td>
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Pilot Project (Case in CDRM1)
Summary of the Outputs and Activities

✓ Output 3: Management method in CDRM I is improved for further efficient use for heavy equipment.

Related Activities

- Investigation and analysis of the management status of construction equipment
- Revision of management procedures for construction equipments
- Creation of spare parts procurement list
Summary of the Outputs and Activities

Output 4: Function of PTD is strengthened to support target provinces for gravel road maintenance.

- Review and institutional analysis of budget and personnel required for road maintenance
- Proposal of improvement plan for continuous road maintenance
- Implementation of support for PTD in target provinces that maintain unpaved roads in accordance with the improvement plan
Challenges faced under COVID-19

1. JICA Experts hadn’t entered to PNG.
2. Lockdown is executing in some targeted Provinces.
3. Situation of COVID 19 over PNG is still unrest.
Expected Impacts

1. Economic activity
2. Local skills and capacity
3. Connectivity, including access to health services
Thank you.