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SOME GENERAL THEORETICAL ISSUES ON SCIENTIFIC HUMAN RESOURCE DEVELOPMENT

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ABSTRACT
In each historical period, each stage of social development requires an appropriate resource. Those are natural resources, financial resources, scientific and technological resources and human resources. In particular, human resources, especially scientific human resources, are always considered as important resources, play a great role in the growth and development of society. Within the scope of the article, the author analyzes a number of theoretical issues about scientific human resources and scientific human resource development such as: Concept, characteristics, roles and content of scientific human resources development.

Key Words: Human resources, scientific human resources, scientific human resource development.

1. INTRODUCTION
Nowadays when the integration and development trend of countries in the world is taking place strongly, the competition is taking place fiercely, but the victory will only belong to those who have higher "intellectual resources". Scientific human resources will be one of the decisive factors for that success, and especially for countries in the process of industrialization and modernization. Vietnam is in the process of accelerating its industrialization and modernization in the context that the scientific and technological revolution is taking place all over the world, globalization is increasing, international integration has become the laws for the development of all countries. This is a favorable condition and opportunity for us to apply scientific and technological advances to accelerate industrialization and modernization of the country to gain a head start by taking a shortcut. In order to effectively take advantage of opportunities and overcome the challenges created by the above context, it is necessary to have strong internal resources, especially human resources with strong political courage and high intellectual quality, being capable of building, developing and effectively applying mankind's science and technology to the specific conditions of our country.

2. RESEARCH CONTENTS
2.1. The concepts of human resources
Currently, there are many different concepts of human resources. The World Bank says: Human resource is understood as the full potential of human capital including: knowledge, skills, and health that each individual possesses. The United Nations says: "Human resources are all the knowledge, skills, experiences, abilities and creativity of people that are related to the development of each individual and the country" [1, p.125]. This concept considers human

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resources mainly in terms of human quality and its role and strength in social development. Therefore, the United Nations has called on countries to pay more attention to human resources, because investment in human resource development has a higher rate of capital recovery than other investments. This investment's benefits are more evenly spread than investment in other resources.

From the point of view of the Communist Party of Vietnam: "Human resources are the most precious capital, playing a very decisive role for our country when financial resources and material resources are limited. Those resources are laborers with high intelligence, good workmanship, good qualities, and they are trained, fostered and promoted by advanced education associated with a modern science." [2, p.11]. With such a viewpoint, for a long time, our Party has advocated to implement the goal of education to improve people's knowledge, train human resources, foster talents, and consider investment in education as an investment in social development, not only in an investment for social welfare.

2.2. The concept of scientific human resources and scientific human resource development.

To understand the concept of scientific human resources, we first need to know what science and the scientific research are?

Science is known as a system of human knowledge about nature, society and thinking, about the objective laws of the movement and development of things and phenomena in the world.

According to Vu Cao Dam: "Scientific research is generally aimed at satisfying the need to perceive and renovate the world, that is discovering the essential properties of things and phenomena; detecting the movement laws of things and phenomena; applying the laws to create solutions that affect things and phenomena" [3, p. 20].

According to Nguyen Van Le: "Scientific research is the exploring of the nature of things in order to satisfy the cognitive needs, and at the same time create solutions to affect things and transform things according to their intended use." [4, p. 18].

In general, scientific research is an activity of seeking, examining, investigating, or experimenting. Based on the data, documents, knowledge...obtained from experiments, investigations, observations, collection...to discover new things of the studied object, thereby creating the more valuable, higher technical means and methods to transform objects according to human purposes.

Scientific human resources is a concept used to refer to those who carry out scientific research. They are bachelors, masters and doctorates, associate professors, professors. Or some people may not have formal degrees, but they also do similar jobs as researchers, scientists, participating in the creation of new knowledge, products and processes, and the creation of new methods and systems.

Similar to the terms "economic growth and development", the term "human resource development" is associated with the perfection and improvement of human resources quality. In the development trend of the times, developing the high-quality human resources is a basic and

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long-term requirement of all countries. Human resource development is the process of changing the quantity, quality and structure of human resources in a positive direction; and is also the process of increasing the material and spiritual values for employees.

With such a view and approach on human resource development, in my opinion, scientific human resource development is an upward movement of this human resource in terms of quantity, quality, structure to meet the development requirements of the country in the context of strong development of science, technology and the knowledge economy.

