

# Investing in intermediate means of transport in Madagascar

Paul Starkey<sup>1</sup> and Luc Rasamoela<sup>2</sup>

<sup>1</sup> Animal Traction Development, Oxgate, 64 Northcourt Avenue, Reading RG2 7HQ, UK

<sup>2</sup> Cellule de coordination du transport en milieu rural, Ministère des Travaux Publics, Anosy Antananarivo, Madagascar

## Abstract

*Efficient rural transport systems require complementary infrastructure, motorised vehicles, intermediate means of transport, boats, railways and an air network. Intermediate means of transport are essential for domestic use, agricultural production, local trade and consolidating larger loads. In rural areas, vicious circles of scarce transport, insufficient users and inadequate support services hinder development. In Madagascar, as elsewhere, transport investment has been biased towards infrastructure. As part of an integrated rural transport strategy, an investment programme, supported by the World Bank, will include a component specifically designed to enhance the use of intermediate means of transport in Madagascar.*

*Investment proposals and an innovative networking methodology were developed through a three-year participatory process involving many stakeholders, workshops, pilot projects and consultancies. The five-year programme should start in 2002 and include an eight million dollar component that aims to enhance rural mobility by increasing the number of intermediate means of transport, diversifying their uses and improving their quality. Progress will be assessed using quantitative and qualitative indicators. Four main transport types will be promoted: cycle-based technologies, animal-powered carts, human-powered carts and water-based transport. Emphasis will be on rural mobility, with some relevant investment around urban markets. Ways of developing small-scale motorised transport and improving transport services will be studied.*

*Increasing intermediate means of transport will require many, small, coordinated, decentralised, user-orientated, participatory initiatives. These will involve local promotion, pilot introductions, action-research, enhancing credit availability and developing a 'critical mass' of technologies in numerous different locations. These 'micro-projects' will be implemented by autonomous NGOs and private sector partners, linked through a network. Supply issues will be addressed involving artisans, local associations and operators. Knowledge, capacity and expertise will be built up, through workshops, publications, media outputs, associations, training and national and international networking. Collaborative investigations and action-research will identify problems and solutions relating to bicycle price/quality, boat construction and mechanisation, ox cart improvement, measures of rural mobility, tricycles, transport using donkeys or horses, complementary rural transport services, infrastructure and marketing. Relevant legislation and policies will be reviewed. All preparatory work concluded that lack of credit was a limiting factor and in many countries ownership of means of transport has been increased through targeted credit. The programme will work with credit organisations to develop and publicise appropriate credit products, using existing liquidity.*

*A national network, known as MITA, has been formed to start the collaborative processes envisaged in the investment programme. Its steering committee, comprising key partner organisations, will ensure overall coordination and monitoring. Responsibility for each activity will be delegated to one or more competent organisations (NGOs, private sector). The Rural Transport Unit will represent the government, facilitating the process and ensuring budgetary control. National network coordination should allow valuable lessons, problems and experiences to be widely shared, increasing the rate of progress and impact of this innovative programme.*

### **Need for investment in intermediate means of transport**

Poverty alleviation requires improved mobility so women and men can access daily needs, services, markets and income. In Madagascar and elsewhere, transport investment has been biased towards infrastructure. An integrated, poverty-oriented approach is appropriate and this requires complementary means of transport (motorised and non-motorised) as well as the infrastructure. Efficient rural transport systems are multi-modal, involving long-distance, large-scale motorised road transport, intermediate means of transport (IMTs) for village and 'feeder' transport, and (depending on circumstances) water-based transport, railways and the air network.

As part of a wider rural transport initiative, and subject to final negotiations, an innovative five-year programme will aim to improve rural mobility in Madagascar through intermediate means of transport. About eight million US dollars will be invested in increasing the overall number of intermediate means of transport in use, increasing and diversifying their uses and improving their quality. The long-term aim is poverty reduction, and it is hoped that within a five year period, at least half a million poor people will directly or indirectly benefit from increased use of intermediate means of transports.

