

Employment-intensive methods for the construction of infrastructure

WHAT ARE EMPLOYMENT-INTENSIVE METHODS?

'Employment-intensive' is the term used by the International Labour Organisation (ILO) to describe the optimal use of labour to achieve the maximum effect on poverty reduction, while paying due regard to cost and quality issues. Generally, an appropriate mix of labour, material and equipment is required to provide products of adequate quality in a cost effective manner.

WHAT ARE THE BENEFITS OF USING EMPLOYMENT-INTENSIVE METHODS?

There is clear evidence that, in defined circumstances and for defined tasks, employment-intensive methods can deliver results of appropriate quality, within an agreed timeframe and to budget. Moreover, these approaches – if properly managed and supported – can bring additional benefits in that they:

- create a significantly larger number of unskilled and low-skilled jobs than if more equipment-based methods were used; these jobs would be readily accessible by individuals with low levels of education or training, including women; if suitably targeted, the poor can benefit directly through earnings
- intensify the development impact of the investment through the multiplier effects of workers employed
- increase local ownership of the assets and facilitate skills transfer to local communities – knowledge that will be useful for later maintenance
- realise significant foreign exchange savings

NICARAGUA - DANIDA FOCUS ON EMPLOYMENT IN RURAL ROAD REHABILITATION

"For rural road rehabilitation [in Nicaragua], using labour-based methods instead of machine-based methods generates 17 times more employment. On average, 30% of this employment is for women."

Source: 'Comparative Study on Employment Creation and Financial and Economic Costs of Labour-based and Machine-based methods in Rural Roads in Nicaragua', IT Transport, May 2009

IN WHICH SECTORS ARE EMPLOYMENT-INTENSIVE METHODS USED?

A study on employment-intensive infrastructure conducted by the European Commission¹ finds that employment-intensive technologies have to date been mainly used in the roads sector. Employment-intensive approaches are particularly well suited to the construction, rehabilitation and maintenance of tertiary and secondary (earth and gravel) roads, as well as for the construction of small bridges and culverts and other associated works. They are also suitable for urban street pavement and drainage. But virtually all construction projects comprise at least some elements (work items) where employment-intensive methods could be used², including projects in social sectors, such as health and education.

¹ 'Study on Employment-Intensive Methods in Infrastructure and other Non-Social Sector Programmes', 2009/220452/1, Final Report, October 2010 – commissioned by DEVCO E3/ESIP.

² For a detailed list of amenable tasks, see 'Study on Employment-Intensive Methods in Infrastructure and other Non-Social Sector Programmes'.

There is some room for replicating and scaling up employment-intensive approaches in the roads sector. But there are also limitations as strict quality control is vital to delivering durable assets and technical specifications may require the use of equipment to achieve the desired quality. Other sectors also create good opportunities for scaling up the use of employment-intensive methods. Promising areas are environmental management and climate change adaptation, as well as multi-sector projects embracing agriculture and forestry: see examples below.

NEPAL: IRRIGATION AND WATERSHED DEVELOPMENT

- From 2007-2010, the Dutch Government has supported the ILO Employment Creation and Peace-Building based on Local Economic Development (EmPLED) project in Nepal, including employment-intensive community infrastructure. 'Green jobs' outcomes have included:
- Irrigation field canals and agricultural roads: 28,700 green workdays, 500 workers, 4km of agricultural roads, canals to irrigate 210 ha
- Watershed development – riverbed, agro-forestry and embankment grassing: 22,600 green workdays, 600 workers, restoring/upgrading 16km² watershed.

WHAT IS EC EXPERIENCE WITH EMPLOYMENT-INTENSIVE METHODS TO DATE?

The EC study found that the EC is funding a significant number of programmes using employment-intensive methods, but the size of the programmes is often rather small. The study identified employment-intensive approaches in 45 EC projects/programmes in 27 countries since 2000. However, the majority of projects were located in sub-Saharan Africa and many were a response to emergency situations and fall under ECHO not DEVCO.

