



Intermediate Means of Transport (IMT) and Rural Transport Services

Experiences of ITDG in Asia and Africa

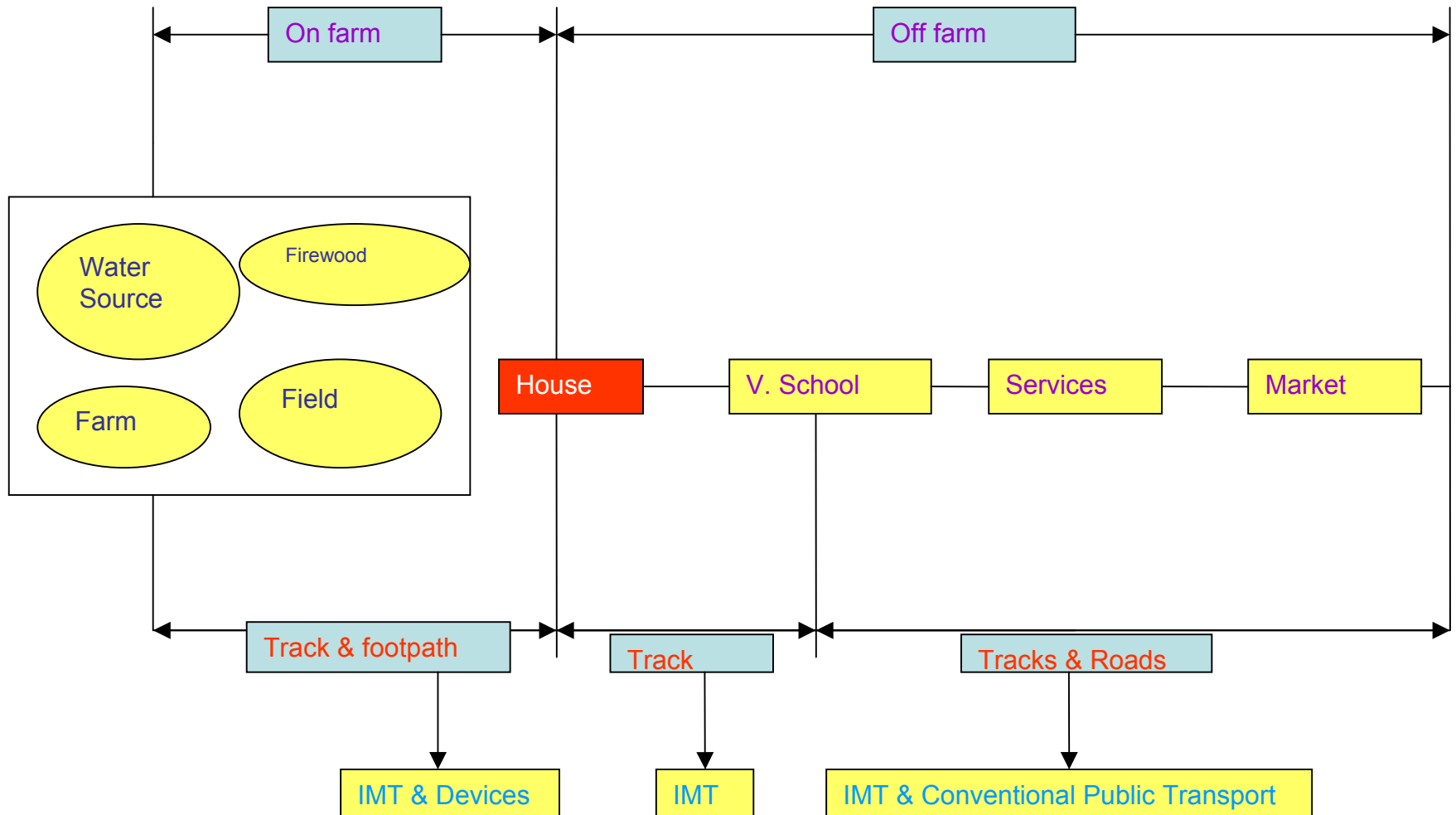
By

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Context.....

