

A FRAMEWORK FOR BIOTECHNOLOGY STATISTICS (OECD 2005)

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The development and application of biotechnology has the potential for far-reaching economic, social and environmental impacts. It is therefore important to outline a statistical framework to guide the measurement of biotechnology activity. This Framework is intended to provide the basis for statistical compilation work within OECD member countries and those non-member countries wishing to adopt the standards.

The focus of the Framework is on biotechnology R&D and the application of biotechnology techniques to produce goods or services. For simplicity, these are referred to in this Framework as key biotechnology activities. End uses of biotechnology, for instance the use of products produced using biotechnology in manufacturing, agriculture or private consumption, are of increasing policy interest but are beyond the scope of this document. However, many of the statistical standards articulated here will be relevant to such uses. The Biotechnology Statistics Conceptual Model in Chapter 2 illustrates the distinction between key activities and end uses.

Under the auspices of the OECD's National Experts on Science and Technology Indicators (NESTI) group, five Ad hoc Meetings on Biotechnology Statistics have been held to date. The Biotechnology Statistics Framework is based on the methodological work produced by these meetings (held from 2000 to 2004). It is hoped that publication of the Framework will encourage further statistical work in this field and stimulate debate leading to further improvements in biotechnology statistics.

The Biotechnology Statistics Framework includes the following components:

- Information on concepts, units and definitions for statistical purposes.
- An articulation of user needs and how these relate to the statistical material in the Framework.
- Guidelines for data collection, including a model question on biotechnology R&D, a model survey of key biotechnology activities, and related methodological information.
- Classifications to support the definitions and/or describe statistical units and data.
- Links to other relevant manuals.
- A glossary of terms.

Knowledgebase on Economic Statistics - Methods and Country Practices
<http://unstats.un.org/unsd/EconStatKB/KnowledgebaseArticle10429.aspx>