

# **Developing the Rural Roads Knowledge Base in Support of the ADB Sustainable Transport Initiative**

**ADB Transport Forum**

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SEACAP  
South-East Asia Community Access  
Programme

# ADB Transport Forum

Asia on the Move: Energy Efficient  
and Inclusive Transport

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## Rural Transport – Way Forward

Success - Political priority;

Professionalize:

- o Knowledge to good practice
- o Good practice into practice

Sustainability:

- o Socio-economic impacts
- o Technical solutions;

Communities of practice.

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# Introduction

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- ADB invests heavily in rural roads:  
**≥ \$4B: 1996 - 2009**
- ADB has new corporate and transport strategies:
  - Rural roads are a priority for continued investment.
- Sustainability depends upon good engineering and management decisions.
- Decisions reflect access to & quality of DMC knowledge bases.

# Introduction

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- Support for research into practice is needed to continuously improve the knowledge base.
- There are examples of effective approaches to support knowledge base development.
- ADB needs to support the development of the DMC knowledge bases.

# ADB's Strategies

- Strategy 2020
  - Better transport is common to achieving key strategic objectives.
- STI
  - Enhanced lending and TA to support sustainable transport.
  - Rural transport will continue to be important.

# LVRP Characteristics

- Focus on rural roads carrying  $\leq 250$  vpd.
  - Most extensive element in the network.
  - Least financially supported.
- = Need to do much with little.
- Deterioration influenced by local environment and traffic.
  - Requires different technical solutions to those established for high volume roads.

# Key Factors Influencing Sustainability 1/8

- Policy and Strategy
- Decentralization
- Classification
- Standards and Specifications
- Road Environment
- Pavement/surface design
- Whole life costing
- Construction Materials
- Specifications and Supervision
- Maintenance

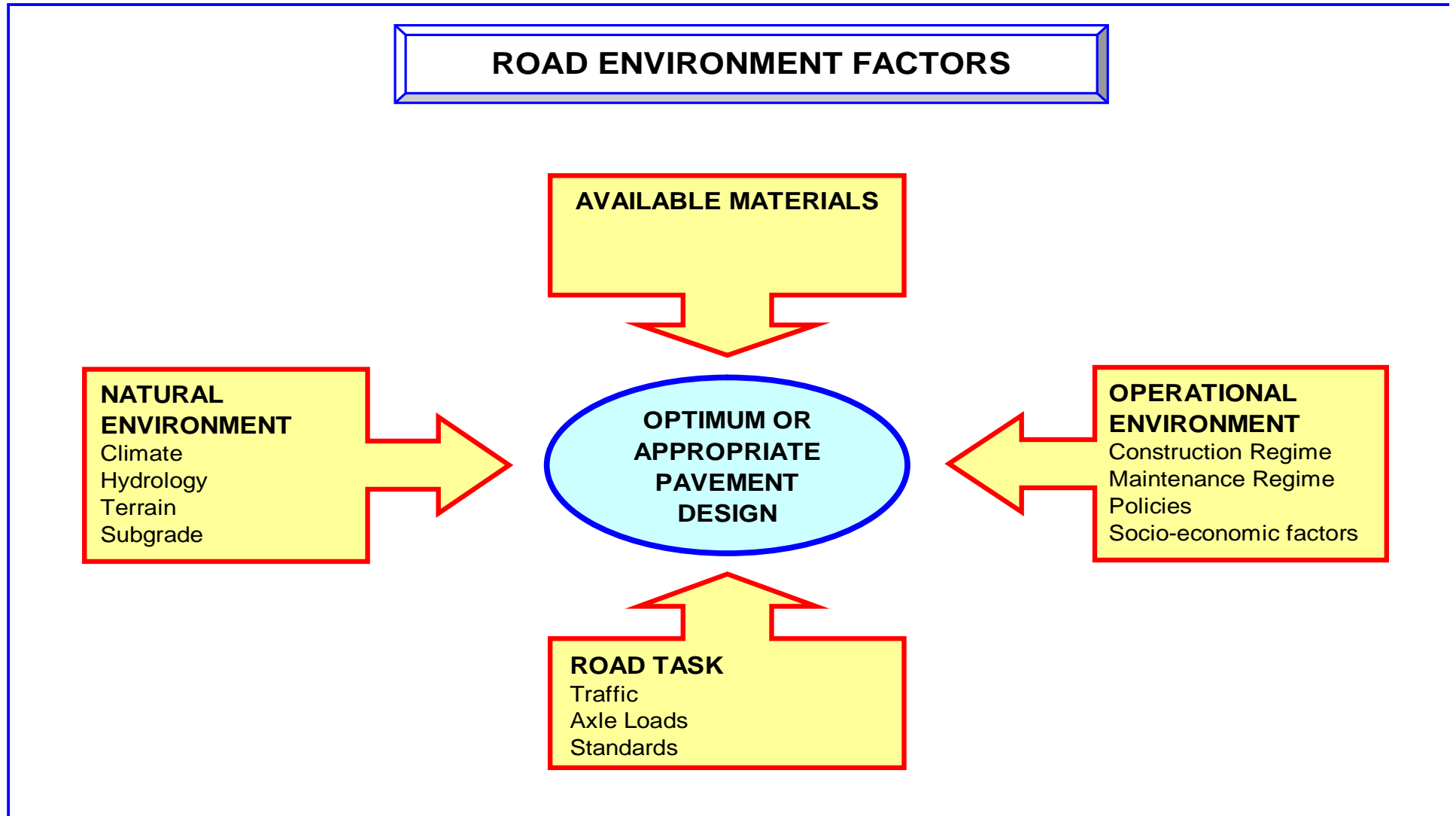
# Key Factors Influencing Sustainability 2/8

