# **Comparative Mapping** of Production Process

Workers' knowledge as an instrument of union action at the workplace



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# Mapping of the **Production Process**

To investigate the production system from the workers' point of view, and to identify problems caused by the organization of the production process and by the ways of production

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### The production process is formed by

### Organization of the work

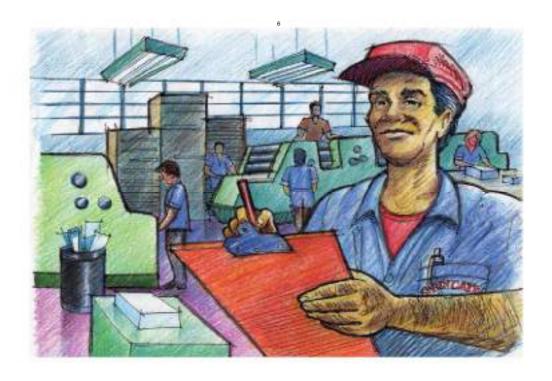
- •Administration and allocation of human resources
- •Stimulation and motivation of the workers
- Human productivity

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### Organization of the production

- Organization of material
- Machinery, equipments and production flows
- Lay-out and design of the factory
- Mechanical productivity





### **Mapping of the Productive Process**

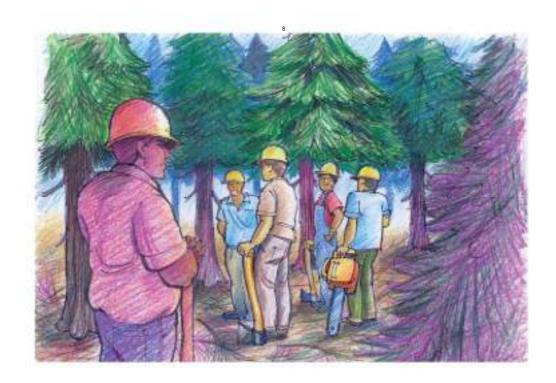
Individual workers or workers organized in base groups

- support groupsfactory groups
  - union delegates activists

collect as much as possible information about the production process

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# Information about production process and production chain to be collected:

- number of employees
- volume of production
  - productivity
- quantity of extra work / overtime
- breaks, holidays, days off and absenteeism
  - suppliers and clients

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An easy way to collect data is to draw a

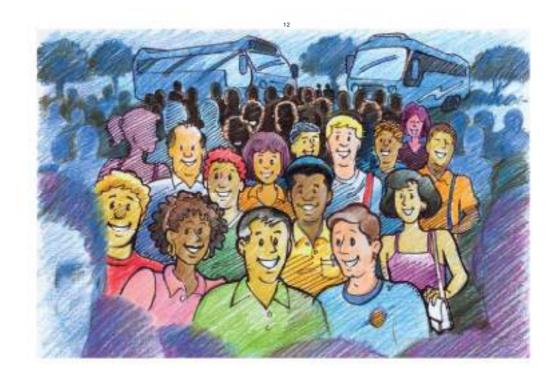
# **Calendar of Productivity**

M	Т	W	Т	F	S	S
01	02	03	04	05	06	07
80	09	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	<b>27</b>	28
29	30	31				

where each worker lists his/her daily production and hours of work

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# Construction of collective knowledge

The information needs to be systematized and analyzed by the workers themselves

This means:

draw a map of the factory, create a map of the production process and identify where the main problems for the workers are found



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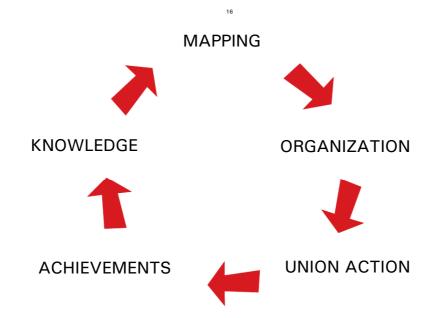
### Construction of collective knowledge

It permits us to reconstruct the production process and the production chain in which we are involved.

In this way we can discover the reality and the logic of the production system, we work in.

The map and the design of the factory enables us to visualize all of the production process, which gives us a general image of the organization of production. This enables us to link detected problems to the way the production is organized at our work.

