



TECHNICAL BRIEF

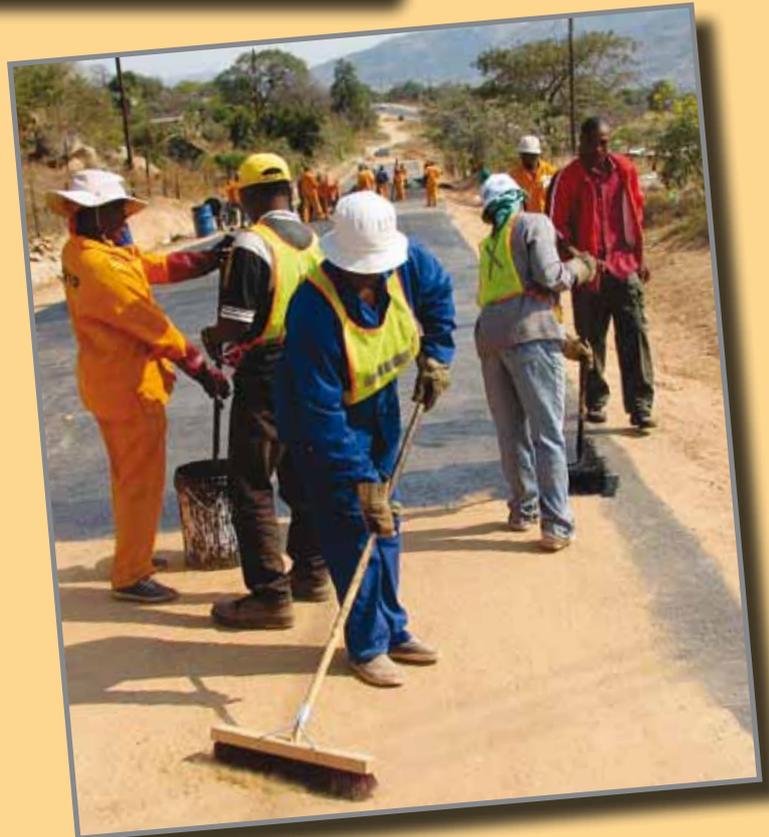
TASK SYSTEM

Definition:

A task is a clearly defined quantity of work to be completed to specified quality by a worker for payment of one day's fixed standard wage. The main incentive is that the worker can knock off when s/he has finished the task set.

Different types of Remuneration systems

The *task work* system is often confused with other remuneration systems. Three common remuneration systems (*task work*, *piece work* and *time-based*) are described in the table below. Whilst the payment for both the *task work* and *piece work* workers is *productivity-based* (based on output) the *time-based* worker is paid for the time spent at work without relating it to the output.



| | Time Based <i>Worker is paid on the basis of time present at work</i> | Productivity Based <i>Worker is paid on basis of how much he or she produces</i> | |
|---------------|---|--|--|
| | Daily Paid | Piece work | Task work |
| Principle | Worker is paid fixed sum each day for working fixed number of hours that day. Start, breaks and finish times are established. | Worker paid on basis of small quantities of output. No time fixed to accomplish task. | Worker paid a fixed task rate for fixed output over estimated, say six hours. |
| Advantages | Simple to organise and easy book-keeping. | Maximises output. | Where task is set properly, allows typical worker to finish early and go home. |
| Disadvantages | Strong supervision required for high output. Progress can be very variable. | Can lead to self exploitation. Can be difficult to administer. | Close supervision in daily task assignment. Improper task can lead to exploitation |

The *piece work* system generally yields the highest output, followed by the *task work* system, with the *time-based* system yielding the least output. However the *piece work* system is not recommended as it often leads to self exploitation by workers. For the Expanded Public Works Programme (EPWP) workers cannot be employed under the *piece work* system. They are to be employed under the *task work* system and if the task to be performed cannot be quantified they should be employed under the *time-based* system.

Issues to consider while setting a task:

- ◆ What are the activities to be done?
- ◆ What are the prevailing site conditions e.g. Terrain hardness/difficulty?
- ◆ What quantities of work are to be carried out in each of these activities?
- ◆ Can the activity be implemented most effectively as an individual task or group task?
- ◆ Is the activity broken down into a format that is simple to instruct, understand, execute and complete within a day?
- ◆ What are the suitable productivity norms (guidelines on individual output capability) to be used?
- ◆ What is the sequence (order) of carrying out these activities?
- ◆ Overall can resources be planned and utilized to the optimum?