- Policy and Strategy
  - Framework for investment
  - Pulls together all of the knowledge
  - Needs to be continuously updated to reflect current economic, financial and technical information.
- Decentralization
  - Capacity challenges.

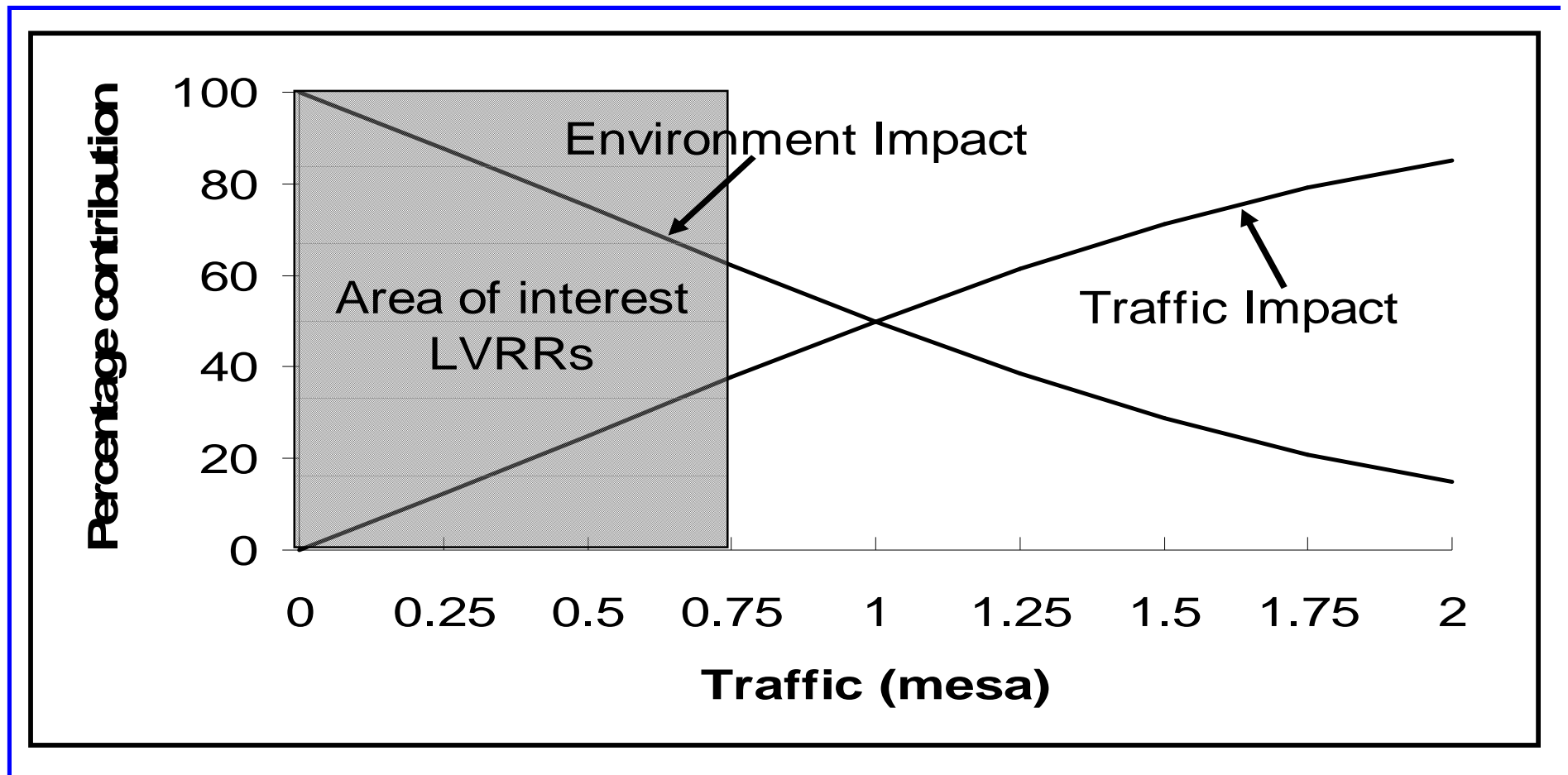
# Key Factors Influencing Sustainability 3/8

