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DEVELOPMENT OF A HIGH QUALITY HUMAN RESOURCE IN VIETNAM TO MEET THE TARGET OF INDUSTRIALIZATION AND MODERNIZATION

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Abstract

The article presents the tasks of developing high quality human resource in Vietnam to meet the target of industrialization and modernization of the country. It comes from the actual requirements of the society, from the Vietnamese Human Resource Development Strategy for the period 2011-2020, [1], from the requirements of high quality human resource to meet the target of industrialization and modernization to the year 2020, from the current situation of human resource and high quality human resource of Vietnam, the authors point out the requirements for developing of human resource in terms of economic management: developing of human resource assumes high in quality, sufficient in quantity, uniform in occupational structure and qualifications. Based on that, we have put forth practical and scientific solutions to improve the efficiency of human resource development in Vietnam to meet the demand of industrialization and modernization in the new context.

Introduction

High quality human resource is always the driving force of socio-economic development and is an important prerequisite factor to meet the requirements of industrialization and modernization of the country.

In Vietnam, at the Resolution of the ninth Party Congress, it was stated that “education and training development is one of the important driving forces for industrialization and modernization, as a condition for promoting human resource - the basic element for social development, rapid and sustainable economic growth”.

To carry out the Party's and State's policies on boosting socio-economic development; ensuring security and national defense; to restructure the economy in order to successfully achieve the 2011-2020 industrialization and modernization target, one of the important measures that Viet Nam has always paid attention to is the building and development of human resource; the focus is on the development of high quality human resource in terms of quantity, quality assurance and suitable structure as one of the



urgent requirements for the achievement of the industrialization and modernization target of the country stage now.

Methods

As mentioned above, high quality human resource to meet the target of industrialization and modernization must be considered on the criteria for determining the quality of Vietnamese human resource, considering the requirements of developing human resource for industrialization and modernization, considering the tools to develop a high quality human resource for meeting the target of industrialization and modernization in Vietnam. Therefore, in this article, we use three types of study design: research design to identify factors that affect the development of high quality human resource to meet the target of industrialization and modernization in Vietnam. Secondly, a descriptive research design and a causal study design are used to describe the degree of impact of the toolkit for state management on the development of a high quality human resource for meeting the target of industrialization and modernization in Vietnam. Based on the analysis and evaluation of research results, the topic of evaluating the current status of development a high quality human resource in Vietnam in terms of scale, quality and structure of high quality human resource.

The main research methods are qualitative research methods and quantitative methods that are closely integrated throughout the research process with the desire not only to describe the theoretical picture of how the impact of the development of high quality human resource to meet the target of industrialization and modernization, but also to quantify this impact through reliable statistics collected from the secondary data from the statistical reports of the General Statistics Office, the Ministry of Education and Training, the Ministry of Planning and Investment, the departments, the boards,... in terms of quantity, quality and structure of high quality human resource of Vietnam to meet the target of industrialization and modernization. In addition, primary data sources were collected through surveys of the demand of high quality human resource from economic organizations and agencies to analyze and evaluate the situation of developing human resources for meeting the target of industrialization and modernization.

Results

Literature review of human resource development meets the target of industrialization and modernization

Some related concepts

The concept of high quality resource:

In the dictionary of the Market Economy: "High quality human resources are those who have a certain level of knowledge, expertise, ability and skill with their own creative



work in practical conditions. It can contribute to the development of society and of humanity". [10]

High quality human resource in the period of industrialization and modernization includes leaders and managers; scientific and technological staffs - those who have university or college degrees or higher and a group of skilled technical workers. [8]

Thus, high quality human resource to meet the target of industrialization and modernization refers to qualified workers with professional skills in a specific industry, according to the classification criteria of professional labor, certain techniques; have the capacity and skills to work well, be creative and dynamic in order to adapt to changing environment and be able to change themselves to suit the requirements of changing environment; they have the ability to creatively apply knowledge and skills that have been trained in the labor process to improve labor productivity, quality and efficiency. This high quality human resource in the period of industrialization and modernization must become a key factor contributing to the economic restructuring of the country in the direction of industrialization and modernization.