Important factors to consider while establishing task rates:

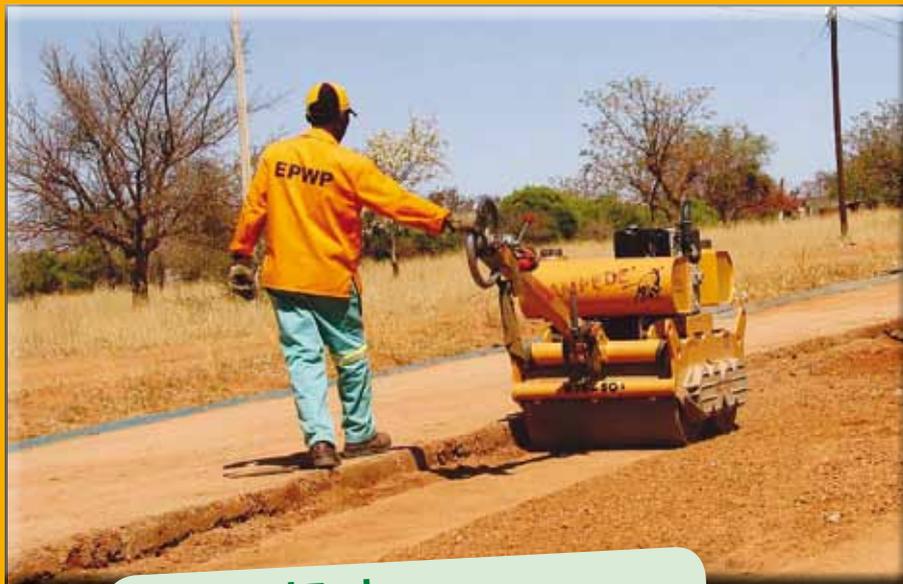
- ◆ The effort required for undertaking the work, e.g. soil hardness/wetness, bush thickness, material throwing distances, and lifting heights.
- ◆ The use of the correct hand tool for the job to be done.
- ◆ The condition of the tools e.g. tools in good condition and ergonomically designed tools yield better productivity, allowing a relatively higher task to be set.
- ◆ The weather conditions such as temperature and humidity.
- ◆ The fitness/health of the workers and their experience of work.
- ◆ Socio-culture of the local people.

Where applicable:

- ◆ Task work system is largely applied in Labour Intensive Construction (LIC) technology as it optimises employment.
- ◆ Task work system is applied and recommended for LIC as an incentive for the workers to complete their daily task earlier than the normal working hours of the day and leave to do other income generating or social activities. The task work approach also relieves the supervision for production

The task work system is generally implemented as:

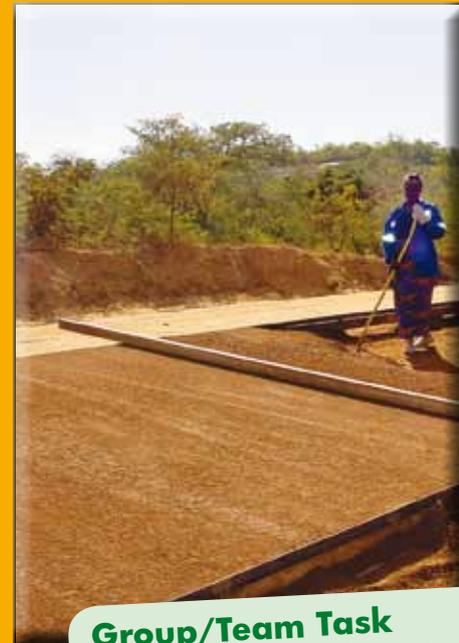
- ◆ Individual task
- ◆ Gang or group task



Individual Task:

An individual task is an agreed amount of work given to an individual worker to complete in a day.