Intermediate means of transport are local transport solutions that increase transport capacity at a relatively low capital cost, while reducing drudgery. Intermediate means of transport can enhance personal mobility, improve trade and marketing, and enhance the profitability of large-scale vehicles by carrying goods and people to and from transport hubs. Land-based intermediate means of transport include wheelbarrows, handcarts, trolleys, bicycles, tricycles, animal-powered transport, motorcycles and power tiller trailers. These carry people and/or goods, with loads generally between 50 kg to 1000 kg. Equivalent intermediate water based transport technologies include canoes, rafts and small boats, and these generally have higher carrying capacity.

### **Intermediate means of transport in Madagascar**

Despite the clear importance of intermediate means of transport, the number in use in Madagascar is low relative to the number of rural households. The existing ownership and use patterns in Madagascar are not homogenous, but vary between places, being influenced by topography, climate, infrastructure, population density, ethnic group, purchasing power, fashion, supply systems and 'unpredictable' human invention, experiences, aspirations and preferences (Starkey, 2001a). In all regions of Madagascar, the highest concentrations of transport devices can be seen around rural markets, transport hubs and in and around urban areas. Here, transport demand encourages virtuous circles of diverse technologies and critical mass of users and services creating improved mobility, economic activity and efficient transport.

In rural areas, vicious circles of scarce transport, insufficient users and inadequate support services can hinder development. In Madagascar, the majority of the 300,000 bicycles are found in urban and peri-urban areas (Lalana, 2001). In some local areas, a 'critical mass' of users of particular technologies has developed over time. This is true for the traditional ox cart in the highlands and parts of the south, with about 300,000 carts (of various designs) in regular use. However, in some areas (eg, along the east coast) there are almost no carts.

The patchy pattern of distribution of intermediate means of transport in Madagascar includes many innovative uses that have developed 'spontaneously', initiated by local individuals and entrepreneurs. These include at least four different models of rickshaw (pousse-pousse) adopted in different areas and quite elaborate four-wheel handcarts equipped with steering and brakes. Other examples include local concentrations of horse carts, donkey carts, single-ox carts, ox carts with pneumatic tyres and bicycles with seats for passengers. In water transport, there are local concentrations of metal 'pirogues' and other types of boats used as taxis and transport services (Palmer, 2001). All these innovations tend to be very localised, and they do not necessarily spread to new areas 'spontaneously'.

### **Integrating intermediate means of transport into the national transport strategy**

The situation analysis and investment proposals outlined here are the culmination of a three-year process of problem identification and discussion with key stakeholders, and the development of an integrated rural transport strategy. A national workshop, arranged by the Rural Travel and Transport Program (Programme de Transport en Milieu Rural) in May 1999 was followed by six regional workshops employing participative methodology and discussions between transport professionals, non-governmental organisations (NGOs), private sector suppliers and the users (and potential users) of intermediate means of transport. The problem identification process culminated in February 2001 with a national workshop to agree the rural transport strategy and to prepare a goal-orientated logical framework for the investment programme (PTMR, 1999, 2000; Madagascar, 2001).

Consultancy studies were undertaken in relation to the major investments in infrastructure, including the rehabilitation of roads, railways and ports. The more modest investment in intermediate means of transport also required detailed preparation. National and international consultants provided situation analyses and some pilot projects were initiated and monitored (Lalana, 2000, 2001; Palmer, 2001; Raharison, 2001a, 2001b, 2001c; Rakotoson, 2001, Starkey, 2001b). In August 2001, key stakeholder organisations came together in planning workshops relating to intermediate means of transport and agreed both realistic investment targets and the processes outlined here (Starkey, 2001c). The methodology is based on the concept of networks. A network is a group of individuals or organisations who exchange information and undertake joint activities on a voluntary basis, in such a way that their individual autonomy is strengthened by the interactive process of networking (Starkey, 1998). A provisional network Steering Committee was formed in September 2001 and has met several times to plan procedures for implementing the intermediate means of transport programme.

The investment proposals relating to rural roads and intermediate means of transport were discussed at six regional workshops held in October 2001. The workshops provided more information on partner organisations willing to participate in the intermediate means of transport programme and criteria for monitoring and evaluating the success of this component. Subject to administrative procedures, the investment should start in 2002.

To oversee the programme investing in roads and intermediate means of transport, the government of Madagascar has established a small Rural Transport Unit. This is administratively responsible to the 'Programme Sectoriel des Transports', supervised by the Ministries of Transport and Public Works.

