

Action Plan Report



Country : FIJI

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Current status and issues of road maintenance in my country

- ▶ Aging structures
- ▶ Structures exposed to saltwater
- ▶ No bridge maintenance manual system
- ▶ Environmental issue
- ▶ Signage's and Markings
- ▶ Lack of resources and manpower
- ▶ Rising maintenance costs for unpaved rural roads (especially M3 roads)

Comparing road networks is similar to blood veins in a human body and without proper care the body would collapse and similar to the network if it's not properly maintained the economy will fall.

So for the aging structures in my country that are more than 50 years and exposed to salt waters are in a critical status

Roads with pavement that are constructed about 50 years are fallen apart

Waste water from construction site not treated and are harmful to the environment surroundings

Knowledge and know-hows learnt in this training

- ▶ Road Maintenance System Cycle
- ▶ Bridge maintenance System
- ▶ Use of Recycle materials for road making materials
- ▶ New technologies of using colors pigments for asphalt
- ▶ Reinforcing existing bridge piers exposed to saltwater's and typhoon earthquake
- ▶ Inspection/Management Cycle Road sign
Technology transfer from Japan's advanced road construction techniques

On how Okinawa operates its inspection and management cycle

Intervals of bridge inspections and key points of bridge inspections

Recycles materials that can be recycled for road making materials – concrete, plastic bottles, glass bottles and so on

New technology use of drones (infra red rays for crack inspections)

Seismic reinforcement to bridge superstructures

Additional technology and others that I am interested in learning more

- ▶ New technologies and research and designed
- ▶ Use of carbon fibres to strengthen concrete piers
- ▶ Use of Resin in making asphalt to pave roads
- ▶ Bridge construction on another level
- ▶ Soil erosion protection works
- ▶ Road vegetation
- ▶ Water purification
- ▶ Use of Ground cell method for unpaved roads



Using of nuts caps to prevent corrosion

Different paint applications on steel beams to prevent corrosion

Typical resin and color pigments used for asphalt

IV Project and others that I wish to apply in my country

- ▶ Proposed for a monorail to eased traffic congestion
- ▶ And construction of a freeway
- ▶ Construction of pedestrian walkover bridge in the congestion areas - Suva City



One of the major problem we have in Fiji is the traffic congestion for the Suva=Nausori corridor and so the a long plan to ease traffic flow is proposed for a Monorail route

Or construct a freeway with

Conclusion

- ▶ Disaster-Resilient Infrastructure Development Rand D
- ▶ Preventive Maintenance Culture
- ▶ Revitalization of the local economy through use of local materials and workforce
- ▶ Use of Technology for Monitoring and Asset Management
- ▶ Maintenance manual system for Bridges and Roads
- ▶ Draw up a FIJI standard guidelines
- ▶ Reduction in maintenance cost

Development in Research and designed capacity

Adopted the preventive maintenance model rather than corrective measure

Use of local sources materials and reduce cost

Use of New technologies equipments for monitoring and assessment

ARIGATO, THANK YOU,
MALOLELEI, TALOFA, VINAKA

