Crop Post Harvest Programme (CPHP)

Rural Transport Services Project for Kenya

NRIL Component Kick-off and Progress Reporting Workshop

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June 2002
Project Title: Improved Agricultural Rural Transport for Kenya

Research Programme: CPHP

Project Leader/Institution: Pascal Kaumbutho / KENDAT

NRIL Contract Number: ZB0293

DFID Contract Number: R8143

Production System: Cross-cutting

Reporting period Year 1: April 2002 to March 2003

Start Date: April 2002  End Date: March 2005

A Kenya National Forum Group for Rural Transport and Development Initiative

Supported by Crop Post-Harvest Programme (CPHP/NRIL), Infrastructure and Urban Development Department (DFID/IUDD) and Swedish International Development Agency (SIDA)

and

Implemented by a KENDAT Consortium, with professional assistance from Swedish University of Agricultural Sciences, Silsoe Research Institute, University of Warwick and the International Forum for Rural Transport and Development (IFRTD), Development support backed by ITDG, East Africa and ILO ASIST
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<th>Full Form</th>
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<tbody>
<tr>
<td>CBO</td>
<td>Community Based Organization</td>
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<tr>
<td>DFID</td>
<td>Department For International Development</td>
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<td>IFRTD</td>
<td>International Forum for Rural Transport</td>
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<td>IMT</td>
<td>Intermediate Means of Transport (singular)</td>
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<td>ITDG</td>
<td>Intermediate Technology Development Group</td>
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<tr>
<td>IUDD</td>
<td>Infrastructure Urban Development Department</td>
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<td>KARI</td>
<td>Kenya Agricultural Research Institute</td>
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<td>KENDAT</td>
<td>Kenya Draught Animal Technology</td>
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<td>MOU</td>
<td>Memorandum Of Understanding</td>
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<td>NES</td>
<td>National Environmental Secretariat</td>
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<td>NFG</td>
<td>National Forum Group</td>
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<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>NRI</td>
<td>National Research Institute</td>
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<td>NRIL</td>
<td>National Resource International Limited</td>
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<tr>
<td>PC</td>
<td>Project Coordinator</td>
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<td>RA</td>
<td>Research Assistants</td>
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<td>RTS</td>
<td>Rural Transport Services</td>
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<td>RTSP</td>
<td>Rural Transport Services Project</td>
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<td>RTTP</td>
<td>Rural Transport and Travel Project</td>
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<tr>
<td>SIDA</td>
<td>Swedish International Development Agency</td>
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<td>SLU</td>
<td>Swedish University of Agricultural Sciences</td>
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<tr>
<td>SRI</td>
<td>Silsoe Research Institute</td>
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<tr>
<td>UON</td>
<td>University of Nairobi</td>
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<td>UOW</td>
<td>University of Warwick</td>
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Executive Summary

This summary covers the outcome of the Rural Transport Services Project – Kenya (RTS-Kenya) workshop held from 6th – 10th May 2002 at the Fairview Hotel, Nairobi, Kenya. The event was a follow-up of the project Kick-off workshop held in October 2001. It was organized with the main aim of reporting the project progress and mapping out directions for improved steering.

The project has its beginnings four years ago. At that time, the need was recognized for a thorough assessment of the constraints to procurement of improved transport modes in the rural situation, their availability and utilization based on cultural knowledge, environmental, gender, technical and other factors.

In the four years, various scenarios have been explored, finally culminating to a consensus among stakeholders in the form of the RTS – Kenya Project, with concrete funding commitments by SIDA, NRIL and IUDD. The project is basically a research undertaking with a development component to try out certain research findings.

The super goal of the project focuses on improving livelihoods of poor men and women. The project will make a significant contribution to the super goal by improving, through new knowledge and insights, the basis for policy choices on ways in which transport services provision can enhance livelihood systems in rural and peri-urban environment. The project has three purposes, each of which is separately funded by IUDD, NRIL and SIDA. These purposes are:

**IUDD Component**
To systematically assemble data and information that can provide guidance on the key policy and livelihood options towards sustained IMT based transport services for the poor at national and local level.

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

**SIDA Component**
To establish and disseminate information on key factors and parameters for measuring appropriateness of transport in the agricultural sector, with special regard to operational efficiency, gender and environment.

The workshop was attended by 24 participants drawn, from 11 national and international institutions. The participants were all experts in their own disciplines and work, having long experience.

The major highlights of the event comprised discussions on the work done, gaps identified, project implementation in the field, management, collaborations and the way forward.

It was underscored that the research team had done commendable work in preparing for the preliminary, major research work. In particular, it was noted that the project had registered the following five major achievements:

- Confirmation of project design,
- Identification of researchers,
- Project launching in the kick-off and follow-up workshops,
• Generation of terms of reference, reporting structure and other project management guidelines and systems,
• Design of research tools. Based on a master reference questionnaire, the tools have been tested and plans with development beneficiaries advanced to a reasonable design,
• Collection of preliminary data (in some cases) especially in way of pre-testing and refining the research hypothesis.

In the next six months, there will be concerted, detailed research in the field, followed by data compilation/analysis and report writing. All activities will be geared towards the Golden Milestone Workshop (GMW) in October 2002.

The workshop will be a major partnership-building event where much dissemination of the research results and planning for the way forward will take place, with key stakeholders and collaborators presenting their input. There will be keen attempt to invite policy makers and donors who, it is expected, will bring in valuable contribution towards the development aspects of the research findings, both for long-term and broader impact in the country. Also, the GMW will serve as an event for confirmation of all component proposals for the year 2003.

The project will now be implemented in five research sites, that is Limuru (Kiambu), Kalama (Machakos), Magadi (Kajiado), Mwea (Kirinyaga/Embu) and Lake Victoria (Busia). These have been selected on the basis of five major factors: high level of IMT potential; diversity of livelihoods and farming systems; presence of strong collaborators; market vibrancy and remoteness.

The report discusses certain key issues that have potential to impact on all project’s implementation. Some general guidelines have been developed on how to manage these issues. In summary, it has been decided that the project will manage the components as discrete entities rather than from an integrated perspective but observing the crosscutting synergies. Another point concerns ways of carrying out research. The principles of representativeness, cost – effectiveness, multi-dimensional approach, participatory methodologies, results integration and collaboration with other research development agencies, need to be closely adhered to.