### **Investment aims and approach**

Within the intermediate means of transport programme, four broad types of transport will be promoted:

- cycle-based technologies
- animal-powered carts
- human-powered carts (including wheelbarrows and 'pousse-pousse' rickshaws)
- water based transport (motorised and non-motorised).

These technologies all have proven value for rural development and poverty alleviation in Madagascar. A fifth category, small-scale motorised transport (motorcycles, small tractors), has yet to be proved viable in Madagascar. In the first instance, only feasibility studies and pilot projects will be undertaken with these technologies, with further investment dependent on actual experiences.

The complementary sector of larger-scale motorised rural transport services (notably bush taxis, pickups and trucks) is not receiving investment at this time, but provision will be made for some detailed studies of this sector,

### **Investment methodology: a devolved but coordinated investment programme**

The nature of intermediate means of transport (individual ownership or small-scale transport services with very localised adoption patterns) necessitates a devolved, user-orientated, participatory approach that recognises the need to create a 'critical mass' in numerous different locations. The introduction of greater and innovative use of intermediate means of transport is most likely to come from many small, decentralised initiatives, which may involve local promotion, pilot introductions, collaborative action-research to improve technologies and/or expanding local credit availability.

National-level coordination is a prerequisite, and certain aspects relating to transport promotion such as those relating to credit, taxes, supplies of materials (notably imported components), as well as initiatives relating to publicity, safety, training and the promotion of national and international information exchange can be tackled at national level, but success will depend on local ideas and acceptance.

The wider impact of investment in this sector is most likely to be achieved by many small coordinated initiatives that are planned and implemented by organisations working closely with the users and potential users. For these reasons, most of the planned investment in this programme will be undertaken by existing NGOs and microcredit agencies, which already have contacts in rural areas, linked by a loose coordinating network to promote the exchange of ideas and information. Several organisations have already been included in the planning process and have helped to establish the network. A database of other potential partners is being prepared. The partners will include national NGOs such as Lalana and SAF-FJKM (Sampan Asa Momba ny Fampandrosoana Fiangonan'ny Jesoa Kristy eto Madagasikara), international NGOs such as Agro-Action, CARE, Intercooperation and Vétérinaires sans frontières), credit agencies such as OTIV and TIAVO (Ombon-Tahiry Ifampisamborana Vola and Tahiry Ifamonjena Amin'ny Vola), community associations, research organisations, government services (eg, agricultural extension) and private sector suppliers (both formal in informal sectors).

An expanding ripple model is envisaged, with a small number of key organisations in the centre (perhaps 15-30 of the larger NGOs and credit agencies) that will in turn work with many (perhaps 400) smaller organisations (local NGOs, associations and community-based groups). These will work with the individual beneficiaries (perhaps 50,000 direct beneficiaries). As certain transport technologies may benefit many family members, neighbours and clients (in the case of transport services), the total number of beneficiaries will be greater. As project-stimulated adoption is likely to encourage virtuous circles of local 'critical mass' and further secondary adoption, the number of people affected by project initiatives could reach half a million within five years (indicators will be defined to allow the monitoring of programme impact).

Although the emphasis will be on rural mobility, some investments will involve urban-based enterprises and support services. Rural transport technologies and services often have crucial urban connections (transport hubs, supplies, support services. For certain innovative technologies (such as tricycles), pilot introductions may take place around urban markets, to establish the critical mass of users and support required for subsequent rural promotion.

### **Investment through small projects**

At the heart of the investment programme will be many small-scale initiatives aimed at enhancing rural mobility through the greater or more efficient use of cycle-based technologies, animal-powered carts, human-powered carts, water-based transport (motorised and non-motorised) or a

combination of complementary transport modes. Some projects will concentrate on the supply side (eg, boat builders, cart manufacturers, cycle workshops), while others may concentrate more on promoting greater or diversified uses (eg, user associations, women's groups, developing transport services).

In order to have a wide-ranging impact, work should take place in most of the 111 'Fivondronana' administrative districts of Madagascar that together contain 1300 recognised communities. Due to environmental and population differences, equality of distribution is unrealistic, but a total of 50 small projects, with an average cost of \$50,000 is a realistic target. Some of the larger partner NGOs are likely to be able to plan and implement projects in several sectors (cycles, boats, carts) and in several different provinces.

