

# **Livelihood And Employment Creation**

**Labour-based infrastructure projects**

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Labour-based infrastructure projects

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# PREFACE

## Proposal of short Operational Guidelines<sup>1</sup>

*This collection of short guides describes a number of activities (based upon labour, enterprise and business development, training and local area development) that will contribute to the promotion of both social and economic recovery and livelihoods. Each activity is explained, and 'why', 'how', and 'when' (or when not) to implement them is outlined in a brief guide.*

### A. Why these guides

These guides provide a practical introduction to employment and business-related interventions. They are written for humanitarian and development field workers working on the promotion of self-reliance and livelihoods of displaced populations and other conflict-affected communities. They highlight opportunities and limitations of different relevant ILO approaches and methodologies for socio-economic empowerment through employment-oriented strategies. They should help field staff decide the suitability and feasibility of adopting these approaches in their particular operations; and will also help identify any need for specific ILO expertise to support relevant UNHCR operations.

These guides will not substitute technical expertise in the field; rather they are programming and decision-making guidelines that will help programme and technical staff oversee the design and implementation of relevant activities. Further technical training or partnerships should be developed as appropriate.

The subjects can be divided into three major categories:

'Cash for work', 'Food for work', 'Labour-based infrastructure reconstruction' and 'Community contracting' belong to the first. These three areas concentrate on the creation of temporary jobs that can inject cash into a community rapidly. These jobs are not meant to provide sustainable livelihoods, but are designed to revive the local economy, provide a boost to household economies, either in refugee hosting areas or in the reconstruction phase of a post-conflict situation, in order to create the means for further development.

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<sup>1</sup> These short guides were elaborated by Maria Lazarte G. to be included in the UNHCR Self reliance Manual and have been derived from consultations with ILO technical departments and based on their relevant publications.

The second category includes micro- and small-enterprise development and its subsections: 'Microfinance', 'Business development services', 'Start and improve your business' and 'Women entrepreneurship development'. This group concentrates on building sustainable self-employment, and on micro- and small-enterprise support and development.

The last group contains general strategies that can be used in combination with strategies above in order to promote individual and communal economic development. These include 'Emergency public employment services', 'Skills-training', and 'Local economic development'.

## **A. Who should use them**

These guides are written for middle managers, national and international field experts and associated partners.

## **B. How should they be used**

The guides comprise of a combination of briefings and a compilation of major relevant ILO tools on each subject.

The guides provide decision-oriented information on each area, and expansive methodological guidelines as well as a reference to an additional online bibliography and contact information for further resources and technical help.

The guides are divided into the following sections:

A brief summary of each strategy ('what is').

Its main advantages ('why implement')

Information on when to implement each strategy ('when to')

Warnings ('when not to implement').

Problems and challenges to consider before and during implementation ('problems/challenges').

Basic steps or different forms of each particular strategy, and some recommendations to consider during the implementation of each strategy ('how to').

## **C. Contents**

There are twelve guides

Building a basis for employment and enterprise development

1. Vocational and skills-training
2. Local economic development
3. Public employment services

Short-term employment options

4. Cash-for-work
5. Food-for-work
6. Labour-based infrastructure projects
7. Community contracting

Business development options

8. Micro and small enterprise promotion
9. Microfinance
10. Business development services
11. Start and improve your own business
12. Women entrepreneurship development

# Labour-based infrastructure projects

## A. What are labour-based infrastructure projects

Labour-based infrastructure projects (LBIP) are short and medium term infrastructure works that generate employment and income by maximizing the use of available unskilled labour.

LBIPs are particularly useful in rehabilitation and reconstruction of areas devastated by conflict, where the rapid injection of cash into a community is necessary. The focus is on the rehabilitation of essential infrastructure for addressing immediate needs.

LBIPs contribute to longer-term development through improvements to the physical and social infrastructure (e.g. roads and irrigation systems; and drinking water, schools, health clinics and housing respectively).

## B. Why carry out labour-based infrastructure projects

### *Job creation*

Labour-based reconstruction rapidly generates jobs and income. LBIPs contribute to poverty alleviation by acting as a bridge between immediate needs and long-term development.

In displacement situations where there is a need for additional infrastructure, LBIPs allow displaced populations and locals to access immediate income, and contributing to peace-building.

In crisis situations, thousands of jobs can be created. LBIPs enable local and displaced (IDPs, refugees, returnees) populations to become less dependent on humanitarian aid, and reduce the impact of food distribution on local markets. In disaster zones LBIPs can prevent mass migration in search of employment, and introduce the resources necessary for initiating self-recovery. Moreover, maintenance needs will create further jobs once the project is finished.

### *Labour-based vs. equipment-based technology*

If implemented successfully, labour-based methods will produce standards similar or more advantageous than equipment based techniques which favour technology over labour power.

Labour-based projects can be up to 50% cheaper than equipment based projects (if wage levels are set below \$4), and generate up to 20 times more jobs - with 50-60 percent of costs going to wages. (In equipment-based projects wages are typically 5-10% of costs). In this way labour-based technology (LBT) can inject more cash into a community than equipment-based methods. Moreover, its benefits are multiplied as workers spend their wages and fuel other businesses (other concerns: duration and quality).

