SOS POLITICAL SCIENCE AND PUBLIC ADMINISTRATION,

JIWAJI UNIVERSITY, GWALIOR

MBA II SEM - HRD 202

SUBJECT NAME: WAGES & SALARY ADMINISTRATION

UNIT-V

TOPIC NAME: PRODUCTIVITY

DEFINITION OF "PRODUCTIVITY"

Definition:

Productivity refers to the physical relationship between the quantity produced (output) and the quantity of resources used in the course of production (input).

"It is the ratio between the output of goods and services and the input of resources consumed in the process of production."

$$\text{Productivity } (P) = \frac{\text{Output } (O)}{\text{Input } (I)}$$

Productivity means an economic measure of output per unit of input. Output refers to the total production in terms of units or in terms of revenues while input refers to all the factors of production used like capital, labour, equipment, etc.

Output implies total production while input means land, labour, capital, management, etc. Productivity measures the efficiency of the production system. The efficiency with which resources are utilized is called productive efficiency. Higher productivity means producing more from a given amount of inputs or producing a given amount with lesser inputs.

At the level of a plant or an industry productivity is an output-input ratio. But at the macro level, productivity is a measure of performance of an economy or country. From a nation's viewpoint productivity is the ratio of available goods and services to the potential resources of the country.

Productivity means an economic measure of output per unit of input. Output refers to the total production in terms of units or in terms of revenues while input refers to all the factors of production used like capital, labour, equipment, etc. Productivity is a good indicator of the efficiency with which a factory is operating. If a firm has higher productivity, i.e. it produces more with a given amount of inputs, it means it is utilizing the resources properly.

With respect to insurance industry, the amount of policies and contracts sold by each sales employee is called productivity.

Productivity refers to the physical relationship between the quantity produced (output) and the quantity of resources used in the course of production (input).

"It is the ratio between the output of goods and services and the input of resources consumed in the process of production."

Productivity is the ratio between output of wealth and input of resources used in production processes.

Productivity – Concept (With Formula)

The concept of productivity can be applicable to any economy, small, medium and large business, government and individuals. Productivity aims at the maximum utilization of resources for yielding as many goods and services as possible, desired by consumers at lowest possible cost. Productivity is the ratio of output in a period of time to the input in the same period time.

Productivity can measured with the help of following formula:

$$\text{Productivity} = \frac{\text{Output in a Period of Time}}{\text{Input in the Same Period of Time}}$$

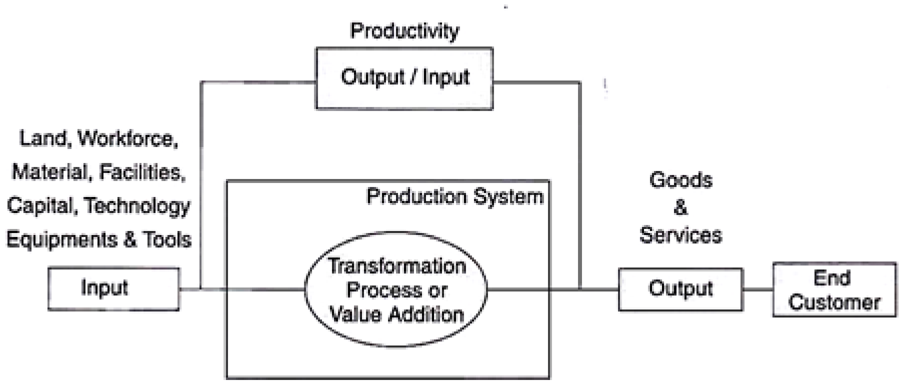

Fig. 2.1 System Concept of Productivity

In simple terms Productivity is the ratio of output to some or all of the resources used to produce the output.

Productivity can thus be measured as:

$$\text{Productivity} = \frac{\text{Quantity of Goods and Services Produced}}{\text{Ammount of Resource Used}}$$

Mathematically $$P = \frac{O}{I}$$

"Productivity is the quantitative relation between; what a firm produces and what a firm uses as a resource to produce output, i.e. arithmetic ratio of amount produced (output) to the amount of resources (input)".

In general, productivity is a measure of performance or output. The number of sales (of premium and contracts) generated per sales person is known as productivity. It is a measure of how effectively the sales targets are being met for an insurance company.

1 Productivity as an objective concept

It can be measured, ideally against a universal standard.