Although the small projects will be autonomous, they will be linked through the network to other small projects, credit schemes, national investigations, and international sources of information. Their valuable lessons and problems experienced will be shared through networking exchanges, so increasing the rate of progress and the overall impact.

### **Collaborative investigations and action-research**

In addition to direct investment in small-scale projects, resources will be made available for important investigations (participative surveys, collaborative adaptive research-development) to identify problem areas and possible solutions. These will be in all sectors (cycles, boats, carts, etc). Following studies and planning workshops, several key areas have already been identified, and several partner organisations have expressed willingness to undertake collaborative work.

Among the major national initiatives already discussed are:

- *Bicycle evaluation and promotion.* While a wide range of bicycle-related actions are envisaged, a priority will be the identification of sources of low cost bicycles of suitable design and quality. Several organisations (NGO and private sector) will collaborate in a programme involving the pilot importation, testing and multi-location evaluation of a range of low-cost bicycles/components imported from several countries. The objective will be to identify suitable specifications and sources, and making this information widely available to all potential importers.
- *Boat construction and mechanisation.* In a collaborative programme, there will be trials in several locations of long-tail motors and improved boat-construction techniques, with networking exchanges within Madagascar and with programmes in Asia. External networking contacts have already be established through the International Forum for Rural Transport and Development (IFRTD) that has recently initiated a complementary international research project.
- *Ox cart improvement.* Another major project involving several NGOs in all parts of the country will relate to ox carts. Existing metal-banded wheels are considered to be a constraint in several parts of the country, and there is a widely-perceived need to develop and promote appropriate ox carts that are less damaging to the road infrastructure. A participative methodology, with national and international networking, will be employed.
- *Studies measuring rural mobility and rural transport services.* There is a need to identify and measure indicators of rural mobility and rural transport services that can be used to assess progress. Such indicators may include the number of each type of intermediate means of transport (carts, bicycles, etc) that are owned within communities (with data disaggregated for gender, age and economic status). Linked to this may be usage patterns (numbers of journeys per day, trip purpose, distance travelled, load carried, number of people using each transport device). Where possible, such parameters will build on the experience of transport programmes in other countries. Surveys will be required in different areas to test data collection and the relevance to rural women, men and children

of the selected indicators. This collaborative programme will involve many interested organisations and will complement and build on existing experiences and on-going socio-economic data collection initiatives.

- *Tricycle promotion.* Tricycles are very widely used in many countries, and there is considerable interest in their use in Madagascar, notably in flatter places with relatively good infrastructure. Various designs proven successful in other countries will be imported and/or locally made. Working with interested transporters and/or user groups, information will be gathered and shared relating to design suitability, operational parameters and market interest.
- *Potential for developing transport using donkeys and/or horses.* Equids (donkeys and horses) are very important for rural transport in many Asian and African countries, but only small numbers of are used for transport in specific areas of Madagascar. Existing users in Madagascar have expressed great enthusiasm for equids, but this view is not widely shared. Participative and collaborative studies will be carried out to define more clearly the existing situation, the current trends and limiting factors and the possibilities for expanding the present systems of use. Working with present users, ways will be sought on ways of enhancing the efficiency of use and expanding the number of beneficiaries.
- *Development of complementary rural transport services.* A series of collaborative and participative studies will be undertaken to review constraints to efficient motorised rural transport services, and identify ways of promoting greater complementarity between transport modes.

These and other comparable studies will be implemented by major NGOs, working in collaboration with government, the private sector and smaller NGOs. These joint programmes will be essential for helping the various pilot projects choose suitable technologies for promotion. Sharing of information during the planning, implementation and evaluation of these initiatives will be assured through the networking methodology that will be a condition of funding.

### **Enhancing capacity, information exchange and synergic collaboration**

Capacity and expertise in this sector will be built up, through a wide range of networking activities, workshops, publications, formation of associations (constructors, operators, users), professional exchanges and formal training. This information exchange and networking will be considered an integral part of the investment strategy, and budgetary allocation will be made for network coordination, publicity and publications.

