

**Rural Road Surfacing Research (RRSR)
SEACAP 1
Trials Dissemination Workshop**

**RRSR : SEACAP 1
Background and Rationale**

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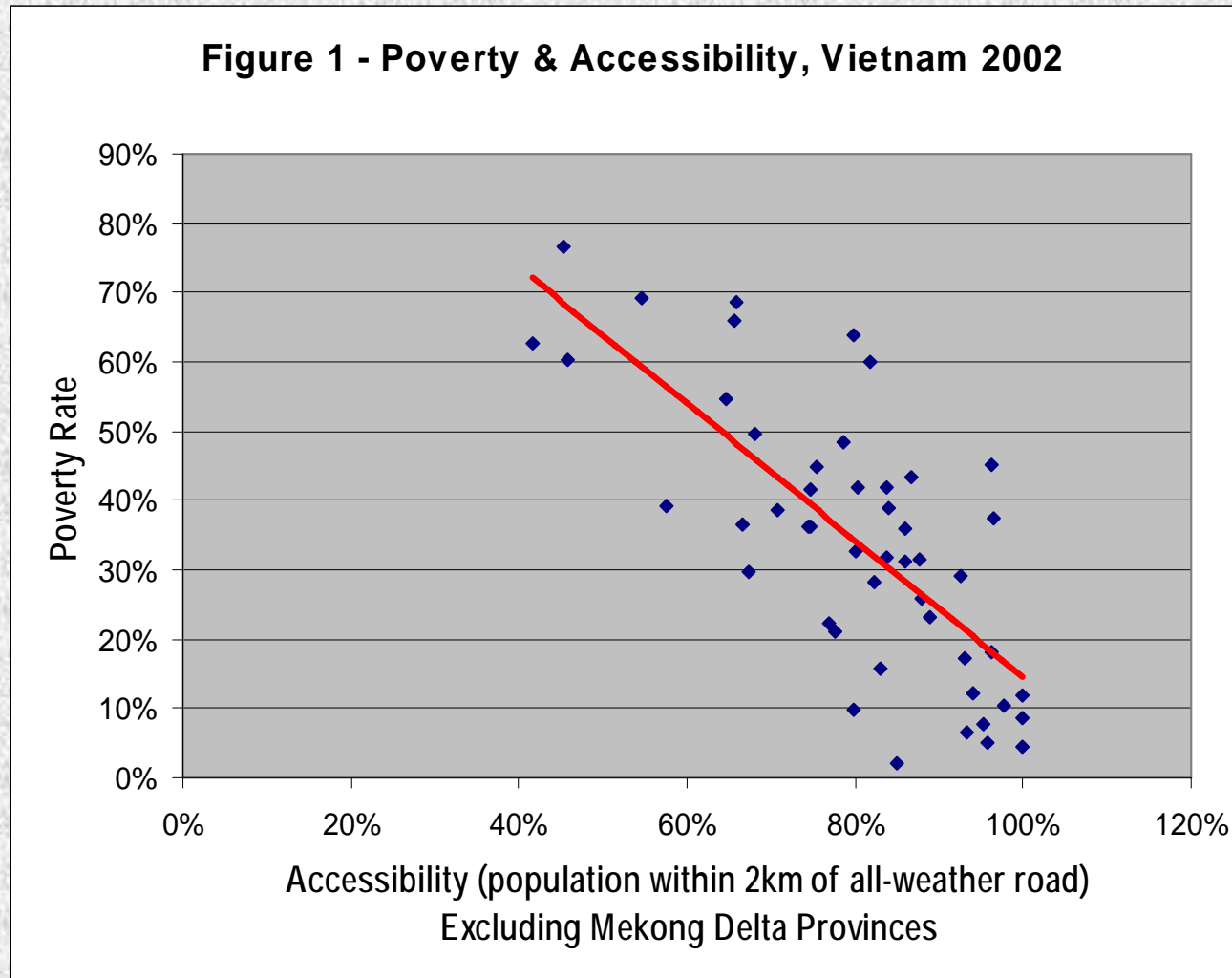


Background

- ❑ There has been an unsustainable reliance on gravel roads to solve the access problems of poor and rural communities in Vietnam.
- ❑ Justification of gravel surfaced roads has been based on research carried out in other regions.
- ❑ Vietnam is a particularly challenging environment for unpaved roads.



Poverty is linked to Poor Access



Development requires good ACCESS



Rural Economic and Social development needs commercial, educational, health and infrastructure initiatives that rely on **GOOD PERMANENT ACCESS**.

Unfortunately, Poor Access for many rural communities limits the effectiveness of these initiatives, because of:

- ❑ unreliable travel or impassability, especially in the rains,
- ❑ high unit transport costs for goods, services & people.