The concept of industrialization and modernization:

In Vietnam, the Party raised the concept of industrialization and modernization as follows: "Industrialization and modernization is a radical and comprehensive transformation of production, business and service activities and socio-economic management, from the use of manual labor is mainly used to popularize labor power with advanced technologies, means and methods, based on the development of industry and scientific and technological advances, to create high labor productivity".

The concept of high quality human resource development:

In the ILO's view on labor, "the development of high quality human resource is not only about skillful occupation but also of capacity development, which is to make people have the need to use that capacity to advance to get a good job as well as satisfy the career and personal life".

Development of high quality human resource to meet the industrialization and modernization objectives of the country, which are activities aimed at creating human resources of high quality, structure and quality to meet the demand of human resources. The process of innovation and socio-economic development of the country in the direction of industrialization and modernization.

The typical and the target of industrialization and modernization

The typical and the target of industrialization and modernization:

The above concept shows that the process of industrialization and modernization in our country must closely combine the two contents of industrialization and modernization in the process of development. This process, not only industrial



development, but also economic and labor restructuring in each sector, each sector and in the whole national economy in the direction of technology and technology with the typical elements of industrialization and modernization are as follows:

Table 1: The typical elements of industrialization and modernization [9]

No.	Elements	<i>Industrialization</i>	<i>Modernization</i>
1	Scientific basis	Classic physics	Modern physics
2	Technical facilities / labor tools	Machine work	Automatic control
3	Technological basis	Mechanics, electricity, electronics, chemistry, macrobiology	Automation, mechatronics, chemistry, microbiology, information technology
4	Elements of human - machine systems	Human controls	Automatic machine controls to follow the program
5	Knowledge	Knowledge is spiritual, superstructure	Knowledge becomes the force of material production
6	Classification of labor	- Labor of mind - Manual labor	- Interference between mental and physical labor; Information and non-information labor
7	Characteristics of the economy	Industrial economy	Industrial economics and knowledge economy

The targets of industrialization and modernization in Vietnam:

In Vietnam, industrialization and modernization has been identified from the third Party Congress (1960); since then, always consistent with the policy, but there is a reasonable adjustment of content, model, objectives to suit each stage. At the twelfth Party Congress (2016), [2], the views on industrialization and modernization continue to be supplemented and developed to suit the new situation of the country and the trend of international integration, with the following targets:

To create conditions for changes in the substrate for social production, increase labor productivity, increase human control over nature, economic growth and development, improve people's living conditions and stabilize the situation. economic, political and social, contributing to the victory of socialism.

To create material conditions for consolidating and strengthening the State's economic role, enhancing the managerial capacity, the capability to accumulate and develop production, create more jobs and raise incomes. the development of comprehensive human freedom in all socio-economic activities.

To create favorable conditions for science and technology to quickly develop to an



advanced and modern level. Strengthening the material and technical force for national defense and security; ensuring the economy, politics and society of the country are increasingly improved in the direction of industry and modern.

The above analysis shows the direct relationship between industrialization and modernization with production forces. Industrialization and modernization is to socialization of economic-technical production in the direction of socialism. It has the effect, meaningful and comprehensive. Therefore, our Party determines: "Developing the productive forces, industrializing the country in the direction of modernity ... is the central task".

The requirements for high quality human resource development to meet the target of industrialization and modernization in Vietnam

Human resource is the decisive factor for the development of each nation. In the context of accelerating national industrialization and modernization, human resource development is considered one of the three breakthroughs of the country's socio-economic development transformation strategy. Human resource development becomes the foundation of sustainable development and increase national competitiveness. Therefore, the development of high quality human resource for industrialization and modernization of the country meets the following requirements:

Firstly, ensure that human resource is one of the three breakthroughs for industrialization and modernization, successfully implementing the objectives set out in the socio-economic development strategy, such as transforming the growth model from the owner weakening the width to developing a reasonable width and depth; strengthen the application of science and technology; economic restructuring, labor restructuring; increase labor productivity, effectively use social resources.

