

6. WORKSHOP EVALUATION AND CONCLUSIONS

6.1 Evaluation

A formal workshop evaluation was conducted at the end of the workshop. The evaluation touched on all key factors including workshop preparations, presentations and moderation, the process and outcomes, field visits, secretariat support, venue and logistics.

The results of the evaluation were very encouraging. As seen in the table below, all aspects were rated by most participants either A or B where A=very good, B=good, C=okay, D=rather weak, E=very poor and Z= I was absent.

	ITEM EVALUATED	SCORE					
		A	B	C	D	E	Z
1.	Overall workshop impression	█					
2.	Meeting participant's expectations		█				
3.	Clarity of objectives		█				
4.	Workshop process		█				
5.	Keynote presentation		█				
6.	Presentations by project team		█				
7.	Plenary discussions		█				
8.	Group discussions	█					
9.	Workshop moderation		█				
10.	Realization of workshop outputs		█				
11.	Secretariat support	█					
12.	Display of posters and literature	█					
13.	Communications to participants before the workshop		█				
14.	Communications to participants during the workshop		█				
15.	Field visit	█					
16.	Transport and logistics		█				
17.	Final strategic planning		█				
18.	Venue and facilities	█					
	TOTAL ITEMS	6	12				

The detailed scores for each item out of a possible score of 110 are as follows:

Item	Score	10	20	30	40	50	60	70	80	90	100
1. Overall Impression											
2. Meeting expectations											
3. Clarity of objectives											
4. Workshop process											
5. Keynote presentation											
6. Presentations by project team											
7. Plenary discussions											
8. Group discussions											
9. Workshop moderation											
10. Realization of outputs											
11. Secretariat support											
12. Display of posters and literature											
13. Pre-workshop Communications											
14. Communications during workshop											
15. Field visit											
16. Transport and logistics											
17. Final strategic planning											
18. Venue and facilities											

The table shows that out of the 18 items evaluated all of them scored 90/110 and above with the exception of one item (presentations by the project team) which scored just slightly less (87/110). The best-rated items in terms of total marks were: overall impression of the workshop, clarity of workshop objectives, venue and facilities, and secretariat support.

According to most of the participants (50%), the most interesting part of the workshop was field visit. Other issues mentioned as registering most interest were keynote presentation, plenary discussions, group discussions, and strategic planning.

There was no consensus of opinion as to what was least interesting. Answers here became too varied. Some of the aspects of the workshop rated variously by one or two participants as "least interesting" were: Group work, cocktail, presentations by project team, opening ceremony, prior communications and arrangements, deciding on research and development, field visit and coordination.

Items singled out for possible improvement in the future included time keeping, communications before the workshop, and logistics. In their general comments, participants further underscored high satisfaction with the workshop while at the same time pointing out important weaknesses that may need to be addressed next time. Some sample comments were such as: Workshop was well conducted; job well done-thumbs up; good organization; no time for prayers; absence of topic consultants during some group discussions; more emphasis on networks is needed; time keeping not well set.

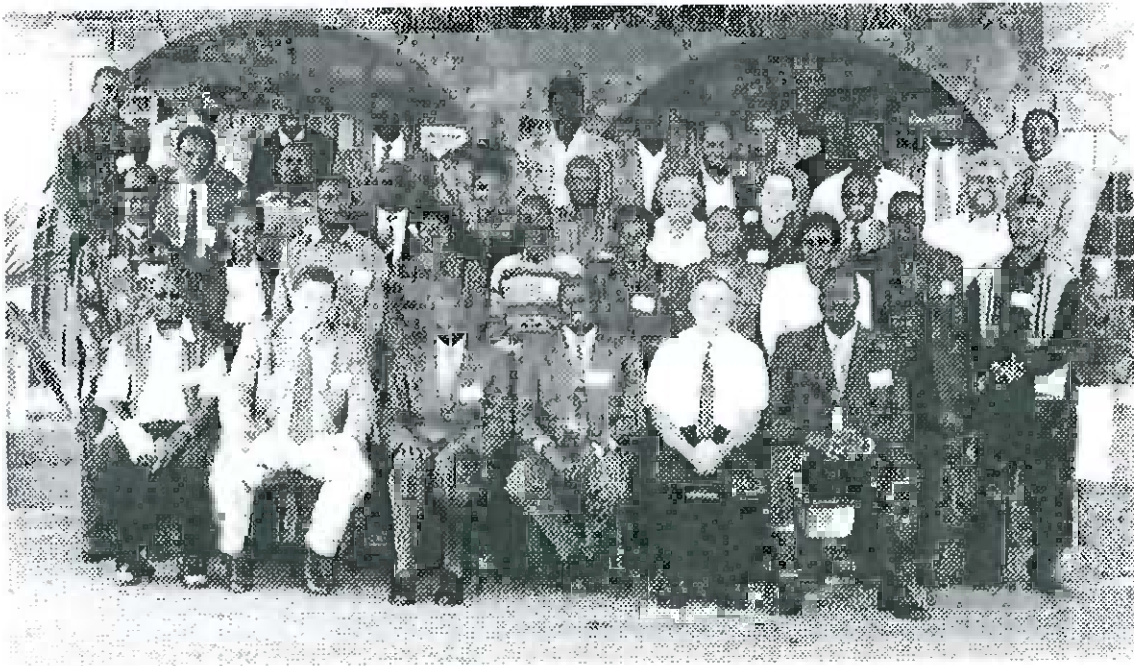
On the overall, new learning was generated by the workshop. 83% Of all participants recorded that they did learn something new. The new learning was in the areas of cooperation and networks, planning process, project coordination, social cultural dimensions of RTS, technical research in RTS, relationship of RTS to agricultural productivity and what various stakeholders are doing on ground.