2.3. Characteristics of scientific human resources

Firstly, scientific human resources must have qualifications.

Reality has proven that scientific research is very difficult intellectual work, so it requires researchers to have a high level of expertise. To do the scientific research, in addition to basic knowledge, researchers need to have a deep understanding of their research area. It means, the specialized knowledge is required. Otherwise, their research results only stop at experiential knowledge, it is unlikely that they can be applied to scientific practice as well as labor practice. Moreover, those experiences need to be checked and determined the application scope...by people who have high expertise and have experience in surveying and researching this work. In many cases, scientific researchers need not only knowledge of their study field, but also a certain understanding of related fields.

Secondly, scientific human resources must have scientific thinking methods. Scientific thinking is a high-level stage of the cognitive process, which is carried out through a certain system of thought manipulations in the minds of scientists (or those who are using scientific knowledge and properly applying the requirements of scientific thinking) with the help of a system of "tools" of scientific thinking (such as languages and forms of scientific thinking) to mold premise knowledge, built into new scientific knowledge, in the form of new concepts, judgments, inferences or hypotheses, theories, new scientific theories, reflecting the perceived objects more accurately, more fully, more deeply, more authentically.

Thirdly, scientific human resources must be able to detect problems and consider problems for research. Before starting to study a problem, the researcher needs to determine whether the problem is urgent to study or not. This helps the research problems to be close to reality and highly applicable.

In addition, scientific human resources also need to have the qualities of a true scientist, which are: having a passion for scientific research; sensitive to research issues; persistent research; careful and meticulous in the research process; honesty with research results…

2.4. Contents of the scientific human resources development

Regarding qualities

The qualities of scientific human resources not only create the general quality but also are an important factor determining the quality of this human resource. The qualities create the soul and strength of scientific human resources. The qualities of scientific human resources are first expressed in political quality. Political quality is a very important factor that helps scientific researchers to have a firm courage in the face of social changes. On that basis, conducting the comprehensive educational research activities, orienting for the implementation of the appropriate and effective research activities and objectives.

Regarding the professional qualifications

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The qualifications of scientific human resources are, first of all, manifested in the ability to access and update the modern scientific and technological knowledge of the world, innovations in the working practice to apply directly to scientific research activities. The qualifications of scientific human resources are also reflected in the program they are trained in, in the ability to absorb the amount of knowledge in the learning and working process.

Due to the specificity of scientific research activities is to seek, consider, investigate, or experiment.. Based on the data, documents, knowledge,...achieved from the scientific research experiments to discover new things about the nature of things, about the natural and social world, and to create the more valuable, higher technical means and methods. Scientific researchers who want to carry out scientific research projects must have certain knowledge about their research areas and it's important to practice the self-reliance and methodical work. Moreover, scientific research is a creative work. Therefore, in addition to the accumulated knowledge, to meet the requirements of the job, scientific human resources need to have the ability to approach problems in many directions.

Regarding the research capacity

For the scientific human resources, capacity is understood as based on the system of knowledge that scientific researchers are equipped with. They must form and master a skill system to conduct the effective scientific research. The skills of a scientific researcher is understood as the ability to apply the acquired knowledge to the scientific research activities and turn it into the research products. Scientific researchers must have good qualifications and capacity to be able to solve problems posed in the research process. The evaluation of the quality and the scientific research capacity of this team is not only based on the number of research works but mainly on the value and effectiveness of those research works.

2.5. Roles and factors affecting the development of scientific human resources

Scientific human resources play an important role in basic research and application - implementation. This team has focused on the key theoretical and methodological issues of basic research science. They have gradually brought Vietnamese science to access the world scientific knowledge, at the same time, they have had new contributions to the development of science and technology in Vietnam, thus contributing to meeting the practical requirements of the reform cause, serving the country's industrialization and modernization and international integration.

Scientific human resources have the role of “engagement” for the purpose of discovering, disseminating, and popularising the scientific knowledge. A scientific research project is only complete when the results are published in a scientific journal with peer review and serious criticism. Here, transparency of scientific research is important, because it is not only a requirement of science but also an aspect to distinguish science from non-scientific. In addition, the team of scientific researchers also directly implements the research requirements of the relevant State-level programs, with the most focus on people, culture and education to meet the requirements of the industrialization and modernization of the country.