Secondly, exploiting, using effectively, saving human resources, besides, on the one hand, it creates opportunities for the economy to develop strongly, on the other hand, creating great pressure on job creation, vocational training and labor restructuring.

Thirdly, the demand for vocational training of workers is higher in both quantity and quality due to higher incomes, due to the demand for economic restructuring as well as the demand for labor migration.

Fourthly, the development of human resource should meet the requirements of more balanced development between regions, industries and economic sectors arising from the requirement of maintaining political stability, ensuring security, national defense for the development of the country.

Fifth, high quality human resource must be adaptable to the scarcity of scarce natural resources and a decline in financial investments; it is possible to propose solutions to increase the opportunities for development in the context of rapid change of technological generations, correlating economic strength among regions.



The content of developing high quality human resource to meet the target of industrialization and modernization

Development of high quality human resource ensure sufficient quantity and structure in line with the requirements of industrialization and modernization

The basic characteristic of high quality human resource is the number of labor. For each country, it is expressed in the number, age and gender structure, level and distribution of human resource in industries in the economy in order to achieve the objectives and tasks of the organization and of the country in the present or future. Therefore, the ensuring the human resource of the country with adequate number of employees with the appropriate structure is the issue should be concerned about properly. Ensuring proper quality and quantity of human resource in line with planning, attracting and selecting human resource to ensure that the country has enough labor force for each period to meet the task of industrialization and modernization.

Development of the quality of human resource to meet the target of industrialization and modernization

Development of the physical of human resource:

In order to bring into full play their ability to meet and fulfill their assigned tasks, the laborers must be physically fit, have good health and professional skills for process production in continuous and prolonged time and always have the consciousness, mental refreshment to promote high creative capacity of each employee.

Therefore, in order to improve the capacity of the human resource, physiological and physiological standards are required to be suitable for the local business. As a basis for the selection of labor, production of labor force of human resource.

Development of the professional qualifications of human resource:

Development of the professional qualifications is important in improving the quality of human resource. In the current trend of advancement of science and technology, workers need to be equipped with higher professional knowledge, which is the foundation for improving their skills of work, the knowledge necessary for the labor process to achieve high efficiency. In order to improve professional skills, the country needs to implement training plans, develop short-term and long-term training programs to improve and update knowledge for the country's human resource.

Development of the personality and aesthetics of laborers:

Moral qualities and behavior of workers directly affect the quality of human resource. Hence, development of high quality human resource not only focuses on the physical and mental aspects, but also on the ethics of the workforce.



Development of the teamwork skills

Development of the teamwork skills is the development of interpersonal skills within a team, in order to effectively promote the potential development of all members. For the top of group leaders, skills development should be developed to form key roles in the group, manage meetings, develop teamwork processes, create and stimulate potential. For other members of the team, it is necessary to acquire the necessary skills such as problem solving, communication, negotiation, negotiation, decision making.

Characteristics of Vietnamese human resource

According to the teachings of President Ho Chi Minh: "To build socialism must have socialist people". Therefore, it can be inferred that the industrialization and modernization of the country requires a people of industrialization and modernization.

Vietnam is on the way to industrialization and modernization with its economy characterized by three civilizations interwoven with civilized agriculture, civilized agriculture and some elements of civilized knowledge.