6.2 Conclusions

From the evaluation it is easily concluded that the project's Golden Milestone Workshop was a great success. Indeed, in informal interactions, participants kept on pointing out the added value the workshop had brought to their professional RTS work. The level of participation from many distinguished institutions is also evidence of the high profile attached to the workshop by these institutions. In the past a lot of effort has been put into interventions that are yet to reach maturation. Continuation of these interventions is a must if the benefits of the past one-year of work are to be fully realized by the target groups. It is then hoped that funds will be available, at least to cover finalization of current incomplete activities. It is expected that the following activities will be finalized by March 2003 under the remaining SIDA and NRIL funds: supplementary data collection and analysis for each area of study; pending case studies with artisans, IMT operators, horticultural and rice producers; and community feedback sessions. Further funding will then become necessary to take the project beyond this point.

It is expected that this project will continue to register donor attention because of its potential in poverty alleviation in Kenya. Many poor men and women will perhaps see their stagnated livelihoods open up when they get reached by interventions directly emanating from or otherwise driven by this project.

WORKSHOP PARTICIPANTS



Unfortunately several participants were not at the opening ceremony when this picture was taken. Notably missing in the photo are Tim Donaldson of CPHP and Dan Kisauzi of NR International Regional office for East Africa.

Rural Transport Services Project for Kenya

Golden Milestone Workshop Report

ANNEXES

ANNEX I: WORKSHOP PROGRAM

Sunday, October 13th 2002

Participants arrive in Nairobi, Kenya

15:00-17:00 **Registration**

18:00 **Welcome Cocktail and Dinner**

Monday, October 14th, 2002

08:00 - 9:00 **Registration Contd**

09:00 - 10:15 Opening ceremonies-, **Master of Ceremonies, Prof. Timothy Simalenga**

Workshop objectives– **Dr. P.G. Kaumbutho, Project Team Leader**

Opening speech - **Guest of Honor**

Keynote presentation

Transport services and poverty alleviation-**Prof. John Howe**

10:15 - 10:45 **COFFEE BREAK**

SESSION I: MEETING THE CHALLENGES

Chair: Mr. Elijah Agevi, ITDG

10:45 - 11:15 Overview of the RTS project

P.G. Kaumbutho, KENDAT

11:15 - 11:35 Transports and Poverty Reduction: The case of Kenya

Sylvester Kasuku, Director CBS, Chair Kenya National Forum Group

11:35 - 11:55 Rural transport services and policy actualization: A Legislator's opinion

Hon Alfred Nderitu, MP, Mwea

12:15 - 12:35 Appropriate transport infrastructure for Kenya: A donor's viewpoint

Andrew Smallwood, Snr Engineering Advisor, DFID Kenya

12:35 - 13:00 Discussion

13:00 -14:00 **LUNCH BREAK**

SESSION II: UNDERSTANDING AND INVOLVING END-USERS

Chair: Timothy Simalenga

14:20 - 14:40 Experiences from the Village Travel and Transport Programme of Tanzania