Rural Travel pattern Chart



Rural Transport

Rural people have different needs.

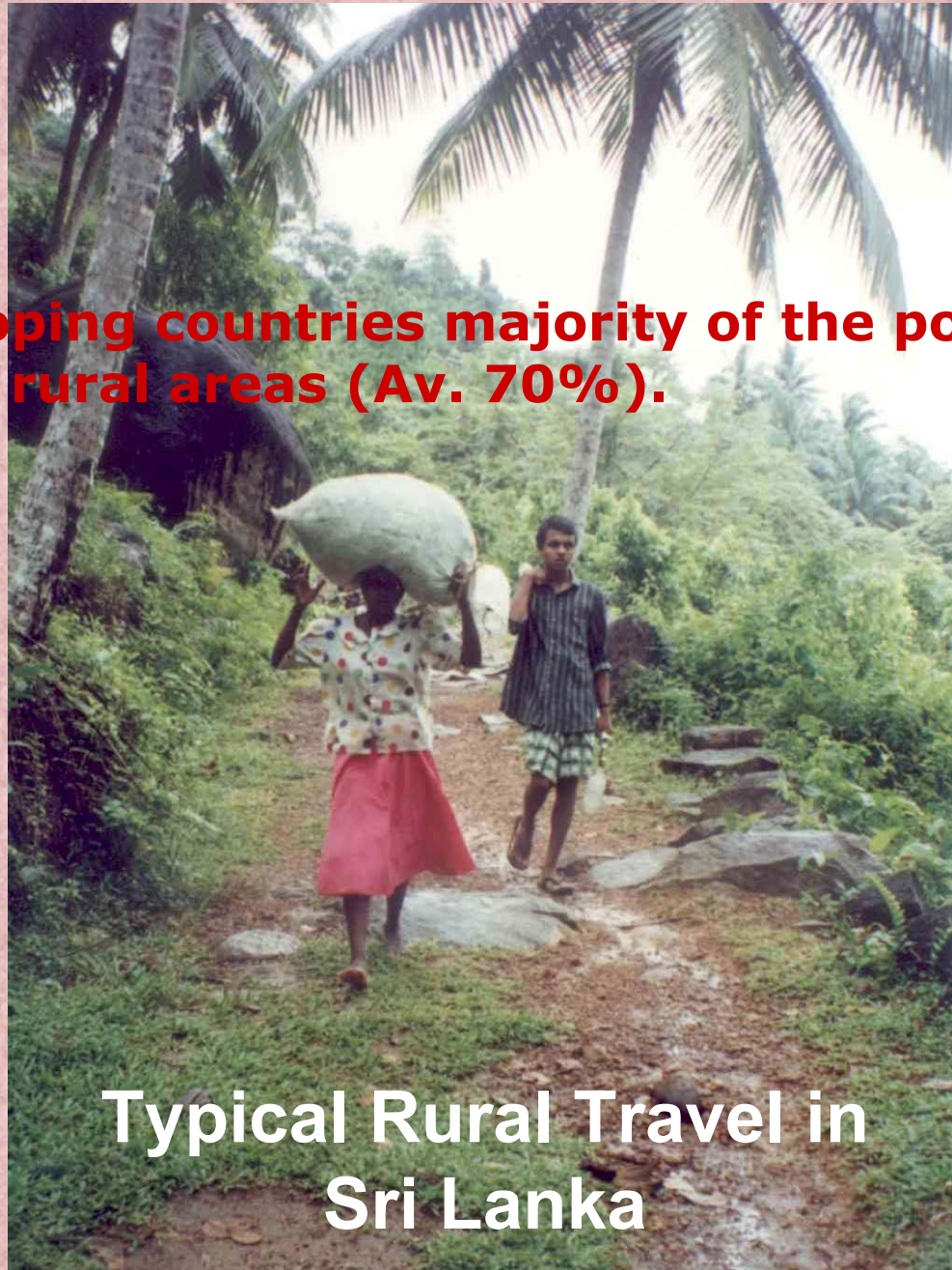
Economic and service related activities

- Access to markets & shops
- Access to health centres
- Going to schools
- Access to farms

Subsistence and social related activities.

