# INSTITUTIONALIZING POLICIES TO ATTRACT OVERSEAS VIETNAMESE SCIENTIFIC AND TECHNOLOGICAL INTELLECTUALS TO PARTICIPATE IN THE DEVELOPMENT OF SCIENCE, TECHNOLOGY AND INNOVATION IN VIETNAM

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#### Summary:

Human resource development, including the development of scientific and technological human resources and the overseas Vietnamese experts, is one of the strategic breakthroughs confirmed in the 10-year Socio-Economic Development Strategy for 2021 - 2030. On May 11, 2022, the Prime Minister issued the Strategy for the Development of Science, technology and innovation until 2030, with various goals, tasks, and solutions aimed at promoting the development and application of science, technology and innovation (STI), highlighting the role and participation of the Vietnamese intellectuals abroad. With the aim to propose solutions to strengthen the attraction of overseas Vietnamese intellectuals in the development of STI, the article covers the following main topics: (i) Concept, categorization, role, and characteristics of the overseas Vietnamese intellectual community; (ii) Policies to attract and utilize overseas intellectuals in China and South Korea; (iii) The Party's and the State's policies toward overseas Vietnamese intellectuals; (iv) Proposals for institutionalizing policies to attract overseas Vietnamese scientific and technological intellectuals to participate in STI development.

**Keywords**: Science and technology; Innovation; Human resources; Attractive policies; overseas Vietnamese experts.

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### 1. Concept, categorization of intellectuals, and the role and characteristics of the overseas Vietnamese intellectual community

### 1.1. Concept and categorization of intellectuals

#### a) Concept of intellectuals

"Intellectuals" originates from the Latin word "Intelligentsia", meaning wisdom, smartness, knowledge, and intelligence. Although the term "intellectuals" appeared quite early in history, due to many different approaches, with different functions, depending on the perspective of each organization, each country, each period, and according to their own goals, intellectuals are understood in many ways. After the August Revolution, President Ho Chi Minh conceived of intellectuals: "A person who has

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completed university can be called an intellectual<sup>2</sup>". However, in reality, a person with a high level of education is only a necessary condition, not a sufficient condition to become an intellectual. A highly educated person can only become an intellectual when he applies his knowledge to reality, bringing spiritual and material values to serve society and the people. This means that a university education is only a necessary condition, but more importantly, it is necessary to apply the knowledge learned to serve social life.

Resolution No. 27-NQ/TW dated August 6, 2008, on building a team of intellectuals in the period of promoting industrialization and modernization of the country stipulates that "intellectuals are intellectual workers, with high levels of education in a certain specialized field, with the ability to think independently, creatively, to disseminate and enrich knowledge, creating valuable to society spiritual and material products". This is the first time the concept of intellectuals has been mentioned in the Party Resolution, not only highlighting the characteristics of intellectuals but also demonstrating the development in awareness and the special attention of the Party to this important force in society. In Resolution No. 45-NQ/TW on continuing to build and promote the role of intellectuals to meet the requirements of rapid and sustainable national development in the new period, the Party continued to affirm that "Intellectuals are a workforce of intellectuals, with high educational qualifications, and deep expertise in a field, and the ability to think independently and creatively".

Thus, it can be generalized that intellectuals are people who have the following basic criteria:

- Intellectual workers, with creative ability;
- Highly educated, and qualified in the profession;
- Applying knowledge to practical social life.

### b) Categorization of intellectuals

From theory and practice, intellectuals can be divided into groups according to different criteria based on the nature, characteristics of activities, and fields of activity of intellectuals.

- Categorizing intellectuals according to the nature and characteristics of intellectuals' activities (according to the type of organization where intellectuals are working), includes the following groups:
- + Group of intellectuals working in public service organizations in the fields of science, technology and innovation, education and training, health, literature and arts, and journalism (referred to as the group of civil servant intellectuals):

<sup>&</sup>lt;sup>2</sup> Ho Chi Minh, Complete Works, National Political Publishing House, Hanoi, Vol.5.