WHAT ARE THE CHALLENGES TO EC ADOPTING EMPLOYMENT-INTENSIVE METHODS?

EC has a strategic preference for larger-scale contracts in its development cooperation, whereas employment-intensive infrastructure programmes generally require numerous contracts with small enterprises. Prompt disbursement of funds in a decentralised setting is also important and this may present a challenge for EC procedures. These challenges may be overcome by using intermediate actors to manage contracting and monitoring or by using sector budget support as the aid modality where this is possible.

Interventions need to be based on the local labour market and institutional context. This means that infrastructure teams need to work closely with social development sector specialists in designing new interventions.

In some instances, there may also be a strong case for delegating responsibility for implementation to others (either specialised intergovernmental agencies such as the ILO, other donors such as DANIDA, or Government bodies).

IS CAPACITY BUILDING REQUIRED?

Employment-intensive approaches cannot be adopted without prior planning. The EC study's analysis of past experience reveals that significant capacity building of multiple bodies (including Government, managers, supervisors, SMEs and civil society) is a pre-condition for project success. Building capacity to a point where programme sustainability is achieved requires a long time

horizon. Sustainability also requires mainstreaming of the approach into government planning and procedures.

Building a system to manage and maintain rural roads and other infrastructure (whether using labour-based or equipment based approaches) is likely to take even longer. But successful models exist (such as the GIME in the EC Sao Tome & Principe project – see below) and could be replicated. Maintaining assets is vital if the flow of benefits from investment is to be sustained and maintenance activities can generate long-term employment opportunities. But many partner governments do not have sufficient funds or capacity. Donors (including EC) are now funding maintenance and this should be promoted.

GIME – SAO TOME & PRINCIPE

A successful example of long-term employment creation through maintenance works is the Sao Tome & Principe Community Road Maintenance Groups (GIME). GIMEs are rural civil society groups supervised by the government body in charge of roads (INAE) and funded directly by the state. They are composed from people living in the area of the road and are responsible for maintaining a section of road. 32 GIMEs provide work for 1700 people – 3% of the total population. The initiative has been highly successful in terms of road maintenance and rehabilitation, and generating employment opportunities for the very poor. It has also been found to be a very inexpensive way to maintain the roads.

EMPLOYMENT-INTENSIVE METHODS IN SECTOR PROGRAMMES AND BUDGET SUPPORT?

The EC's transition toward increased partner autonomy will lessen the degree of influence exerted over the implementation methods used in projects. Increased partner autonomy is a positive development as it may facilitate the EC's support of employment-intensive works where this has been adopted as government policy. But elsewhere strengthened policy dialogue will be required to promote employment-intensive approaches, with a greater focus on demand-led capacity building.

HOW CAN EMPLOYMENT-INTENSIVE APPROACHES CONTRIBUTE TO LONG-TERM POVERTY ALLEVIATION?

The EC study found that the immediate positive effects of employment-intensive infrastructure programmes are real and can be profound when correctly planned and implemented. However, for the longer-term contribution to alleviation of poverty in situations of chronic unemployment and underemployment a broader structural approach is needed. Employment-intensive approaches do have the potential to alleviate poverty provided that the following conditions exist:

- i. They are part of a continuous programme of employment intensive infrastructure construction/rehabilitation over a period of years
- ii. They succeed in introducing and sustaining a programme to maintain the assets created using employment intensive methods
- iii. The assets created are of high quality and support productive activities and sustainable livelihoods on the part of the poor, and
- iv. If necessary, the construction of assets is accompanied by the delivery of complementary inputs (seeds, fertilizer) and services (agricultural extension, business development) that may be needed for the development of sustainable livelihoods.

HOW CAN WORKING CONDITIONS AND LABOUR STANDARDS BE IMPROVED?

