LABOUR PRODUCTIVITY IN THE
MANUFACTURING ENTERPRISES OF NEPAL

Ramjee Prasad Paudyal∗

ABSTRACT

The manufacturing public enterprises have now begun to realize the significance of enhancing labour productivity with the emerging environment of competition and liberalization. The ever-growing process of globalization, the open-door policy to imports, and the obvious shift to buyer's market have thrown new demands and challenges on these enterprises. Given these opportunities and challenges provided by the emerging realities, the enterprises have now to match markets with products and other corporate resources more effectively and efficiently to strengthen their competitive advantage. In the current manufacturing environment purchases and personnel expenses (labour) are representing the major proportion of total input. Generally, labour productivity refers to the quantity of output produced by a given quantity of labour input. The labourers are the key determinant of the total value added. More precisely labour productivity is often used as a test of industrial efficiency and even as an index of economic development of a society. Labour productivity is, therefore, fully concerned with the efficient use of labour, so that optimum outputs and benefits could be achieved. Productivity had also suffered because of the failure of the management to adjust to the changes taking place within the workforce. In managing human resources, leadership styles, and motivational systems had not kept abreast of these changes. Furthermore, the negligence to improve and monitor employee productivity and taking corrective actions are evident.

INTRODUCTION

The world, at present, could be described as economically borderless as the forces of globalization are expanding rapidly. As a result, business organizations have spread out as multinational organizations throughout the globe giving tremendous growth to competition. Competition among the business units is not only confined to grab larger market shares, but also for acquiring resources. With the growing thrust for globalization and increasing competition among the economic units for both inputs and outputs, the world in the twentieth century had also witnessed the unprecedented concern of the people and societies for the optimum utilization of limited resources. In the context, in order to survive, grow and meet the social expectations, it is utmost important that these business units should be competitive.

Productivity is a multi-reflective concept related to better income for investors, better wages and bonus for the individual workers, more taxes and revenues for the government, and easy access to goods and services for the society. Although the significance of the concept of productivity was recognized

∗Associate Professor, Tribhuvan Multiple Campus, Tribhuvan University, Tansen, Palpa, Nepal
in the early seventeenth century, it got its real importance during the twentieth century mainly due to the free global market, international competition, and rising social and legal pressures for the productive use of resources. In the present context, productivity has received top priority in every society both at macro and micro levels.

The manufacturing public enterprises in Nepal have now begun to realize the significance of enhancing labour productivity with the emerging environment of competition, liberalization and deregulation. The every-growing process of globalization, the open-door policy to imports, and the obvious shift to buyer's market have thrown new demands and challenges on these enterprises. Given these opportunities and challenges provided by the emerging realities, the enterprises have now to match markets with products and other corporate resources more effectively and efficiently to strengthen their competitive advantage.

After the inception of the multiparty system of politics in 1990 the productivity issues got prominence at the national level. In 1993, NPEDC was established. Similarly, Nepal Productivity Council (NPC) was formed in 1996 and it brought its policy in the same year. National Planning Commission (1998) for the first time in the history of development planning in Nepal, and the Ninth Plan (1997-2002) which has one main objective of poverty alleviation, has incorporated "productivity promotion and quality management" as thrust areas of national development.

Internationally, the productivity movement of Nepal begins together with the establishments of the Asian Productivity Organization (APO) in 1961 AD. Nepal is the founding member of this organization. Nepal's growing participation, commitment and membership in different forums of international and regional communities, including the WTO, have brought new threats and opportunities for the enterprises in Nepal to be competitive in the global market. Major shifts were made in industrial, trade, labour and foreign investment policies. These reforms along with fiscal reforms and structural adjustments were introduced to reduce unproductive controls, enhance productivity, attract foreign investment, strengthen private investment, and integrate the economy into the global economy.

Generally, labour productivity refers to the quantity of output produced by a given quantity of labour input. The labourer is the key determinant of the total value added. More precisely labour productivity is often used as a test of industrial efficiency and even as an index of economic development of a society. Labour productivity is, therefore, totally concerned with the efficient use of labour, so that optimum outputs and benefits could be achieved.

In the context of the emerging business reality as mentioned above, the present study was undertaken to understand and analyze the emerging issues in labour productivity, and productivity measurement, improvement, planning and evaluation. The measurement models developed by Shimizu et al. (1997), Prokopenko (1989), and Sumanth (1984) were used in the study to assess and
analyze the productivity situation in the selected manufacturing public enterprises. Productivity measurement was attempted through the application of qualitative approaches. This would help the enterprises to identify the issues relating to labour productivity and enable them to plan and execute productivity-related activities.