In recent years, the general level of the labor force of our country has been improved and the level of qualifications has gradually improved. Below are some indicators reflecting the size and structure of labor in 2016 as follows:

The percentage of trained workers aged 15 years and over who are working in economy classified by professional qualification

Table 2. Percentage of trained workers classified by professional qualification

No.	Degree training	Percentage (%)
1	Not trained in technical qualifications	79.4
2	Trained in technical qualifications:	20.6
	- Vocational training:	5.0
	- Professional range:	3.9
	- College:	2.7
	- University or higher:	9.0

[Source: General Statistics Office of Vietnam][5]

In the report submitted by the Vietnamese Government to the National Assembly on November 15, 2004, the rate of trained laborers, vocational secondary schools, colleges, universities and post-graduate schools was 13%; in 2006, this rate was 18.4% and according to the General Statistics Office of Vietnam presented in Table 2, the proportion of trained laborers accounted for 20.6% with college, university/professional range/vocational level is 1/0.33/0.43. Thus, the number of technically qualified workers is very low among the current labor force in Vietnam, but is very unbalanced. On the



other hand, highly qualified graduates workers (college, university and above) currently account for 56.8% of the total number of trained professionals and account for a very small share of the total labor force the whole society (11.7%).

Structure of technical labor by economic sector

Although the share of technical labor in the total labor force in the country is very low, distribution by economic sector is very unreasonable (Table 3).

Table 3. Structure of technical labor by economic sector

No.	Economic sector	Number of employees (,000 people)	Number of employees with professional qualifications (,000 people)	% compared to number of employees	% compared to professional qualifications
1	Industry – construction sector	13,061.5	4,022.9	24.5	23.8
2	Agriculture, forestry and fishery sector	22,315.2	3,682.1	41.9	12.5
3	Service sector	17,926.1	3,275.5	33.6	17,3
4	Total	53,302.8	10,980.4	100.0	20.6

[Source: General Statistics Office of Vietnam][5]

According to statistics on labor employment in Vietnam in 2016, the total number of rural laborers is 22,315.2 thousand people, accounting for 41.9% of the total labor force of the country. Of which, the proportion of technical workers in agriculture, forestry and fishery is low (12.5%); the rate of technical workers in the industry construction and service sectors also accounts for a modest proportion, reaching only 23.8% and 17.3% of the total labor force of the country.

With the current number and structure of labor in Vietnam, about 60% of Vietnam's population are farmers, while the remaining 40% of the population are in operation. Therefore, in the implementation of the objectives, the Vietnamese people in addition to the advantages of diligence, flood, injury, hard, emotional ..., there are still features characterized by farmers. job freedom; slow, not necessarily the characteristics of industrial labor; locality, alien to integration; greedy, heavy theory, lightweight practice, less active, creative, lack of competitiveness, no risk.



The content of developing high quality human resource to meet the target of industrialization and modernization in Vietnam

In order to realize the target of industrialization and modernization of Vietnam in the context of international and deep international economic integration, development of high quality human resource should identify the objective of development of industrial labor force with full potential, to compete and actively work in modern conditions, specific development should meet the requirements on practicing capability; social competence; adaptive capacity; creative capacity; the ability to create business and self development capacity.

Developing a high quality human resource through training and provide further training

To develop a high quality human resource to meet the target of industrialization and modernization in Vietnam, the first step is to accurately forecast the basic criteria for the development of a high quality human resource as the population size forecast; on the labor force; GDP per capita; rate of trained labor; number of laborers trained professional skills ... The correct forecast of the above criteria will help the country to know the ability of developing a high quality human resource to meet the target of industrialization and modernization in certain time.

In Vietnam, the method of forecasting the demand for high quality human resource in accordance with the investment capital for science and technology in economic state organizations and companies in Vietnam for the period of 2016-2020 is forecasted with result as follows:

Table 4. Forecasts on some basic indicators of the development of high quality human resource in the year 2020

No.	Criteria in year	2016	2020
1	Population (<i>,000 people</i>)	92,700	98,000
2	Labor force working in the economy (<i>,000 people</i>)	53,302.8	59,200
3	GDP per capita (<i>USD, current price</i>)	2.18	2.85
4	Number of universities and colleges	517	650
5	Rate of trained labors(%)	> 60%	> 70%
6	Number of people trained in high-level occupational skills (<i>thousand people</i>)	10,980.4	15,000
7	Industry development index	46%	46 - 55%
8	Agricultural development index	23.5%	15 - 20%
9	Service sector development index	42,3%	45% - 55%