- + Group of intellectuals working in central and local state management agencies, Party agencies, and political organizations. Intellectuals in this group are civil officials and cadres in the state administrative apparatus and political system (referred to as the group of civil official intellectuals);
- + Group of intellectuals in the armed forces;
- + Group of intellectuals in the business sector;
- + Group of intellectuals working in socio-professional organizations, which are the intellectuals working in associations and federations;
- + Group of Vietnamese intellectuals abroad.
- Categorizing intellectuals according to their fields of activity, includes the following main groups:
- + Group of intellectuals working in the field of science and technology: it is a team of intellectuals participating in scientific research activities, experimental implementation, technology development, innovation, technology application, science, and technology services, etc.
- + Group of intellectuals working in the field of education and training: it is a team of intellectuals participating in teaching, research, etc.
- + Group of intellectuals working in the healthcare field: it is a team of intellectuals participating in medical examination and treatment, etc.
- + Group of intellectuals working in the field of literature and art: it is a team of intellectuals participating in creative activities, theories, literary and artistic criticism, etc. in the field of literature and art.
- + Group of intellectuals working in other fields such as justice, information and communication, transportation, construction, etc.

In addition to the above-mentioned categorization of intellectuals, it is possible to group them based on the educational level, gender, age, etc. of intellectuals. Grouping intellectuals is only relative, each grouping method will have different values in statistical activities as well as in management or assessment and policy development for intellectuals. Among the above-mentioned groups of intellectuals, the group of overseas intellectuals working in the field of science and technology is an indispensable part of the country's science and technology intellectuals in general, participating in the country's science and technology activities, and contributing to realizing the country's development goals in the present and the future.

### 1.2. The role of the scientific and technological intellectual team

Creating new knowledge

The intellectual team, through scientific research and technological development activities, creates new knowledge. New knowledge can be completely new and unprecedented or can be developed from existing knowledge. The result of this development is different from the knowledge that already exists. Through their activities, intellectuals contribute to creating labor results expressed in the form of scientific information or technological information such as the new discoveries, new findings, new laws, new theorems, new principles; new inventions, new technical solutions, new processes, new know-how and secrets, new technologies or new products, etc.

Acquiring, disseminating, and applying knowledge

The activity of acquiring, disseminating, and applying knowledge is a closely linked chain, ensuring that knowledge is not only learned but also spread and transformed into practical values. The intellectual team plays a role in absorbing and disseminating knowledge in many different ways, including directly participating in training and fostering human resources to improve their qualifications and create a source of forming an intellectual team that meets the requirements of the country in each period. At the same time, the intellectual team also plays a role in knowledge application, putting knowledge into practice to create economic, social, and cultural values through the transfer of scientific and technological results.

Participating in the development of the State's guidelines, policies, and laws

The intellectual community is the main force in providing scientific arguments that contribute significantly to the direct planning of the Party and State's guidelines, policies, and laws, or indirectly through consulting, advising, and criticizing the development of the Party and State's guidelines, policies, and laws.

Contribution to the science, technology and innovation development, as well as to the socio-economic development

With a high education level and deep expertise, the intellectual team plays a core role in the science, technology and innovation development, from research, application, deployment, and technology development activities to commercialization and product manufacturing activities. They are the pioneering force, which have a great influence on other labor forces, and contribute greatly to economic growth and social development, improving people's lives, and ensuring the social security of the country.

With the above-mentioned activities, the intellectual team, including overseas Vietnamese intellectuals, has an important mission and role, participating directly or indirectly in the process of producing material wealth for society, and contributing to the national strength and development level of the country.

### 1.3. Characteristics of the overseas Vietnamese intellectuals in science and technology

In recent years, the role and participation of Vietnamese intellectuals and experts abroad in domestic science, technology and innovation activities have grown stronger, making many important contributions to knowledge transfer, scientific and technological progress, human resource training, mobilizing international resources into Vietnam, etc., serving as a bridge to help the country to absorb advanced scientific and technological achievements, and to expand international cooperation and integration. In particular, in recent years, Vietnamese intellectuals abroad have strengthened their connections on a regional and global scale, creating flexible working and cooperation mechanisms for domestic and foreign experts when participating in projects and programs within Vietnam's national development strategy.