NRIL component

A one-year activity and output schedule for NRIL component has been drawn up for the research work between April 2002 and March 2003. Each quarter of the year has specific deliverables, which are:

**(i) Deliverables: 1st quarter:**

- Emerging socio-economic data and possible solutions draft report
- Appropriate RT means options and services draft report.
- Kick-off reporting and review Workshop conducted
- Report of workshop prepared and circulated
- Indicative list of stakeholders and collaborators report

**(ii) Deliverables: 2nd quarter:**

- Socio-economic data and possible solutions report.
- Cost/benefit analysis draft report
- Appropriate RT means options and services report.
- Additions to stakeholders and collaborators list reported and invitations to GM Workshop implemented.
(iii) **Deliverables: 3rd quarter**

- Cost / benefit analysis report
- Industrial and beneficiary exploitation potential reported.
- Golden Milestone Workshop report conducted
- Stakeholder roles and collaborative structure defined and reported.
- Report of workshop with gaps, further actions and way forward prepared and circulated.
- Workable partnerships in ART services documented

(iv) **Deliverables: 4th quarter**

- Report on follow-up of missing links
- Report on follow-up and missing links
- Final report on engineering services and user/service provider needs
- Workable partnerships followed-up and MOUs discussed and most relevant signed

By March 2003, the project will need to provide its major deliverables for each component as follows:

A report with the following key content:

- Socio-economic aspects of access to transport services and provision for small holder agricultural sector,
- Options for the provision and utilization of appropriate motorised and non-motorised transport services,
- Performance of the small holder agriculture sector,
- Factors that determine successful partnerships in the delivery of intermediate RTS,

(i) **IUDD Component**

By October 2001, the project will need to provide its major deliverables for each component as follows:

A report presenting:

- A comparative over-view of the role of transport under different livelihood systems,
- Opportunities and bottlenecks for development of local IMT based RTS,
- Institutional roles and responsibilities of private and public sectors in the provision of IMTs specifically and RTS in general,
- Proposals for activities of a second phase of the project.

(iii) **SIDA Component**

By October 2003, the project will need to provide its major deliverables for each component as follows:

A report based on:

- Logistical, gender and environment effects on transport services and capacity utilization efficiency
An important aspect of the project will be the exchange of lessons learned and experiences with its sister projects in Ghana and Uganda funded by NRIL. After the first year, the project will gradually move from basic research to action research and development.
1.0 INTRODUCTION

1.1 Background

The quality of life and economy of rural communities of East Africa continue to weaken with the largest part of the population remaining marginalized from development activities and progress. This is despite various efforts made to alleviate poverty. Many rural communities do not seem to have derived benefits from public sector and other development projects and investments.

Transport is about mobility and accessibility. Rural transport is a major factor in agricultural production and marketing. The modes of transport range from head loading, usually by women, on farm and village paths to pick-up trucks on tarmac roads. Between head loading and the pick-up truck, there exists a considerable economic and technological gap, which needs to be filled as a way of improving land and labour productivity.

In an attempt to fill this economic/technological gap, constraints to procurement of improved transport modes, their availability and utilization, based on cultural knowledge, environmental, gender, technical and other factors need thorough assessment. For instance, the extent to which on-farm transport shortcomings differ for men and women have not be quantified. Without such assessment, it remains difficult for planners and others to quantify the potential impact in policy development among other support-service interventions. Hence the need exists for a thorough investigation of the pertinent issues to enable the design and implementation of correct interventions.

To appraise this need, several organizations were called to a workshop at Silsoe Research Institute (SRI), from which a project concept note was developed. The concept note ramified an endeavour to articulate the required assessment by:

- Researching transport constraints of agricultural production and marketing
- Collecting comparable data in different locations in East Africa
- Allowing more general conclusions on the impacts of improved transport systems
- Giving limits on possible improvements of local transport systems and
- Indicating the magnitude of their impacts

A core team of researchers was established and given the mandate to continue the follow-up. This core team was made of representatives from the University of Nairobi (UoN), Kenya Network for Draught Animal Technology (KENDAT), Kenya Agricultural Research Institute (KARI), University of Warwick (UoW), Swedish University of Agricultural Sciences (SLU) and Silsoe Research Institute (SRI), the International Forum for Rural Transport and Development (IFRTD), with representation of the transport National Forum Groups (NFGs) for Kenya, Uganda and Tanzania.

Discussions with donors were initiated and this led to the development of further concepts and ideas. Eventually, a three-phase strategy was agreed upon. In phase one, a workshop would be conducted involving national and regional specialists and other stakeholders to develop a project for improved transport systems in agricultural production and marketing for smallholder farmers in East Africa. Phase II was to comprise of an appraisal and needs assessment initiative to analyse production and marketing related restrictions and determine strategies to finds real solutions. Phase III would focus on implementing innovative interventions such as credit schemes for self-propelled, private sector provision of rural transport services, including infrastructural input and other approaches as identified in Phase II. While the project articulation workshop (phase I) was conducted in November 1997, Phase II activities did not commenced
immediately. As a result of constantly changing funding scenarios, it has taken four years for a consensus to be reached, in the form of the Rural Transport Services Project – Kenya, with concrete funding commitments by Sida, NRI and IUDD. The project is currently implementing a 2-year research and development study whose overall goal is expressed as:

Through new knowledge and insights, improve the basis for policy choices on the way in which transport services provision can enhance the livelihood systems of poor men and women in rural areas and peri-urban environment in Kenya.

It is hypothesised that realisation of the overall goal will lead to a significant, positive impact on the project’s super goal which is stated as: to improve the livelihoods of poor men and women. The project is supported by SIDA for two years and IUDD for one year. Recently, the NRIL has also joined the donor consortium with a one-year support.

1.2 Workshop Objectives

This event was organised six months after the project’s KICK-OFF workshop to consider the progress made, evaluate whether that progress was in the intended direction and if necessary, re-adjust guidelines for better steering.

Also, since the kick-off workshop, a new team from Silsoe Research Institute and the University of Warwick (DTU) had been commissioned to carry out specialized study in the NRIL component. A new locality has also been added with new enumerators and field contacts. It was therefore necessary to provide a forum where they could present their work proposals and get introduced to project status and other researchers in the project. The specific objectives were:

- to receive an overview and progress made in the RTS project,
- to review the log-frames of each component and pin-down key issue needing reflection and resolution,
- to introduce the NRI component and discuss its operation within the ongoing,
- to define or redefine roles of team members,
- to review the timeliness of each component and lay strategies to accomplish expected outputs/deliverables in time,
- to receive thematic reports from team leaders and take stock of progress made relative to respective log-frames,
- to identify gaps and bottlenecks, clarify synergies and differences between the different components and work teams,
- to review research sites and establish clear study boundaries based on clear strategic rationale
- to discuss research methodology and agree on the main elements of the final questionnaire,
- to develop a plan of action with clear benchmarks,
- to discuss and agree on the capacity needed in field data collection and supervisory arrangements,
- to discuss and re-define roles of collaborators.

1.3 Methodology

The workshop was conducted as an open discussion event. In each session, selected speakers gave presentations on their defined assignments. These presentations then formed the basis for in-depth, focused, exploratory discussions, which served to isolate key issues for improved project implementation.
1.4 Workshop Programme
The programme structure featured five main steps as follows:

1.4.1 Throwing light on the project strategy

An overview of the project was provided showing the log frames of the different project components and how they integrate at Goal and Super-goal levels. A snapshot review was also made of the challenges resulting from a shortened funding period and application of different time-lines for the three components.