Camilla Lema for Josephine Mankusye, VTTP Tanzania

14:40 - 15:00 Bicycle taxis: Needs for an emerging local transport solution

Ngware Boda Boda Association

15:00 - 15:20 Rural development in perspective: Community Involvement And

Support Sera **Wanjiru for Rev B. Kanina, ACK: Christian**

Community Services Programme, Kirinyaga, Kenya

15:20- 16:00 Discussion

16:00 - 16:30 **COFFEE/TEA BREAK**

SESSION III: EMANATING FROM THE RTS PROJECT FOR KENYA

16:30 - 16:45 Introduction to the Workshop Process and Objectives-**Workshop Moderator**

16:45 - 17:15 Discussion

Tuesday, October 15th, 2002

SESSION III: EMANATING FROM THE RTS PROJECT FOR KENYA Contd

Session Chair: Charles Kaira

- 08:30 - 08:50 Rural Transport in a Policy Context: Challenges and findings
Peter Njenga - IFRTD Eastern and Southern Africa
- 08:50 - 09:10 Background information, Research Design and Resource Mapping
Legesse Kennanni
- 09:10 - 09:30 Status of Rural Transport Technologies: Operation and support service infrastructure
J. Mutua, KENDAT / Colin Oram Univ of Warwick
- 09:30 - 10:10 Discussion
- 10:10 - 10:30 **TEA/COFFEE BREAK**

Session Chair: Camilla Lema

- 10:30 - 10:50 Household level issues: gender and transport findings for Kenya
Cecilia Njenga - HABITAT
- 10:50 - 11:10 Findings about transport operation environment and ergonomics
Legesse Kennanni and Dave O'Neill
- 11:10 - 11:30 Towards a logistical framework for Kenya's Rural Transport Operations
Girma Gebresenbet, Swedish University of Agricultural Sciences
- 11:30 - 13:00 Discussions
- 13:00 - 14:00 LUNCHES

SESSION IV: COMPAIRING FINDINGS AND MAJOR ISSUES

Session Chair: Stephen Mutua and Moderator

- 14:15 - 14:45 Preliminary findings from the Uganda Rural Transport and Marketing Project
C. Kaira, NFG Uganda
- 14:45 - 15:00 Summaries and grouping of emanating issues
Moderator
- 15:00 - 16:00 Group Discussion
Moderator
- 16:00 - 16:15 **TEA / COFFEE BREAK**
- 16:15 - 17:00 Group Reporting
Moderator
- 17:00 - 17:15 Field Visits and Logistics
KENDAT

Wednesday, October 16th, 2002

Field visits - Magadi, Mwea, Limuru and Machakos

(Groups identify team leader and discuss findings on the way back)

19:00 **Workshop Dinner**

Thursday, October 17th, 2002

- 08:30-09:30 Field visit reports and discussion
Moderator

SESSION V: STRATEGIC PLANNING SESSION

Session chair: Moderator

09:30-10:00 Key issues and priorities for Phase II (*Group Discussion*)
Moderator

10:00-10:30 **COFFEE/TEA BREAK**

10:30 - 11:30 Further information and Development Interventions: Stake holder .Roles.
Moderator

11:30 - 12:15 Responses from Donor Reps on Phase II interventions
- CPHP / NRIL – **Tim Donaldson and Dan Kisausi**

12:15 - 13:15 Building networks, links and collaborative initiatives with other actors
- Rural Travel and Transport Programme – **Tseggai Elias**
- ILO ASIST - **Camilla Lema**
-Transport Research Laboratories - **Annabel Davis**

13.15 – 13.45 - Workshop Evaluation

13:45 - 13:55 - Closing Remarks - **Elijah Agevi, ITDG East Africa**

13.45 - 14:30 **LUNCH BREAK**

15:00 Departures

Friday, October 18th, 2002

10:00 - 14:00 **Core team and moderator meeting in KENDAT office**

ANNEX II: List of invited Workshop Participants

	Name	Affiliation	Address	Tel	E-mail
1.	Cecilia Njenga	Habitat		883323	espi@onebox.com
2.	Sellah Wanjiru Thiaka	CCS Wanguru	P.O. Box 255, Wang'uru	0163-48207	
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20.	Bainito Atonya	MOARD	ITDG P.O. Box 38, Magadi		
21.	Andrew Smallwood	DFIDEA	P.O. Box 30465, Nairobi, Kenya	254-02-2717609	Aj-smallwood@dfid.gov.uk
22.	Tseggai Elias	RTTP, World Bank	88 Nelson Mandela, Harare, Zimbabwe	729611-3	telias@worldbank.org
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26.	Girma Gebresenbet	SLU, Sweden	Swedish University of Agricultural Sciences, P.O. Box 7032, 750 07 Uppsala, Sweden	46-18-671901	Girma.Gebresenbet@lt.slu.se
27.	Emma Ng'ang'a	Artesian Marketing			
28.	Reuben K. Muni	Dept. of Agric. Engineering, Univ. of Nairobi	P.O. Box 58108, Nairobi	254-02-631353/4 (o) 570218 (h)	
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ANNEX III: DETAILED PROJECT BACKGROUND