- Collection of water
- Collection of firewood
- Social visits.

★In developing countries majority of the population live in the rural areas (Av. 70%).



Typical Rural Travel in
Sri Lanka

★ **National transport policies include only conventional transport solutions.**



Conventional is not appropriate for rural conditions

- **Rural transport needs are different and cannot be addressed by conventional interventions.**



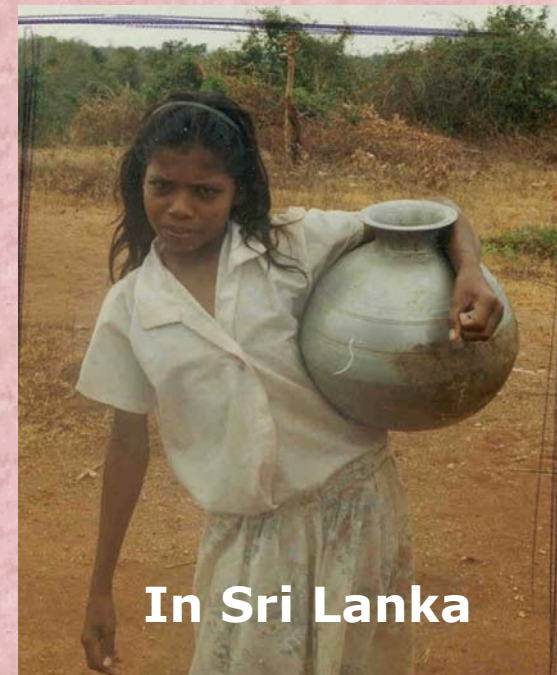
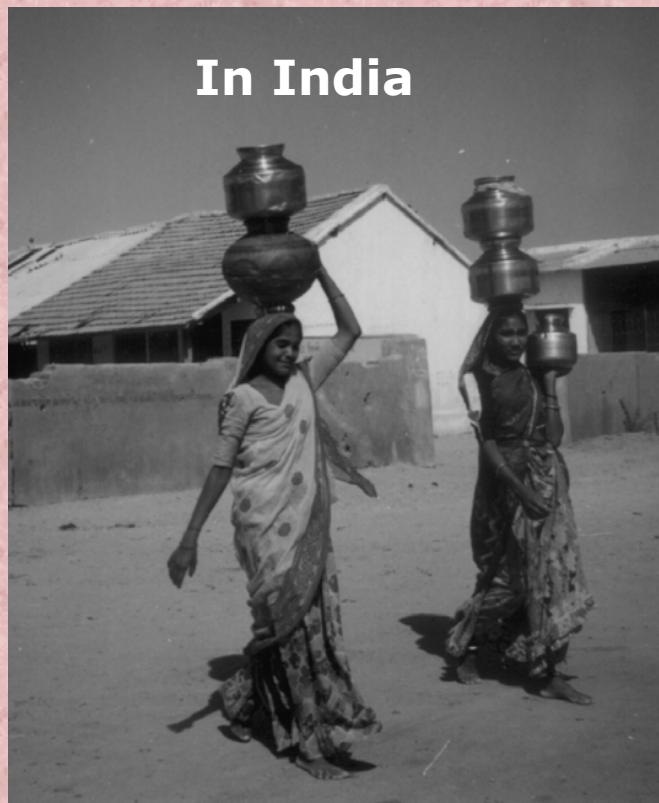
Head-loading and crossing rivers to access markets in Orissa, India