[Source: Ministry of Planning and Investment of Vietnam][7]



According to a survey by the Ministry of Planning and Investment, the forecast of increasing demand for high quality human resource by companies and state organizations in Vietnam in the 2016-2020 period is as follows:

Table 5. Forecasts increased demand of high quality human resource in 2020

No.	Level of training	High quality human resource is available in 2016 (,000 people)	High quality human resource forecasts to increase in 2020 (,000 people)
1	Trained labors: - College - University or higher	10.980,4 4.172,52 6807,88	3.204,15 1.242,30 1.961,85
2	For each sector: - For industry - construction sector: - For agriculture, forestry and fisheries sector: - For service sector:	10.980,4 4.022,9 3.682,1 3.275,5	3.204,15 1.206,87 1.014,63 982,65

[Source: Ministry of Planning and Investment of Vietnam][7]

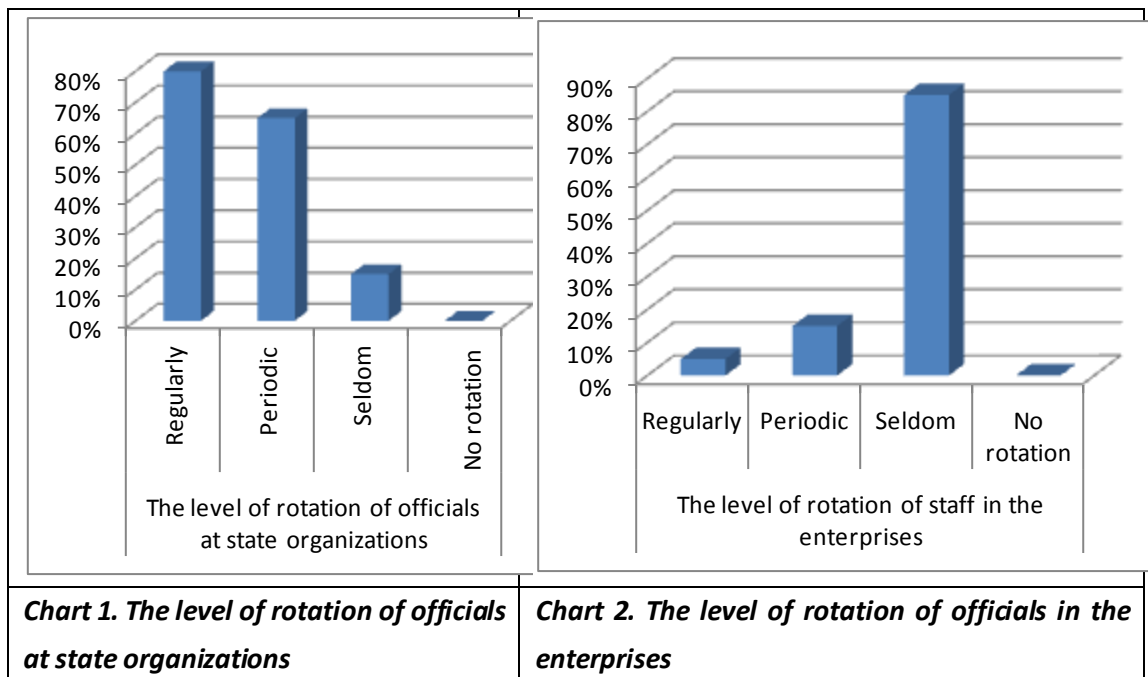
Based on the forecast of demand for high quality human resource in Vietnam to meet the goal of industrialization and modernization, in the current period, Vietnam has gradually adjusted the structure of human resources training in terms of industry structure and level training is an objective requirement and is an urgent task on the national macro level as well as the scope of each level of university, college, vocational and vocational training, especially the training structure in each field of training. At the national level, as predicted by the university network planning model, the ratio of universities - colleges/ professional range/technical workers will shift from 1/0.33/0.43 to 2016, trying to adjust this ratio by 2020. is 1/3/7. [3]. In order to develop the human resource in sufficient quantity and quality, in the past years, Vietnam has increased the scale of training of practical engineers and opened more vocational training colleges replacing part of the intermediate training professionals no longer fit the needs of use in some industries today.