- Standards and specifications
  - Basis for technical and engineering decisions.
  - Need to be:
    - Task Based;
    - Local resource and situation based;
    - Affordable
      - Construction and maintenance.

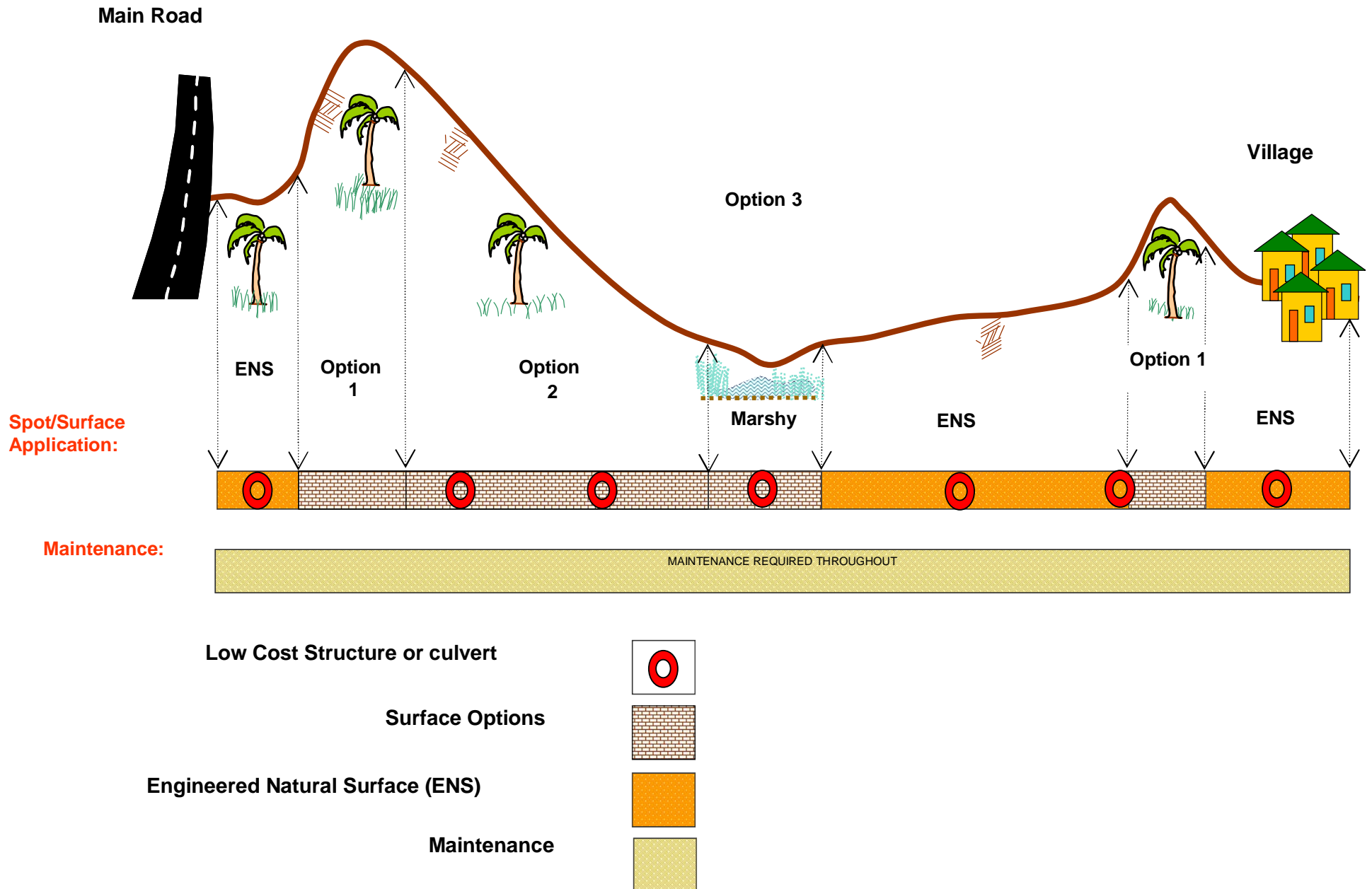
# Key Factors Influencing Sustainability 4/8



