

# Research and Development Statistics

## Years 2021-2022

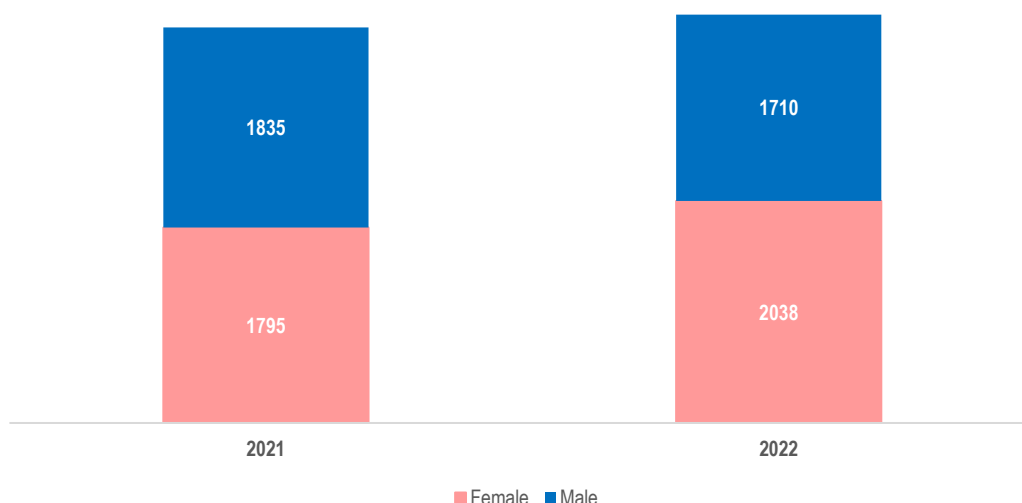
**Tirana, December 6, 2024:** The National Institute of Statistics of Albania publishes for the first time the data on Research and Development (R&D). The data collection is organized for each performance sector, the Government Sector, Higher Education Institutions (HEI), Private Enterprises and Non-Profit Organizations (NPOs). The data refers to the time period 2021-2022 were collected using a combined method.

In the condition of accelerated development of science and technology, this sector holds special importance, especially in strategic sectors with priority for the country. Science and technology are part of every aspect of our daily lives and they, together with innovation, help in addressing some of the major revolutionary and transformative challenges that society is facing. Challenges that lead to increased interest in investments in this sector, with a direct impact on the country's economy.

### Personnel engaged on R&D activities, by sectors of performance and educational level

During 2022, 3,748 people were engaged in R&D activity in Albania on a full-time and part-time basis. This number is defined as the number of people working on the conception and creation of new knowledge, products, processes, methods and systems. In the personnel engaged in R&D activity during 2022 by gender, 54.4 % were female, while in 2021 the highest share was occupied by male gender with 50.6 %.

Fig. 1 Personnel engaged in R&D activities by gender, 2021-2022



**For publication 06/12/2024**

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During 2022, the highest number of **personnel engaged** in R&D activities refers to the HEI sector with 81.6 %, followed by Private Enterprises and NPOs with 9.6 % and the Government Sector with 8.8 %.