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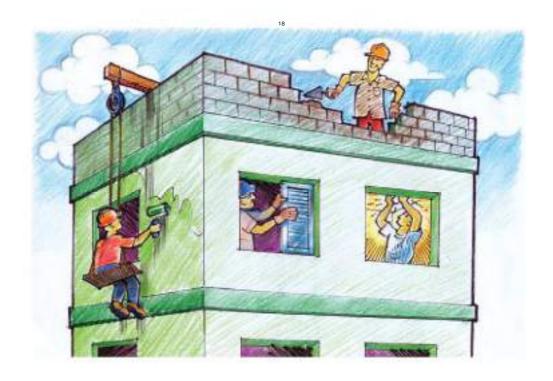


With this information at hand we are able to develop consistent and well-planned strategies and actions, which lead to more control over the production process by the workers.

Information and control over the process enables us to start negotiations and if necessary, conflict, in order to change effectively the workers' reality.

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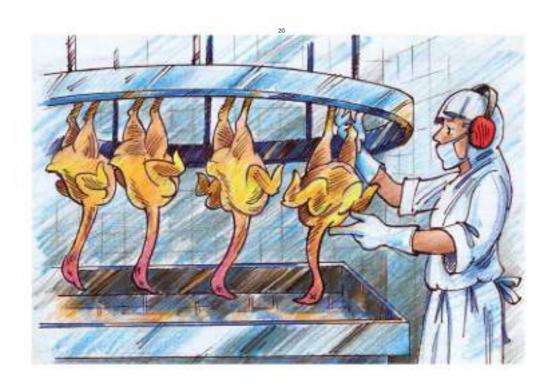


# Calculation of the necessary working power

Serves to determine the number of people needed to realize certain production tasks

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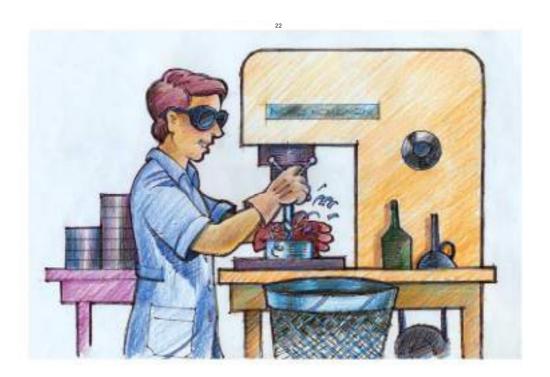
It is possible to calculate, because every worker knows:

what is producedhow many unitshow

And the most important:

- WHO is the PRODUCER

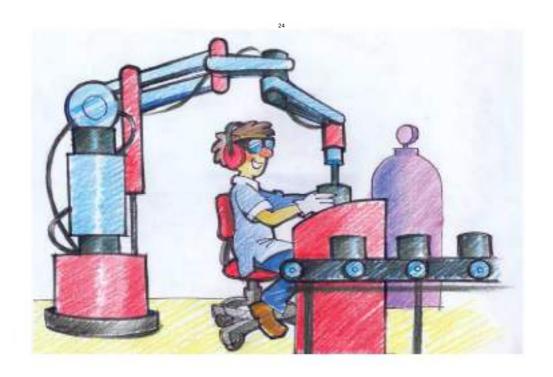
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Therefore, this work demands the cooperation of each and every worker, each individual who is part of the production process.

With help of the production mapping method we collect the data that tell us about the productivity of each workplace.

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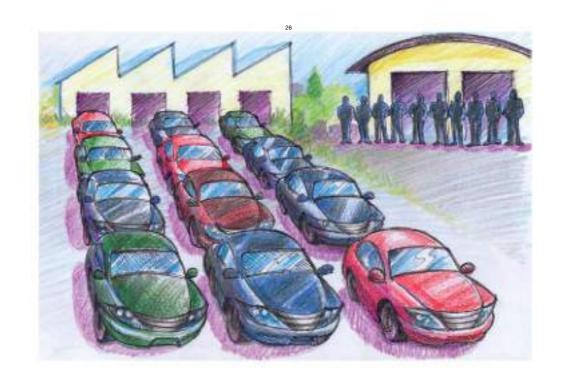
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In which each worker writes down the number of produced units and working hours

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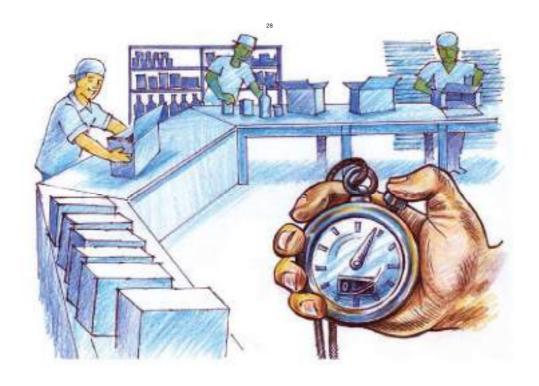
units = work load workers

units = productivity

sum of human and material resources

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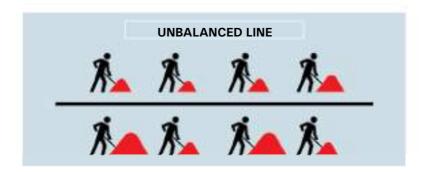


With the collected data we are able to identify in which part of the company the worker is able to produce more units in less time and what is the link between the different work places.