1. PROJECT OVERVIEW

According to the statement of the overall and super goals, the primary thrust of the project revolves around providing improved knowledge base for making transport policies that would lead to the enhancement of the livelihood systems of poor men and women in rural areas and peri-urban environment in Kenya.

1.1 Project Components

The project comprises of three components, referred to after the supporting donors, that is, the IUDD, NRIL and SIDA components. At the time of the Golden Milestone Workshop, the IUDD funding had come to an end, with only a few months remaining for the NRIL.

1.1.1 SIDA component

In this component, emphasis is placed on logistics, gender and environment interface in RTS research and development.

(i) Purpose

The components purpose is to establish and disseminate key factors and parameters for measuring appropriateness of transport means in the agricultural sector, with special regard to operational efficiency, gender and environment.

(ii) Output

This is expressed as: to assess the logistical, gender and environment effects on transport service and capacity utilization efficiency.

(iii) Activities

The component embraces five major activities as follows:

- Assess gender issues in RT (data on roles, time investment/allocation, costs, impact, access to means, labour input and gender load shift e.t.c,
- Conduct user assessment of appropriateness, ownership and service provision of various transport means across sexes,
- Conduct logistics survey (people and freight flow pattern efficiencies, load sizes, distances, frequency, seasonal variations e.t.c and key impediments to adequate transport services,
- Assess user and environment constraints to provision and utilization of transport means (vegetation, topography, pollution, seasonal effects, land degradation e.t.c),
- Propose RTS logistical and policy or other interventions on gender and environment issues for sustained rural livelihoods.

1.1.2 IUDD component

This component is now completed. Major emphasis was placed on livelihoods scoping studies especially in relation to IMT mainstreaming and policy implications.

(i) Purpose

The component's purpose was to systematically assemble data and information that can provide guidance on key policy and livelihood options towards sustained IMT based transport services for the poor at the national and local level.

(ii) Outputs

The component aimed at achieving the following three outputs:

- Opportunities and bottlenecks for development of local IMT transport services determined and presented,
- Institutional roles and responsibilities of provision of IMT services assessed,
- Proposals for activities for subsequent Phase of the project are presented.

(iii) Activities

The following ten activities were pursued to meet the three outputs:

- For every study zone, conduct transport needs survey among communities with an IMT and livelihoods focus,
- Assess infrastructural support in development of IMT services,
- Report on IMT capacity utilization, employment generation, shortcomings and constraints for the various communities,
- Assess institutional factors relevant to transport services
- Assess stakeholders mandate, influence and relationships in the provision and use of transport services,
- Verify contents and adherence of GoK policy documents to address transport needs of the poor,
- Report on ways of promoting public and private sector in removing supply constraints in RTS,
- Examine differences in needs of transport services of the poor for rural, peri-urban and urban areas and across economic levels of users,
- Assess vehicle, user and pay load compatibility, capacity for users to reach destination and other operational details e.g. impact of over-design, seasonal variability, spot improvement e.t.c,

- Conduct stakeholders' workshop, assess findings and make strategic proposals with a policy and livelihoods focus.

1.1.3 NRIL component

This is principally a post-harvest programme. It has a strong focus on identifying the role played by RTS interventions in enhancement of Smallholder Agricultural Sector (SAS) production through smoother, easier transport in post harvest operations.

(i) Purpose

The purpose here is to provide the right strategies for improving the livelihood securities of poor households.

(ii) Outputs

This purpose is broken into three outputs, which are:

- Socio-economic aspects of transport services for smallholder agricultural sector (SAS) assessed,
- Options for provision and utilization of appropriate motorized and non-motorized transport services for improved SAS performance investigated,
- Factors that determine successful partnerships in delivery of intermediate RTS identified.