### *Use of local resources*

LBT limits the import of machinery and encourages the use of local human and physical resources (local contractors and materials). LBIP therefore maximises the injection of cash into the community, and the project's impact on rehabilitating the local economy.

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<sup>3</sup>*Decent work matters in crisis* (fact sheets), ILO, IFP Crisis.

### *Skills development/empowerment*

Labour-based methods strengthen the socio-economic capacity of populations living in the area. They build-up the vocational skills of workers (when preparing them to undertake technical tasks e.g. training on road building) increasing the value of labour and rate of salaries. LBT develops planning, negotiation and decision-making skills, and promotes capacity-building towards the maintenance and repair of infrastructure. In particular, it can empower groups with special needs, who are often its main target.

### *Social cohesion*

In LBIPs communities will work together towards goals that will be beneficial to all its members (e.g. schools, roads). In this way, LBIP contributes to social stability and cohesion, and the promotion of peace.

### **C. When to implement labour-based infrastructure projects**

Labour-based infrastructure projects should be implemented in areas where:

There is an abundant supply of unskilled labour;

Building, repair and rehabilitation of infrastructure are pressing needs.

This approach is particularly useful in emergency situations where infrastructure is lacking or has been severely damaged, or poor infrastructure was a factor leading to the emergency.

Labour-based methods can also be adopted in areas with low populations or labour surpluses as long as a sufficient number of workers are prepared to move to the site e.g. in areas where employment is scarce (see migration).

Labour-based projects are particularly useful in developing countries and areas heavily affected by crisis, where heavy equipment and advanced engineering are not readily available. Labour-based technology is especially suitable in situations where there is an urgent need to stimulate the economy, and provide a rapid source of income to as many people as possible.

LBIPs are suitable for emergency, rehabilitation and development phases of a crisis. An employment programme should combine LBIPs, skills and vocational training, and micro and small enterprise development.

### **D. When not to implement LBT works**

LBT is likely to be feasible when:

The cost and availability of labour compares poorly to alternative technologies.

The technical capacity and quality standards of a project are high.

Small equipment and local material resources are available.

It possible to reach an effective compromise between cost, labour intensity and the envisioned duration of works.

A needs-assessment must be completed before starting the project. It should address technical, financial and social issues (such as the need for mine clearance, security and accessibility of an area, number of conflict-affected people, condition of infrastructure, labour supply, and institutional capacity).

It is important, when undertaking short-term projects, to avoid dependency through involvement in ongoing maintenance activities. Ongoing maintenance should be the responsibility of the community or government (see cash-for-work).

**E. Problems/challenges**

*Common concerns*

**Duration.** Rapidity will be proportional to the number of workers involved. (There are productivity/costs saturation indexes when hiring more workers will not increase productivity or cost-effectiveness significantly.) It is possible therefore to achieve a desired time-frame using an adequate balance of costs and number of employees (in some cases with a substantive advantage over equipment-based methods e.g. in mountainous or elevated terrains).

**Quality.** Technical quality ultimately depends on the standards enforced. LBIP can produce quality equal to equipment-based works. In some cases, some minor equipment might be necessary for this purpose. Quality also depends on achieving the right balance between the amount of labour to be used and the technical capacity for its management (see figure 13.3).

Figure 13.3: Technical persons per unskilled labour

Position	Ratio tech pers. / unskilled labour
Engineers	1:500
Technicians	1:100
Supervisors	1:100
Sub-contractors	1:50
Foreman	1:20

Source: *Reconstruction in El Salvador and the use of Employment Intensive labour technologies*, ILO, IFP Crisis.

**Costs.** Depending on the set wage, costs can be equal or even lower than equipment-based works (average \$4 or less / day).

In LBIPs compromises must be achieved between the expected time frame, costs, quality and level of employment generation.

### *Implementing challenges*

It is important that the government and private sector are positively disposed towards and well informed of LBT works, to ensure successful impact.

Prevent forced labour i.e. persons compelled to work under fear of punishment. In particular, avoid recruitment through intermediaries, which can lead to exploitation.

Attaining a diversified workforce might be difficult. However, several steps can be taken to include groups with special needs (ex-combatants, returnees and displaced populations) and minorities, and to address gender. Measures include:

- Changing the remuneration. Lower wages attract more vulnerable groups.
- Setting quotas (e.g. heads of household), but these should not be maximums.
- Reorganising the content of the work.
- Communicating the existence of job opportunities widely in the community.
- Advertising job opportunities in areas accessible to women and minorities, using audio and visual means.
- Encouraging female gang leaders/forewomen to persuade other women to join.

**Migration** might be viewed negatively by the local population. Contractors can mix locals and migrants at appropriate ratios to reduce tensions. Recruiting local workers can prevent unexpected social implications and contribute to developing a local sense of ownership.

**Rationing** can be applied in areas where there is an over-abundance of labour, but this must be transparent. Rationing methods include: lowering remuneration (to attract groups with special needs); reducing individual task size (creates more jobs by lowering the daily request of productivity); lotteries; job rotation; and staggered recruitment.