The Decent Work Agenda is relevant to all EC infrastructure programming and not just to employment-intensive approaches. The EDF General Conditions³ contain clauses on compliance with ILO core labour standards (para.12.9) and national labour law (para.14.2). Some contracts used for employment intensive works contain a few additional clauses. The issues raised are mainly around working conditions including health and safety, but some also include clauses on minimum wages, provision of water and resting time.

However, the key challenge for the meaningful implementation of any contractual provision is to establish responsibilities and a framework for monitoring and reporting. This can most effectively be provided from within the project team. On major projects funded by the EU it is commonly the responsibility of the project supervisor to ensure that the contractor complies with the contractual obligations, but practice is not yet consistent (see guidance tool: “Addressing labour standards and working conditions in infrastructure”).

Recommendations

1. Strengthen and expand EC support for employment-intensive infrastructure (EII) programmes in partner countries where employment-intensive investment is a government priority.

Experience suggests that, where projects are implemented without active partner government support and ownership, their impact is short-lived, in terms of sustainability of both asset and employment. The best results will be obtained in close cooperation with government and other donor agencies through a decentralised management system.

2. Adopt a long time horizon and give attention to support for routine maintenance

Long-term involvement is critical to building the capacity required for sustainability. It is important to make a thorough assessment of capacity-building needs and adjust the project programme, budget and staffing arrangements accordingly. Careful consideration should be given to funding routine maintenance in order to preserve the value of the assets and generate opportunities for regular employment over an extended period of time. Even more important is help to build and strengthen national maintenance systems. This also requires continued technical assistance over an extended period.

3. Promote the expansion of employment intensive programmes into new sectors and into multi-sector projects aimed at creating sustainable livelihoods

Opportunities exist to scale up employment-intensive opportunities in the roads sector, where appropriate, but there are also substantial opportunities to promote employment-intensive approaches in other infrastructure sub-sectors and in other sectors. Promising areas are irrigation and water management, environmental management and climate change adaptation, and multi-sector projects embracing agriculture and forestry.

Multi-sector projects can be particularly useful in focusing attention away from the immediate objective of creating short-term employment in construction to the creation of sustainable livelihoods in the longer term. Additional inputs may be required (seeds, fertilizer, business training) in order to bring this about.

³ General Conditions For Works Contracts Financed by the European Development Fund (EDF) or the European Union

4. [Develop partnerships with other agencies engaged in employment-intensive infrastructure](#)

The EC has not, historically, been at the forefront of efforts to promote employment-intensive infrastructure. DEVCO and Delegation staff should aim to develop strategic alliances with other key international actors, including the ILO, and seek to foster operational links at country level in the delivery of projects.

5. [Promote coordination and cooperation around the employment dimension within the DEVCO and the EC Delegations](#)

Integration of employment concerns into planning requires a mix of expertise which cannot easily be resourced within a single unit. Within Brussels services and within Delegations, there is scope to improve coordination between infrastructure / operations staff and social development experts. Infrastructure teams should consult with social sectors when designing infrastructure programmes.

6. [Recognise the relevance of the Decent Work Agenda to all infrastructure programming, including large-scale, capital-intensive works](#)

It is important that decent terms of employment and working conditions are integrated into contracts and a clear framework established for monitoring and reporting in employment intensive projects. But all investment in infrastructure creates jobs, and the Decent Work Agenda applies equally to infrastructure investments where employment-intensive approaches are not used. Employment-intensive works should be perceived as a point of entry to the broader question of decent work in infrastructure works, not its conclusion.

FURTHER RESOURCES

- 'Employment concerns in infrastructure project design', Tools for practitioners, DEVCO E3/E7
- 'Addressing labour standards and working conditions in infrastructure', Tools for practitioners, DEVCO E3/E7
- 'Study on Employment-Intensive Methods in Infrastructure and other Non-Social Sector Programmes', 2009/220452/1, Final Report, October 2010 – commissioned by DEVCO E3