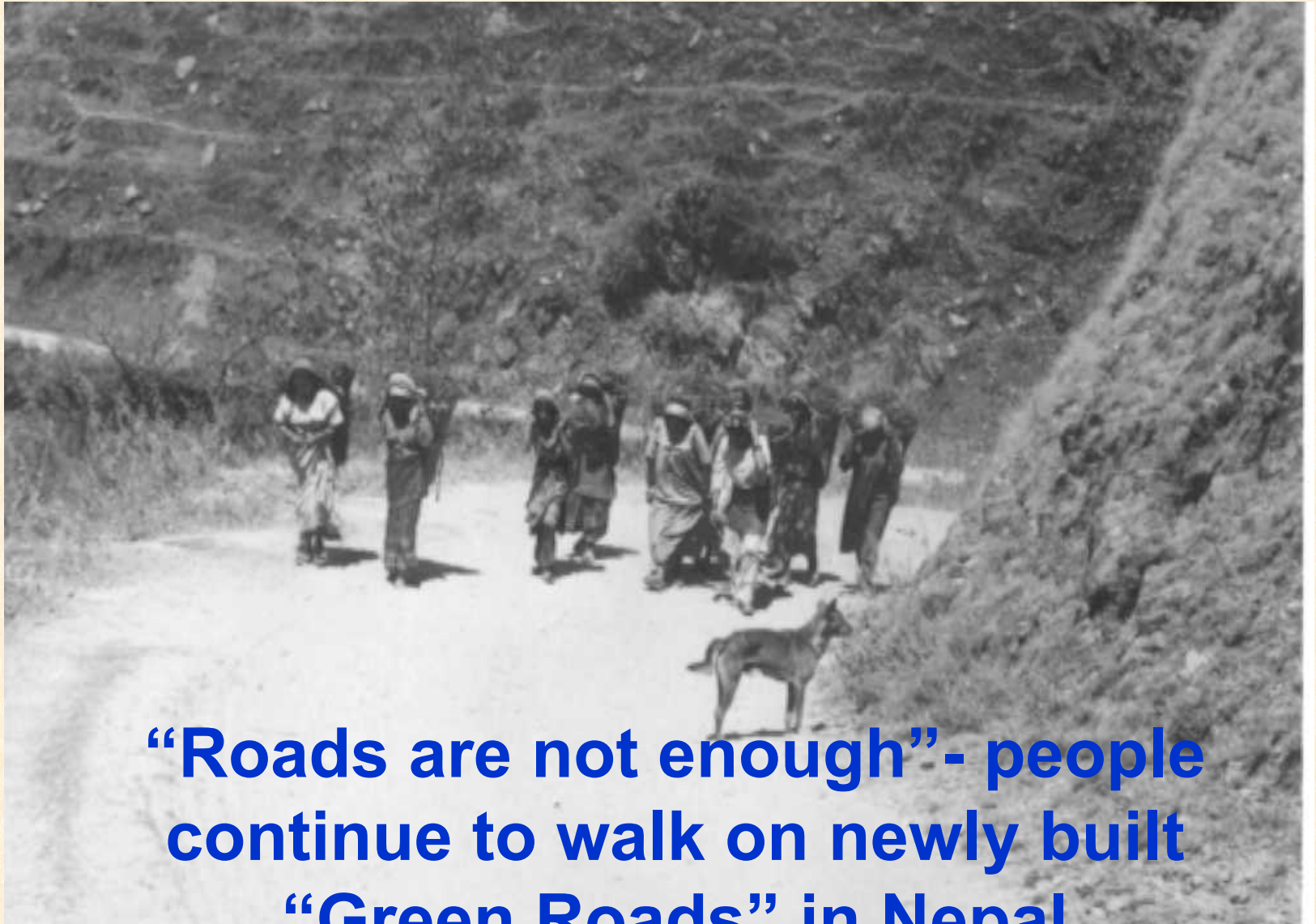
Load carrying in bicycles - India



Rural transport needs are different

Transporting water.