Looking back at the scientific research achievements in the years of innovation, it can be seen that scientific human resources have made an important contribution to the construction and development of the country, have met the requirements of the cause of economic innovation,

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have solved many timely problems posed by social practice in terms of theoretical basis, contents and implementation method. Scientific research works not only ensure the scientific basis for a number of important decisions and policies of all levels, departments and branches of the state, but also provide solutions to implement the Resolutions of the Party and the National Assembly on scientific innovation, thus solving many pressing political tasks of the branches.

For training facilities, the scientific research is one of the important factors in enhancing the quality of training, improving the capacity of each individual in each training facility, contributing to self-improvement in the trend of deep international integration and information explosion era, new creations, new inventions and new scientific and technological knowledge are growing strongly in all fields of the economy-society.

The scientific research in the fields of social sciences and humanities plays an important role in providing scientific arguments for the planning of the Party's guidelines and policies, and the State's policies and laws; affirming the history of national formation and development; protecting the national sovereignty and territorial integrity; preserving Vietnamese values and cultural identity.

Factors affecting the development of scientific human resources

Firstly, the attention of leaders, managers and the efforts of scientific human resources themselves. Reality has proven that management leaders always play an important role in promoting the development of scientific human resources. If the management leader is interested in scientific research, interested in the research staff with the appropriate compensation policies and the recognition of the merits and achievements of this team, then scientific human resources in each agency and organization will surely thrive in both quantity and quality. Compensation policies include: To increase funding and investment in facilities for researching; the talented young scientists are given priority to participate in or chair the scientific research projects; to encourage the promotion of the young and capable scientists to higher positions...

In addition to the attention of leaders and managers of agencies and units, professional qualifications, research capacity, sensitivity to social changes are also factors that promote the development of the scientific human resources. The scientific research staff with high professional qualifications, training and research experience, they themselves will surely achieve high results in the research work, making an important contribution to enhancing the quality of scientific research staffs of the agency or unit they work for. Moreover, the proficiency in foreign languages, informatics, the application of information technology, and the proficient use of software in the research are also important factors promoting the development of scientific human resources. Thus, it can be said that, the attention of leaders and managers to the team of scientific researchers and the efforts of the researchers themselves will be the factors that directly affect the development of the scientific human resources.

Secondly, the impact of education and training. Education and training are factors that directly affect the development of productive forces, determine the growth and socio-economic development of each country because the qualifications, capacity and quality of employees are

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products of the education and training process. All countries recognize that a complete, synchronous and comprehensive education will create scientist who are the knowledgeable, skilled, dynamic and creative workers. Therefore, education and training will directly determine the development of the quality of scientific human resources, because, for human resources in general and scientific human resources in particular, education and training is a direct decisive factor to the formation and development of worldview, moral sentiments, and personality perfection. For society, with the cause of scientific research, education and training are the process of accumulating a human capital to provide knowledge to meet the society development.

Thirdly, the impact of science and technology development in the context of globalization. The development of science and technology in the world or of any country in the region in the context of current globalization also greatly affects the development strategy of a scientific research organization, then it will be the guideline to promote and decide the development of scientific research staffs in terms of both quantity and quality. The development of science and technology requires scientific researchers to gradually improve their professional qualifications and research capacity to meet the requirements of the socio-economic development in general and the science-technology development in particular.

Besides, the development of agencies and units, in which scientific researchers are working, is also a factor affecting the development of scientific human resources. The development of agencies and units requires each individual participating in scientific research to further cultivate professional qualifications, research capacity as well as political qualities to meet the requirements of the development of their agency or unit.

3. CONCLUSION

Human resources today are considered as an important factor of socio-economic development, then, it is the economy - society that enjoys the fruits of that development. Of the total human resources, scientific human resources are the key human resource of the country, have a special role and significance, determine the economic growth and development of the country. Therefore, each country must have a priority policy in building and developing this human resource. The study of general theoretical issues about scientific human resources and scientific human resource development will help us better understand the nature and decisive role of this human resource as a resource compared to other resources in the development process of the country in general and of each locality in particular. As a result, there are effective solutions to build and develop scientific human resources to meet the requirements of socio-economic development.

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