Organizations can monitor productivity for strategic reasons such as corporate planning, organization improvement, or comparison to competitors.

It can be used for tactical reasons such as project control or controlling performance to budget.

2 Productivity as a scientific concept

It can be logically defined and empirically observed.

It can also be measured in quantitative terms, which qualifies it as a variable and therefore, it can be defined and measured in absolute or relative terms.

It is much more useful as a concept dealing with relative productivity or as a productivity factor.

3 Productivity as a measure concept

Useful as a relative measure of actual output of production compared to the actual input of resources, measured across time or against common entities.

As output increases for a level of input, or as the amount of input decreases for a constant level of output, an increase in productivity occurs.

"Productivity Measure" describes how well the resources of an organization are being used to produce input. 4 Productivity as an efficiency concept.

Productivity is often confused with efficiency. Efficiency is generally seen as the ratio of the time needed to perform a task to some predetermined standard time. However, doing unnecessary work efficiently is not exactly being productive.

It would be more correct to interpret productivity as a measure of effectiveness (doing the right thing efficiently), which is outcome-oriented rather than output-oriented.

“Productivity is an aggregate measure of the efficiency of production; it is the ratio of output to inputs i.e. capital, labor, land, energy and materials”.

“Productivity refers to the efficiency of the production system and an indicator to; how well the factors of production (land, capital, labor and energy) are utilized”.

Productivity is the ratio between output of wealth and input of resources used in production processes. Output means the quantity of products produced and the inputs are the various resources used in the production. The resources used may be land, building, equipment, machinery, materials, labour etc.

Productivity is a concept that’s widely misunderstood. The main reason is that we use the word productivity on a macro and micro scale. On the news, we read about workforce productivity, which is basically the aggregate output of all workers.

So when we read “Productivity increased in September” we’re confused. Those macro trends have nothing to do with how productive a person is. To me, productivity is a personal measure. Especially in the 21st century where most of us work independently. We're no longer machine operators. We're skilled knowledge workers who manage their own time and energy.

Based on the above, there are **two types** of productivity:

1. **Workforce productivity:** The *total* amount of goods and services workers produce in a certain period.
2. **Personal productivity:** The *relevant* output of an individual in a certain period.

You do not control the former but you have 100% control over the latter. Hence, if a person, manager, CEO, leader, wants to improve collective productivity; one must improve personal productivity.

One note on the definition of personal productivity. By *relevant* output, I mean working on the *right* things. You can be highly productive and have a lot of output, but the results you achieve might be useless. When you focus on relevant output, you get the right things done. Things that improve your career, business, organization.

Also, it's important to look at productivity over a certain period, preferably monthly. Consistent output is what drives results.

Benefits of Improved Productivity

Productivity is the measure that defines growth in the economy and one's living standards (higher income, better benefits, more free time).

Ray Dalio, a well-known investor and philanthropist, emphasized the importance of productivity in his explainer video ***How The Economic Machine Works*.**

In the 30-minute video, he explains how the economy works and gives advice on how you can increase your wealth. His most important piece of advice? Here it is:

"Do all that you can to raise your productivity, because in the long run, that's what matters most."

Productivity can be increased by the following ways:

1. Increasing the output using the same input.

2. Reducing the input by maintaining the output as constant.

3. Increasing the output to a maximum extent with a smaller increase in input.

Productivity – Factors Affecting Productivity

Productivity is the outcome of several factors. These factors are so interrelated that it is difficult to identify the effect of any one factor on productivity.

These factors may broadly be divided as follows:

1. Human

Human nature and human behaviour are the most significant determinants of productivity.

Human factors may further be classified into two categories as given below:

(a) Ability to work – Productivity of an organization depends upon the competence and calibre of its people—both workers and managers. Ability to work is governed by education, training, experience, aptitude, etc. of the employees.

(b) Willingness to work – Motivation and morale of people is the second important group of human factors that determine productivity. Wage incentive schemes, labour participation in management, communication system, informal group relations, promotion policy, union management relations, quality of leadership, etc., are the main factors governing employees' willingness to work. Working conditions like working hours, sanitation, ventilation, schools, clubs, libraries, subsidized canteen, company transport, etc., also influence the motivation and morale of employees.

2. Technological:

Technological factors exercise significant influence on the level of productivity.