1.4.2 Presentation of interim findings

Resource persons researching into various topics did present their tentative findings, showing gaps to be addressed in the next six months. Participants gave feedback for mapping a concrete course of action.

1.4.3 Presentations by the new RTS team members

The new team did present their anticipated areas of investigations, the methodology and expected fieldwork of strategy. Feedback from other participants served to provide the team with a clear picture of the situations to expect on the ground. It also enabled them to refine the research objectives.

1.4.4 Streamlining project operations

Key issues emerging from the presentations were analysed as a way of drawing up the way forward and making the project more manageable.

1.4.5 Way forward

Discussions on the way forward centred on decisions concerning final selection of research sites, pending research work, the project deliverables, and collaborations.

A more detailed workshop programme is herewith attached as Annex I.

1.5 Participation

The workshop attracted 24 participants drawn from the following institutions:

- Swedish University of Agricultural Sciences (SLU),
- International Forum for Rural Transport and Development (IFRTD)
- Ministry of Labour, Kenya,
- Kenya Network for Draught Animal Technology (KENDAT),
- University of Nairobi, Department of Agricultural Economics (UoN),
- National Forum Group – Uganda,
- Ghana IMT Project,
- Department for International Development (DFID), Nairobi,
- National Forum Group – Kenya,
- Silsoe Research Institute, UK,
- University of Warwick.
The participants were experts in their own areas of discipline and work, having long experience. Hence the workshop was highly enriched by their knowledge, views and opinions. A detailed list of participants showing their institutions, designations and contacts is provided as Annex II.

2.0 PROJECT OVERVIEW

As stated in 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.

2.1 Project Components

The project comprises of three components, referred to after the supporting donors, that is, the IUDD, NRIL and SIDA components.

2.1.1 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

Five major activities have been defined for this component as follows:

- Assess gender issues in RT (data on roles, time investment/ allocation, costs, impact, access to means, labour input and gender load shift et al,
- 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 et al) 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 et al),
- Propose RTS logistical and policy or other interventions on gender and environment issues for sustained rural livelihoods.

2.1.2 IUDD component

This component falls under the sustainable livelihoods office of DFID. It has a major focus on livelihoods scooping in relation to IMT policy

(i) Purpose

The components purpose is 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 seeks to achieve 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 will be pursued to meet these 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 user 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.

2.1.3 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 will be achieved through attempt to realise 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
Nine activities have been identified for these activities:

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

2.2 Project Implementation

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

2.2.1 Management

The overall day-to-day management is carried out by the 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,
- 4 support staff.
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 Technical Manager
- 2 Research Supervisors
- 1 Research Assistant
- 8 Enumerators

2.2.2 Technical Studies

The technical work of the project is carried out by a core team drawn from seven institutions according to disciplinal areas of specialization as outlined here below:

(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 Group (ITDG) – a key member of the NFG provides support in selected 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, DTU, UK contributes the major support on the IMT technology part of the study.
- Niklas Sieber of the University of Karlsruhe, Germany has the major responsibility with regard to the transport economics part of the study.

3.0 SCOPE OF THE STUDY

The study is multi-dimensional, covering many disciplines including policy, socio-economics, mechanical and civil engineering, logistics, ergonomics, environment, development and dissemination. This chapter gives the terms of reference that define the scope under each disciplinal task.

3.1 Discrete Areas Of Investigation

The study has been broken down into nine discrete lines of work concentration.

3.1.1 Policy and institutional framework
This study will provide the context and background against which the transport system in Kenya is to be understood. It will provide the historical perspective on the development of the transport system in Kenya, as well as a bird’s-eye view on the current status. In conducting the study, it is assumed 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,
there is need to trace the basis of existing policy orientation, the institutional responsibilities the regulatory framework and the general features of the transport system arising thereof.

The study comprises of literature survey and collection expert opinions. It will cover the following specific assignments:

- 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.

In its conclusion the study will clearly define the policy areas to which this project could contribute, and suggestions of how this could specifically be accomplished.

3.1.2 Socio-economics

The socio-economic analysis will provide the main backbone to the overall programme of work. It carries key crosscutting aspects that will need to be integrated into other components of the work. The crosscutting aspects are:

- Background socio-economic/livelihood data for all the study sites
- Livelihood analysis and the role of transport
- Gender analysis

In addition, the analysis will provide a key framework for understanding the nature and function of local transport systems in areas under investigation. Specific areas to capture in this study include:

- 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).

3.1.3 Engineering and Logistics

This part of the study will assess the types of transport infrastructure available in support of rural transport in all the study areas. As a point of departure, it will assess the adequacy of infrastructure in relation to the frequency, types and the volume of traffic observed.
The adequacy assessment will pay due attention to types of traffic observed in the study areas, the intensity and volume of the traffic, and overall connectivity. Specific points of investigation are:

- to analyse the types of local transport infrastructure in support of the local livelihood and production in selected study areas,
- to assess the extent to which existing infrastructure facilitates or hinders overall mobility,
- to assess the suitability of transport infrastructure in relation to development of IMT services,
- to establish the institutional responsibilities of development and maintenance of the local infrastructure in study areas,
- to assess 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,
- to suggest key remedial improvements that can be made to ensure that infrastructure meets the mobility and access requirements of the community.

3.1.3.1 Logistics

The logistics study will assess the existing capacity, shortcomings of input and output flow at smallholder farm and other business level and report on the effect of possible interventions regarding flow of inputs and outputs from market to farm and vice versa, in the identified study zones. The detailed investigation is broken down into the following elements:

- Status report (capacity, availability and use) of existing travel and transport logistical networks and needs categorization for services,
- Infrastructure and the impact of developmental changes about the same (including roads, bridges, IMTs, telecommunication, institutional and user/provider involvement and other improvements e.t.c),
- 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.

3.1.3.2 Mechanical engineering

This part will 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

3.1.3.3 Technology Development

The University of Warwick draft Technology Unit has a rich experience from projects implemented in Africa and other developing countries and has been identified to provide a resource person to take the lead in this line of the project. Much information can already be provided on low cost harnesses, performance requirements of carts (long life, high reliability, high load capacity, silence e.t.c) and import duty policy, EU and Japanese vehicle dumping into Africa.

3.1.4 Environment and Ergonomics
The environment part of the study aims at identifying environmental impacts of rural transport with particular reference to land use and natural resource management, infrastructure and ecology. The specific points that will guide this part of the study are:

- 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 area 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 need to be adopted by the communities as appropriate an in particular, consider: 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, accidents and solid wastes and interplay in future development.

3.1.4.1 Ergonomics

The study on ergonomics will be headed by a resource person from Sisoe Research Institute, of UK. The study will investigate the intervention of IMT design and people in the areas of performance, safety, comfort, livelihoods and the effect of these on poterage and post-harvest (packaging and marketing). Also, the integration, supplementary and complimentarily of human, animal and engine power will be assessed.