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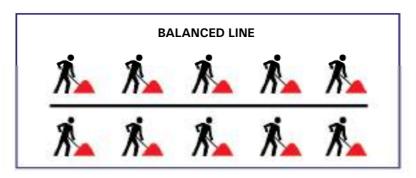
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Based on the collected data, we can now look into:

the balance of the production line
the balance of the work places
the calculation and control of working hours



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### Therefore we need:

- ongoing contacts between workers and union activists
- the official company information, to be able to compare these to the information supplied by the workers

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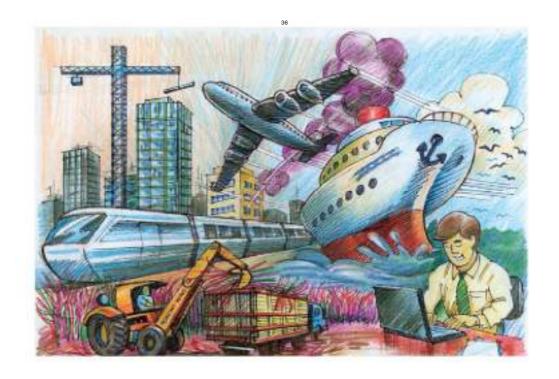
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### Once the information is possessed, we can:

- visualize the production process as one,
  - detect "evolving" tendencies,
- negotiate process changes, that we find necessary,
  - oppose process changes which the company tries to impose upon us.

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### **Comparative mapping**

# A method for trade union action in the workplace and in the world

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### **Comparative Mapping**

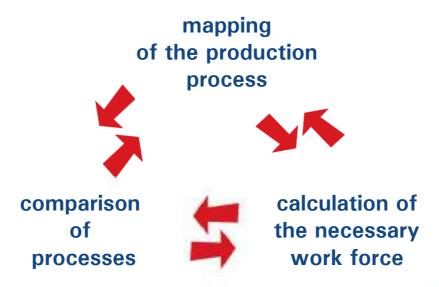
Mapping the production system from the point of view of the workers and comparing the drawings/mapping results with other shops, sectors, enterprises, branches in different countries, etc

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### **Comparative Mapping**

consists of **3 elements** 

of the same method of trade union action:



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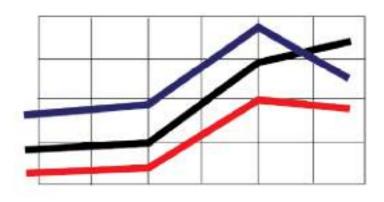
### **Comparative Mapping**

Until now we have studied two of the three elements. Let's look into the third one:

## comparing the processes

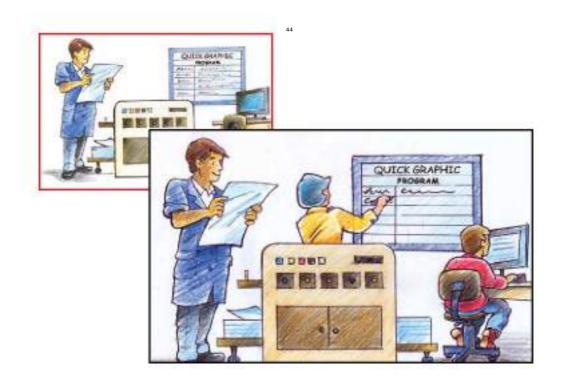
### **Benchmarking**

Instrument that compares production processes in similar companies



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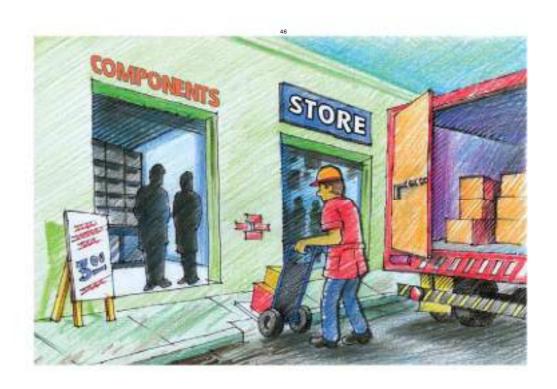