According to statistics from the State Committee for Overseas Vietnamese, up to now, the overseas Vietnamese community has about 6 million people, living and working in more than 130 countries and territories, with more than 80% in developed countries with advanced science and technology. Among them, the intellectual and expert community has reached nearly 600,000 people (accounting for about 10%) and is working in many fields such as basic research, applied research, technology development, business and manufacturing; in the fields of social sciences and humanities, natural sciences, management, economics, etc.; in the fields of electronics, information - telecommunications, machine manufacturing, biotechnology, space science, new materials, etc. Many overseas Vietnamese intellectuals currently have important positions in economic establishments, and famous scientific organizations in the world, and have been awarded many prestigious international awards.

Overseas Vietnamese intellectuals and experts contribute to the homeland's science, technology and innovation development with increasingly in-depth activities, through many diverse ways directly to indirectly, such as organizing a series of training courses, seminars, scientific conferences, or participating in technology transfer projects, cooperating to find investment markets in the high-tech field. Many overseas intellectuals are both scientists and businessmen implementing R&D projects and also have the role of connecting the domestic market with the world market. On average, each year, about 300 - 500 overseas Vietnamese intellectuals return to the homeland, of which about 45% participate in teaching and research cooperation at universities and research institutes, while the rest participate in technology transfer and innovation activities, or in building creative startup ecosystems, etc. In addition to returning to the country to directly participate in science, technology and innovation projects and activities, the sharing and indirectly contributing intellectual resources from a distance has

become a common trend that many overseas Vietnamese experts and intellectuals have chosen.

In the coming period, there will continue to be a need for the proactive and active participation of Vietnamese intellectuals from all over the world to serve the country's development needs.

### 2. Policies to attract and employ overseas intellectuals in China and South Korea

China and South Korea are two countries that have been very successful in attracting overseas intellectuals to return to work in their home countries through comprehensive policies. Governments of these countries believe that to attract overseas intellectuals to return to work in their home countries, in addition to offering attractive competitive salaries, it is necessary to support overseas intellectuals with many non-material incentive mechanisms and policies.

In China, many programs and plans have been developed and implemented to attract the Chinese diaspora from overseas to return and work in the country, such as the "Hundred People Plan", "Plan to Attract Outstanding Talents from Abroad", "Financial Support Program for Outstanding Young University Lecturers", "Seed Fund for Returning Home Overseas Scholars", "National Science Fund for Outstanding Young Scholars", "One Hundred, One Thousand and Ten Thousand Program", "Changjiang Scientist Plan", etc. These programs and plans have attracted thousands of outstanding scholars and experts from abroad to return to participate in new research, and breakthrough research in important fields such as aerospace, high-temperature transmission industry, biology - genetics... The government has introduced a very effective "red carpet" policy to invite Chinese intellectuals to return to the country such as:

- Information and repatriation procedures support: The government simplifies the requirements for permanent residence and visas for overseas scholars who have acquired foreign nationality. The Ministry of Foreign Affairs has granted repatriates longer-term visas. Shanghai was the first locality to make the experiment of issuing long-term residence cards to overseas researchers, which later became a national policy;
- Competitive high salaries and other material benefits for repatriated overseas Chinese intellectuals: The government pledges to pay high salaries, equivalent to the salaries they are currently receiving abroad, to invite world-renowned overseas Chinese scientists to work in China. In addition, they are also paid for housing and other benefits. The Chinese government believes that competitively high salaries and material benefits for repatriated overseas Chinese intellectuals are a necessary investment,

helping China use the returned intellectuals for the goal of national selfreliance and long-term competitiveness;

Reasonable use to promote the talents of overseas Chinese intellectuals: Overseas Chinese scientists invited to work in the country are assigned tasks appropriate to their capacity, and qualifications and linked to the goals of each mentioned above program and plan. For example, within the "100 People Plan", scientists are responsible for researching and developing cutting-edge science, with the aim of training and nurturing a new generation of Chinese talents to undertake missions in the scientific fields of the 21st century, their mission is to use advanced science and technology knowledge to explore new research fields, and at the same time, build their research groups and teams.

With the "Changjiang Scientists Plan", scientists are responsible for taking on the position of professor at universities. In some localities of China, incubators are also established in research and development zones - also known as "parks for overseas scholars/students to establish businesses" - to create an environment for overseas Chinese intellectuals to demonstrate their talents:

- Establishing a "Chinese Overseas Student Service Center" to serve as a bridge between overseas students who want to return to serve their homeland country and businesses that need to recruit talent.

