

# Rural Transport Training Materials

## Module 5:

### Social and Environmental Issues

An investigation into the constraints of the availability of motorised transport services in rural Ghana

Session 5.5

**Part 2**

Presentation 5.5b



# 1. Introduction

## Learning Objectives

This session enables participants to:

- ③ Explore a range of different survey methods used to identify transport performance in rural Ghana
- ③ Examine the factors effecting poor people's access to transport in rural Ghana
- ③ Reflect on the key lessons learnt and how they may be applied to other countries

# Session Overview

- © Project summary
- © Survey instruments

## 2. Project summary

- ◎ Rural poverty linked to access to essential facilities
- ◎ Access comprises
  - extent and quality of infrastructure
  - siting of facilities relative to residential areas
  - availability of transport services
  - affordability (time and/or money) of travel to facilities

© 1997-1998 TRL and DfID conducted 2 survey exercises in Ghana

© Surveyed

- 7 districts
- 2 peri-urban villages
- 57 villages (Some on main road, others far from any motorable track)

© Interviewed

- 412 households
- 197 vehicle owners

# Findings

- ◎ **Population density** has a large impact on the cost and provision of rural transport services
  - i.e. better services are associated with higher population densities
- ◎ In Northern Ghana far less use is made of motorised transport than in the south
  - north is poorer than south
  - more bicycle ownership in north than south
- ◎ Large differences in fares exist between districts
  - suggests that operators and unions have less influence where competition is greater

- ◎ High goods charges for short distances
- ◎ In southern Ghana expenditure on transport increases as income rises
- ◎ Market-related trips
  - were the main trip purpose outside the village
  - accounts for majority of motorised transport use
- ◎ Demand for motorised transport is elastic
  - trip making by households is sensitive to income and fare levels

# 3. Survey Instruments

3 types of survey instruments used

Household  
questionnaire

Participatory  
mapping  
checklist

Vehicle  
operator  
questionnaire

# Household questionnaire

## ⊙ Demographic & household composition

- household head's age, sex, marital status
- men and women (18 years old or over)
- children under 18

## ⊙ Income & livelihood

- estimates of household income
- agricultural and non-agricultural income source

## ⊙ Expenditure

- food (grown and purchased)
- other consumables
- clothing
- health and education fees

## © Possessions & property

- to assess prosperity
- ownership of vehicles, bicycles, radios, etc.
- house type and fuel use

## © Travel patterns

- journey frequency, type, distance, mode of travel & fare
- disaggregated by gender

## © Goods transport charges

- charges per quantity and distance

## © Reason for dissatisfaction with motorised transport services

- rank of reasons why they do not make more use of motorised transport

## Participatory mapping checklist

- ③ Meeting with village headmen, assemblymen, schoolteachers, etc.
- ③ To obtain permission for household interviews
- ③ To collect information
  - village size
  - location of water sources, markets, schools, religious centres, etc.
  - type and extent of agriculture
  - type and quality of road links
  - type and frequency of motorised transport services

# Vehicle operator questionnaire

## ⊙ General information

- vehicle type, ownership, load capacity, crew composition, use, and type of operation
- vehicle route, road quality, distance, time, trip frequency, charges and difference between the wet and dry seasons

## ⊙ Drivers of passenger and goods vehicles

- service demand
- how and where goods vehicle drivers find their loads

## ⊙ Seasonal constraints on vehicle operators

## ⊙ Vehicle operating costs and maintenance

- vehicle age, tax, insurance, fuel type and costs, responsibility for maintenance and servicing, frequency of servicing, vehicle utilisation and availability of spare parts

## ⊙ Small enterprise services in vehicle maintenance

## ⊙ Payment for vehicle

- how the vehicle has been / is being paid for
- availability of credit
- reasons for purchase of particular type vehicle

## ⊙ What changes would improve business

# Transport survey methods in rural Ghana



## Group discussion

1. *What key lessons can we draw from this case study to apply to other countries & projects?*
2. *What recommendations would you make for improving the survey methods for this project?*