## **Benchmarking**

Management method for the ongoing improvement of the production processes in a company, by comparing them with production processes in similar companies that are considered "best of their branch"

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# Comparison of production processes

is the third element in the trade union method that provides workers with an understanding of the production chain they work in, and the competition among different companies

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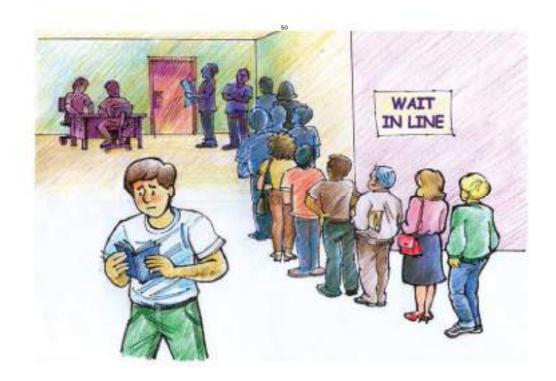


## **Comparison of processes**

leads to the identification of existing differences in various companies concerning:

- working conditions and rhythm of work
- working hours
- wage levels
- productivity
- quality
- prices and costs of production
- others

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# By understanding the differences, union and workers can discover:

- potential strategies for production re-structuring
- planned outsourcing
- costs reductions
- planned dismissals
- the more competitive companies
- critical issues and potential conflicts

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### It allows us to:

- develop strategies and conditions for union action that would fit the historical moment as well as the juncture, seeking to attack the nerve of entrepreneurial initiative.
- develop viable and pro-active solutions and autonomous alternatives to defend class interests.
- increase workers' control of production, economic and social processes

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#### The elements of which comparative mapping consists

Aim at obtaining knowledge of a constantly changing reality through the comparative analysis of working places and of the production process from the point of view of the workers' interests, taking into consideration:

- the number of workers employed and necessary per operational unit at the each enterprise.
- the work load and speed of work
- the organization and management of production

Out of the empirical knowledge of workers three elements were developed. When joined together, they create favorable conditions for strengthening the workers' organizations and its fighting power.

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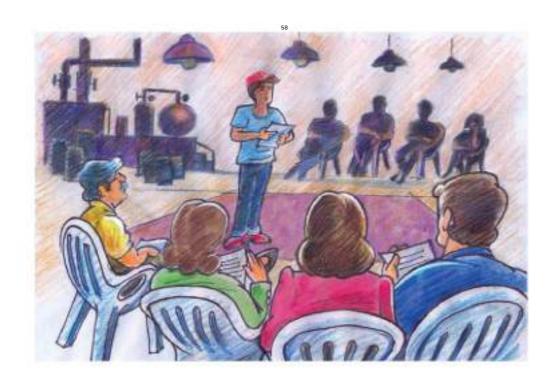
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### Summary

# **Comparative Mapping**

## step by step





### First step

## Mapping collectively

- Base group
- Working place

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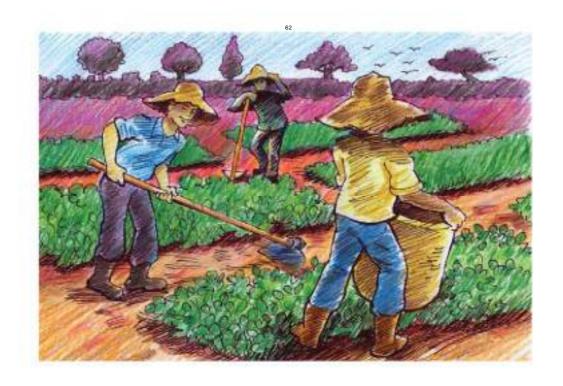
### **Second step**

## Systematize collectively

- Base group
- Union activists and leadership
- Working place

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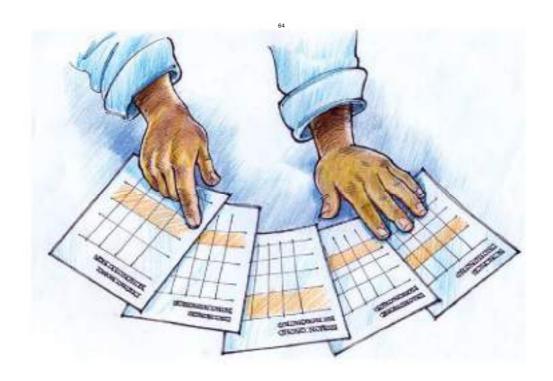
## Third step