3.1.5 Transport Economics

Niklas Sieber of University of Karlsruhe will provide the transport economics backstopping. The KENDAT will provide a transport economics expert. The study in this discipline will reflect on the three major areas of investigations:

- Isolation of important IMT attributes relevant to different users,
- How fixed costs of market access precludes smallholders from lucrative livelihood options,
- How lack of incentives can inhibits the uptake of IMTs.

Data emanating from the investigation will provide a clear view of the salient micro-level economic issues that are important in designing viable infrastructural and transport mode systems.

3.2 Cross-cutting Issues

3.2.1 Pro-poor transport system

The project is hinged on proposing pro-poor transport interventions. 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 needs to be reflected in all the above studies.
3.2.2 Livelihoods concept

Once the relationship between the livelihood system and transport is understood, the next task is 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 must be interpreted from the focus of improving the livelihoods of poor men and women.

3.2.3 Gender concept

The issue of gender will feature 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 will feature more in the socio-economics investigations, there is need for each researcher to look for gender interpretation of his/her line of investigation.

4.0 ACHIEVEMENTS. OF THE PROJECT SO FAR

Since the SIDA and IUDD kick-off workshop (October, 2001), considerable study preparatory work has been done. A snapshot of the various achievements, and then ensuing gaps is provided here below:

4.1 Policy

4.1.1 Achievements

The team handling policy issues has already completed a general scan on the RTS policy environment in Kenya. The outcome indicates that there is no particular and specific policy on RTS in this county, but some few aspects of it can be traced in statutes dealing with other subjects.

Even here, transport policy is dominated by historical and colonial hangover, which defines it in a simple technocratic perspective, pre-summing that the infrastructure is provided only where the economic activity is sufficient to pay for the investment. As a result, policy making in Kenya has tended to respond to the formal, highly visible economic activities, while pre-including, to a large extent, the household-based, socio-economic, rural activities and urban informal sector. However, there is need to redefine it from a more socially oriented perspective as a means for poverty reduction.

4.1.2 Next steps

For the rest of the study, therefore, there is need for mainstreaming poverty concerns in transport policy by means of looking at the following areas:

- the general, replicable and cost effective approaches that can be used to provide transport services to meet social development targets such as health, nutrition and food security,
- how to provide for transport in a highly segmented market,
- viability of market driven low-cost region/area specific transport operations.

Following this line of thought, it has been noted that the main focus of improving access in poor rural settings will be underpinned on a two pronged enquiry strategy:

- how basic transport infrastructure is provided – especially for non-motorised transport,
• the extent policy and strategy focus on providing widespread basic infrastructure.

4.2 Socio-Economics

4.2.1 Accomplishments

The work carried out so far on these topics answer to the outputs of the IUDD (1, 2 and 4). It also provides synergy to the main research questions of the NRI component.

In broad terms, the study has attempted to capture how the transport system impacts on the five livelihood assets, i.e. social, human, natural, physical and financial capital.

So far data has been collected in the five capital concepts with the following emphasis:
• data being collected on physical capital including: an inventory of transport services available in each study area (types, frequency e.t.c); an assessment of transport infrastructure and general connectivity in all study areas; gender desegregated access to means of transport; availability of markets and their level of integration,
• data on natural capital including the role of transport in enhancing or constraining access to natural resources,
• data on human capital to establish the correlation between levels of mobility and access and the level of human capital development (e.g. maternal health care, infant mortality e.t.c) and how this compares between households and areas with different levels of access and mobility,
• data on financial capital, attempting to establish whether there is a correlation between availability of transport and opportunities for financial accumulation,
• data on social capital, investigating whether transport is a significant variable in explaining the extent of social interaction.

Poverty reduction and gender mainstreaming have been guiding principles in the data collection. In poverty reduction, attempts have been made to go beyond the lack of income, to highlight the interplay of the various capital concepts in determining people’s well-being in the practical sense. Prioritisation of the needs of the poor people has been carried out applying people-centred, participatory, multi-level approaches. Gender mainstreaming has focused on understanding gender roles in rural transport and the factors that impact on these roles.

4.2.2 Next steps

The study team has so far made an over-view that allows for more precise statements of the study hypothesis. Detailed work for the study team in the next six months has been defined in three major areas:
• To carry out a detailed household focused analysis of key socio-economic parameters determining demand, access and use of transport services,
• To establish the institutional responsibilities for development and maintenance of the local infrastructure,
• An analysis of market share and niches of the different means of local transport as observed in the study areas.

4.3 Environmental Dimensions of Transport
Although environment is a cross-cutting issue it was decided to investigate it as a discrete subject with its own researcher due the fact that it is a separate area of professional specialization.

4.3.1 Achievements
The study team has carried out a preliminary study of the four study areas (Mwea, Machakos, Magadi and Limuru) with respect to five rural means of transport (draft animals, bicycles, wheelbarrows and carts). Three case studies are highlighted, featuring Kikumbini Mwendi-Wega Women Group - Mwea, Ngurubani Bicycle Taxis self-help group – Mwea and the ITDG transport project in Magadi. The project has produced the following highlights:

- Increased haulage leads to increased land use which may have a negative impact on the environment in terms of soil erosion and over-utilization of the natural resource base leading to poorer soils, less productivity, reduced food production, food insecurity. Eventually, there may be need for more expensive inputs to retain land productivity which may be not fully compensated by the benefits of the increased haulage.
- Hence there is need to integrate a transport intervention with soil conservation interventions.
- Over-use of some transport means such as sledges and metal-wheeled carts can lead to formation of gullies and consequently accelerated soil erosion.
- Popularity of non motorised IMTS (the case of bicycle taxis) has led to less reliance on motorised transport, hence reduction of environmental pollution by petrol/diesel fumes.
- The donkey as a draft animal in Limuru and Mwea seems to be highly abused. It is often seen with open body sores, resulting from over-loading, poor harness gear, beating and slashing (when they stray into neighbour’s crops). This reduces their efficiency in rural transport and long term benefits. This calls for proper interventions in animal welfare and health.
- In some areas people believe that donkey waste causes tetanus disease if walked on with bare feet. People have therefore developed deep-rooted aversion to any donkey waste and this has affected the adoption of the donkey as a transport means.

4.3.2 Next steps
This preliminary study will be followed by more detailed observations, community focused groups interviews and survey on the following areas:

- Assessing the environment and transport interface and effects of means on the livelihoods of the local communities,

- Identifying the positive and negative impacts of these transport modes,

- Suggesting ways to reduce or eliminate negative impacts while enhancing positive ones.

