

RTS-1 Promotion of IMT and non-motorised transport

While motor transport is increasingly becoming more common in rural areas, particularly for long hauls, human-powered and animal-based intermediate means of transport (IMT) offer a more affordable and sustainable means of transport. IMT is particularly important in supporting the development of integrated village-hinterland linkages (see [NLD-3](#)).

The World Bank defines IMT as “those means of transport which are intermediate between the traditional modes of walking ... and modern, conventional motor vehicles such as cars, pick-ups, trucks and buses”.

These IMT transport technologies are convenient, flexible, require relatively small outlays, sustainable, widely available and relatively affordable, particularly for inter- and intra-village as well as village-to-market produce movement and domestic chores.

Africa, and particularly Sub-Saharan Africa, has very few intermediate means of transport in comparison to other developing regions. The World Bank talks off the “missing middle” which characterises transportation in Sub-Saharan Africa. Use per capita is very low, as well as there being only a limited range of types of IMTs.

Types of IMTs <i>(extract from SSATP20, 1996)</i>	Wheelbarrows: <ul style="list-style-type: none">• Carry heavier loads than headloading;• Can be home manufactured;• Not suitable for hilly terrain;• Not suitable over long distances.
	Hand carts: <ul style="list-style-type: none">• Greater stability & better balance than wheelbarrows so carry heavier loads;• Best flat terrain & smooth surfaces;• Can be home manufactured or made in small workshops.
	Pack donkeys: <ul style="list-style-type: none">• Particularly suited for hilly terrain;• Can carry many different loads;• Easy to care for;• Lower status than oxen & cattle means women often use them.
	Sledges: <ul style="list-style-type: none">• Usually drawn by oxen;• Simple & cheap;• Often made at home;• Similar capacity to that of the pack donkey;• Can damage road surfaces.
	Animal-drawn carts: <ul style="list-style-type: none">• Drawn by donkeys or if larger by oxen;• High load capacity;• Mainly used for agricultural transport;• Can be made in small-scale workshops.

Bicycles:

- Most common African IMT;
- Manufacture is capital intensive but local plants could assemble knocked down kits;
- Allow faster speeds & greater loads than walking & head loading;
- Require adequate spares at low prices & specialised repair services;
- Use by women could be far higher, particularly if more women's models were made available;
- Used for personal transport (even taxi services) & load carrying. (Tricycles are mainly used in urban areas for small deliveries & small-scale selling)

Bicycle trailers:

- Increase load capacity of the bicycle;
- Best suited to flat or rolling terrain;
- Can be manufactured in small metal-working workshops.

Motorised vehicles:

1. Motorcycles and mopeds;
2. Motorcycle adaptations;
3. Three-wheelers;
4. Locally made four-wheel vehicles.

(These motorised IMT are not generally found in the rural areas of Africa. They are expensive to purchase & maintain, and require repair and servicing capabilities.)

Intermediate means of transport are more easily used by, and are more likely to be made available to, women and children than more expensive and sophisticated vehicles. It is thus important that an environment conducive to the development of intermediate means of transport be created.

Determining The Suitability And Sustainability Of IMT <i>(extract from SSATP20, 1996)</i>	
Environmental factors	<ul style="list-style-type: none"> • Topography; • Stock & condition of infrastructure; • Population distribution (dense, clustered, sparse).
Economic, industrial, and social factors	<ul style="list-style-type: none"> • Economic factors; • Technology; • Financial factors; • Cultural factors; • Community-based organizations (for collective ownership of IMTs); • Complementary initiatives (may require infrastructure development, promotion of draft animals, provision of credit services, mechanical engineering).
Institutional strengths & weaknesses	<ul style="list-style-type: none"> • Effect of national institutions & agencies on the context of promoting IMTs.
Effect of regulatory frameworks	<ul style="list-style-type: none"> • Road safety including roadworthiness of vehicles & safety of passengers & other road users.
Effect of industrial policies	<ul style="list-style-type: none"> • Directly or indirectly impact on the promotion of IMTs (e.g. import licenses, import duties; development of industries that may manufacture IMTs; distribution and marketing of agricultural produce).

Possible Intervention Actions <i>(extract from SSATP20, 1996)</i>	
Adaptation & improvement of existing IMTs	<p>Primary considerations:</p> <ul style="list-style-type: none"> • Infrastructure stocks; • Economic (demand for & affordability of IMTs); • Technology & supply issues; • Financial factors; • Community organisation issues; • Agencies and initiatives for support. <p>Planning for manufacture & assembly:</p> <ul style="list-style-type: none"> • Training; • Materials & components supply; • Finance for manufacture and marketing; • Business development.
Introduction of new IMTs	<p>Primary considerations:</p> <ul style="list-style-type: none"> • Identification of potential users; • Economic, industrial and social factors (particularly cultural acceptance). <p>Planning for processes which include:</p> <ul style="list-style-type: none"> • Testing suitability of proposed IMT; • Reaching minimum threshold of use (via loans, hire purchase, credit, direct sales); and' • Regularisation of access to IMTs.

The following actions will significantly aid in the promotion of IMT use:

- putting in place credit systems;
- decreasing the price of IMTs through supporting local manufacture and loosening restrictive legislation;
- promoting collective use; and
- assisting in the formation of small enterprises capable of manufacturing and repairing simple transport, light construction equipment and tools.

Specific example of actions to promote IMT <i>(extract from WB-DP334, 1996)</i>	
Government policy measures	<ul style="list-style-type: none"> • Encouragement of a competitive market for import & distribution of IMT components, and imported IMT; • Provision of credit for investment of local industries in manufacturing equipment & materials; • Prevention of artificial decreases in the competitiveness of local manufacturing & distribution industries.
Supportive husbandry & veterinary services	<ul style="list-style-type: none"> • Develop training & extension services for the increased use and supply of ox and donkeys in suitable areas; • Address constraints imposed by diseases on work animals.
Develop distribution systems	<ul style="list-style-type: none"> • Use government, parastatal, cooperative or NGO distribution systems to market bicycles, IMT spare parts and materials for the local production of IMT.
Demonstrate use of IMTs	<ul style="list-style-type: none"> • Increase use of IMT by government officials; • Use mass media, demonstration & community initiatives - working closely with women's organizations - to promote use by women.