Information exchange and planning workshops will be held at national and regional level. Every year, there will be at least one wide-ranging workshop open to all network members, as well as one or more technical workshops focused on particular subjects (eg, safety, participative methodology) or sectors (eg, cycles, water transport, animal power). National level workshops will be complemented by annual workshops in each region. It is estimated that 1000 people will be trained at local level, and 40 will receive international exposure (mainly international workshops and exchange visits to learn from other countries).

Resources will be available for international expertise (consultancies, exchange visits from other countries) to advise on particular transport technologies or assist the planning, implementation and follow up of specific initiatives.

It is envisaged that the proposed investment in networking activities involving all key actors will stimulate additional investment in intermediate means of transport by suppliers, purchasers and a range of development agencies. These extra activities will result from programme publicity and the virtuous circles of investment and adoption that normally follow the achievement of 'critical

mass' in a particular location. Such synergy will gear up the benefits of the core programme investment and networking activities.

### **Improving complementarity, security and regulatory environment**

In addition to the investment programme, there will be activities aimed at improving the complementarity of the infrastructure, different transport systems (motorised, non-motorised, road, path, waterway) and marketing systems. Aspects such as safety, security, legislation and fiscal matters will also be reviewed, and action taken where appropriate. Examples include promotion of secure parking for bicycles, licensing arrangements and drafting/enforcement of safety codes for intermediate means of transport (including water transport). This work will mainly be undertaken within the context of other network activities (pilot projects, national studies, workshops and consultancy assignments).

### **Addressing limiting factors to water transport**

In some parts of the country, localised silting or inadequate infrastructure limits water transport. Funds will be made available for local spot improvements to improve water transport (small jetties and local dredging in key areas). Although this investment relates to infrastructure, it is included in this programme to improve the operation of small boats. The water transport sector does not have local organisational systems for maintenance and improvement comparable to those in the roads sector.

### **Importance of credit for purchasers and suppliers**

All preparatory work relating to this transport investment (workshops, field visits and studies) has made it clear that lack of microcredit for the purchase of intermediate means of transport restricts their adoption. The problem is greatest for the poorest members of society and for women. Investment in motorised water transport and improved boat construction techniques is also limited by lack of access to credit. Evidence from many countries suggests that the number of people benefiting from intermediate means of transport can be increased through carefully targeted medium-term credit, with conditions appropriate for such a purchase. Such credit is generally a productive investment, with economic benefits. In some cases, credit is required for small workshops, manufacturers and distributors.

As part of the preparation for this component, a study of credit was commissioned (Rakotoson, 2001) and a small workshop was held with relevant stakeholders and microcredit agencies. It was agreed that there was a problem in Madagascar to obtain credit for intermediate means of transport, as the existing microcredit agencies did not have appropriate credit 'products' targeted to this area. The microcredit workshop concluded that there was no need to create a new institution specialising in this area, as existing microcredit agencies were willing to create appropriate credit products, subject to technical guidance and the availability of sufficient 'liquidity'.

### **Complementarity of credit provision, small projects and network activities**

The various credit organisations involved in the planning process initially proposed that a new line of credit should be made available through this investment programme and earmarked for loans for intermediate means of transport. It was envisaged that the funds allocated for credit would be managed by the Agence d'Exécution du Programme MicroFinance, an existing microcredit project supported by the World Bank. An advisory committee, comprising the main microcredit agencies and professional associations, together with key network members, would propose suitable new credit products with terms suitable for the purchase of intermediate means of transport. It would then be for the individual credit organisations to develop such products and administer additional funds using their own credit systems.

However, World Bank credit experts considered that liquidity within the banking and credit sector was not actually a limiting factor, so that new credit funds for transport devices were not required at national level. Clearly lack of credit was a critical constraint at village level, but this could be addressed if the existing credit organisations accessed the available liquidity. This means that there will be no specific credit component within this investment programme, but the steering committee, and network members, will work with existing credit organisations to help them develop and promote suitable credit products. It is envisaged this will result in targeting credit to both poor rural users (women, men and associations) and small suppliers (artisans, retailers). Given the existing problems of rural credit already identified, an early challenge for the various micro projects funded by this programme will be getting existing credit organisations to develop appropriate credit products and make them available in rural locations.

