

Explanatory Notes on Main Statistical Indicators

Regular Institutions of Higher Education refer to educational establishments recruiting graduates from senior secondary schools as the main target through National Matriculation TEST. They include full-time universities, independently established colleges, colleges, and institutions of higher professional education, institutions of higher vocational education and others.

Universities and independently established colleges primarily provide undergraduate and above courses; colleges mainly impart undergraduate courses, institutions of higher professional education and institutions of higher vocational education primarily provide professional trainings; and other institutions of higher education refer to educational establishments, which are responsible for enrolling higher education students under the State Plan but not enumerated in the total number of schools, including: branch schools of universities and colleges and junior colleges.

Institutions of Higher Education for Adults refer to educational establishments, enrolling personnel with senior secondary school or equivalent education through National Matriculation TEST for Adult, and providing higher education courses in forms of correspondence, spare time, or full time for adults. Institutions of higher learning for adults include schools of higher education for staff and workers, schools of higher education for peasants, colleges for management cadres, pedagogical colleges, independent correspondence colleges, radio and television universities and other educational establishments. Other educational establishments refer to undertaking adult students enrolment but not enumerated in the number of schools under the State Plan.

Scientific and Technological Activities (S&T Activities) refer to organized activities which are closely related with the creation, development, dissemination and application of the scientific and technical knowledge in the fields of natural sciences, agricultural science, medical science, engineering and technological science, humanities and social sciences (referred to as scientific and technological fields). To account for the needs of scientific and technological investment, S&T activities can be classified in to 3 categories: research and development (R&D) activities, application of R&D results, and related S&T services.

Personnel Engaged in S&T Activities refer to personnel directly engaged in S&T activities, in the management of S&T activities, and in providing direct service to S&T activities, who spend over 10% of the total working hours in a year in S&T activities. (1) Personnel directly engaged in S&T activities include researchers, engineers, technicians and other related personnel engaged in S&T activities in independent-accounting R&D institutions, institutions of higher learning, and in research institutes, laboratories, technology development centers and

central experiment workshops under enterprises and institutions. Also included are people working in S&T research project teams, professional and technical personnel working in S&T information archiving institutes, and graduate students working on the design of their thesis. (2) Personnel engaged in the management of S&T activities and in providing direct service to S&T activities include senior management people responsible for S&T activities in independent -accounting R&D institutions, S&T information archiving institutes, institutions of higher learning, and in enterprises and institutions where S&T activities are undertaken. Also included are people responsible for the planning, administration, personnel management, financial management, logistics supply, equipment maintenance, information and library management that are related with S&T activities. People providing indirect services are excluded, such as security, medical service, drivers, plumbers, cleaners and those providing catering and related service. This indicator reflects the size of personnel engaged in S&T activities.

Research and Development (R&D) refers to systematic and creative activities in the field of science and technology aiming at increasing the knowledge and using the knowledge for new application. R&D includes 3 categories of activities: basic research, applied research and experiments and development. The scale and intensity of R&D are widely used internationally to reflect the strength of S&T and the core competitiveness of a country in the world.

R&D Personnel refer to persons engaged in research, management and supporting activities of R & D, including persons in the project teams, persons engaged in the management of S&T activities of enterprises and supporting staff providing direct service to the research projects. This indicator reflects the size of personnel engaged in R&D activities with independent intellectual property.

Total Expenditure of Funds on R&D refers to the real expenditure of surveyed units on their own R&D activities (basic research, application study, test and development) including direct expenditure on R&D activities, indirect expenditure of management and services on R&D activities, expenditure on capital construction and material processing by others. Excluding the expenditure on production activities, return of loan, and fees transferred to cooperated and entrusted agencies on R&D activities.

Patent is an abbreviation for the patent right and refers to the exclusive right of ownership by the inventors or designers for the creation or inventions, given from the patent offices after due process of assessment and approval in accordance with the Patent Law. Patents are granted for inventions, utility models and designs. This indicator reflects the achievements of S&T and design with independent intellectual property.

Patented Inventions refer to the new technical proposals



to the products or methods or their modifications. This is universal core indicator reflecting the technologies with independent intellectual property.

Patented Utility Models refer to the practical and new technical proposals on the shape and structure of the product or the combination of both. This indicator reflects the condition of

technological results with certain technical content.

Designs refer to the aesthetics and industrially applicable new designs for the shape, pattern and color of the product, or their combinations. This indicator reflects the appearance design achievements with independent intellectual property.