4.4. Logistics and Engineering

4.4.1 Achievements
The study team has done a fact-finding mission and reconnaissance survey in five study areas (Limuru/Lari, Kajiado, Machakos, Mwea and Laikipia). Substantial data has been generated with respect to the following points:

- how farmers and transporters develop or modify transport means to fit their resources and requirements e.g. transporting fertilizer using sack panniers, using sledges where carts are expensive and roads narrow, e.t.c.
- on-farm processing e.g. rice milling, maize shelling, to reduce bulk weight (transport costs) and add value,
- Commercial use of bicycles to transport people and goods (boda boda): issues of registration/licensing, comfort, capacity, safety/diseases, e.t.c,
- Local capacity for production, manufacture, e.t.c bicycles and cart workshops, mobilization for road repairs, e.t.c,
- Knowledge and skills as well as appropriateness of technologies are important for adequate technology transfer – e.g. carts in Kajiado,
- Financial considerations of IMTs.

4.4.2 Next Steps

The next six months will be devoted to gathering detailed data on three major research domains:

- the extent of IMT use in Kenya – demand and supply conditions,
- constraints to and opportunities for enhanced utilization of IMTs,
- appropriate interventions (technological/engineering) and options.

4.5 New Study Team – NRIL Component

Since the Kick-off workshop, the project has carried out work principally supported by SIDA and DFID-IUDD.

Recently, the NRIL support has commenced and work on this component will commence in May 2002. The component has brought in a new team that will concentrate on three disciplines: ergonomics, IMT development and transport economics

5.0 KEY ISSUES FOR STREAMLINING PROJECT OPERATIONS

During the technical input presentations, certain issues did arise that need to be addressed so as to make sure that the project operations proceed smoothly and the deliverables are realised. The issues are:

5.1 Whether to Manage the Project components as Discrete or Integrated Entities

In the original project design, the three project components were conceptualised as one entity with one master logframe and a common report structure. However, it is now clear that this design is not very tenable in the face of many changing circumstances. Rather than fund the project as a consortium from an overall perspective, donors are funding their own project component separately, with different commencement times. Despite this, the donors are keen that the project captures the synergies between the three components.

For these reasons, it is strategic that each component be managed as a discrete entity, bound by its own logframe, timelines, contract and reporting agreements.

However, it must be realised that the whole study is designed to feed into one overall goal and super goal. As the research proceeds, attention needs to be paid to the indicators at the overall goal and super-goal levels, and how information to evidence them gets gleaned from each component’s research findings, to prove the impact created by the project.

5.2 Whether To Operate In ASAL Areas
Pastoralists are communities whose economic mainstay is livestock production. Kenya pastoralists inhabit the arid and semi-arid (ASAL) region; which is poor in vegetation, water resources and inherently fragile ecosystem. About 80% of Kenya’s total land area falls under ASAL region and supports over 6 million rural inhabitants. There is increasing demand by pastoralists for sustainable food, energy, water, health care, education, housing, sanitation, marketing facilities to improve their livelihood. These basic/essential requirements are partially or poorly available and accessible due to underdeveloped transport infrastructure and nearly absent communication and other facilities.

Moreover, there are other unique problems like insecurity, quarantine measures and recurrent drought, which highly compromise the extremely poor transport situation. Tracking and trekking for livestock marketing are of special interest to the RTS project.

For these reasons the output of the RTS-Kenya project can help to determine a better and realistic transport intervention strategy to solve the complex socio-economic problems of the pastoralists. With this in mind, it was decided that there would be a keen attempt made to capture pastoralist issues in the study areas of Kajiado in general and Magadi in particular.

5.3 Policy Output

It was recognised that policy information is underpinned in all the research work that will be carried out in the other technical disciplines and therefore, a policy data collection field routine cannot be separately undertaken without a lot of duplication of research effort. Consequently, the various researchers will need to collect policy information as they carry out work on their special disciplines. To make sure the appropriate data is collected, the policy researcher will need to provide other researchers with guidelines on how to integrate the policy issues into their investigations.

5.4 Logistics and Engineering

It was noted that all the researchers did not share a common definition on logistics and it integration to engineering issues. Also the field research methodology for collecting logistics information seemed unclear to many participants. It was recommended that the logistics and engineering team should provide a definition that can be commonly adopted by the project and also clarify the field methodology preferably in a short write-up.

In as far as the logistics/engineering study will be carried out through interaction with the communities, the team would enrich its field investigations with participatory approaches, whose input could be borrowed from the socio-economics study team.

5.5 Ergonomics

The workshop also noted that Ergonomics being a new line of study was not well understood by the field support team. It had also not been adequately included in the master reference questionnaire. This gap needs to be corrected so as to ensure that the research questions will be included in the master reference questionnaire. This is also important for the field support team to collect the relevant ergonomics data exhaustively.

5.6 Economic Cost-Benefit Analysis

The workshop noted that economic-cost-benefit factors are an important consideration in uptake of technology. They provide a pointer to the relevant incentive systems that can be suggested to government. There is need therefore for the project to make an elaborate study on this
especially with the objective of disseminating to policy makers during the GMW. This calls for the engagement of a transport economics professional to specifically study this area in detail.

5.7 Master Reference Questionnaire (MRQ)
A small working group composed of the projects core-team; the field support team and a few other members of the workshop did review the MRQ, with the objective of refining it for effective and efficient field application.

The work group discussed many details such as:

- How to pose the questions,
- Information to be elicited by each question,
- How to carry out exploratory investigation of open-ended interesting emerging issues,
- How to record responses to open-ended questions,
- Common field mistakes to avoid.

There was also revision of each question to remove cumbersomeness, double meanings, innuendoes, negativities, irrelevancies and other difficulties that one normally encountered with draft field questionnaires.

Despite that this session was very revealing, it was realised that each researcher needed to have a more thorough session with the field support team concerning his/her set of questions so that nothing is left to chance. This will reduce the need for additional field trips to fill up missing information.

On the over-all, the questionnaire was found to need a thorough revision based on the inputs provided by the working group and the questionnaire format proposed in the kick-off workshop. That format emphasises the need to breakdown each line of investigation into short, simple, logically flowing questions that the ordinary farmer can answer without being inhibited by difficulties in the question, its length, vocabulary and syntax. Such a tool would enable the research teams to collect honest, clear, down-to-earth responses from respondents.

5.8 Community Focused Group Facilitation

The core-group also highlighted that a lot of information will be collected through community meetings. The need to keep these meetings focused and fruitful was emphasised. The optimal number for the meetings was found to be minimum 20 persons and maximum 30 persons. The group also noted that it is very difficult to code and record what people say in these meetings since they can often be quite animated and fast, with many people talking one after another. Also, whether the right information comes out largely depends on the quality of facilitation.

With these highlights, it was agreed that the meetings should be facilitated, not by enumerators, but by the research assistants who are more experienced in group dynamics. Also it was noted that information coming from these sessions is not easy to code and record in the conventional way. For that reason, it is very important that the senior researchers should especially attend these meetings so as to take comprehensive notes which they can later transcribe, code and analyse.