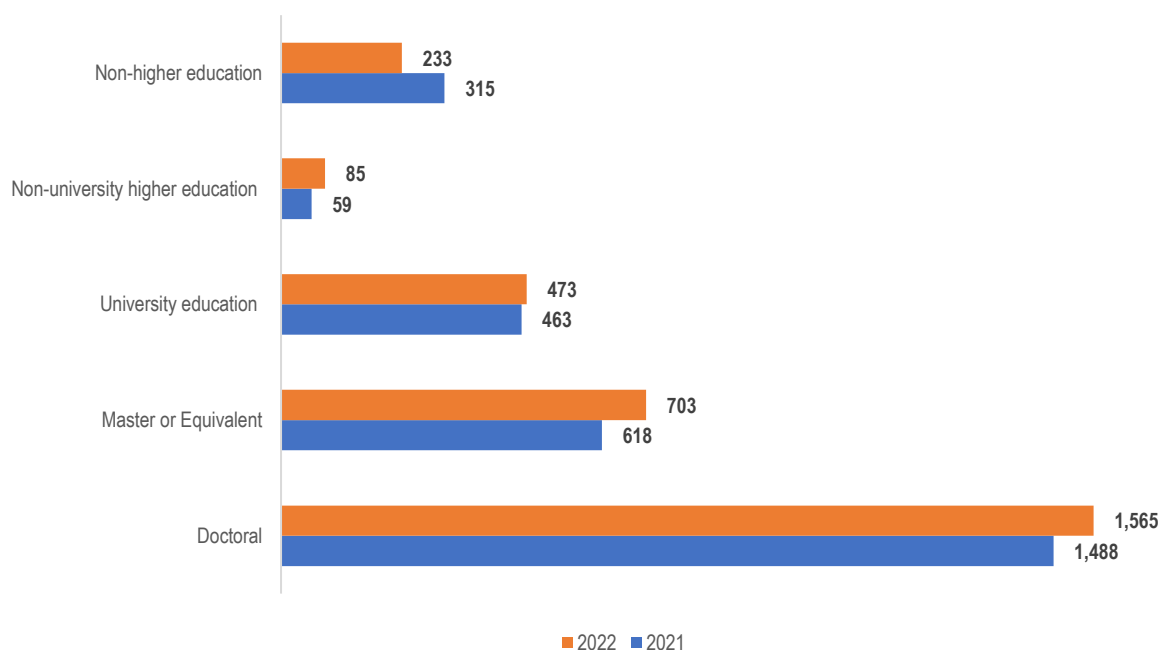
During 2022, Scientific Researchers account for the majority of personnel engaged in R&D with around 55.2 %, Professional Personnel with 21.6 %, Technical Personnel with 10.6 % and Support Personnel with 12.6 %, while during 2021, by personnel structure was accordingly Researchers 55.3 %, Professional Personnel with 20.5 %, Technical Personnel with 11.0 % and Support Personnel with 13.2 %.

**Tab. 1 Personnel engaged in Scientific Research and Development, 2021-2022**

	Government sector		Higher Education Institutions		Private Enterprises and Non-Profit Organizations	
	2021	2022	2021	2022	2021	2022
Researchers	195	209	1,670	1,731	138	131
Professional Personnel	23	43	569	661	152	107
Technical Personnel	35	35	265	295	99	62
Support Personnel	36	43	439	372	9	59
<b>Total</b>	<b>289</b>	<b>330</b>	<b>2,943</b>	<b>3,059</b>	<b>398</b>	<b>359</b>

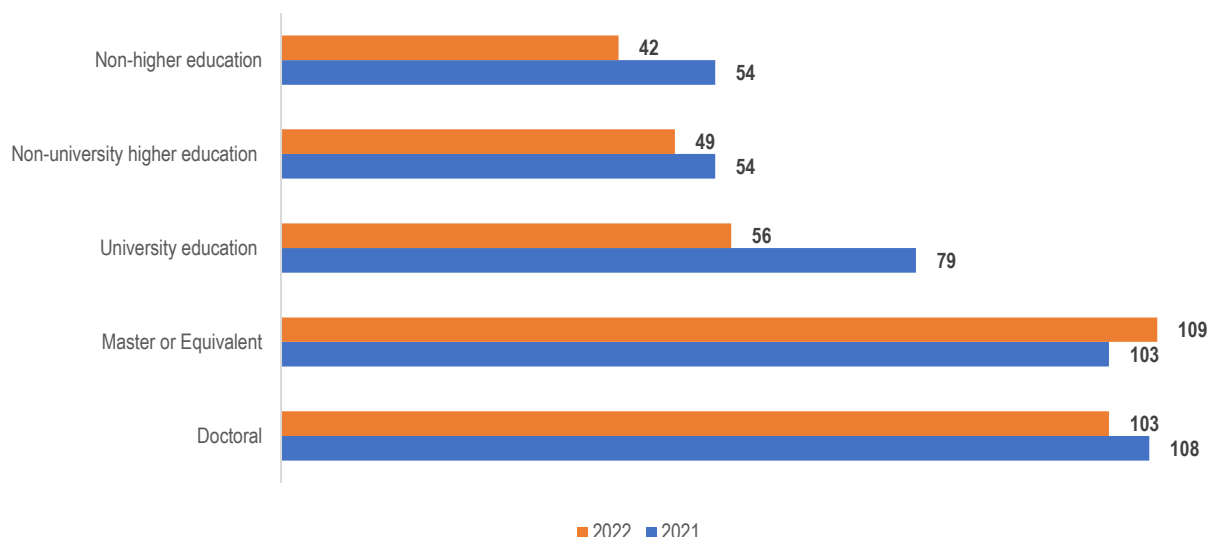
In 2022, according to the classification by level of education for HEI sector, personnel with a "Doctoral" educational level account for the largest share at 51.2 % and compared to 2021, it has increased by 5.2 %.