In Korea, since the 1970s, Korea has been interested in "importing overseas Korean brainpower" to work in the homeland and that became an important source of human resources for developing new technologies in Korea. The use of overseas Korean intellectuals is often linked to the goals of each program, such as the Fellowship Program recruiting professors and those with over 5 years of post-doc research experience to return to the country to participate in teaching and research on information technology and biotechnology; the Brain Return 500 Program attracting the best human resources to form and develop high-quality research teams, participating in basic scientific research such as physics, chemistry, life sciences, etc.; or the mechanisms and policies used by universities and research institutes. Some policies that Korea applies to attract overseas Korean diaspora are:

Very high salaries, internationally competitive: Since 2002, Seoul National University has paid overseas Korean researchers three times more than the average salary of a researcher in a Korean university. The Korea Institute of Science and Technology (KIST) has offered unprecedentedly attractive salaries and bonuses as well as large financial support from the government to attract talented scientists and experts. Many top-notch researchers have returned from abroad due to the promises of exceptionally high salaries, housing subsidies, and a research environment with advanced equipment. The monthly salary of KIST

researchers is 10 times higher than the GDP per capita at that time<sup>3</sup>. This is equivalent to the salary of middle-class people in Korea. The first overseas Korean scientists to return to work at KIST were paid a quarter of the salary they received in the US (because most scientists returned from the US). This salary is three times higher than the salary that university professors in the country receive and is even higher than the salary of the Korean President<sup>4</sup>;

Creating an attractive environment for overseas Koreans to return to work: In addition to receiving extremely high salaries, overseas Korean scientists are also guaranteed autonomy in research, project financial management, etc. The Korea Institute of Science and Technology (KIST), immediately after its establishment, KIST initiated a very well-designed and operated program to attract talent (brain-drain), focusing on overseas Korean intellectuals living and working in Europe and the US<sup>5</sup>. The preferential measures that KIST applies to attract and retain talented staff include: (i) High salaries, above the current salary of civil officials; (ii) Favorable, attractive working environment with modern equipment; (iii) Sabbatical or one-year paid leave to participate in research, surveys, and study abroad; (iv) other preferential packages on housing, transportation, etc. Thanks to the autonomous mechanism in personnel policy, KIST continues to attract and recruit highly qualified scientists and engineers from abroad<sup>6</sup>.

In order to promote the creation of an environment to attract overseas Koreans to work in the homeland, the Korean government allows public research institutes to establish affiliated higher education units. The educational units of public research institutes commit and guarantee overseas Korean scientists and engineers both the status of university professors and researchers. Research institutes are also encouraged to appoint official titles

<sup>&</sup>lt;sup>3</sup> Myungsoo Park (2013), Science and Technology Human Resources for Economic Growth: A Case Study of Korea, Journal of Science and Technology Policy and Management, Vol. 2, No. 3/2013.

<sup>&</sup>lt;sup>4</sup> Choi Huyng-Sup (2012), KIST-Contract Research Institute, Tia Sang Online Magazine, April 5, 2012.

<sup>&</sup>lt;sup>5</sup> KIST's selection and recruitment of overseas Koreans from 1966 to 1970 was conducted with the assistance of the Battelle Institute of the United States. Through its network of branches and partners around the world, the Battelle Institute provided overseas Korean scientists with introductory materials on KIST's goals, scale, and other necessary information. From there, the Battelle Institute listed and connected with 800 overseas Korean scientists, of whom 150 were key scientists in the United States and Europe and were given priority for screening. In October 1966, KIST Director Dr. Choi Hyung Sup personally went to the United States to directly interview and persuade these scientists to return home. As a result, 65/69 excellent Korean scientists and experts interviewed by Dr. Choi expressed their willingness to return to their home country to work for KIST. Next, KIST sent the candidates a copy of the results of the survey report on market demand and economic and technical sectors of Korea (previously investigated by the Institute) so that scientists could choose research topics suitable to their fields of expertise, develop research outlines and send them to KIST. After reviewing the research proposals of Korean scientists, in June 1967, the Director of KIST continued to return to the United States to conduct the final selection process. 18 Korean scientists were interviewed directly by Dr. Choi at the Battelle Institute, to form a research human resource for the initial stage of the Institute.

