

ISSUES SPECIFIC TO DEVELOPING COUNTRIES

Mário Forjaz Secca

Physics Department, Faculdade de Ciências e Tecnologia,
Universidade Nova de Lisboa, Lisboa, Portugal



Issues Specific to Developing Countries

Specific issues:

- Lack of funding
- Difficulty in access
- Difficulty in communication
- Lack of training of qualified people

Main problem

First and foremost problem:

- Lack of funding in the health sector
- Bad management of those funds

Maintenance program

Most equipment purchased without a planned and regular maintenance program:

- Maintenance people only called when something goes seriously wrong.

Maintenance program

Lack of regular maintenance:

- Equipment can attain serious working and safety problems
- Stoppage time can be unnecessarily long.

Donations

Lack of funding compensated by donations

- A well thought donation plan is rare
- Donations can be a problem:
 - Lack of specific spare parts
 - Lack of specific running supplies
 - Manuals and displays in foreign languages

Donations

- Some equipment practically unusable.
- Common for developing countries to become graveyards of donated equipment from richer countries.
- Proper donation plan and quality check of the donated material should be implemented.

Another problem

Capital centered

- Most resources allocated to administrative center
- Support and attention to smaller hospitals and health centres around the country overlooked or ignored.

Access and communications

Difficulties in road access and communications.

- More investment in communication network, including teleradiology image exchange, based on a growing mobile phone network.

Diversity of manufacturers

Excessive diversity of manufacturers.

- Lack of well planned acquisition
- Different hospitals and centres have different manufacturer machines
- Difficult to have a cheaper single team and maintenance program.

Diversity of manufacturers

- Most manufacturers not interested in going to remote areas to service a single unit of their brand

Training

Training of local engineers:

- Service, maintain and repair the equipment
- Get over how protective manufacturers are about allowing other people to touch their machines.

Training

- Most developing countries have few qualified people trained to service, maintain, repair and use equipment
- Even more critical: lack of training programs for them.

Training

Objective:

- Training programs for engineers and medical physicists
- Aimed at maintaining equipment running at its best, and optimizing its use.