

Standardization of Bioindustry/Biotechnology Classification System & Analysis of the Korean Bioindustry Structure

- 생물산업/생물공학기술 표준분류체계 구축 및 생물산업 구조 분석 -

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Innovation in biotechnology is a subject of great interest worldwide. Korea is also trying to nurture biotechnology in the public and private sectors with the goal of extracting economic benefits. Recently, the Korean government announced its selection of next generation growth engines, including bioindustry. Along with friendly policy, public investments will be focused on these promising strategic areas. The competitiveness of Korea's biotechnology industry is expected to rise to the level of fully developed countries by the year 2012. Korea's share of the global biotech market should also increase thanks to self-developed technologies.

On the other hand, the innovation effect and the economic impact of biotechnology are of international concern. Individual nations as well as international organizations such as the OECD have devoted much effort to evaluating and comparing the economic effects of biotechnology. Accordingly, statistical analysis of these industries is becoming more important, and standardization of statistical data is strongly needed. In Korea especially, biotechnology is diffusing to a range of domestic industries, and so a strategic focus must be developed for policy measures.

This project aims to establish a classification standard for biotechnology and bioindustry, to consolidate statistical information, improve the efficiency of policy measures, and enable analysis of domestic industry using standard criteria. This will be done in cooperation with the OECD working group on biotechnology statistics.

Bioindustry refers to all industries related to biotechnology, biological resources, and bio-products. The present classifications in Korea rely on the classification systems of other countries, including those of the U.S. and the OECD. The current system,

however, is not detailed and sophisticated enough for statistical purposes using industrial and product categories.

To establish a classification standard, efforts are underway to combine the classification model set out by the Ministry of Commerce, Industry and Energy with the Korean Standard Industrial Classification (KSIC). Referring to the KSIC has its limitations with regards to bioindustry, as it may prove to be difficult to match all existing and new product items with the existing classification. In order to compensate for these deficiencies, the current standards should be augmented with field survey data. This project will also conduct fact-finding surveys with the assistance of related institutions, such as the Korea National Statistical Office, the Bioindustry Association of Korea (BAK), and the Bio Venture Association. While comparing the statistics from the field surveys and the existing KSIC classification, a standard classification frame for biotechnology and bioindustry will be reestablished, and a clear picture of Korean bioindustry will be developed.