The main technological factors are as follows:

(a) Size and capacity of plant

(b) Product design and standardization

(c) Timely supply of materials and fuel

(d) Rationalization and automation measures

(e) Repairs and maintenance

(f) Production planning and control

(g) Plant layout and location

(h) Materials handling system

(i) Inspection and quality control

(j) Machinery and equipment used

(k) Research and development

(l) Inventory control

(m) Reduction and utilization of waste and scrap, etc.

3. Managerial:

The competence and attitudes of managers have an important bearing on productivity. In many organizations, productivity is low despite latest technology and trained manpower. This is due to inefficient and indifferent management. Competent and dedicated managers can obtain extraordinary results from ordinary people

Job performance of employees depends on their ability and willingness to work. Management is the catalyst to create both. Advanced technology requires knowledge workers who in turn work productively under professionally qualified managers. No ideology can win a greater output with less effort. It is only through sound management that optimum utilization of human and technical resources can be secured.

4. Natural:

Natural factors such as physical, geological, geographical and climatic conditions exert considerable influence on productivity, particularly in extractive industries. For example, productivity of labour in extreme climates (too cold or too hot) tends to be comparatively low. Natural resources like water, fuel and minerals influence productivity.

5. Sociological:

Social customs, traditions and institutions influence attitudes towards work and job. For instance, bias on the basis of caste, religion, etc., inhibited the growth of modern industry in some countries. The joint family system affected incentive to work hard in India. Close ties with land and native place hampered stability and discipline among industrial labour.

6. Political:

Law and order, stability of Government, harmony between States, etc. are essential for high productivity in industries. Taxation policies of the Government influence willingness to work, capital formation, modernization and expansion of plants, etc. Industrial policy affects the size, and capacity of plants. Tariff policies influence competition. Elimination of sick and inefficient units helps to improve productivity.

7. Economic:

Size of the market, banking and credit facilities, transport and communication systems, etc. are important factors influencing productivity.

Productivity is an economics term which refers to the ratio of product to what is required to produce the product. Productivity is outcome of several interrelated factors. All the factors which are related to input and output components of a production process are likely to affect productivity.

So, there are many factors which can influence productivity; such as internal and external. Knowing the internal and external factors that affect productivity of an Industrial organization; give industrial engineers; the intelligence, they needs to sort out the low performance of resources and make strategic plans for the futur

The best thing about internal factors is that you can control many of them. External factors are all those things that are beyond your control. To deal with all these factors we need different people and variety of techniques and methods

Some of the Other Factors

The factors influencing productivity can be classified broadly into two categories:

(A) Controllable Factors.

(B) Uncontrollable Factor

(A) Controllable Factors:

Controllable Factors are considered as internal factors. These are the factors which are in control of industrial organization.

Controllable factors are:

1. Material and Power:

Improved quality of raw materials and increased use of power have a favorable effect on productivity. An effort to reduce materials and energy consumption brings about considerable improvement in productivity.

It consist:

i. Selection of quality material and right material.

ii. Control of wastage and scrap.

iii. Effective stock control.

iv. Development of sources of supply.

v. Optimum energy utilization and energy savings.

2. Machinery and Plant Layout:

The size of the plant and the capacity utilization has direct bearing on productivity. Production below or above the optimum level will be uneconomical and will tend towards lower level of productivity. The arrangement of machines and position in the plant and the setup of the wore-bench of an individual worked will determine how economically and efficiently production will be ferried out.

3. Human Factors:

Human nature and human behavior are the most significant determinants of productivity. Human factors include both their ability as well as their willingness.

i. Ability to Work:

Ability to work is governed by education, training, experience and aptitude of the employees. Productivity of an organization depends upon the competence and caliber of its people (both workers and managers).

ii. Willingness to Work:

Motivation and morale of people are very important factors that determine productivity. These are affected by wage incentive schemes, labour participation in management, communication systems, informal group relations, promotion policy, union Management relations, quality of leadership, working hours, sanitation, ventilation, subsidized canteen and company transport etc.

4. Organization and Managerial Factors:

Organization factor include various steps taken by the organization towards maintaining better industrial relations such as delegation and decentralization of authority. These factors also influence motivation likewise the existence of group, with higher productivity as their goal is likely to contribute to the organization objectives.

The competence and attitudes of managers have an important bearing on productivity. Competent and dedicated managers can obtain extraordinary results from ordinary people. Job performance of employees depends on their ability and willingness to work.

5. Technological Factors:

Technological factors exert significant influence on the level of productivity.