ISSUES

The issues forwarded in the study aim to measure the productivity planning, improvement, measurement, evaluation, and awareness. Issues are used in the study to measure the qualitative data of productivity. Still to date there was not any form of accepted labour productivity measurement model to state the status of productivity in the manufacturing public enterprises of Nepal. This was the main issue of the study.

The issues thus indicate the need gap of the productivity measurement model and evaluation in the manufacturing sectors of Nepal. Therefore, this study is probably one of the most expected ones in Nepal. Hence, many productivity-related issues and questions still remain unanswered. The present study therefore has been undertaken to address the following two research questions raised by the model:

- To what extent are the employees of the enterprises aware of the productivity concepts and benefits?
- What are the critical factors that have significant influence on labour productivity?

OBJECTIVES OF THE STUDY

The basic objective of the study is to assess the labour productivity of the manufacturing public enterprises in Nepal. This objective has been divided into the following specific sub-objectives:

1. To study the level of productivity awareness among the employees of these enterprises;
2. To assess the planning, improvement, implementation, measurement, and other critical factors of labour productivity programs; and
3. To suggest recommendations for the improvement of labour productivity in these enterprises.

RESEARCH DESIGN AND METHODOLOGY

The main sources of primary data were the officer-level employees of six enterprises. The six manufacturing public enterprises selected for the study were: Dairy Development Corporation, Hetauda Cement Factory, Herbs Processing and Production Company, Janakpur Cigarette Factory, Lumbini Sugar Mill and Royal Drugs Limited. Questionnaires and in-depth interviews were the basic research instruments used to collect primary data.

Four different types of measures were used to get an overview of productivity in the selected enterprises. First, outcome measures were studied to assess the outcomes and their influence in productivity. Secondly, input measures
measured the inputs in the production processes. This measure was compared to outputs to measure productivity. Thirdly, action measures were studied to assess the activities that affected the desired productivity. Finally, the diagnostic measures gave insight to why an output, input, or action measure is at its current level. A measurement regime based solely on input or output measure is unlikely to be of strategic benefit.

In the context of the emerging business reality as mentioned above, the present study was undertaken to understand and analyze the emerging issues in labour productivity, and productivity measurement, improvement, planning and evaluation. The measurement model developed by Sumanth (1984) is used in the study to assess and analyze the productivity situation in the selected manufacturing public enterprises.

**PRODUCTIVITY CYCLE SYSTEM MODEL**

When the countries have to improve their national productivity levels and growth rates, efforts must first begin at the organizational level. In order to be successful and effective, such efforts need to be formal. A formal productivity program in an organization is generally called the productivity cycle. In this study, the analysis of the manufacturing public enterprises in Nepal has been done based on the productivity cycle system model as suggested by Sumanth.

An organization that begins a formal productivity program for the first time can begin with productivity measurement. Once the productivity levels are measured, they have to be evaluated or compared against planned values. Based on this evaluation, target levels of productivity are planned on both short term and long term basis. In order to assess the degree to which the improvement will take place next period, productivity levels must be measured again. This cycle thus continues as long as the productivity program operates in the organization (Sumanth 1984).

**Productivity Cycle System Model**

![Productivity Cycle System Model](source)

*Source: Sumanth (1984).*
This study is specifically focuses on the emerging issues, problems, rationale, and the status of labour productivity. The senior executives and managers of the selected manufacturing public enterprises were considered for in-depth interviews. These senior managers were selected irrespective of their nature of job and tenure of employment. In the process of selecting senior managers for the in-depth interviews and questionnaire distribution, due attention was given to the representation of major departments/divisions of the enterprises including technical and non-technical personnel based on their population. The total senior managers in the enterprises selected for in-depth interviews were 20 for each enterprise. All the managers heading the major departments in these enterprises were included in the sample as they were supposed to have greater insights into the issues and could provide reliable and valid information.

The collected information was then analyzed respondent-wise and enterprises-wise. The responses were also analyzed based on the nature of jobs (technical and non-technical) and respondents’ age and experiences. The primary data was analyzed following the computer software program EPI info 6- version 6.02, October 1994 - World Health Organization, Center for Disease Control and Prevention, USA.

Since, the framework of analysis included empirical study and analysis of opinions pertaining to various issues related to labour productivity. This study is mainly descriptive-cum-exploratory in nature.

RESEARCH FINDINGS

The study identified some critical success factors and some blockers of labour productivity in the enterprises under study. The major findings were organized into issues like productivity awareness, planning, improvement, implementation, measurement, accountability of the government and the like.