(iii) Activities

The component features nine main activities. These are:

- To assess density of demand for rural transport services (RTS), life cycle costs and capacity to satisfy needs of SAS,
- To quantify role and potential of various intermediate RTS and importance of infrastructure (foot-bridges, footpaths, e.t.c.) including transport avoidance measures,
- To report on dissemination of RTS (user/supplier gaps/links) and ways of promoting appropriate transport means in a private sector driven SAS,
- To conduct a survey of existing intermediate RTS and means and report on technological and infrastructural qualities for utilization by SAS,
- To user-test appropriate exotic intermediate RTS and means and assess local industry capacity and user environment to sustain them,
- To evaluate socio-economic impact of intermediate RTS and means on the performance of SAS with special regard for agricultural production and marketing,
- To conduct a comprehensive who is who in rural transport development and a stakeholder purpose, work outputs activities survey for Kenya and beyond,
- To receive recommendations on participatory involvement of parties in voicing and sharing for RTS advancement,
- To report on best practice of building individual and institutional partnerships (roles of planners, implementers, service providers and users in intermediate RTS).

1.2 Project Implementation Strategy

The project implementation falls largely into two areas: management aspects and technical studies.

1.2.1 Management

The overall day-to-day management has been the domain of KENDAT, with the following broad responsibilities:

- To develop Memorandum of Understanding (MOU) with all collaborating institutions and contracts with individuals,
- To maintain quality control through an effective/efficient internal control structure,

- To facilitate information exchange through an internal as well as external newsletter (like the DFID *Transport*) and Internet List Server run by International Forum for Rural Transport and Development (UK, NFG),
- To build partnerships and links with partner organizations in-field and elsewhere and oversee generation of research outputs,
- To establish a databank,
- To organize workshops conferences and seminars,
- To facilitate project monitoring and evaluation.

To carry out these responsibilities, KENDAT has a well-established secretariat and field back-up resources, supported by the projects core funds.

The secretariat comprises of the KENDAT Executive Coordinator, Accountant, Secretary, and 4 support staff.

The field back-up team has 12 personnel as follows:

- 1 Technical Manager
- 2 Research Supervisors
- 1 Research Assistant
- 8 Enumerators

The SLU does assist the KENDAT management with general administration of the SIDA component. The field back-up team has 12 personnel as follows:

1.2.2 Technical work

A core team drawn from seven institutions according to disciplinal areas of specialization as outlined here below has so far carried out the technical work of the project:

(i) Kenya Institutions

- KENDAT provides a consortium of resource persons on all aspects of the study, including engineering, environment and safety, policy, institutional collaboration, gender, social-economics, and transport economics. Over and above their areas of expertise, these resource people also contribute the local knowledge and experience, which strongly compliments the study efforts of the researchers from non-Kenya institutions,
- The National Forum Group (NFG) contributes to development and dissemination,
- The Intermediate Technology Development Group provides support in certain research sites on development and dissemination issues of the study.

(ii) Overseas Institutions

- The International Forum for Rural Transport and Development, UK, contributes to policy and international dissemination,
- Swedish University of Agricultural Sciences, Sweden, leads in the study on logistics,
- Silsoe Research Institute, UK takes the lead on Ergonomics and technology,
- University of Warwick, Development Technology Unit (DTU), UK contributes to the IMT technology part of the study,

1.2.3 Project Partnerships and networking

Networking has formed an important outlook for the project with the realization that contributions from various institutions would provide invaluable synergy in thought, project design and implementation. So far, the following institutions have collaborated with the project either through joint planning and implementation, or through exchange of information.

Institution	Type of collaboration
Numerous transport users and service providers, CBOs, NGO and institutions	Information generation and experience sharing platform, including transport service piloting in the field.
Kenya Institute of Public Policy, Research and Analysis (KIPPRA)	Implementation of the research, and technical support to development of policy packages
Kenya Roads Board	Providing linkages to policy debates on (rural) transport infrastructure
NFG Uganda	Direct information sharing with planned direct collaboration under NRIL component
ILO ASIST (Kenya Liaison Office)	Technical advice and information sharing
Animal Traction Network for Eastern and Southern Africa (ATNESA)	Project planning and direct information sharing.
University of Durham IMT Project / Ghana NFG	Project planning and direct information sharing. Breaking new ground in IMT interventions.
University of Karlsruhe (Germany)	Project planning and direct information sharing.
Transport Research Laboratory (TRL, UK)	Project planning and direct information sharing.
Rural Travel and Transport Programme (RTTP) World Bank	Direct information sharing

2. SCOPE OF THE PROJECT

The project was designed as a multi-dimensional, research and development study covering many technical domains including policy, socio-economics, mechanical and civil engineering, logistics, ergonomics, and environment. In this chapter an attempt is made to present an overview of each domain as a way of defining the background for discussing the results of the GMW. Discussion is also made with regard to certain important concepts factored into the project design because they were foreseen as important in defining quality dimensions of the project implementation.