These include the following:

i. Size and capacity of plan

ii. Product design and standardization

iii. Production planning and control

iv. Plant layout and location

v. Materials handling system

vi. Inspection and quality control

vii. Machinery and equipment used

viii. Research and development

(B) Uncontrollable Factors:

Uncontrollable factors are known as external factors and these factors are beyond the control of the individual industrial organization.

Uncontrollable factors are:

1. Economic Political and Social Changes:

There are economic, social and political factor that affects the productivity.

i. Economic Factors like Size of the market, banking and credit facilities, transport and communication systems, etc. is important factors influencing productivity.

ii. Political Factors like Law and order, stability of government, harmony between states etc. are essential for high productivity in industries Taxation policies of the government influence willingness to work, capital formation, modernization and expansion of plants etc. Industrial policy affects the size, and capacity of plants. Elimination of sick and inefficient units also helps to improve productivity.

iii. Social Factors like Social customs, traditions and institutions influence attitudes towards work and job. For instance, bias on the basis of caste, religion, etc., inhibited the growth of modern industry in some countries. The joint family system affected incentive to work hard in India. Close ties with land and native place hampered stability and discipline among industrial labour.

2. Natural Resources:

Natural factors such as physical, geographical and climate conditions exert considerable influence on productivity, particularly in extreme climates (too cold or too hot) tends to be comparatively low. Natural resources like water, fuel and minerals influence productivity.

3. Government Factor:

Government policies and programs are significant to productivity practices of government agencies, transport and communication power, and fiscal policies (interest rates, taxes) influence productivity to the greater extent.

Productivity – Importance

Productivity has become almost synonymous for progress. The resources of a country are generally limited. Therefore, higher productivity is essential for improving living standards and for the prosperity of a nation. Higher productivity requires elimination of waste in all forms. Higher productivity leads to economic growth and social progress.

It is only by improving productivity that employees can get better wages and working conditions and more employment opportunities. Higher productivity brings lower prices for consumers and higher dividend for shareholders. It improves the exports and foreign exchange reserves of a country. Thus, productivity is the key to prosperity.

Higher productivity is of special significance in an underdeveloped country like India. Mass poverty and unemployment cannot be eliminated without increasing productivity in agriculture, industry and all other areas of human activity. According to John W. Kendrick, “the chief means where by human kind can raise itself out of poverty to a condition of relative material influence is by increasing productivity”.

In brief, higher productivity provides the following importance

(i) It helps to reduce the cost of production per unit through more economical or efficient use of resources.

(ii) Reduction in costs helps to improve the profits of a business. The enterprise can more successfully compete in the market.

(iii) The gains of higher productivity can be passed on to consumers in the form of lower prices and/or better quality of products.

(iv) Similarly, gains of higher productivity can be shared with workers in the form of higher wages or salaries and better working conditions.

(v) Availability of quality goods at reasonably low prices helps to improve the standard of living in the country.

(vi) Due to higher productivity, a firm can survive and grow better. This helps to generate more employment opportunities.

(vii) A more productive enterprise can better export goods and earn valuable foreign exchange for the country.

(viii) Higher productivity means better utilization of the country’s resources, which helps to control inflation in the country.

COMMON PRODUCTIVITY CHALLENGES

Before I share the most commonly used techniques to improve productivity, I want to focus on the biggest obstacles. If you don't address these common blocks, none of the productivity tips will stick.

1. **Distractions** — The modern-day workplace is an inherently distracting place. Enter any office building and you'll see countless people in meeting rooms, walking around, drinking coffee, or chatting about the latest episode of a popular entertainment show. If that's not distracting enough, we all own devices that demand our attention. As a result, we can't work on our tasks without getting interrupted for 5 minutes.

2. **Personal reasons** — Life is demanding. Some of us work 10 hours a day (or more). That leaves us only a few hours of spare time in the evenings. As a result, we're spread to thin because we also have our personal demands like relationships, family, doing groceries, paying bills, working out, etc.

3. **Not enough training** — We want to be more focused at work. We want to be more calm in our personal lives. We want to make sure our lives matter. But we don't see productivity as a skill one can learn.

All the above challenges can be solved by improving your productivity skills. It's important to be aware of what's standing in your way to becoming your most productive self. For most of us, the three above roadblocks are the biggest ones. We need to commit to overcoming them and strive to reach our full potential.