<sup>&</sup>lt;sup>6</sup> Ministry of Science and Technology (2014), Project to establish Vietnam - Korea Institute of Science and Technology (V-KIST), Hanoi/2014.

to young overseas Korean scientists and engineers who wish to work longterm in Korea. This program helps young overseas Korean scientists and engineers both improve their capacity and have good opportunities to find official job positions.

The above-mentioned experiences from China and Korea show that countries all use salary incentives to attract talent. This measure seems indispensable and is the most important in the overall policies in general. In addition, there should be other support policies such as information and repatriation procedures support, a favorable and attractive working environment, encouraging creativity and capacity development, professional promotion opportunities with higher positions; support for expatriate families in finding jobs, and good study opportunities in the homeland;...

### 3. Policies and guidelines of the Party and State for overseas Vietnamese intellectuals

Recognizing the important role of Vietnamese intellectuals abroad, our Party and State have issued many guidelines, orientations, mechanisms, and policies to attract and enhance the contributions of this team in many important documents such as:

Resolution No. 36-NQ/TW dated March 26, 2004, of the Politburo on work with Vietnamese people abroad; Directive No. 45-CT/TW dated May 19, 2015, of the Politburo on continuing to promote the implementation of Resolution No. 36-NQ/TW dated March 26, 2004, of the 9<sup>th</sup> Politburo on work with Vietnamese people abroad in the new situation; Conclusion No. 12-KL/TW dated August 12, 2021, of the Politburo on work with overseas Vietnamese people in the new situation; Documents of the 13<sup>th</sup> National Party Congress;

Resolution No. 45-NQ/TW dated November 24, 2023 of the 13<sup>th</sup> Central Executive Committee on continuing to build and promote the role of the intellectual cadre to meet the requirements of rapid and sustainable national development in the new period, Conclusion No. 69-KL/TW dated January 11, 2024 of the Politburo on continuing to implement Resolution No. 20-NQ/TW dated November 1, 2012 of the 11<sup>th</sup> Central Executive Committee of the Party on developing science and technology to serve the cause of industrialization and modernization in the conditions of a socialist-oriented market economy and international integration, Law on Science and Technology 2013, Decree No. 87/2014/ND-CP dated September 22, 2014 regulating the attraction of individuals who are Vietnamese diaspora and foreign experts working in science and technology to participate in science and technology activities in Vietnam, Project on Promoting Resources of Vietnamese diaspora to serve the country's development in the new situation (Decision No. 1334/QD-TTg dated November 10, 2023); National Strategy

on attracting and utilizing talents to 2030, vision to 2050, Strategy for science, technology and innovation development to 2030,...

In 2023, the Ministry of Science and Technology submitted to the Prime Minister for consideration and approval the Project "Attracting and effectively promoting talented scientists and experts who are overseas Vietnamese diaspora", in which the important role of talented overseas Vietnamese scientists and experts was identified, affirmed as potential, a valuable asset of the Vietnamese people, and a supplement and continuation of the country's scientific, and technological, and innovative knowledge strength; The project has set out the specific goals, tasks, and solutions to attract the participation and contribution of Vietnamese intellectuals abroad in the science, technology and innovation development of Vietname.

The above-mentioned documents clearly state the Party and State's guidelines, orientations, and policies towards overseas Vietnamese intellectuals as follows:

- *Investment and business policies:* create increasingly open and equal conditions, without discrimination between enterprises and investors who are Vietnamese citizens living abroad and domestic enterprises and investors;
- Labor and employment policies: Vietnamese people living abroad returning to work in Vietnam will be considered for appointment and hiring to take leadership positions in science and technology organizations; be assigned to preside over the implementation of science and technology tasks at all levels;
- Salary policy: Vietnamese intellectuals living abroad returning to work in Vietnam will receive salaries according to the expert hiring regime, agreed salaries based upon the nature, scale, and influence of the science and technology tasks; based on the capacity, qualifications, and effectiveness of the individual's contributions, the salary can be paid equivalent to the same position in foreign organizations;
- Honor and reward policies: Vietnamese intellectuals abroad are considered for recognition of scientific titles and technological titles; be honored, rewarded, and awarded in science and technology by the State for scientists who have made great contributions to the development of science and technology in the country;
- Policies on nationality, *immigration, and residence:* there have been many reforms in administrative procedures, and visa exemption policies for overseas Vietnamese experts; overseas Vietnamese intellectuals enjoy the same prices for services and tickets on means of transport as applied to all Vietnamese in the country; there are no restrictions on real estate ownership.

