

**BUILDING OF HUMAN RESOURCES
FOR SCIENTIFIC MANAGEMENT AND SCIENTIFIC RESEARCH
ACTIVITIES IN VIETNAM**

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Abstract:

The building of human resources not only deals with procedures and measures to increase the human resources in term of quality and quantity but also create the opportunities to promote the self-development of human resources. The building of human resources in general and the one for scientific management and scientific research activities in particular plays important roles for development of science and technology (S&T) of every nation and give active contributions to socio-economic development in global aspects. This paper is focused on clarification of the notion of “building of human resources”, subjective and objective actors in this process, the building of human resources for scientific management and scientific research activities then provides contents and basic concepts to build human resources for scientific management and scientific research management activities in Vietnam.

Keywords: Human resources; Science management; Scientific research.

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1. Introduction

Practice of S&T development in Vietnam shows that the mindset and the awareness of the roles of human staffs in field of scientific management and scientific research activities, the guiding concepts and development policies for development of human staffs have been confirmed and indicated clearly in the Party’s documents and resolutions on S&T development since the last decade of the XX Century and the early years of the XXI Century. The practice in certain ministries and local administrations, however, shows an ongoing loosen concentration of attention on recruitment, training and use of staffs working in field of science management and scientific research activities which limit the implementation of S&T development policies. The actual lack of qualified, competent and leading staffs in field of scientific management and scientific research activities who are capable of solving great science problems of the country, and the gap in capacities between generations are put in urgent agendas for studies and identification of measures for settlement.

2. Notions of the building of human resources

The notion of the building of human resources is interpreted as dealing not only with procedures and measures to increase the human resources in terms of quality and quantity but also the creation of opportunities to promote the self-development of human resources to meet the need of the country's development.

According to contents of building of human resources, in theoretical aspects as well as in practical aspects, there is not fully unified interpretation of the notion. The incomplete unified interpretation of the notion of "building of human resources" generates from different objectives and approaches of actual organizations and individuals. International Labor Organization (ILO) interprets that the notion of building of human resources covers not only the high level of qualification and training in general but also the development of capacities and the effective use of these capacities in works as well as satisfaction of vocational aspirations and individual life [9]. United Nations Development Programme (UNDP) interprets that the building of human resources is to assign rights to people through enhancing their education and building their capacities then they can themselves to improve the life's standard of not only their families but also their enterprises, communities and the whole society [10].

Among studies made in Vietnam on the matter of the human and human resources, the point of view by Ho Sy Quy attracted a special attention. He considered that the building of human resources is to train and to develop the human identities and hidden capacities to make them useful and happy in life. It is also to create opportunities and to issue guides and methods for the whole population to get chances for education and training, and then to make the most adequate decision for national needs to improve the life of population [4, p.41].

Following the above noted concepts of the building of human resources, this paper presents the contents of works to build human resources, namely:

First, building of human resources through training and capacity enhancing activities. Training and capacity enhancing is one of the ways to access knowledge on objects and phenomena in the world (the natural and social worlds and the mindset in global). They are also activities to get and to transfer knowledge and experience from generation to generation, in direct or indirect ways of information propagation. In process of human development, the volume of human knowledge about the world gets increased and diversified. Today, the process of knowledge transfer from the generation to other generation is expanded through active supports of modern technologies and technical equipment. The volume of knowledge

the people is received through training and capacity enhancing activities, however, is only part in the total volume of created human resources, the remaining part is generated from capacity enhancing through practical activities. Interpreting this, on basis of limited activities of learners, knowledge acquired at this stage mainly is of theoretical nature (theory prevails practice). From another side, the starting point of cognitive process of trainees is to meet needs to enhance and add their scientific knowledge. Therefore, the knowledge that people get at this stage only plays the basic and background roles for their further application in working practice.

Second, building of human resources through practical works. When participating in working process, the human activities get attached to the practical reality of socio-economic development. At this stage, the practical reality is just the starting point of cognitive process. The practical reality requires new knowledge and capacity enhancement to settle, in return, problems posed by practical reality.