AWARENESS

Though the respondents were found to be in favor of labour productivity, they were confused about the concepts of productivity. The technicians were better aware of productivity related concepts than the non-technicians. All the respondents opined that the employees need to be articulated to productivity related concepts and benefits. The respondents suggested some issues to be fairly addressed by the management. These included productivity plan formulation and implementation, productivity measurement, cost reduction programs, and information-sharing. These activities would give positive results if they are undertaken with the involvement of employees.

The concept of productivity and its benefits to investors, employees, government, society and the enterprises themselves, were not properly understood and realized by the employees of the enterprises. As mentioned by the respondents, they had no idea about it. The respondents accepted that certain changes were made in their enterprises due to the introduction of new technology and the changes made in the top management. In spite of these changes, there was hardly any change in their productivity position.
PLANNING

Without appropriate rules and standards, productivity planning cannot be effective. At the policy level, however, differences need to be made with respect to rule formulation based on the nature of the industry. The workers are to be identified as vital among the resources for the improvement of labour productivity. However, the employee-related priorities were different and mixed in the enterprises under study. It was found that the top-level executives had paid only moderate attention to labour productivity planning. Their focus was just to minimize the impact arising due to excessive political interferences. Hence, less attention was paid to the introduction of new technology, as it demanded higher investment and additional workforce. Further, the managers were also doubtful about the effectiveness of the existing personnel policies to enhance labour productivity.

IMPROVEMENT

The system of productivity competition and reward was not properly used by the enterprises. Similarly, there was also no system of punishment. Thus, the basic pillars of building the productivity environment did not exist in the enterprises. Jobs were created without considering the labour and other costs. The staff members were not involved in the productivity improvement programs. Their opinions were not sought. Tasks were not assigned to employees according to their interests, education or experience. These practices had serious implications on workers' commitment to productivity. However, the technicians were found to be relatively more aware and committed to productivity.

The productivity improvement strategies were not exercised and formalized by the enterprises. However, the enterprises exercised activities like setting specific objectives for work, fixing production targets, undertaking performance evaluation, associating the related staff to specify the target dates, saving costs, minimizing wastages, encouraging suggestion from employees, and making provisions for skill development of employees.

The respondents felt that the major problems associated with productivity improvement were: lower production capacity utilization, poor maintenance of machines, lack of raw materials to keep the factory in operation, less working hours, failure to deliver the goods to customers on time, higher energy and fuel wastages, and excessive scrap and material wastages.

PRODUCTIVITY IMPLEMENTATION

The effective implementation of the productivity plans generally rests upon the people. The prime responsibility should rest with the senior executives of their enterprises for implementing the productivity programs; followed by departmental heads and technical engineers. At the same time, they also agreed that the responsibility of increasing productivity rests with all the employees right from the top executives down to the lower level workers.
MEASUREMENT AND EVALUATION

The respondents were asked to rank the factors influencing the productivity measurement in order of their importance. The decision making pattern of management was the most influencing factor and the attitude of the workers was the least influencing factor as pointed out by the respondents. The quality of labour, freedom to work, better utilization of existing talents, quality of raw materials, appropriate technology, information management system, and freedom of expression were the other critical factors leading to productivity problems in the enterprises under study.

An evaluation system has both the administrative and developmental objectives. Administrative objectives refer to the use of the system for such decisions as promotion, placement, continuation of service and the like. Development objectives pertain to the use of the system for identification of strengths and weaknesses. The exact role of evaluation can be spelt out once its objectives are identified. However, the respondents conceded that the present evaluation and measurement systems restrict promotion and also hinder employees' commitment to productivity.

The next aspect preferred by the employees was the feedback system of the evaluation. In fact, the responses clearly indicated that there was a need to bring about changes in the personnel policies of the enterprises. The respondents emphasized that to improve productivity, the evaluation results should be communicated to them and their strengths and weaknesses are indicated to them for future improvement. The qualification and experience were the main bases of the existing system of evaluation for promotion. The majority of the respondents clearly expressed that there was hardly any provision for learning attitudes and creativity in the evaluation system. Similarly, the enterprises also seriously lacked in creating proper work environment and involving employees in problem-solving.

The respondents had opposed the inextricable components of the evaluation system currently in use for various reasons. One of the deterrent points of the system was the influence of the socio-cultural context. The respondents confessed that the socio-cultural contexts like favoritism, nepotism, and corruption had seriously influenced the appraisal practices. Such types of practices frustrate the employees and affect their productivity.