2.1 Disiplinary Areas Of Investigation

The study was broken down into nine discrete lines of work concentration. The main thrust of each study area is as follows:

2.1.1 Policy and institutional framework

The aim of this study was to provide the context and background against which the transport system in Kenya is to be understood. The study was expected to outline the historical perspective on the development of the transport system in Kenya, as well as the current situation. Right from the beginning it was emphasised that the existing transport system in Kenya is the sum-total of past and present policy choices, which themselves are based on political, economic and social values. For the rural Transport Services project to propose new policy options and institutional responsibilities, it was therefore necessary to trace the basis of existing policy orientation, the institutional responsibilities the regulatory framework and the general features of the transport system arising thereof.

With this perspective in mind, the study was expected to provide detailed treatment of the points below:

- A general characterization of the transport system in Kenya and the institutional framework with specific reference to rural development,
- The principal historical and current underpinnings of transport policy in Kenya, its implicit and or explicit objectives (examine policy in the context of the past and political economy),
- Key outputs of the transport policy in Kenya including: trends in motorization over the years; alternative transport technologies (e.g. IMTs) and their acceptance in policy and practice in Kenya; infrastructure development (rural access roads program, minor roads program, labour based technologies, roads 2000),
- An overview of the conceptual basis for linking transport to poverty reduction,

- Key principles for mainstreaming poverty considerations in transport sector investments, opportunities and bottlenecks for application in policy and practice in Kenya.

2.1.2 Socio-economics

The socio-economic study was expected to provide framework for understanding the nature and function of local transport systems in areas under investigation. For that reason it carried key crosscutting aspects that needed to be integrated into other components of the project work. Work concentration was expected on the following points:

- Factors influencing supply and demand for transport in areas under investigation (e.g. population density, land use and settlement patterns, economic, livelihood systems, physical features, topography, poverty statuses e.t.c),
- Detailed analysis of key socio-economic parameters determining demand, access, use and flow of benefits and or costs for transport services at the household level (household livelihood profiles, incomes, gender, socio-cultural perceptions e.t.c.),
- The role and contribution of transport to livelihoods (a social and economic cost-benefit analysis of transport system under different livelihood contexts),
- Environmental consequences/dimensions of different transport systems (land-use issues and impacts, ecological and natural resource management concerns, safety/accidents e.t.c).

2.1.3 Civil engineering

This part was to look into the existing capacity of rural transport services in all study areas, with the following details:

- Technological development, availability and use
- Development of an IMT based economy
- Local institutional roles and responsibilities in the provision of transport services
- This part of the study was principally expected to assess the types of transport infrastructure available in support of rural transport in all the study areas.

As an important point of departure, the study needed to provide information about the detailed study of the adequacy of infrastructure in relation to the frequency, types and the volume of traffic, its intensity and overall connectivity.

Specific points of investigation were outlined as follows:

- Various types of local transport infrastructure providing critical support to local livelihoods and production in selected study areas,
- The extent to which existing infrastructure facilitates or hinders mobility,
- The suitability of transport infrastructure in relation to development of IMTs and
The institutional responsibilities of development and maintenance of the local infrastructure
- The interest of the community and its capability in supporting the maintenance of their infrastructure, (through labour and direct financing) and the framework through which this could be done,
- Key remedial improvements that can be made to ensure that infrastructure meets the mobility and access requirements of the community.

2.1.4 Environment

The environment part of the study was meant to identify key interrelationships between environment and rural transport, with detailed treatment of the following points:

To establish the key environmental concerns relating to a sustained rural transport activities and in particular as it impacts on land-use, ecological balance and the equitable management of available natural resources,

- To establish the key environmental concerns in the development, maintenance and utilization of rural transport infrastructure,
- To establish the extent of environmental awareness amongst the rural population in the project areas and any existing programmes from government, non-governmental

organizations and local communities geared towards the promotion and preservation of the environment, taking into account any apparent gaps,

- To establish the main environmental impacts arising from rural transport systems and make recommendations and future action that needs to be adopted by the communities as appropriate and in particular, consider the following: utilization, preservation and management of natural resources and ecological concerns on the context of poverty alleviation; effects of increased transport on roads and paths with particular reference to soil erosion, emissions, dust pollution, accidents, and solid wastes and the interplay of these factors in future RTS development.