**“Roads are not enough”- people
continue to walk on newly built
“Green Roads” in Nepal**

How can this Sudanese farmer take his rich harvest to the market without adequate transport



Will this donkey able to carry the whole harvest?



Inadequate Transport at the nearest motorable road from a remote village in West Kenya



Hand Carts in Bangladesh



Issues

Economic

- ▶ No proper infrastructure
- ▶ No appropriate means of transport
- ▶ Drudgery and time consuming journeys
- ▶ Markets become inaccessible
- ▶ No cash crops produced
- ▶ No opportunities exploited



Issues continued

Social & subsistence

- ◀ Difficulties faced by patients to get access to hospitals and health centres especially by women in pregnancy.
- ◀ Productive time lost on collecting water and firewood, especially by women and children.
- ◀ Distant location of services and schools.

IMTs

Cycle Rickshaws in Bangladesh



IMT as an alternative

- ➔ a device that will ease travel between walking and motorized transport.
- ➔ Increase the Load carrying capacity of existing modes.
- ➔ Used as an appropriate transport service.
- ➔ Local capacity for manufacture and/or maintenance.



Few IMTs developed by ITDG



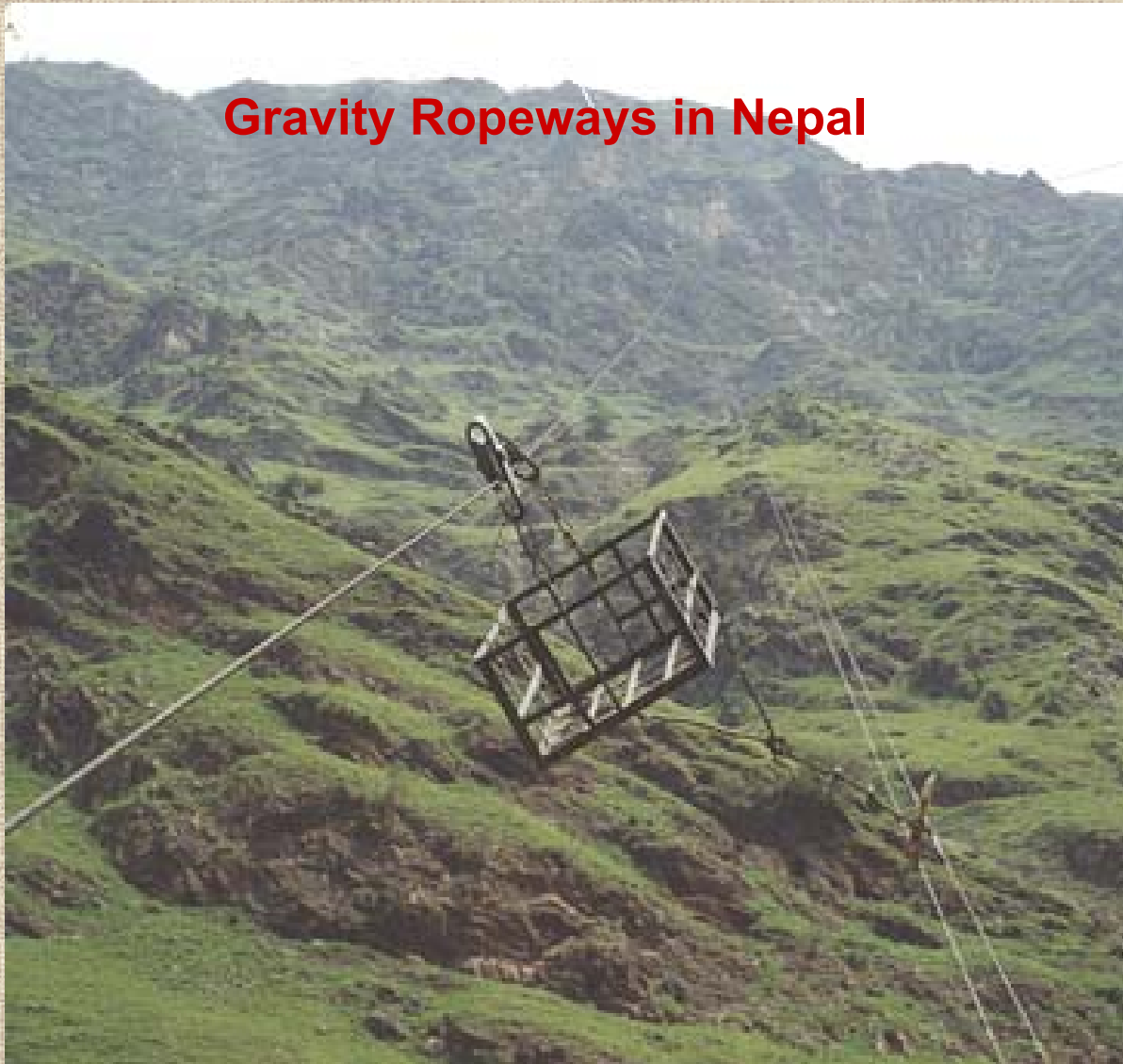
Donkey harnessing and donkey carts in Sudan