Regular **attendance** might be difficult to achieve if there are other conflicting activities (e.g. domestic or seasonal agricultural labour demands), the wages are too low, or outward migration takes place. The standard rule is “no work no pay” rather than having high expectations on regular attendance. Bonus systems can encourage attendance. Adequate record-keeping is necessary to track and monitor attendance. Workers should be aware of and understand the regulations and expectations concerning attendance.

## **F. Partners & Targets**

### *Targets*

Targets include male and female labourers in the locality from all community groups, with particular attention to groups with special needs. In order to avoid social tension it is important to make recruitment as open as possible, using quotas (careful that they do not become maximums) and wage setting to attract more workers from groups with special needs.

### *Partners*

UN agencies and other relevant national or international organisation involved in the emergency, rehabilitation and/or development phase (ILO, UNICEF, ICRC, WFP, UNDP), national and local authorities, bilateral programs, NGOs.

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<sup>4</sup>Only at exceptionally low wages does labour supply decline. This can simply reinforce poverty

## **G. How to carry out labour-based infrastructure projects**

### *Steps*

- 1. Planning.** Identify problems and needs. Draw terms of reference detailing scope and content, interventions and budgets of a LBIP (e.g. calculate the appropriate combination of labour-based and equipment-based works).

In order to determine the level of labour-intensity consider the Time Quality Cost (TQC) approach: calculate the maximum duration of works, the number of labourers to be employed and any small machinery necessary to guarantee quality. Ensure that a cost-effective compromise is reached between these elements. Maximise local use of resources.

Infrastructure works can be of medium- or high-intensity:

**Medium-intensity** works (15-50% investment on labour) may include irrigation structures and canals, paths, primary and secondary bridges, public offices, parks, playgrounds, parking and cemeteries.

**High-intensity** works (more than 50% investment on labour) include irrigation maintenance and operation, general maintenance of primary and secondary paths, street cleaning, waste management, trash disposal and transport.

Planning and implementation of LBIPs should be done in consultation with target groups.

2. Making **damage and gap assessments**. Gather information on the pre-emergency condition of infrastructure, local planning needs, extent of infrastructure damage, design and location, features that contributed to the degree of destruction, ways in which the damage impedes recovery, ways in which the destruction hinders reconstruction, and other concerns such as level of security, number of people affected, and so on. If there has been a sudden population increase in a locality, as a result of displacement or return to country of origin, identify existing infrastructure gaps, and the extent of damage or limitations of these structures.

Priorities should be established with community participation, and should aim to restore a degree of self-sufficiency while re-establishing basic needs such as water supply and sanitation, health and education services and facilities, roads and housing.

3. Establishing of mechanisms for **coordination, planning and prioritising** infrastructure works together with other UN and international agencies, national authorities (e.g. within UN programme priorities if existing) and communities.
4. Addressing **training** needs and programmes. Local technical and supervisory personnel must be trained in the basic skills necessary for the implementation of labour-based programme implementation.
5. Establishing LBIPs as a long-term **policy of government**.

Community ownership of the projects should be encouraged to ensure sustainability (community-based works over public-works).

On wage and payment see: cash-for-work.

*Some practical considerations*

A task-based remuneration method is better adapted to LBIPs than a time-based approach. In task-based systems, the disciplinary system is self-regulating (workers are interested in finishing fast to leave early) and require less supervision.

Never employ a child under the age of 14 and a person under the legal minimum age, or allow them to assist in the workplace.

A clear simply written description of the recruitment process, and the terms of employment, should be made available generally prior to recruitment. Ensure information is distributed through a variety of channels, and in different forms, at several locations.

For more information on LBIP see:

- 📖 *Employment intensive reconstruction works in countries emerging from armed conflicts*, InFocus Programme on Crisis Response and Reconstruction. International Labour Organisation, Recovery and Reconstruction Department. Geneva: ILO, 1998.
- 📖 *Good labour policies and practices in employment intensive programmes Quick overviews from the guide*. ILO Employment-Intensive Investment Branch, International Labor Office, Recovery and Reconstruction Department. Geneva: ILO.
- 📖 *Capacity-building for contracting in employment intensive infrastructure programmes*. ILO Employment-Intensive Investment Branch, International Labor Office, Recovery and Reconstruction Department. Geneva: ILO
- 📖 *Re-opening Mozambique Lessons learned from the Feeder Road Programme*. ILO Employment-Intensive Investment Branch Sida United Nation Development Programme Administracao Nacional de Estradas. Maputo: UNDP, 2002
- 📖 *Of nets and assets : effects and impacts of employment-intensive programmes a review of ILO experience*. Keddeman, Willem. ILO Employment-Intensive Investment Branch, International Labor Office, Recovery and Reconstruction Department. Geneva : ILO, 1998.

Links:

[www.ilo.org](http://www.ilo.org)  
[www.ilo.org/public/english/employment/recon/LBIP/](http://www.ilo.org/public/english/employment/recon/LBIP/)  
[www.ilo.org/crisis](http://www.ilo.org/crisis)

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