In general, overseas Vietnamese are an inseparable part of the Vietnamese ethnic community and a valuable resource for the nation. Attracting overseas Vietnamese is based on the potential, capacity, and feasibility of the resource, contributing to supporting overseas Vietnamese to live stably and continue to contribute effectively to the development of the country. Policies to attract overseas Vietnamese intellectuals in science and technology to participate in the science, technology and innovation development in Vietnam are increasingly being improved, and have created clear changes. In the coming period, with increasingly strong and specific requirements and goals for national development, the contribution of overseas Vietnamese intellectuals in science and technology will be very much needed. Mechanisms and policies need to be more bold, innovative, linked to specific tasks, and in line with the aspirations and legitimate interests of overseas Vietnamese intellectuals.

## 4. Measures to institutionalize policies to attract overseas Vietnamese science and technology intellectuals to participate in the science, technology and innovation development

In the coming period, the world situation is forecasted to continue to evolve rapidly, complexly, and unpredictably. The world economy is undergoing a profound and comprehensive transformation in the face of the strong development of science, technology and innovation, and the 4th Industrial Revolution; sustainable, inclusive development, green growth, digital economy, and digital society are becoming urgent; separation and polarization is becoming increasingly clearer under the strong impact of conflicts, wars, geostrategic, geopolitical and geo-economics competition on a global scale. Domestically, the scale, potential, and competitiveness of the economy are increasingly affirmed; Science, technology and innovation are becoming more closely linked with and influential on socio-economic development;... Besides, our country continues to face the problems of increasing environmental pollution, climate change, resource scarcity, epidemics, and population aging in the future,... which requires increasingly higher contribution and development of science, technology and innovation.

The 10-year socio-economic development strategy 2021 - 2030, the Strategy for Science, Technology and Innovation Development to 2030 has set out the goal of socio-economic development based on science, technology and innovation like these: by 2030, the economy will develop dynamically, rapidly and sustainably, independently and autonomously based on science, technology and innovation associated with improving efficiency in foreign affairs and international integration;...; science, technology and innovation will be developed steadily, truly becoming a driving force for growth, contributing decisively to making Vietnam a developing country with modern industry and high average income; enhancing Vietnam's position and

prestige in the international arena. Strive to become a developed, high-income country by 2045.

With that context and goal, in the coming period, Science, technology and innovation will continue to play a particularly important role and mission, which is decisive for socio-economic development to realize the country's development goals. Vietnam needs to pay attention to developing high-quality science and technology human resources and increase the attraction and contributions of overseas Vietnamese intellectuals to participate in specific activities and jobs. Below are some proposed specific activities in the field of science and technology that need to attract the participation of overseas Vietnamese intellectuals and some policies to attract the participation of this group.

### 4.1. Proposing measures to attract overseas Vietnamese science and technology intellectuals to participate in the following activities:

*First*, provide practical solutions for Vietnam to strongly and completely shift its economy to a growth model based on productivity, scientific and technological progress, and innovation; leading and connecting domestic science and technology to integrate with world science and technology.

Second, provide experiences and work with domestic scientists and managers to: (i) Build institutions, mechanisms, and policies on science, technology and innovation in accordance with international practices, respect the characteristics of creative labor, accept venture, risks, and delays in scientific and technological activities; (ii) Build specific and outstanding policies to increase the contribution of science, technology and innovation to socioeconomic development; (iii) Develop a legal framework to implement pilot, experimental and specific mechanisms for new economic models/types based on science, technology and innovation.

Third, support Vietnam in attracting foreign investment resources for science, technology and innovation; participate in training science and technology human resources, technical human resources, technology management human resources, and business management to have a team of good and approaching international standards scientists and experts, in which the attention is paid first to some areas of digital transformation, green transformation, circular economy, sharing economy, and especially early and rapidly to train the semiconductor chip engineers to take advantage of the current great opportunities in semiconductors.