K. Marx wrote: “The combining of labor works with mental and sportive activities for all the children, over certain age, is a method not only to enhance social production but also to produce the globally developed humans” [tr.3, p.688].

Therefore, in the idea of K. Marx, the building of human resources was rooted from practical reality. The human practical reality gets extended since the activity capacities of the human today change up. Human activity capacities are results of cognitive process and needs to settle problems posed by practical reality. It is a mutually linked and synergy process. By this way, this changing process occurs, repeats and, then, leads to develop and improve human knowledge.

Third, building of human resources through the extending of opportunities of choice to liberate creative forces. “The human development is in fact the development of capacities. The choice by humans occurs when opportunities of choice and the capacities of choice appear with humans. The appearance of opportunities of choice partially depends on the facts if social institutions get open and how capacities of the community can facilitate the appearance of opportunities of choice. In global view, the appearance of opportunities also reflects the capacities of the society where the human lives and does activities. These capacities are the combination of capacities of the people living in that society and even of those having lived previously” (by *Pham Thanh Nghi*, [5]). The extending of opportunities of choice for people is also the fact to create driving forces for people to take pro-active moves to participate in the process where they build up themselves their capacities. Only by this way, the human can mobilize his

capacities and creativity in practical activities in general and in scientific management and scientific research activities in particular, the latter being a field which requires a very high level of creative mindset.

3. Subjective and objective actors in building of human resources in field of scientific management and scientific research activities

The Philosophy Dictionary notes: “Subjective actors are those entities which conduct actively activities, have cognitive capacities, have consciences and wills, and objective actors are those entities which have the cognitive activities and other activities that subjective actors are directed to. Subjective and objective actors are considered in actual inter-links which can be shifted and transferred from one role to another one. In these inter-links one actor can be subjective one, but in other links, it can become objective one, and inversely” [8, pp.92-93]. Therefore, when considering the definition of subjective and objective actors of building of human resources, it is needed to consider the actors in actual inter-links. Every subjective actor has its corresponding objective actors, being subject to the rate, scope and scale of human resources in scientific management and scientific research activities.

The building of human resources in field of in scientific management and scientific research activities requires the involvement of different subjective actors in the whole society. This involvement can be direct or indirect, extended or narrow, which are subject to the positions, roles, functions and tasks of every subjective actor in the society. In Vietnam, subjective actors in building of human resources in field of in scientific management and scientific research activities can be divided into the main three groups, namely: (i) First group includes macro level organizations of the Party and the State; (ii) Second group includes organizations which use human resources, for example research institutes, universities, enterprises; and (iii) Third group includes individuals in the system of human resources for scientific management and scientific research activities.

Respectively in every level, subjective actors which build human resources have their corresponding objective actors. In macro levels, in links towards the subjective actors - the State - which builds human resources, the organizations which use human resources are subjective actors in activities of building human resources. In micro levels, in links towards scientific research conducting individuals, the organizations which use human resources are objective actors in activities of building human resources. Therefore, in practical reality, the definition of subjective actors and objective actors is quite relative and gets attached to actual links. This definition is meaningful in theoretical aspects which permit to define right

tasks accordingly assigned to every organization in the system of organizations participating in S&T activities in general and in building of human resources in scientific management and scientific research activities in particular.

As example for better understanding of this link, this paper presents some subjective actors and their corresponding objective actors in building of human resources, namely:

- The Party is a political organization which has the leading role towards the State. In lines with the role as subjective actors to participate in building of human resources in scientific management activities, the Party, through documents, resolutions and guidelines, issues indications, policies and directives for development of human resources. In these links, the State receives them and institutionalizes them through legal regulations, policies, plans and programs.
- The National Assembly is the highest State power organization which is entitled to establish the Constitution and laws, and to decide socio-economic tasks. In lines with the role as subjective actors to participate in building of human resources, the National Assembly concretizes guidelines and policies of the Party on the law-based development of human resources, appropates actual tasks on socio-economic development including the tasks related directly or indirectly to activities and plans of building of human resources submitted by the Government.
- The Government is the highest administrative organization which carries out the unified management and development of S&T activities, guides the implementation of policies and plans for S&T development, unified management S&T institutions, technology development organizations and etc. In lines with the role as subjective actors to participate in building of human resources in scientific management activities, the Government approves strategies, plans and actual tasks in building of human resources in scientific management activities submitted by Ministry of Science and Technology (MOST) and related line ministries and local administrations.