2.1.5 Logistics

The logistics study was intended to focus on investigating in detail the following elements:

- Status (capacity, availability and use, shortcomings) of existing travel and transport logistical networks and needs categorization for services at small holder farm and business levels,
- Infrastructure and the impact of developmental changes about the same (including roads, bridges, IMTs, telecommunication, institutional and user/provider involvement and others.
- Derivation of agricultural marketing structures and other transport services, including how they could be improved, based on status and generation of descriptive data that derives key operational parameters useable in the project localities and other parts of Kenya.
- Possible interventions regarding flow of inputs and outputs from market to farm and vice versa, in the identified study zones.

2.1.6 Mechanical engineering

This part was to look into the existing capacity of rural transport services in all study areas, with the following details:

- Technological development, availability and use
- Development of an IMT based economy
- Local institutional roles and responsibilities in the provision of transport services

2.1.7 Ergonomics

The study was expected to provide an investigation into the intervention of IMT design and people in areas of performance, safety, comfort, livelihoods and the effect of these on potorage and post-harvest (packaging and marketing). Also, the integration, supplementarity and complimentarity of human, animal and engine power was to be assessed.

2.1.8 Transport Development

The University of Warwick, Draft Technology Unit has a rich experience from projects implemented in Africa and other developing countries. It was foreseen that it would provide much information on low cost harnesses, performance requirements of carts (long life, high reliability, high load capacity, silence e.t.c) and import duty policy. The Kenyan context was to be studied and useful insights outlined as to how some of these technologies can be adapted to meet local needs.

2.1.9 Transport Economics

This study was supposed to shed light on three major areas of investigation:

- How to isolate important economic IMT attributes relevant to different users,
- How fixed costs of market access preclude smallholders from lucrative livelihood options,
- How lack of incentives can inhibit the uptake of IMTs.
- Understanding on how to put values on production and marketing losses resulting from flawed logistical systems.

- The salient micro-level economic issues that are important in designing viable infrastructural and transport-mode systems.

2.2 Cross-Cutting Concepts

2.2.1 Pro-poor transport system

The project is by its essence a pro-poor transport project. A transport system designed to respond to the needs of the poor has to reflect the balance between day-to-day subsistence activities (trips to the market, trips to fetch water, food, and energy), and the long-term objective of improving livelihood assets, through strategic investments that facilitate efficient access to markets, health, education, trade and other services. This view was to be strongly addressed in the studies.

2.2.2 Livelihoods concept

It was intended for all investigations to focus specifically on the poor, combining the poverty knowledge with an understanding of how transport contributes to livelihoods. All data generated from the study was to be interpreted from the focus of improving the livelihoods of the poor.

2.2.3 Gender concept

The issue of gender was to be considered in each of the above discrete investigations in that gender represents a way of looking at the normal livelihood activities. Gender considerations feature in the design, production, adoption and use of the various transport modes, in the distribution of accruing benefits, and in the re-distribution of transport responsibilities within the household. While gender analysis was to be given its prominent treatment in the socio-economics investigations, each researcher was expected to put keen interest to include gender interpretation in his/her line of investigation.

2.3 Project Sites

During the project design stage there was a rigorous exercise to identify the sites where research activities would be carried out. The decision considerations were:

2.3.1 IMT potential

The first decision criteria identified concerned high potential for IMTs, both in terms of quantity (density of IMTs) and variety (different types of IMTs). Sites with this potential would provide the researchers a good chance to observe, among other things, the varied interface of the different IMT modes and infrastructure regimes.

2.3.2 Diversity of livelihoods and farming systems

As the overall goal of the project hinged on livelihoods and poverty reduction, it was thought necessary to select sites where a diversity of various livelihoods and farming systems could be observed in a manner representative of the normal Kenyan socio-economic set-up. Despite the need for diversity and representativeness, it was decided not to scatter the sites too much, as this would in turn make the coverage logistics too difficult and expensive.

2.3.3 Presence of strong collaborators

From the onset, the project followed a strategy of working together with other institutions on ground. This was expected to enrich the project work in terms of methodology experience and approach as well as bringing in efficiency for data collection.

