Managing Roads 3: Efficiency & Effectiveness in Managing Roads

The previous articles have highlighted the importance that roads play in any economy, their enormous costs but even larger benefits, and how they can be funded. This article highlights what are the common problems experienced in managing roads in many countries, and from this, what can be done to ensure that the money spent on providing roads (whether it is enough or not), is used as efficiently and as effectively as possible. Efficiency refers to how well something is done, whereas effectiveness refers to whether it was the right thing to do.

The focus of this article is not on the technical or engineering issues of managing roads, but on the institutional arrangements: what are the relationships between different institutions and the organisational constraints that affect their ability to fulfil their tasks as well as possible? These institutional factors strongly influence the technical and engineering performance of these organisations (important as they are).

The institutional problems of managing roads are common to many countries (developing and developed) and have a significant impact on the ability to deliver road infrastructure to an adequate standard and at a reasonable cost. Some of the most common are:

- **Funding is unpredictable, erratic, incomplete or late.** The funding arrangements for roads need to provide a stable, predictable and long-term level of funding (even if it is inadequate), so that road managers can make and apply long-term plans, so as to reduce the overall road transport costs to the community during the whole life of the road. This was discussed in the earlier articles (no. 2).
- **Decision making is slow and bureaucratic.** This is often caused by a lack of clear responsibility for the specific functions on which decisions are required, resulting in a lengthy process of numerous individuals and institutions needing to be involved before a decision can be made. Besides slowing decision making, this continual consultative process is often demoralising to those involved. Making specific individuals clearly responsible for specific functions within specific institutions allows decisions to be made quickly and provides managers with a greater sense of control and responsibility. However, with this greater autonomy must come greater transparency and effective accountability, in order to reassure others that decisions and actions are known and appropriate.
- **Decisions are not clear or are inappropriate.** There are a number of reasons why this can happen:
    - **The decision makers are many**, allowing individuals to deflect criticism onto others, (i.e. 'passing the buck') with no one being accountable, because no one is effectively responsible. Such opaque mechanisms make it much more difficult to identify where problems exist and how to fix them. They just allow these problems (and the costs associated with them) to perpetuate.
    - **There is no effective accountability** (even when responsibility is clear), allowing decision makers to avoid being accountable for their decisions or actions. This may be due to weak management oversight, poor reporting systems, or ultimately, to disinterested or uninformed road users and government oversight.

  - **There are no clear criteria** (or policies) against which to make decisions. Clear policies need to be established (see the first article in this series), against which decisions can be made. These guide managers in their decision making and direct resources to those areas that are considered most important (thereby improving effectiveness).
  - **The information on which decisions are made is inaccurate**, **inappropriate, incomplete or out of date**. It is important that managers are able to use their information systems to support their decisions. This in turn makes it easier for them to justify (account for) their decisions, as well as ensuring that the institution's resources are directed to the most appropriate need.

- **Staff morale is low undermining the development of a professional culture**. If staff are remunerated badly (i.e. uncompetitively), not given the resources to do their jobs properly, and are expected to work out of inadequate offices, then they are in effect being told that they are not important and that they are not valued. It may be possible to hire or retain good managers, but that will be the exception to the rule: it will be in spite of the system, not because of it. As soon as they see a better opportunity elsewhere, they will leave, with the best, most competent leaving first. Continual external interference, frequent (and unjustified) staff relocations, inflexible remuneration (to reward good performance) and a lack of effective penalties (to discourage poor performance) only exacerbate this problem. If however, a society wants their expensive road asset to be managed as well as possible, then it must be willing to provide the conditions necessary to attract the professional, educated and experienced road managers required. This means offering conditions of employment that are competitive with the private sector (and even with neighbouring countries), as it is these markets within which the best talent competes.

  But this in itself won't be enough to retain the skills that are needed. It is also important to make individuals' responsibilities clear, give them the resources required, and allow them to get on with their work without continual outside interference. Then make them accountable for the decisions that they make.

  Some say that a poor country can not afford to provide these competitive conditions of employment. It should be clear from the first article in this series, that typically, bad or inadequate roads cost the community about 3 times more than it thinks it is "saving", thanks to higher road user costs. So the country can not afford not to! The vast majority of the expenditure on roads is incurred in the actual physical works, with administrative costs (including staff costs) normally only account for about 10% of the total expenditures. Consequently, the additional cost from paying road management staff properly is tiny compared to the overall costs, let alone the enormous benefits that good road management provides to the community. And effective accountability allows this improvement to be measured.

  - **Overstaffing** is another characteristic that is all too common in many public road institutions. This further undermines the development of a professional culture. A road management institution is established to serve the needs of a particularly sector of the public by providing roads efficiently and effectively. It is ***not*** an employment agency, nor an opportunity for the well connected to pretend to work at the public's expense! It would be far better for the country to either support these surplus staff in finding other employment opportunities, or stop pretending and place them in a "Ministry for the Unemployed" where their presence does not undermine the performance of the institutions' important functions.

- **There is a high level of waste and economic losses.** This is related to the comments above. (Institutional factors often are interrelated, which is why they should all be considered at once: for example, having a highly efficient road management (implementation) service is of little benefit if its funding is erratic or its objectives unclear). Inadequate policies result in managers being unable to direct (or prioritise) the institution's limited resources to the areas of most need. If decision making is slow or bureaucratic, lacking in objectivity and transparency, or based on inadequate information, then decisions are unlikely to be as good as they could be. Likewise, a poor allocation of responsibilities means that managers are not clear on what they should be doing. All these factor result in the benefits achieved being less than would have been the case otherwise.

  Corruption is a symptom of inadequate remuneration (if people are not paid an adequate living wage, how else are they expect to survive?!); poor professional culture within the organisation (where such practices are silently condoned); and inadequate accountability (often caused by a lack of clear responsibility), allowing such practices to go on undetected and unchecked.

  Quality of construction can often be a sign of poor institutional arrangements. It is in a contractor's interests to use substandard (i.e. cheaper) materials or to skimp on the quantity or workmanship, but these result in roads that deteriorate more quickly than should be the case, eventually resulting in higher costs to the community. Ensuring that this does not occur and that the community's interests are protected, is an important role of the road institution, who (either directly, or through hiring consultants) must supervise and monitor the contractor's activities and deal with any unforeseen problems. Such rigorous supervision is less likely where an unprofessional culture exists (see above), where bribery is possible (due to inadequate management controls and oversight), where there are inadequate skills present (because the organisation is unable to attract and retain the skills that it requires) or where there is inadequate enforcement of contract conditions (due to a combination of factors above).

Many (if not all) of these weaknesses (and their solutions) are equally applicable to other businesses (and areas of government). This should not be surprising, as roads are perhaps the biggest business in any country. In developing solutions to these problems, it is important to understand what are these weaknesses and why they exist, structuring the relevant institutions to minimise or overcome them. Fortunately, solutions *do* exist for road management, and these are discussed in the final article.

Mark Thriscutt
Road Management Specialist

(Revised: May 2010)