Fourth, advise on implementing state management of innovation in accordance with international practices and standards. Support Vietnamese enterprises to improve their corporate governance capacity, ability to absorb and master new technologies, move towards technological autonomy, and gradually build a self-reliant economy of the country. Provide initiatives in

technology application and build a creative startup ecosystem, commercialize the science and technology results. Support the search for S&T solutions to address the technological difficulties and challenges that the country is facing. Support Vietnam in building a mechanism to implement linkage models between the State and research institutes, universities, and enterprises, promoting innovation and technology transfer.

Fifth, support Vietnam in forming and implementing several key S&T programs of great importance to develop and apply S&T and innovation to realize the country's strategic breakthroughs.

### 4.2. Proposing the policy to be institutionalized to attract the participation of overseas Vietnamese scientific and technological intellectuals

First, offer salaries commensurate with contributions and competitive with salaries paid abroad.

It is necessary to consider paying salaries to overseas Vietnamese experts that are commensurate with their contributions and competitive with salaries offered abroad for similar positions and roles.

Second, creates opportunities for experts to advance in their careers.

Attract Vietnamese experts from abroad to return to work in the homeland and assign them to preside over and lead the implementation of important national S&T tasks, especially in high-tech fields such as electronics, biology, new materials, new energy, aviation, space, oceanography, etc., as well as emerging areas such as AI, semiconductors, energy, digital transformation, etc., which are the world current trends and Vietnam still lacks human resources in these fields.

Third, create a professional and modern working environment to attract overseas Vietnamese intellectuals to work:

- Modernize public research and development organizations by allocating operating funds based on the results and performance assessment of the organizations;
- Invest in improving research capacity and infrastructure while granting autonomy to R&D organizations;
- Grant autonomy and self-responsibility to public research and development organizations in accordance with the characteristics of R&D activities which are creative, with delays and many risks;
- Higher education institutions and research institutes are allowed to use assets including facilities and intellectual property to make linkage and cooperate with organizations and enterprises to promote joint technology research and development and to incubate and form innovative startups;

- Encourage research institutes and higher education institutions to establish innovative startups based on the scientific research and technology development results;
- It is necessary to invest financial resources enough to the threshold for the programs and projects having the participation of overseas Vietnamese intellectuals and experts.

#### Fourth, other favorable mechanisms

- Allow the use of state budget for hiring overseas Vietnamese experts and scientists at an agreed budget level, suitable for the characteristics of R&D activities and suitable for the market:
- Create favorable conditions for accommodation and traveling so that scientists can work with peace of mind;
- Develop and organize the operation and sustainable exploitation of a data platform for overseas Vietnamese scientists and experts on the basis of ensuring the right to post personal information, and connecting with the national S&T database.

In addition to the policies to create favorable conditions to attract overseas Vietnamese S&T intellectuals to participate in the S&T and innovation development of the country as mentioned above, at the same time, there needs to be a mechanism to attach the responsibilities and tasks of this team to the country's development.

#### 5. Conclusion

The S&T intellectuals cadre is a key resource to promote the comprehensive and sustainable development of society. They not only create economic and scientific values but also contribute to building a civilized, progressive, and humane society. Investing in and promoting the role of the S&T intellectuals cadre is a strategic task for every country.

With many important tasks in developing S&T and innovation in the coming time, through the "Network of Overseas Vietnamese Intellectual Associations to Support Innovation and Technology Commercialization", the team of overseas Vietnamese intellectuals and experts will actively participate in contributing to S&T and innovation activities of the country, helping Vietnam deeply integrate into the international community and achieve the Party's and State's national development goals.

To do this, it is necessary to develop and perfect breakthrough policies to attract, select, and employ overseas Vietnamese intellectuals and experts. This requires immediately removing existing obstacles, simplifying administrative procedures, delegating authority more boldly, expanding decentralization, and increasing autonomy for ministries, branches,

localities, and organizations that need to use Vietnamese experts and intellectuals abroad.

At the same time, it is necessary to realize the above policies to attract Vietnamese intellectuals abroad, put the policy proposals into contents in Party Resolutions, and institutionalize them into regulations in State legal documents./.

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