Some sites would therefore be located where the collaborators had on ground activities that are congruent to the project's research agenda.

2.3.4 Market vibrancy and remoteness

To cater for special logistics crop post harvest aspects of the study, it was considered useful to select some sites that would provide a rich observation of both on-farm and market interactions of various transport modes but, also to look at the contrasting picture of remote areas in terms of distance to markets.

Following these four major criteria, five areas had, in the first instance, been selected for the project as follows:

Region	District	Site
Central Kenya	1. Kiambu	Limuru – Lari
Eastern Kenya	2. Machakos	Kalama
Rift Valley	3. Kajiado	Olekatorieri, Magandi
Rift Valley	4. Laikipia	Lamuria, Kibo
Central Kenya	5. Kirinyaga	Mwea
Western Kenya	6. Busia	Hinterland of Lake Victoria

In the follow-up workshop a reassessment of each area was conducted. It emerged that the Laikipia site was not a very suitable site, first because it was too far away, and also, it did not offer any unique attributes that could not be experienced in the other areas. Although Busia was also considered to be quite far from the central start point (Nairobi), the study team decided to retain it because of its unique aspect of water transport along lake Victoria and vibrant cross-border activities. The Olekatorieri site was also dropped for lack of any unique attributes different from other sites such as Kalama. The final sites agreed upon, where project study was to be finalised were:

SITE	DISTRICT
Limuru – Lari	- Kiambu
Kalama	- Machakos
Magandi	- Kajiado
Mwea	- Kirinyaga
Busia	- Western Kenya

The socio-economic and livelihood characteristics of these study areas is as follows:

Lari, Limuru: Located in Southern Central Kenya the area is characterized by high levels of agricultural output and close proximity to Nairobi, a mass market for vegetables grown here. This contributes to a high density of transport demand, and a rich diversity of means of transport, which diminishes to IMTs and particularly donkeys as the distance from the highway increases. Use of IMT based transport is widespread and there is a good interface between walking, IMTs and motor vehicles, including trucks that ferry vegetables 500 kilometers to Mombassa on Kenya's East Coast. Transport operators are keen business people here, making the best of meeting the high density of demand on difficult infrastructure, which becomes basically un-trafficable during wet seasons.

Kalama, Machakos: This site is located in Eastern Kenya and is characterized by low agricultural output, distant markets for produce and extremely poor infrastructure. Walking is common over long distances and animal based IMTs are few in an area with heavy use of animal traction for tillage work. Motorization is low. Public vehicle services, in and out of the area are few. Though links with motorized transport is crucial, the semi-arid area has not raised production levels to attract transport operators for what would be relatively short but difficult haulage distances to urban markets. The area displays a low population diversity and low density of IMTs for personal and (subsistence) goods transport.

Magadi, Kajiado District: Magandi is a site in Southern Kenya, characterized by a pastoral community, whose development is grossly influenced by the modern and expansive (Magadi Soda) factory on one hand, and a rich horticultural farming settlement on the other hand.

The area is otherwise a remote one for the communities, with some tourist centers, marginal agro-pastoralist activities, low population density and relatively long distances to goods and services. ITDG has a health and infrastructure project here, in partnerships with other NGOs (e.g. AMREF - Africa Medical Research Foundation), and has helped communities install culverts or bridges, and introduced Maasai people to operate donkey carts and ride bicycles.

Mwea, Kirinyaga: The Mwea site is located in the savannah plains of upper Central Kenya. It is characterized by low as well as high levels of agricultural output, under the influence of irrigated rice farming and user-unfriendly infrastructure, with variable proximity to markets. It is unique in that it combines transport-time sensitive, horticultural crops (recently introduced), with recently liberalized, rice farming and marketing. The area and its enterprises has many social, financial, institutional, industrial (food processing) and marketing implications and major agricultural development learning for the country's future. The area has variable population density, and a rich diversity of IMTs, including recent *boda boda* (bicycle taxi) entry and medium levels of motorization.

Busia, Western Kenya: Located at the border with Uganda, and far from the national capital (Nairobi) this area is characterized by high agricultural but under-exploited potential, on relatively favorable infrastructure. This origin of *boda boda* transport in Kenya has much IMT intervention experience to offer and development partnerships learning. Development in transport here is easily comparable with Uganda, in terms of governance, regulation, trade intensity, social capital exploitation and other aspects.