5.9 Mapping of Research Sites

It was noted that the project’s base-line data needs to include maps of the research sites, showing topographic characteristics, population and settlement patterns, physical features, land use patterns, e.t.c. The easiest source for the maps would be the government mapping office.
However, it was discussed that government maps are very old and do not in many instances reflect the present situation. Another source would be NGOs, such as USAID, ILO-assist, e.t.c who have done their own maps in the recent past. Maps from these sources are likely to be very reliable. The project management will immediately commence efforts to acquire the site maps from these sources.

6.0 WAY FORWARD

6.1 Final Research Site Selection

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:

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

6.1.2 Diversity of livelihoods and farming systems
As the overall goal of the project hinges 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.

6.1.3 Presence of strong collaborators
From the outset, 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.

6.1.4 Market vibrancy and remoteness
A big part of the study focuses on logistics and post-harvest questions. To cater for this aspect, 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:

<table>
<thead>
<tr>
<th>Region</th>
<th>District</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Kenya</td>
<td>1. Kiambu</td>
<td>Limuru – Lari</td>
</tr>
<tr>
<td>Eastern Kenya</td>
<td>2. Machakos</td>
<td>Kalamala</td>
</tr>
<tr>
<td>Rift Valley</td>
<td>3. Kajiado</td>
<td>Olekotorier, Magadi</td>
</tr>
<tr>
<td>Rift Valley</td>
<td>4. Laikipia</td>
<td>Lamuria, Kibo</td>
</tr>
<tr>
<td>Central Kenya</td>
<td>5. Kirinyaga/Embu</td>
<td>Mwea</td>
</tr>
<tr>
<td>Western Kenya</td>
<td>6. Busia</td>
<td>Hinterland of Lake Victoria</td>
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</tbody>
</table>

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 Olekatori site was also dropped for lack of any unique attributes different from other sites such as Kalama. The final sites agreed upon, where research will now be completed are:

**SITE** | **DISTRICT**
--- | ---
Limuru – Lari Division | Kiambu
Kalama Division | Machakos
Magadi Division | Kajiado
Mwea Division | Kirinyaga
Township and Nambale Division | Busia

6.2 Research Work

So far the project has made five concrete steps:
- Confirmation of project design,
- Identification of researchers,
- Project launching in a kick-off and follow-up workshop,
- Generation of terms of reference, reporting structure and other project management guidelines and systems,
- Design of research tools. Based on a master reference questionnaire, the tools have been tested and plans with development beneficiaries advanced to a reasonable design,
- Collection of preliminary data (in some cases) especially in way of pre-testing and refining the research hypothesis.

In the next six months, there will be concerted, detailed research in the field, followed by data compilation/analysis and report writing. All activities will be geared towards the Golden Milestone Workshop (GMW) in October 2002. The workshop will be a major partnership-building event where much dissemination of the research results and planning for the way forward will take place, with key stakeholders and collaborators presenting their input. There will be keen attempt to invite policy makers and donors who, it is expected, will bring in valuable contribution towards the development aspects of the research finding, both for long-term and broader impact in the country. Also, the GMCU will serve as an event for confirmation for all components for the year 2003.

6.3 Project Deliverables

With the entry of the NRIL the project’s timelines will now extend to March 2003, a-one year period from the time of organising the workshop reported (April 2002) here. During the workshop, this period was divided into four quarters, each with its own deliverables, that is, the research results that will evidence the project’s progress. Towards the end of 2002 a report will need to be compiled (based on the results) for each component, to be provided as the tangible deliverables to the respective donors. The deliverables for NRIL component are presented here below. Other component deliverables have been reported previously.

6.3.1 Quarterly deliverables for NRIL Component

(i) **Deliverables: 1st quarter:**
- Emerging socio-economic data and possible solutions draft report
- Appropriate RT means options and services draft report.
Kick-off reporting and review Workshop conducted
Report of workshop prepared and circulated
Indicative list of stakeholders and collaborators report

(ii) Deliverables: 2nd quarter

- Socio-economic data and possible solutions report.
- Cost/benefit analysis draft report
- Appropriate RT means options and services report.
- Additions to stakeholders and collaborators list reported and invitations to GM Workshop implemented.

(iii) Deliverables: 3rd quarter

- Cost / benefit analysis report
- Industrial and beneficiary exploitation potential reported.
- Golden Milestone Workshop report conducted
- Stakeholder roles and collaborative structure defined and reported.
- Report of workshop with gaps, further actions and way forward prepared and circulated.
- Workable partnerships in ART services documented

(iv) Deliverables: 4th quarter

- Report on follow-up of missing links
- Report on follow-up and missing links
- Final report on engineering services and user/service provider needs
- Workable partnerships followed-up and MOUs discussed and most relevant signed

6.3.2 End of year deliverables

These deliverables are based on the outputs of each component as outlined in the logframe.

(i) IUDD Component

A report presenting:
- A comparative over-view of the role of transport under different livelihood systems,
- Opportunities and bottlenecks for development of local IMT based RTS,
- Institutional roles and responsibilities of private and public sectors in the provision of IMTs specifically and RTS in general,
- Proposals for activities of a second phase of the project.

(ii) NRIL Component

A report with the following key content:

- Socio-economic aspects of access to transport services and provision for small holder agricultural sector,
- Options for the provision and utilization of appropriate motorised and non-motorised transport services,
- Performance of the small holder agriculture sector and relevant transport niches.
Factors that determine successful partnerships in the delivery of intermediate RTS,

(iii) SIDA Component

A report based on:
- Logistical, gender and environment effects on transport services and capacity utilization efficiency

6.4 Collaboration with ITDG

ITDG development agenda includes a transport program whose objective is to, improve mobility and access of people to markets, services and essential resources through greater adoption, transport technologies and services and influencing transport policy frameworks which benefit the poor.

To achieve this objective, the following approaches and activities are applied:

6.4.1 Approaches
- establishment and support of field projects that address transport needs from the perspective of the poor communities,
- networking, experience and information sharing on transport options,
- contributing to and influencing development of appropriate transport policies,
- participation – involving stakeholders in identifying transport solutions,

6.4.2 Activities
- promotion and improvement of affordable technologies
- development of and support to local transport services
- improvement of local infrastructure such as footpaths, tracks and rural roads
- providing non-transport interventions bringing services and facilities closer to the people
- equipping and improving the skills of community groups and members in identifying, prioritising, designing, implementing and maintaining rural transport systems

These approaches and activities are implemented within the vision of a more equitable and just world in which technology enriches and benefits the lives of poor people. Hence ITDGs transport intervention is poverty reduction oriented.

This is congruent to the RTS-Kenya project. For that reason, collaboration with ITDG can bring a lot of synergy, effectiveness and efficiency in generation of the research outputs. As a major collaborator, ITDGs input in the RTS project was envisioned as the following:
- development of appropriate technologies for poor groups, (IMTs, infrastructure, etc)
- development of local capacities (collaborating network, artisans, leaders, IMT operators, etc) in the project areas individually, institutionally for better policy and projects implementation,
- documentation of experiences and information on rural transport services,
- sensitise stakeholders about RTS issues through dissemination of impacts, challenges and opportunities for rural transport services (booklets and factual statements).