### Calculate the necessary workforce

- Base group
- Union activists and leadership
- Working place

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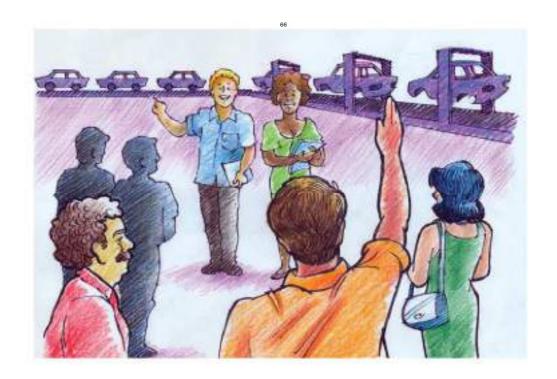
### Fourth step

### To compare the different:

factories - sectors - regions - countries

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### Fifth step

### To focus union action collectively

- To establish priorities and methods of action
- Strategical planning

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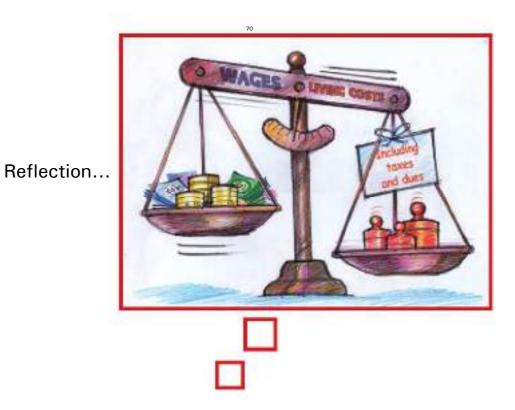
## Sixth step

### **Union action itself:**

- at the workplace
- in a sector
- in a region
- in a country
- in the world

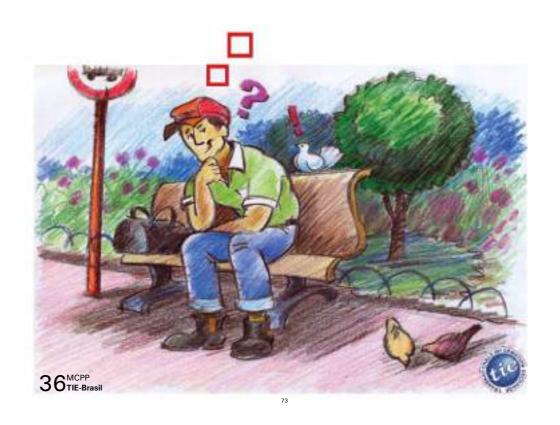
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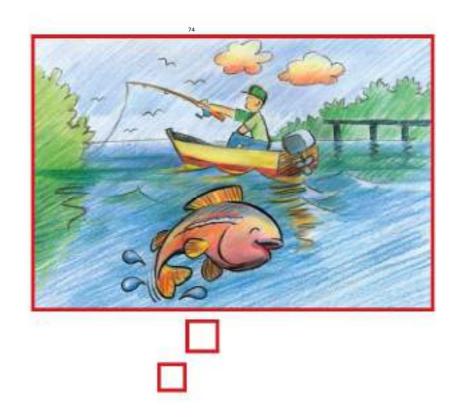
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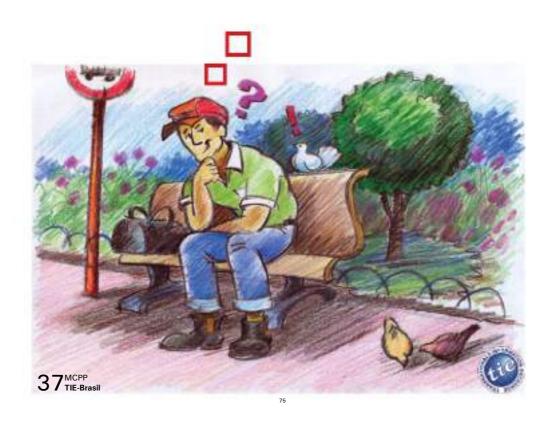
















"COMPARATIVE MAPPING OF PRODUCTION PROCESSES - Workers' Knowledge as an Instrument of Union Action" Is a TIE-Brasil publication qualified for discussions in groups at the seminars of workers and union activists.

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