In this macro level, respectively to the above noted subjective actors in building of human resources (Party, National Assembly, Government), objective actors in building of human resources are the whole set of those who do scientific management works in the system of State institutions, in the system of the Party organizations, in politico-social organizations (including those who do scientific management works in MOST) and scientific researchers in S&T organizations over the whole country.

MOST is assigned to carry out scientific management functions. In lines with the role as subjective actors to participate in building of human resources in scientific management and scientific research activities, MOST hosts and coordinates with line ministries and local administrations to set up the plan of the network of S&T organizations and leads the implementation of issued items. MOST is also the organization to issue (by assigned functions) or to submit to issuance responsible authorities, to organize the implementation of mechanisms and policies on training and using of S&T staffs, to build and to organize the implementation of programs and plans to train staffs working in S&T fields and to support the development of S&T forces.

In links to MOST as subjective actor in building of human resources, the objective actors in building of human resources in scientific management and scientific research activities are not only those who do science management works in the system of State organizations in ministries and local administrations and do scientific research works in S&T organizations over the whole country, but also the system of Party and State organizations which have the role to issue indications and policies related scientific management and scientific research activities, and organizations which do scientific managements or conduct scientific research works.

4. Contents and modes to build human resources in scientific management and scientific research activities

The Party's point of view on the human building in the actual stage, according to Resolution No. 33-NQ/TW by the Party Central Committee, Session XI, is "building the globally developed Vietnamese human resource, orienting cultural, educational and scientific activities to the building of the human with scientific visions and truth-good will-beauty orientations, enhancing knowledge for the Vietnamese human resource to meet demands of socialist oriented market economy and international integration, knowledge based economy and learning society". In field of S&T activities, Resolution No. 20-NQ/TW by the Party Central Committee, Session XI, notes concrete tasks and solutions on use of S&T staffs, namely: enhancing capacities, qualification and quality of S&T management staffs in all sectors and levels, issuing policies of special and respectful use of leading S&T staffs, S&T staffs to host important national tasks and young and talent S&T staffs, innovating the activities of recruitment, assignment, evaluation and appointment of S&T staffs, and etc.

On basis of directive concepts of the Party on the building of the new human in the actual stage and in connection to the building of human resources with the three contents as noted above, we need to concretize and

to be unified in the Party's ideological guides on the building of the new human and human resources, as noted in the Party's resolutions. Some main points can be listed as follows:

First, the orientations for building of human resources in scientific management and scientific research activities include:

- *“Orienting to industrialization and modernization”* to build the new human for objectives and tasks of the country's development;
- *“Orienting to the world”* to build the new human for integration with the world's movements and science development.
- *“Orienting to the future”* to build the new human for S&T development of Vietnam up to the high level in the region and to the middle level in the world in the close future, targeted for 2030.

Second, the concepts and policies to organize the building of human resources in scientific management and scientific research activities include:

- *“Enhanced focus for practice”*: this is the concept of building of human resources in science management and scientific research activities. They need to have high quality and capacities in scientific working activities, taking the real practice of the country's socio-economic development and S&T development as norms and gauges for S&T activities. Practical capacities of scientists and managers are oriented to settle the problems raised from the country's development. By this way, the built human has patriotic spirits and follows the national interests for the best service for the fatherland and the nation of Vietnam. The new human holds and follows strongly the implementation of the Party's guides and policies on the construction and development of the country in every stage. So, the concept of “practicing” is the top requirement for building of human resources. It should be followed strictly for implementation.
- *“Enhanced the focus on younger age”*: this is the concept for building of human resources in scientific management and scientific research activities which target sustainable development and requires creative capacities. We should note that the creative capacities are particular features of S&T activities. In young age years, the people have more passions and are more eager to face difficulties and challenges in scientific works. It is also the time people have the highest creating forces.