MANAGERIAL ATTITUDE AND GOVERNMENT SUPPORT

The productivity-focused schemes adopted by the enterprises were not satisfactory as viewed by the respondents because of the following reasons:

- There was no formal productivity planning, hence the employees were less aware about the productivity status of their enterprises.
- There was the absence of productivity training and education to employees.
- Except for the personal interest, nobody cared for productivity planning and implementation.
- Productivity status was seldom rechecked and evaluated.
Despite these shortcomings in the productivity-related activities, the respondents appreciated the efforts made by the management to enhance productivity. Factors like the positive managerial thinking and attitude; positive thinking of the employees, attitude and abilities of the supervisors, quality of employees in terms of skills, and availability of tools and equipment had led to build the strengths of the public enterprises. However, these strengths were not effectively used to develop their productivity and competitiveness.

With respect to the possible government support, introduction of the productivity education initiated by the universities in Nepal at different levels was highly commended by the respondents as the most sustainable and long-term initiatives to improve labour productivity. They also suggested that the government should pay more attention to:

- publish materials related to productivity,
- start the literacy campaigns in various enterprises targeting the shop-floor workers,
- establish a separate commission to oversee the emerging productivity-related issues, and
- formulate and execute the rules and regulations favorable to productivity.

**CRITICAL FACTORS AFFECTING LABOUR PRODUCTIVITY**

All the manufacturing public enterprises under study were running in big losses due to their poor performance. The personnel expenses occupied a huge portion of the operating expenses and the income generated by the employees did not cover their own expenses. The value added output generation was also low as compared to be expenses. It can thus be said that the labour productivity status in financial terms was not satisfactory. This fairly indicates the need to strengthen the factors directly influencing labour productivity in the enterprises.

The factors negatively influencing labour productivity, as viewed by the respondents, appeared to be lack of capable management and industrial disturbances. The other related factors were manpower planning, skilled manpower, technical manpower, trade unions, proper execution of the Trade Union Act, and employers’ association. Particularly, labour productivity was affected the most by the lack of manpower planning (DDC and HPP), the lack of skilled and technical manpower (JCF), and the lack of capable managerial staff (HCF, RDL and LSM).

The enterprises under study exhibited neither efforts nor ability in these areas resulting in their continued poor performance and productivity.

**RECOMMENDATIONS**

Productivity equations are made up of both constants and variables. Though the enterprises share certain constants like capital, production process, technology, energy, information and public policies, the variables in the productivity equation would be different for each of them. These variables can be defined in terms of policies, strategies, human resources and their motivation,
work culture, participative climate, and so on. The variables in the productivity equation are difficult to quantify. Each individual enterprise must therefore develop its own equation for enhancing productivity, which is specifically tailored to its products, markets, technologies, and work force.

Since Nepal is a member of the World Trade Organization, Nepalese enterprises should strive to remain competitive under a liberalized regime. These enterprises need to properly identify and use the components of the productivity equation to enhance their competitive postures. This is the only way for the manufacturing public enterprises to remain and sustain. The public enterprises should understand that competitive advantage can be built and sustained around six components: low cost, quality, innovation, information, technological adaptation and change. The success of this transformation depends on employees who can work in teams, make decisions, and solve problems.

CONCLUSION

The qualitative evidences analyzed in this study suggest that public policy, and unions are important factors for enhancing productivity. An increase, for example, in participation, gain-sharing, industrial peace, and capacity utilization might create proper conditions for total productivity increases in the future. Enhanced worker awareness, information-sharing, and workers' participation can thus be predicated to have positive effects on productivity. It was found that the dynamics of productivity were influenced by many factors and variables.

The important lesson for management from the results of this study is that the perceived work environment does make a difference in the level of productivity in enterprises. Managers at all the levels should thus pay attention not only to input-output equations of productivity, but also to the work systems, processes and environments. Several positive aspects were perceived as existing broadly across the enterprises like positive attitudes, target-setting practices, process reviews, reward, gain-sharing, and team activities. However, lack of proper evaluation system undermines these initiatives of management and employees and ultimately affects productivity.

This study has pointed to the role of managers, particularly in the areas of goal clarity, open interaction, supervisory support for the teamwork. It is likely that these changed roles of managers influence productivity drives in the enterprises. In such a work environment, employees are less likely to experience fear of negative evaluation that can affect their productivity.

There is also an indication that rigid and formal management structure and conservatism existing in the enterprises impede productivity, because the employees are likely to perceive each of these factors as controlling. The findings of this study have established that the enterprises use a limited range of human resource tools to identify and support productivity through recruitment, training and performance management.
Productivity had also suffered because of the failure of the management to adjust to the changes taking place within the workforce. In managing human resources, leadership styles and motivational systems had not kept abreast of these changes. Furthermore, the managers had neglected to improve and monitor employee productivity and taking corrective actions. Management’s ability to take corrective action had been frustrated by the success of employees in having such actions reversed through union actions and court litigation.

WORKS CITED


World Health Organization. 1994. EPI. Info 6-Version 6.02, USA.