Types of



Group/Team Task

A group task is a fixed quantity between the supervisor and a group which is supposed to be completed by dividing a group task by the number of workers. An estimate of the individual task rates may be combined to

from the supervisor and shifts it to the worker who has flexibility to determine their own pace of working.

- ◆ Task work system is more suitable for activities where standard outputs are established. Some activities are better undertaken as group tasks.

When the Task System is not applicable:

- ◆ If the work to be performed cannot or is difficult to measure such as supervision and watchmen duties.

Procedure for setting a task from work study:

In the absence of applicable guidelines on task rates a task can be set from a work study as follows;

- ◆ Set aside one week for a trial on the activity. Organize the workers on a day-work basis for this activity.
- ◆ Supervise the workers closely, making sure that they all work efficiently for an eight hour period inclusive of breaks. (Do not give the workers an indication that they are being observed/timed)
- ◆ Stop work after eight hours and measure the quantity of work completed.
- ◆ Divide the completed quantity by the number of workers on the activity.
- ◆ The average over a one week period of observa-

tion gives an average task rate for the activity for effective hours of work (exclusive of allowed breaks).

Measures and remedial measures for a fair task

- ◆ Repeat this exercise frequently and adjust the task rate such that the most efficient workers can complete their task after 75% (e.g. 6 hours) of the normal working time and the rest within normal working time (e.g. 8 hours).
- ◆ If a worker fails to complete a task within normal time, observe them for at least three days and if they consistently fail a task which other workers have no problem completing then the worker may be underperforming. Similarly, if a group of workers fails to complete a task after at least 3 occasions, swap them with another group. If another group has no problem completing the same task then the first group may be colluding to underperform.
- ◆ If the majority of workers consistently fail to complete a task even after swapping different groups or finish the task sooner than 75% of the normal working time it is likely the task is not set appropriately.

f Tasks:



of work agreed be-
up or a team of workers
eted in a day. In general,
number of workers gives
sk. Conversely, individual
establish a group task.



Multiple Activity Task

For both individuals and groups it is possible to assign a single activity task or multiple activity task. A single activity task may involve just one activity, for example excavation only. A multiple activity task may involve two or more activities, for example excavation and stone pitching.

A task is set by the supervisor and agreed by the workers or teams. When the work is complete the supervisor checks and records, hence it is important that the supervisor is competent to use this methodology correctly as it affects productivity in terms of both quantity and quality.

A task is never paid in multiples or ratio as it corresponds to a day's work. If a worker is unable to complete a task she/he is liable for the day's wage, but the supervisor must take remedial measures that will enable every task to be completed all the time. Only after establishing that the task is fair may a consistently underperforming worker be laid off. This method does not allow more than one task per day or setting a task that can only be completed in more than a day. A Task is equal to one day's work and payment is based on the daily wage rate.

Worked example

Task rate = $\frac{\text{Total work completed in effective working time}}{\text{Number of workers on activity}}$

Task rate for excavation

Assuming five workers doing a group excavation task over an effective 6 hours (8 hours shift less time for breaks). If they excavated excavation soil of medium hardness totalling 16.5m³. The task rate for excavation is calculated as follows;

$$\text{Task rate} = \frac{16.5\text{m}^3}{5} = 3.3 \text{ m}^3$$

The average estimated task rate will be between 3 and 3.5 m³ for soil of medium hardness.

REMEMBER! Task rates are important tools for productivity; keep them fair.

Task Work and Inclement Weather

If work is stopped due to inclement weather the following is recommended for the EPWP task rated workers;

1. If work is stopped and workers are released they shall be paid as if the day's task was completed.
2. If work is stopped temporarily and the site agent deems it possible to still complete the task on the same day the workers shall complete their task.
3. If the workers are informed not to come to work the following and/or subsequent days they shall not be paid for the days not worked.



Suggested Further Reading

Government of South Africa. (2005) "Guidelines for the Implementation of Labour Intensive Projects under the Expanded Public Works Programme (EPWP)".

De Veen, J and Tajgman D (1998): "Employment Intensive Infrastructure Programmes: Labour Policies and Practices". International Labour Organisation (ILO). Geneva.

Ladbury, S. Cotton A. and Jennings M. (2003). "Implementing Labour Standards in Construction: A Source Book". Loughborough University. UK.