The implementation of these two enhanced focuses in scientific management and scientific research activities has extremely important roles for Vietnam to have S&T staffs which have the highest creating forces and are closely bound to the country's development practice.

Third, the measures for implementation of contents for building of human resources in science management and scientific research activities include:

Measures for implementation of contents for building of human resources through training and enhancing capacities are:

- Building human resources on basis of higher education facilities and S&T organizations. Here, the training is combined with scientific research activities conducted by strong research teams;
- Developing training centers on basis of well-established plans for training and enhancing capacities. The works should be oriented to prepare human resources in scientific management and scientific research activities and to establish scientific research schools and strong research teams;
- Connecting S&T development funds and enterprises with training centers, financial supports being used for research activities by trainers;
- Propagating the model of learning society, developing public research associations which would be a background to develop training and S&T research activities as well as to enhance the educative level of the whole society.

Measures for implementation of contents for building of human resources through practical activities are:

- Practicing permanent and continued ordeals which are useful for staffs working in scientific management and scientific research activities to enhance their capacities to carry out and to settle practical problems rising in scientific management and scientific research activities. Mechanisms and policies should be set up for ordeals and trainings of staffs working in science management and scientific research activities where the assigned tasks should be coupled with sources provided for completion of tasks. This is required for the actual stage of activities of management and use of S&T human resources in Vietnam;
- Providing organizations which conduct management and use of human resources in scientific management and scientific research activities to examine and evaluate, every year, the quality of completion of assigned tasks in scientific management and scientific research activities. The works should permit to evaluate the capacities of the related staffs.

Measures for implementation of contents for building of human resources through extension of opportunities and liberation of creating forces are:

- Building and improving gradually the system of policies to promote the human actors in science management and scientific research activities.

Adequate bases should be established to create creative working environment for people working in scientific sectors;

- Building adequate and integrated mechanisms and policies in order to explore, use and promote effectively scientific human resources, particularly to use respectfully talent and devoted scientists and experts;
- Providing organizations which conduct management and use of human resources in scientific management and scientific research activities with capacities of building and establishing dynamic information environment. This environment would let scientists access to new scientific knowledge. Policies should be issued to promote pro-active initiatives of scientists to explore and to propose tasks for practice-based scientific management and scientific research, to apply their research results and to meet urgent needs required by practical activities of science management and scientific research;
- Providing local administrations and Government functional agencies with capacities to have measures to make a really strong shift in exploration, training and use of human resources from centers of scientific training, research and application.

5. Conclusions

The actual development of Vietnam is putting new objectives for S&T activities: *S&T development is really the key driving force for the fast and sustainable development*. In order to make S&T become the driving force, we need to build the scientific staff strongly developed in terms of quality, quantity and reasonably distributed. For that purpose, the building of human resources in scientific management and scientific research activities should be correctly realized and followed up in implementation practice.

The building of human resources in scientific management and scientific research activities requires the participation, direct or indirect, of subjective actors in the whole society which depends on positions, roles, functions and tasks of every subjective actor in the society. The tasks of every subjective actor of building of human resources are defined: (i) Building of human resources through training and enhancing capacities; (ii) Building of the human through practical activities; and (iii) Building of human resources through extension of opportunities for liberation of creating forces.

In terms of orientations of building of human resources in scientific management and scientific research activities in Vietnam, the paper presents three aspects: (i) orientation to industrialization and modernization, (ii) orientation to the world; and (iii) orientation to future.

In terms of measures and policies of building of human resources, the paper defines the indicators for building of human resources: (i) enhanced focus on practice; and (ii) enhanced forces for younger age.

By this way, the building of human resources in scientific management and scientific research activities will produce the scientific staff which is young, patriotic and devoted to serve the development of Vietnam.

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