**Fig. 2 Distribution of personnel engaged in R&D by educational level at HEIs 2021-2022**



Referring to the classification by **educational level**, for the State Sector, personnel with a "Master's or equivalent" educational level has increased by 5.8 % during 2022 compared to 2021.

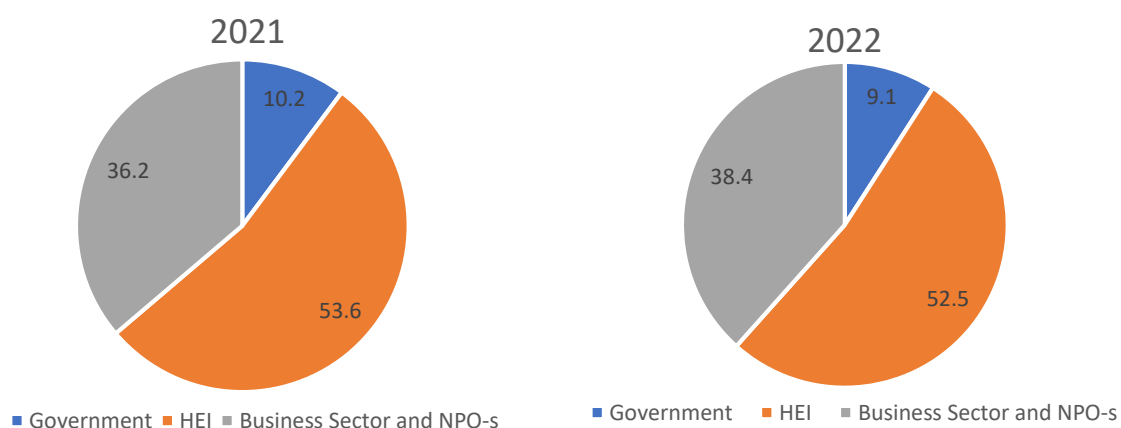
**Fig. 3 Distribution of personnel engaged in R&D by educational level in Enterprises and NPOs, 2021-2022**



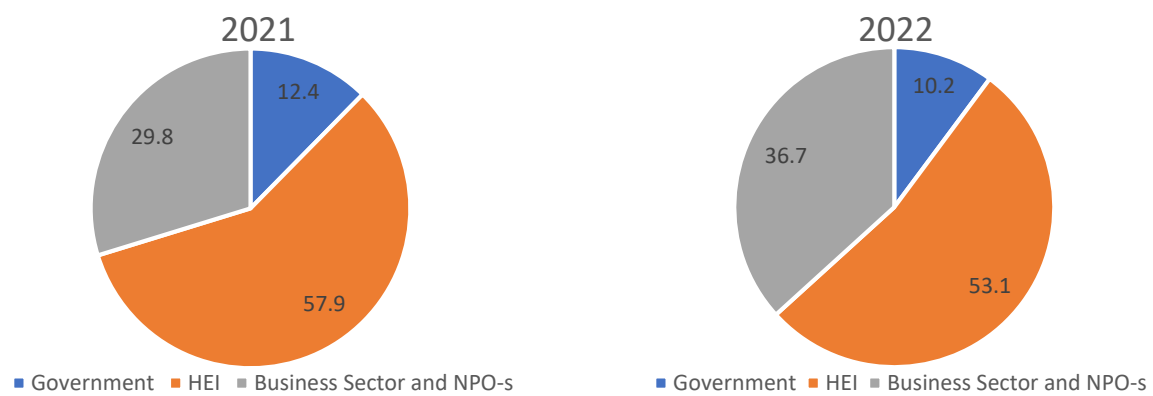
#### Funds and expenditures by sectors of performance