Bicycle Trailers in Sri Lanka, Sudan, Nepal & Kenya



Gravity Ropeways in Nepal



“Extended” bicycle in Sri Lanka



Improved Motorcycle Trailer - Sri Lanka



**“Tuin” – Local innovation of river crossing in Nepal.
ITDG is improving this “Tuin” based on this
indigenous technology.**



Improved Donkey harnessing to carry water - Kenya



Manufacturers

- ◀ Small manufacturers from the rural areas know the needs of the community.
- ◀ Feedback is given direct to them by the users.
- ◀ Maintenance services are readily available in the villages.

Cycle Trailer manufacturers in Nepal



Indigenous knowledge of people can be developed through manufacturer-user links.

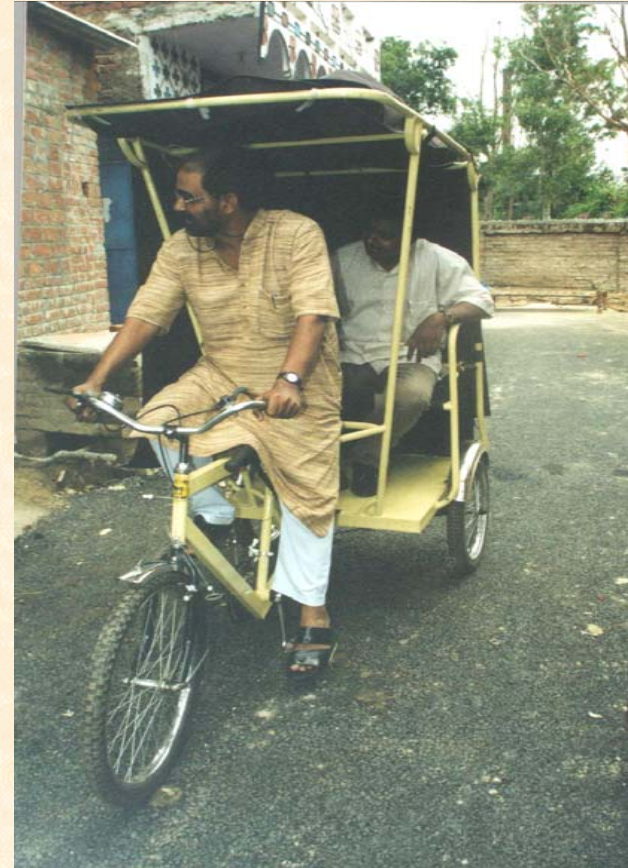


Manufacturers capacity needs to be improved & trained on...