### **Programme management and the importance of a networking approach**

A devolved and networking approach is crucial to the success of this programme, but this does not give unrealistic requirements in terms of organisational structures. The whole programme will be based on a networking methodology. Responsibility for implementing each activity (small projects, national studies, workshops, training activities) will be delegated to competent organisations (mainly NGOs, but including some private and public sector organisations). Such organisations will be linked in a network of autonomous but collaborating members. Intermediate means of transport are known in French as ‘moyens intermédiaires de transport’ or MIT and so the network will be known as MITA, which is also a Malagasy word conveying the sense of moving forward.

Responsibility for overall planning, project appraisal, monitoring, coordination and provision of technical and professional guidance will be assured by a steering committee with transparency and openness. A highly professional, objective, self-critical and user-orientated approach to the programme will be essential, and should be achieved through an enthusiastic, broadly-based and balanced Steering Committee. Some of the first tasks of the Steering Committee were to define its composition, draw up its statutes and started to define its own planning, implementation, monitoring and evaluation procedures. An inclusive and democratic approach was proposed, that would allow new members to be welcomed, while ensuring constructive continuity from the ‘founder’ organisations. Members will chair the Steering Committee in rotation. A secretariat may be established separately or hosted by any of the member organisations. Some secretariat functions may be shared and/or rotated (eg, one organisation publishing a newsletter, another developing a database and another responsible for international liaison). Most specific activities will be delegated to members and to specialised subcommittees, responsible to the main committee.

It must be stressed that the network, that will have much responsibility for planning, implementing and evaluating the programme, is not an organ of government. It is an independent network comprising many autonomous organisations that will be collaborating together. The government’s Rural Transport Unit will be a member of the network, and will have a guaranteed place on the steering committee for the duration of the investment programme. Overall administrative control of investment funds will remain with government, and its Rural Transport Unit, but most project implementation will be contracted to the network partner organisation, on the advice of the Steering Committee.

### **Procedures for planning, selecting and monitoring programme actions**

A consultant was contracted to prepare a manual of administrative procedures. To ensure that gender issues will be considered throughout the investment programme, a combined national and international consultancy has been arranged, in collaboration with the International Labour Organisation, to prepare guidelines and procedures.



The Steering Committee will provide professional guidance and will decide which programmes are to be supported and on realistic budgets. Specific programme activities (small projects, national studies, workshops, training initiatives, consultancy studies, etc) may be proposed by the Steering Committee as a whole or by individual partner organisations. The Steering Committee will also invite other organisations to submit project proposals, initially in the form of concept notes (stating briefly objectives, location, activities, timeframe and outline budget). Proposals will be reviewed in a transparent way by the Steering Committee (or a subcommittee), with members declaring any interests they may have. Organisations submitting acceptable concept notes will be asked to develop more detailed proposals (or ‘tenders’), taking into consideration the advice of the committee relating to costs and methodology. Competitive tenders might be requested, but a collaborative approach, with one lead organisation, is more likely to be appropriate, particularly for the action-research initiatives.

Projects and activities will be implemented by one or more partner organisation, using contracted programme funds or (more likely) a combination of programme funds and funds from other sources. It is already clear that there is already much expertise, enthusiasm and community-based resources within the partner NGOs and microcredit institutions that will be harnessed as proposals are prepared and initiatives implemented. This is likely to ‘gear up’ the value of the funds being invested.

Overall financial control for programme disbursement will remain with government. The Rural Transport Unit will act on the recommendations of the Steering Committee, and using normal government procedures for approval, invoicing and reporting, disbursements will be made to the implementing organisations. These partner organisations will then be responsible for implementing the activities, following appropriate financial control and reporting procedures.

One of the member organisations has been delegated the task of preparing a number of objectively verifiable indicators that can be incorporated into existing socio-economic data-collection systems from the outset. These qualitative and quantitative measures relating to rural transport will be important for assessing the impact of the programme. They will include numbers of transport devices, their use (loads, distances, journeys, type of users) and the cost and quality of the transport. One of the proposed national investigations will involve the monitoring of intermediate means of transport, and the validation of objective indicators, in close cooperation with other organisations involved with socio-economic surveys. This action-research component will work with other organisations and attempt to measure the proportion of economic and social transport needs being met by intermediate means of transport, the complementarity of transport modes and changes in the contribution of intermediate means of transport to the overall transport system.