In addition, the development of high quality human resource through training, fostering, our country is also determined in each sector, each sector, the ratio is different, the structure of training occupations are also structural adjustment training in the fields of engineering and technology, agriculture, forestry and fishery ... should reduce the proportion of training in business administration, banking and finance, and law, which has exceeded demand due to the increase in scale over the past years.

Developing high quality human resource through staff rotation within the organizations and enterprises

Developing quality human resources through the movement of workers within the organization in order to provide workers with a broad understanding of the work to cope with changing jobs in the business environment with many changes. Only when employees have broad knowledge, they can manage and collaborate in working together to increase productivity for the organization. In addition, we need to focus on developing the organizational.

To study the results of the development of high quality human resource through the rotation of internal staff in 20 state agencies and 30 enterprises in Hanoi in 2016, with results as follows:



With the results of in-depth surveys of state agencies on staff rotation, the results are as follows:

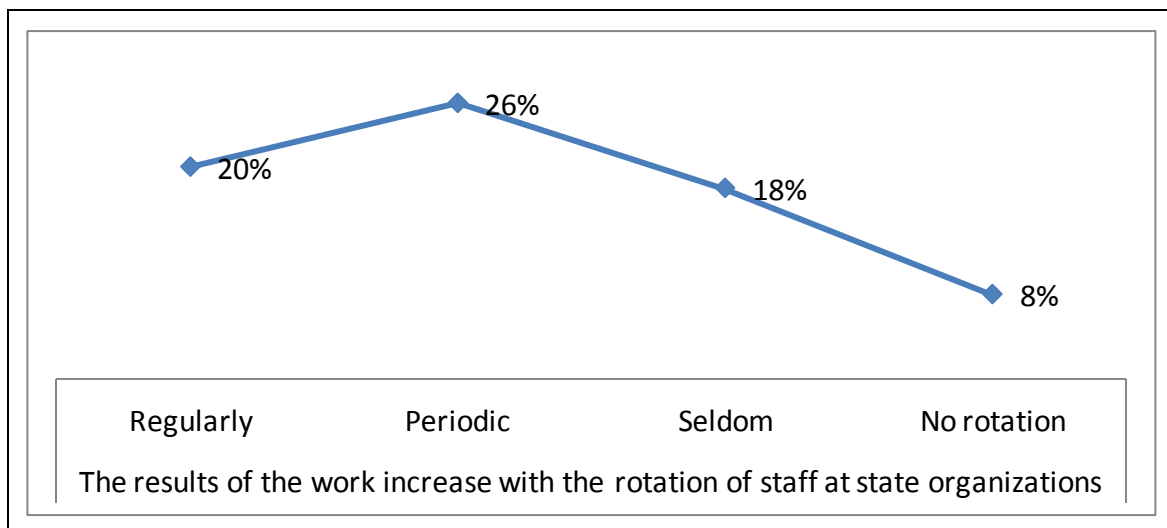




Chart 3. The results of the work increase with the rotation of staff at state organizations

With the statistics shown on the charts, the regular rotation of staff in state organizations, this has helped to increase the performance of workers by 20%; while there is a waiting period for certain staff rotation, this level will increase the performance of the workforce in state organizations by as much as 26%. Thus, the rotation of staff working in the organizations will have a positive effect in the development human resource to meet the target of industrialization and modernization in Vietnam.

In addition, the rotation of staff in the organizations will help to focus the strength of the collective and the individual in the interaction to support and complement each other in the work. The role of teamwork is increasingly recognized and appreciated in the development of high quality human resources to meet the target of industrialization and modernization of the country.