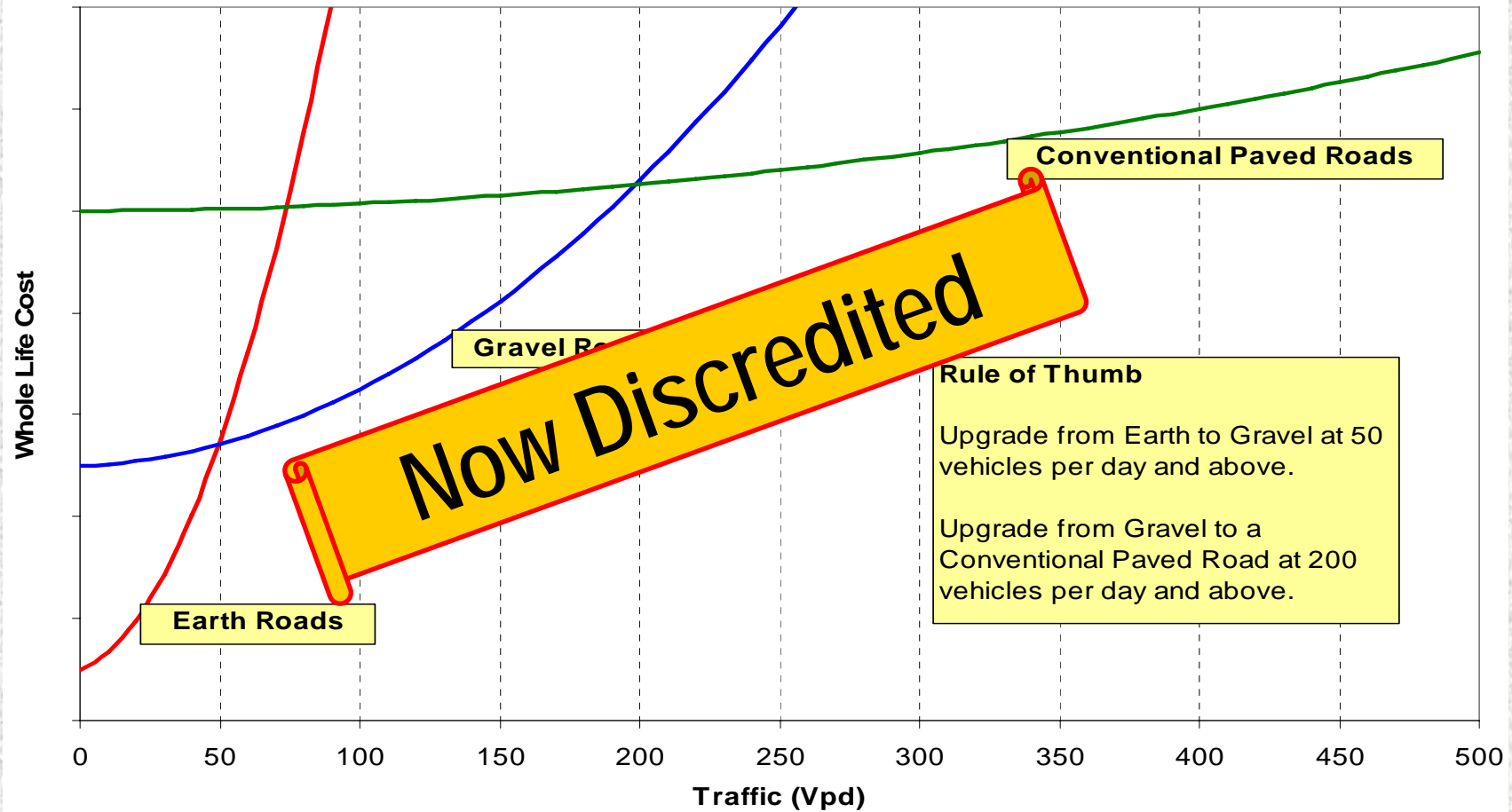
Investment is discouraged by poor access.

Need for Rural Road Surfacing Research

- ❑ Concern of MoT regarding sustainability of RT1 and RT2 gravel roads
 - ❑ Some provinces “sealed” their project gravel roads
 - ❑ Evidence from recent DFID KaR research and experiences elsewhere in the region
 - ❑ Proper gravel road maintenance is difficult to achieve
 - ❑ Existing options and guidelines for alternatives were limited
- ➔ Need for research into gravel performance in Vietnam and to develop a ‘menu’ of more durable, low cost, low maintenance, local-resource-based surfaces, using gravel only where appropriate.

Gravel – The Traditional ‘Rule of Thumb’

Surface Choice based on Whole Life Costs



RRSR Strategic Framework

Rural Road Surfacing Research (RRSR)

Project Objective:

National specifications and guidelines to be developed for a complete 'menu' of surface options suitable for the range of Vietnam conditions.

RRSR Strategic Framework

- ❑ Research to be implemented under RT2 framework
- ❑ MoT, DFID and World Bank as stakeholders
- ❑ Establishment of an MoT Steering Committee, chaired by Department of Science & Technology
- ❑ Rural Road Surfacing Trials initially in 2 Regions of Vietnam RRST-I (4 provinces in Mekong + Central Coastal)
- ❑ Investigations of RT1 and RT2 gravel (un-paved) roads performance (RRGAP – SEACAP 4)
- ❑ RRST-II extended to “roll out” trials in 3 further Regions (8 provinces in Northern Highlands, Central Highlands and Red River Delta).

RRSR Strategic Framework

Study identified need

Initial investigations in 2001

RRST-I = 4 provinces

US\$600,000 of World Bank funds

Hue, Da Nang, Dong Thap, Tien Giang Provinces, → 2005

RRGAP

RT1 & RT2 Roads, → 2005

RRST-II = 8 provinces

World Bank: US\$3.8 million

Gia Lai, Dak Lak, Dak Nong, Ninh Binh, Hung Yen, Ha Tinh, Quang Binh, Tuyen Quang Provinces, → 2006

National “Roll out”

Planned application: US\$100+ million
RT3 from 2007, and other programmes

RRST Strategic Framework

Whole Process planned from the start in 6 Modules:-



Where are we now?

Identify need

Construction research/compile knowledge

NOW

Initial Recommendations

Long Term Monitoring

Disseminate

Final Recommendations

Mainstream

Specifications, Norms & Standards

Road Authority practice

Academic Institutions

Training-Mentoring

Practicing Engineers

Donor Programmes

Contractor enabling environment

International forums