- ◀ **Technical Skills**
- ◀ **Management and Business Skills**
- ◀ **Assist them to develop innovations.**
- ◀ **Then the quality will improve and the cost of the product goes down.**

Manufacturers do Technology Research & Development

Improved Cycle Rickshaws in India



Affordability

- 
- ◀ The cost of the IMT.
 - ◀ Is it within the purchasing power of the poor user?
 - ◀ Is access to credit available?
 - ◀ What can be done to bring the costs down?
- And finally....
- ◀ What can be done to increase affordability?

Affordability continued.....



What can be done to increase affordability?

- ◀ Rural credit Schemes.
- ◀ Group ownership.
- ◀ Community Managed Services.
- ◀ Private sector managed cheaper Transport services.
- ◀ Work with policy makers to reduce taxes.
- ◀ Hire and own systems.
- ◀ Income generation activities or employment creation through IMTs
- ◀ South-South exchanges of experiences and best practices.

Rural Transport services



- Community Managed
- Single ownership
- Fleet ownership

Community managed

Issues

- High Capital investment.
- Skills for management.
- Social conflicts

Advantages

- Meets the travel needs of the majority.
- Minimum corruption.
- 100% user friendly service.
- Sense of ownership.
- Affordable fares.
- Profits accumulated in the bank.



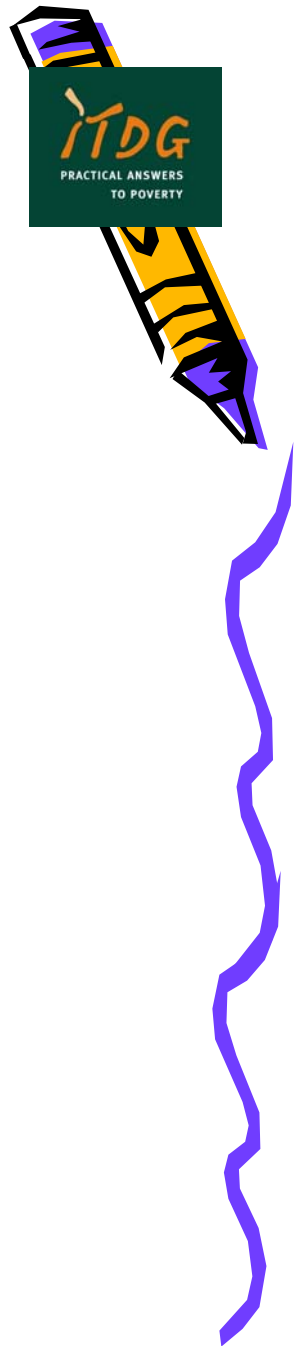
Single Ownership

Issues

- **Capital investment**
- **Availability of financial assistance. (e.g. hire purchase).**
- **Indisciplined.**

Advantages

- **Create employment.**
- **Provide competitive fares.**



Fleet ownership

Issues

- Monopolized management.
- Labour disputes.
- Employee at risk.

Advantages

- Poor people can get employment as drivers.
- More fleets catering to transport needs.
- Provision for new routes.



What needs to be done



Policy Level

- Reduced taxes for IMT imports (e.g. bicycles)
- Recognition of IMT in traffic acts ensuring safety.
- Enforce user friendly regulations.
- Get participation of communities in planning.

Civil Society Organisations

- Build capacities of transport service providers through training and awareness programmes.
 - Establish better relationship between users and service providers.
 - Coordination with policy makers.
 - Facilitation between planners and community groups.
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Continuation

Private Sector

- ☐ **Easy payment terms for buyers of IMTs.**
 - ☐ **Build capacities of manufacturers/service units.**
 - ☐ **Invest in transport fleets.**
 - ☐ **Educate employees for courteous service.**
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We have a long way to go to
solve the transport problems of
these people



Thank you