Developing high quality human resource through quality improvement for each employee

To promote maximize the ability of workers to complete the work assigned well, the employee should have sufficient physical strength, health with professionalism, toughness to meet the requirements of work process in continuous, long time condition. The employee must be active and proactive in the implementation of the work and apply the knowledge that is trained in the work and adapt to changing environment to promote high creative capacity of each employee in solving work.

In order to implement the development of high quality human resource in this approach, over the past years, Vietnam has the highest per capita expenditure on education per capita: on average, about 12% of GDP per year, in the United States only 8%, China is 4.6%...; according to the income of the household, the proportion of spending on education in our country is even higher. The state budget for education and training in 2016 is 20%, it is expected to be 28% in 2020. [4]. In addition, Vietnam now has lots of incentive policies, financial incentives as well as many other financial decisions such as student loans bank to study, support the development of education. It means that the whole country is making great efforts to develop education in particular and to develop a high quality human resource in general.



Conclusions and recommendations

Human resource in general and high quality human resource are considered as one of the most important intangible resources that determine the growth and competitiveness of each country. Recognizing that importance, our Party has identified the development of human resources, especially human resources is one of three strategic breakthroughs and the resolution of the 12th Congress of the Party continues to emphasize: “Mechanisms, policies and solutions for human resource development, especially high quality human resources to meet the requirements of socio-economic development”. In order to develop high quality human resource to meet the target of industrialization and modernization in Vietnam, some solutions as follows:

Firstly, it is necessary to renovate and raise awareness about the role of high quality human resource development in economic restructuring and labor restructuring in the direction of industrialization, modernization and development socio-economic stably, sustainably.

Secondly, renovate state management on the development of high quality human resource to meet the target of industrialization and modernization in Vietnam.

- Renovating the management of high quality human resource training in parallel with renovating the recruitment and use of high quality human resource after training.

- To set up and organize the implementation of appropriate policies and mechanisms for the development of high quality human resource in the field, including contents on the working environment, employment policy, income, living conditions, priority policy, attraction for high quality human resource of Vietnam.

Thirdly, renovate human resource training activities in the direction of modernization in line with the practical requirements of industrialization and modernization in Vietnam.

- Improving the quality of training, on the basis of strengthening the conditions to ensure the quality of training, especially the quality of human resource, to develop output standards in line with labor demand.

- Renovate training methods to meet diverse needs of learners; at the same time, to meet the target of industrialization and modernization in Vietnam.



References

Socio-Economic Development Strategy 2011-2020, National Political Publishing House, 2014.

Communist Party of Vietnam, *Documents of the twelfth National Party Congress*, National Political Publishing House, Hanoi, 2016.

Decision approving the Vietnam Human Resources Development Plan for 2011-2020, National Political Publishing House, 2014.

Ministry of Education and Training (2005), *Scheme of education reform in Vietna*, Education Publishing House, Hanoi.

General Statistics Office of Vietnam (2016), *Employment Survey Report*, Statistical publisher, Hanoi.

General Statistics Office of Vietnam(2015), *Statistical publications*, Statistical publisher, Hanoi.

Ministry of Planning and Investment of Vietnam (2016), *Socio-economic development indicators*, financial publisher, Hanoi.

Nguyen Chi Tan, Tran Mai Uoc, Nguyen Van Phuc (2011), *Human resource of high quality with the cause of industrialization and modernization*, Journal of human resources development, No. 3 (24).

Nguyen Minh Duong, Phan Van Kha (2006), *Training human resource to meet the requirements of industrialization and modernization in the context of market economy, globalization and international integration*, Hanoi National University Publishing House.

Nguyen Huu Quynh (1998), *The Market Economics Dictionar*, Institute for the Study and Propagation of Polytechnic Knowledge, Hanoi.

Book

Vu Thuy Duong and Hoang Van Hai (2010), *Human resource Management Book*, Statistical publisher, Hanoi.

Nguyen Van Diem and Nguyen Ngoc Quan (2012), *Human resource Management Book*, social labor publishing house, Hanoi.

Tran Khanh Duc (2014), *Education and human resource development in the 21st century*, Education Publishing House, Hanoi.