## **Conclusions**

Following a three-year process, many of issues affecting the adoption of intermediate means of transport in Madagascar have been identified. Many different stakeholders have been involved in agreeing procedures for a major investment programme. The proposals are unique in many ways. A large national transport programme is specifically investing to enhance the use of intermediate means of transport in the country. This intermediate means of transport programme will be based on a novel networking methodology, with many delegated small projects collaborating together. While government will retain administrative responsibility, actual implementation will be achieved through the work of NGOs and private sector partners. It will be a challenge to all concerned and a high level of motivation and achievement can be expected from the network and its Steering Committee. Most of the organisations involved already use participatory methodologies and have clear statements relating to poverty reduction, gender and environmental sustainability, and so the efficient achievement of project goals should be in the interests of

everyone, particularly the rural people of Madagascar. The proof of the methodology will be in the outputs and results attained in the coming years. Whatever the degree of success achieved, many valuable lessons are likely to emerge as this exciting programme is implemented and monitored.

## References

- Lalana. 2000. Promotion de moyens intermédiaires de transport pour les femmes Antemoro dans la zone de Lokomby, Sous-Préfecture de Manakara, Province de Fianarantsoa, Madagascar. Dossier pour requête de financement. Antananarivo, Madagascar. 10p.
- Lalana, 2001. Etude sur la filière vélo. ONG Lalana, Antananarivo, Madagascar. 43p.
- Madagascar 2001. Fanambarana manoritra ny politika sy ny tetika itondrana ny fitaterana ambanivohitra Déclaration de politique et de stratégies de transport en milieu rural. Ministère des Transports et de la Météorologie et Ministère des Travaux Publics, Antananarivo, Madagascar. 17p.
- PTMR 1999. Résumé exécutif de l'atelier national 10-12 mai 1999, Antananarivo. Programme de Transport en Milieu Rural (PTMR), Ministère des Transports et de la Météorologie et Ministère des Travaux Publics, Antananarivo, Madagascar. 65p.
- PTMR 2000. Politique et stratégies pour le développement des transports en milieu rural. Programme de Transport en Milieu Rural (PTMR), Ministère des Transports et de la Météorologie et Ministère des Travaux Publics, Antananarivo, Madagascar. 49p.
- Palmer C, 2001. Rapport d'évaluation du transport fluvial à Madagascar. Programme Sectoriel des Transports, Ministère des Transports et de la Météorologie et Ministère des Travaux Publics, Antananarivo, Madagascar. 26p.
- Raharison P, 2001a. Utilisation des transports à traction animale à Madagascar. ONG Lalana, Antananarivo, Madagascar. 23p.
- Raharison P, 2001b. Etat des lieux actuels des moyens intermédiaires de transport (MIT). ONG Lalana, Antananarivo, Madagascar. 43p.
- Raharison P, 2001c. Création d'une base de donnée sur les partenaires intervenant ou s'intéressant aux moyens intermédiaires de transport (MIT). ONG Lalana, Antananarivo, Madagascar. 36p.
- Rakotoson J, 2001. Etude d'un système de microfinancement pour les moyens intermédiaires de transport. ONG Lalana, Antananarivo, Madagascar. 52p.
- Starkey P, 1998. Networking for development (Réseaux pour le développement). International Forum for Rural Transport and Development, London, UK. 103p. ISBN 1-85339-430-0, 1-85339-440-8
- Starkey P, 2001a. *Local transport solutions: people, paradoxes and progress*. SSATP Working Paper 56. Rural Travel and Transport Program of the Sub-Saharan Africa Transport Policy Program (SSATP), The World Bank, Washington DC, USA. 72p.
- Starkey P, 2001b. Aide mémoire de la mission de 16 février – 8 mars 2001. Programme Sectoriel des Transports, Ministère des Transports et de la Météorologie et Ministère des Travaux Publics, Antananarivo, Madagascar. 10p.
- Starkey P, 2001c. Recommandations pour les investissements en moyens intermédiaires de transport (MIT). Programme Sectoriel des Transports, Ministère des Transports et de la Météorologie et Ministère des Travaux Publics, Antananarivo, Madagascar. 14p.