In the 2021-2022 period, the largest share of **funds** for R&D activities, by sectors of performance, was allocated to the Higher Education Institutions (HEIs) sector, respectively with 53.6 % during 2021 and 52.5 % during 2022.

**Fig. 4 Distribution of R&D funds by sectors, 2021-2022**



In the period 2021-2022, according to the sectors of performance, Higher Education Institutions (HEIs) held the main share of expenditures in Research and Development (R&D) activity, including current and capital expenditures, contributing 57.9 % in 2021 and 53.1 % in 2022, respectively.

**Fig. 5 Distribution of spending on R&D activities by sectors, 2021-2022**

# Methodology

The statistical survey on scientific research and development activity is conducted every two years and the observation period covered is a two-year period (2021-2022). The data were collected with surveys, using a combined method. The sectors included in this survey are:

Government sector, Higher education institutions (HEIs), Private enterprises and NPOs, collected with a statistical survey, with a sample, units that meet the criteria of having 10 or more employees. In these two sectors, a sample of 1,715 enterprises and NPOs were interviewed.

## Definitions:

**Research and experimental development (R&D)** comprise creative and systematic work undertaken in order to increase the stock of knowledge - including knowledge of humankind, culture and society - and to devise new applications of available knowledge."

**Scientific research** includes creative work and original investigation undertaken on a systematic basis to acquire new knowledge, including knowledge about humanity, culture and society.

**Experimental development** : the application of research findings or their scientific knowledge to create new or significantly improved products, applications, processes.

The basic criteria for distinguishing R&D activity from related activities is the admission in this activity of a significant element of *introducing something new* and the resolution of scientific and/or technological uncertainty (the uncertainty that arises when the solution to a problem is not obvious to someone familiar with the knowledge base and techniques used in the relevant field).

For an activity to be an R&D activity, it must meet five essential criteria.

- new
- creative
- undefined
- systematic
- transferable and/or reproducible

## Scope of the survey:

### Scientific research and development in the private sector includes:

Any activity classified as R&D is characterized by originality; it must have investigation as a primary objective and must have the potential to produce results that are sufficiently general and to increase knowledge (whether theoretical and/or practical) about humanity.

### Basic research:

Experimental or theoretical work undertaken primarily to gain new knowledge about the fundamental foundations of observable phenomena and facts, without any particular application or use in mind.

**Applied research:**

It is called original research undertaken to also acquire new knowledge. However, it is mainly directed at achieving certain practical goals or objectives.

**Experimental development:**

It is called systematic work undertaken on the basis of existing knowledge gained from research and/or practical experience, which is directed at the production of new materials, products or equipment, at the introduction of new processes, services, or at the radical improvement of those previously produced or introduced.

**Scientific researcher:** is the professional personnel engaged in the conception or creation of new knowledge, products, processes, methods, systems and also in the management of the projects in question. Persons with postgraduate education (PhD) involved in R&D should be considered scientific researchers.

**Technical personnel:** are persons who have basic technical knowledge and experience in one or more fields such as: engineering sciences, physical sciences or social sciences and humanities. They participate in R&D by carrying out scientific observations and technical tasks involving the implementation of concepts and operational methods, usually under the supervision of the researcher (scientific researcher); e.g. personnel who prepare computer programs, test data, analyze them, etc.

**Professional personnel:** are usually highly educated people employed in professional positions (librarians, IT specialists, information experts, etc.), who participate in scientific research and research and development work, but are not the bearers of research and development projects.

**Support personnel:** includes qualified and unqualified personnel participating in R&D or directly related to it; e.g. administrative personnel such as: secretaries, operators, etc.