The specific research site for collaboration was identified as Magadi – Kajiado where ITDG already has a transport intervention. Work between the two institutions has already started in this site in a limited way. In the next six months (May-October 2002), heavy research work with a development component will be jointly undertaken.

6.5 Collaboration with Uganda and Ghana sister projects
Uganda and Ghana are running projects focusing on rural transport services funded by NRIL. While the Ghana project has been going on, the Uganda one will kick-off in May 2002. Both projects did bring in participants to this workshop. The participants presented the general design and strategy of their projects. It emerged that the RTS-Kenya project can learn a lot from the experiences of the Ghana project as well as from the strategy of the Uganda one, and vice versa.

The KENDAT executive coordinator and RTS-Kenya project manager will visit the Ghana project in July. At that time, there will be an end of project evaluation, conducted village-by-village and culminating to a district workshop. It will be useful for the Executive Coordinator to attend some village meetings and definitely the district workshop in which a lot of project experience and results will be disseminated.

The KENDAT Executive Coordinator will attend the Uganda projects kick-off workshop in May 2002. In December 2002 or January 2003, the Uganda project will send farmers to Kenya, specifically to benefit from the experiences of the RTS project. KENDAT will also look into ways of organising a farmer’s education tour to the Uganda project as a way of reciprocating their visit. This may be done through the ITDG support.

7.0 CONCLUSION

In the workshop here reported, it was assessed that the project is on course and that the work will proceed according to expectations, both of the management and the technical team. The following activity and output schedule was suggested for the incoming NRIL component.

<table>
<thead>
<tr>
<th>Time Plan, Activity and Output Schedule</th>
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<tbody>
<tr>
<td><strong>Activities/Outputs</strong></td>
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<tr>
<td>1st Quarter</td>
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<tr>
<td>Kick-off and reporting workshop</td>
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<tr>
<td>Ergonomics and Environment</td>
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<tr>
<td>Socio-eco: H/hold survey</td>
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<tr>
<td>Engineering and logistics (incl IMT support)</td>
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<td>Partnerships</td>
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<td>2nd Quarter</td>
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<tr>
<td>Socio-eco: H/hold survey</td>
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<tr>
<td>Engineering and logistics (incl IMT support) partnerships</td>
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<tr>
<td>Ag economics: cost benefit analysis</td>
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<tr>
<td>Environment</td>
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<tr>
<td>3rd Quarter</td>
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<tr>
<td>Socio-eco: H/hold survey</td>
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<tr>
<td>Engineering and logistics (incl IMT support) partnerships</td>
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<tr>
<td>Ag economics: cost benefit analysis</td>
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<tr>
<td>Ergonomics and Environment</td>
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<tr>
<td>Golden Milestone workshop to present results of phase1</td>
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<tr>
<td>4th Quarter</td>
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<tr>
<td>Filling gaps review of findings and planning for year 2</td>
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<tr>
<td>Filling in on mission information</td>
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<tr>
<td>Synthesis of overall findings</td>
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<tr>
<td>Prepare strategic proposals</td>
</tr>
</tbody>
</table>

21
This is the scheme that will guide implementation in the next one year of the project, with the necessary flexibility. After that new project proposals will apply, with a gradual shift from basic research towards more of action research and development.
## ANNEX I: LIST OF PARTICIPANTS

<table>
<thead>
<tr>
<th>Names</th>
<th>Affiliation</th>
<th>Address (Email)</th>
<th>Telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. David Ljungberg</td>
<td>Swedish University of Agricultural Sciences Logistics Consultant</td>
<td>Ox 7032; 750 07 Uppsala, Sweden</td>
<td>4618671901</td>
</tr>
<tr>
<td>2. Peter Njenga</td>
<td>International Forum for Rural Transport and Development – policy and institutions Consultant</td>
<td>63-71 Collier Street London P1 9BE, UK</td>
<td>0207713669 9</td>
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<tr>
<td>3. Ms. Lilian Macharia</td>
<td>Intermediate Technology Development Group – EA – Transport Programme Manager</td>
<td>Box 39493 Nairobi <a href="mailto:liilianm@itdg.or.ke">liilianm@itdg.or.ke</a></td>
<td>254-2-719313/719413</td>
</tr>
<tr>
<td>4. F. Muchiri</td>
<td>Ministry of Labour Sage Environment consultants</td>
<td>Box 67839 Nairobi <a href="mailto:muchirif@iconnect.co.ke">muchirif@iconnect.co.ke</a></td>
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</tr>
<tr>
<td>5. Pascal Kaumbutho</td>
<td>Team leader – RTS KENDAT</td>
<td>Box 2859, 0200, City Square Nairobi.</td>
<td>254-2-766939</td>
</tr>
<tr>
<td>6. Ms. Cecilia Njenga</td>
<td>Economic and social policy initiative – Gender consultant</td>
<td>Box 61694 Nairobi <a href="mailto:cecilia.njenga-kinuthia@unchs.org">cecilia.njenga-kinuthia@unchs.org</a></td>
<td>254-2-623164</td>
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<tr>
<td>7. Paswel Phiri Marenya</td>
<td>University of Nairobi, Dept, of Ag Economics Transport consultant</td>
<td>Box 29053 Nairobi <a href="mailto:agecon@insightkenya.com">agecon@insightkenya.com</a></td>
<td>254-2-631815/631340</td>
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<tr>
<td>8. Charles Kaira</td>
<td>NFG Uganda Transport Economics</td>
<td><a href="mailto:ckkaira@africaonline.co.ug">ckkaira@africaonline.co.ug</a></td>
<td></td>
</tr>
<tr>
<td>9. Franc Owusu Acheampo ng</td>
<td>Ghana IMT Project Field Supervisor</td>
<td><a href="mailto:acheelous@hotmail.com">acheelous@hotmail.com</a>, cc.Gina Porter <a href="mailto:R.E.Porter@durham.ac.uk">R.E.Porter@durham.ac.uk</a></td>
<td></td>
</tr>
<tr>
<td>10. Andrew Smallhood</td>
<td>DFIF Nairobi –Snr Natural Resources advisor/Snr Engineering Advisor</td>
<td><a href="mailto:Aj-smallwood@dfid.gov.uk">Aj-smallwood@dfid.gov.uk</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Organization/Role</td>
<td>Address</td>
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</tr>
<tr>
<td>11</td>
<td>Sylvester Kasuku</td>
<td>NFG – Urban planning consultant</td>
<td>Box 8750, 00100 Nairobi</td>
</tr>
<tr>
<td>12</td>
<td>Dave O’Neill</td>
<td>Silsoe Research Institute-Ergonomics and safety consultant</td>
<td>Wren Park, Bedford UK.</td>
</tr>
<tr>
<td>13</td>
<td>Colin Oram</td>
<td>University of Nairobi IMT Technology Consultant</td>
<td><a href="mailto:esceo@eng.warwick.ac.uk">esceo@eng.warwick.ac.uk</a></td>
</tr>
<tr>
<td>14</td>
<td>Gideon Chweya</td>
<td>UoN/KENDAT Field supervisor</td>
<td>Box 4221 Nairobi.</td>
</tr>
<tr>
<td>15</td>
<td>Fred Ochieng</td>
<td>KENDAT Field Supervisor</td>
<td>Box 2859, 00200, City Square, Nbi.</td>
</tr>
<tr>
<td>16</td>
<td>Joseph Egessa</td>
<td>Field Enumerator</td>
<td>Box 6326 Kondele, Kisumu</td>
</tr>
<tr>
<td>17</td>
<td>John Muteti</td>
<td>Ministry of Agric. Field Enumerator</td>
<td>Box 2859, 00200, City Square, Nbi.</td>
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<tr>
<td>18</td>
<td>Philip K. Kiliaki</td>
<td>Machakos Locality Transporter/farmer</td>
<td>Box 1694 Machakos</td>
</tr>
<tr>
<td>19</td>
<td>Paul Wamae</td>
<td>KENDAT</td>
<td>Box 2859, 00200, City Square, Nbi.</td>
</tr>
<tr>
<td>20</td>
<td>Nderitu Mugumo</td>
<td>KENDAT</td>
<td>Box 2859, 00200, City Square, Nbi.</td>
</tr>
<tr>
<td>21</td>
<td>Gichobi – AHA</td>
<td>Field Enumerator</td>
<td>Box 2859, 00200, City Square, Nbi.</td>
</tr>
<tr>
<td>22</td>
<td>Kamau – AHA</td>
<td>Field Enumerator</td>
<td>Box 2859, 00200, City Square, Nbi.</td>
</tr>
<tr>
<td>23</td>
<td>Ms. Mweru Mbugua</td>
<td>Field assistant</td>
<td>Box 2859, 00200, City Square, Nbi.</td>
</tr>
<tr>
<td>24</td>
<td>Ms. Lucy Nkirote</td>
<td>Field assistant</td>
<td>Box 2859, 00200, City Square, Nbi.</td>
</tr>
<tr>
<td>25</td>
<td>Munene Kabengi</td>
<td>Guiding Systems Consultant</td>
<td>Box 72387 Nairobi</td>
</tr>
</tbody>
</table>
# Annex II: Workshop Programme