# Key Factors Influencing Sustainability 5/8



# Key Factors Influencing Sustainability 6/8



# Key Factors Influencing Sustainability 7/8

- Pavement/Surfacing Design
  - Task based
  - Local materials and conditions
  - Develop options
- Whole Life Costing
  - Construction, maintenance over design life:
    - Economic impact;
    - Management costs.
  - Need accurate information on deterioration of different technical options under variety of conditions.

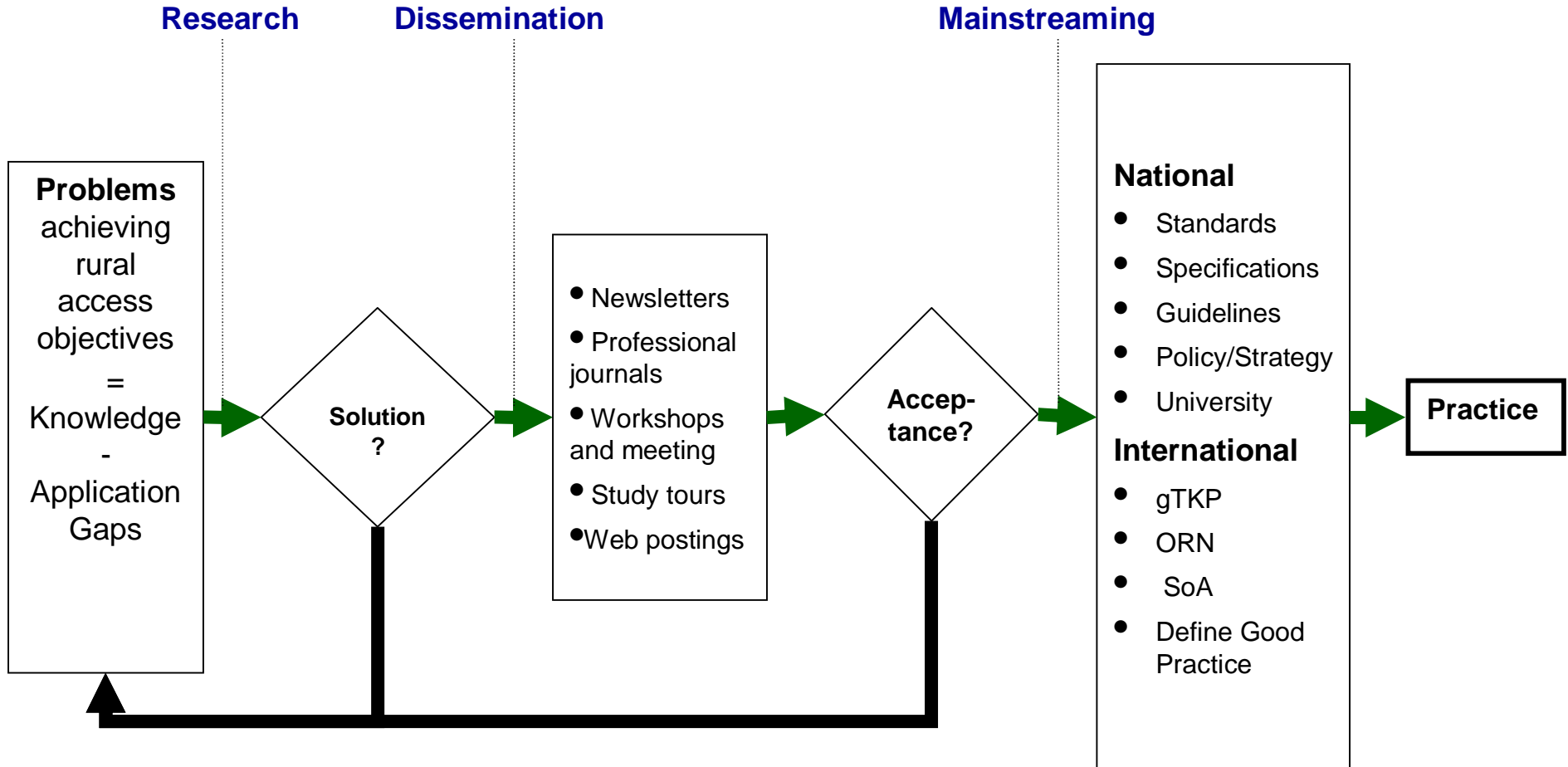
# Key Factors Influencing Sustainability 8/8

- Construction Materials
  - Adapt and process local materials.
- Specifications and Supervision
  - Quality control is critical.
- Maintenance
  - Chronic problem.

# Research in LVRR 1/3

- Research is needed to:
  - Continuously strengthen decision making to account for local conditions;
  - Find out what actually works under what conditions and replicate as appropriate;
  - Provide sound basis for investment.

# SEACAP Model



# Research in LVRR 3/3

- DFID Assessed SEACAP as:
  - Important work not being done elsewhere.
  - Filled a gap in a major sector that underpins:
    - Poverty reduction.
    - Rural development.
    - Access to economic and social opportunities and services.

# ADB's Support for LVRR Knowledge Base

- Support for LVRR Knowledge Base is highly relevant to ADB LTSF
  - Five core areas of operations: **infrastructure**, environment, regional cooperation and integration, financial sector development, and education.
  - Others: health, agriculture, disaster and emergency assistance.
  - Five drivers of changes: private sector dev and private sector operations, good governance and capacity development, gender equity, **knowledge solutions**, and partnership.

## ADB's Support for LVRR Knowledge Base

- Investment in rural roads (and other infrastructure) needs to address rural, urban, and sub-regional linkages to ensure holistic poverty reduction.

# ADB's Support for LVRR Knowledge Base

- Research into practice is needed on key issues:
  - Social and economic benefits/relationships with quality and quantity of LVRR.
  - Engineering and technical issues.
  - Asset management and O&M.

## **ADB's Support for LVRR Knowledge Base**

- Most DMCs do not have the research capacity required.
- There are currently no related research programs in the region.
- SEACAP provides a proven model for this work.
- Research needs continuous support over the duration of the asset life cycle.

## **ADB's Support for LVRR Knowledge Base**

- Suggest ADB encourages donor partners including multi and bi - laterals to jointly:
  - Invest in rural transport research into practice programs;
  - Use the SEACAP model;
  - Provide support through asset life cycles.

Thank You