**Monday, May 6th, 2002**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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</thead>
<tbody>
<tr>
<td>08:30 - 09:00</td>
<td>Arrival and Registration</td>
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</table>
| 09:00 - 09:20 | Introductions, workshop objectives and Outputs  
Dr. Mutua - KENDAT |
| 09:20 - 09:50 | Overview of the 3 projects using the log frame approach and key strategic challenges being faced  
Dr. P. G. Kaumbutho, KENDAT |
| 09:50 - 10:30 | Discussions (Distinctions and justification of 3 components and their deliverables) |
| 10:30 - 11:00 | COFFEE / TEA BREAK               |
| 11:00 - 11:15 | Policy and institutional context: interim findings and gaps in relation to project log frame  
Mr. Peter Nzenga - IFRTD |
| 11:15 - 11:30 | Discussions                     |
| 11:30 - 11:45 | Overview of livelihood framework, socio-economic issues in study area and gaps in relation to project logframes – Ms. Cecilia Kimuthia Nzenga - Habitat |
| 11:45 - 12:15 | Discussions                     |
| 12:15 - 12:30 | Environmental dimension of transport in study areas – Muchiri, NES |
| 12:30 - 13:00 | Discussion and synthesis of morning discussions |
| 13:00 - 14:00 | LUNCH BREAK                     |

**Technical Session II**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>14:00 - 14:15</td>
<td>Logistics and engineering issues in study areas: interim progress and challenges – Dr. J. Mutua - KENDAT</td>
</tr>
<tr>
<td>14:15 - 14:30</td>
<td>Discussions</td>
</tr>
<tr>
<td>14:30 - 14:45</td>
<td>Way forward for NRIL work; how, where, who and why: P. Kaumutho</td>
</tr>
<tr>
<td>14:45 - 15:00</td>
<td>Reflections on Ergonomics inputs to NRIL work – Dave Onnell</td>
</tr>
<tr>
<td>15:00 - 15:15</td>
<td>Reflections on DTU inputs to NRIL work – Colin Oram</td>
</tr>
<tr>
<td>15:15 - 15:30</td>
<td>Reflections on transport economics input – P. Marenya</td>
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<tr>
<td>15:30 - 16:00</td>
<td>Discussion on framework for NRIL implementation</td>
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<tr>
<td>16:00 - 16:30</td>
<td>TEA / COFFEE BREAK</td>
</tr>
<tr>
<td>16:30 - 16:45</td>
<td>TDG's collaboration – Ms. L. Macharia, TDG</td>
</tr>
<tr>
<td>16:45 - 17:30</td>
<td>Discussions on Specific roles and deliverables for new team members</td>
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**Tuesday, May 7th, 2002**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>09:00 - 09:30</td>
<td>Summary of Day 1 and issues arising</td>
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<tr>
<td>09:30 - 10:00</td>
<td>Final research sites selection and boundary setting</td>
</tr>
<tr>
<td>10:00 - 10:30</td>
<td>TEA / COFFEE BREAK</td>
</tr>
<tr>
<td>10:30 - 12:30</td>
<td>Field methodology and questionnaire</td>
</tr>
<tr>
<td>12:30 - 13:00</td>
<td>Field capacity needed</td>
</tr>
<tr>
<td>13:00 - 14:00</td>
<td>LUNCH</td>
</tr>
<tr>
<td>14:00 - 15:30</td>
<td>Overall work plan and benchmarks</td>
</tr>
<tr>
<td>15:30 - 15:45</td>
<td>Reflections on areas of collaboration with Uganda Project</td>
</tr>
<tr>
<td>15:45 - 16:00</td>
<td>Reflections on areas of collaboration with Ghana Project</td>
</tr>
<tr>
<td>16:00 - 16:15</td>
<td>Discussions</td>
</tr>
<tr>
<td>16:15 - 16:30</td>
<td>COFFEE / TEA BREAK</td>
</tr>
<tr>
<td>16:30 - 17:00</td>
<td>Management details of the project</td>
</tr>
<tr>
<td>17:00 - 17:30</td>
<td>Other matters arising and concluding remarks</td>
</tr>
<tr>
<td>18:00</td>
<td>COCKTAIL</td>
</tr>
</tbody>
</table>

**Days 3 and 4 Field Visits for New Team Members**