

BIOTECHNOLOGY INDUSTRY OVERVIEW

Republic of Korea

PREPARED BY: Korea BioVenture Association

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CORE CAPABILITIES

- Advanced technology in the research of organic synthesis
- Well trained research workforce in basic biotechnologies
- Over 20 years' experience in the development of new drugs

REGULATORY FRAMEWORK

- You can find detailed regulation information at KFDA(Korea Food & Drug Administration) www.kfda.go.kr

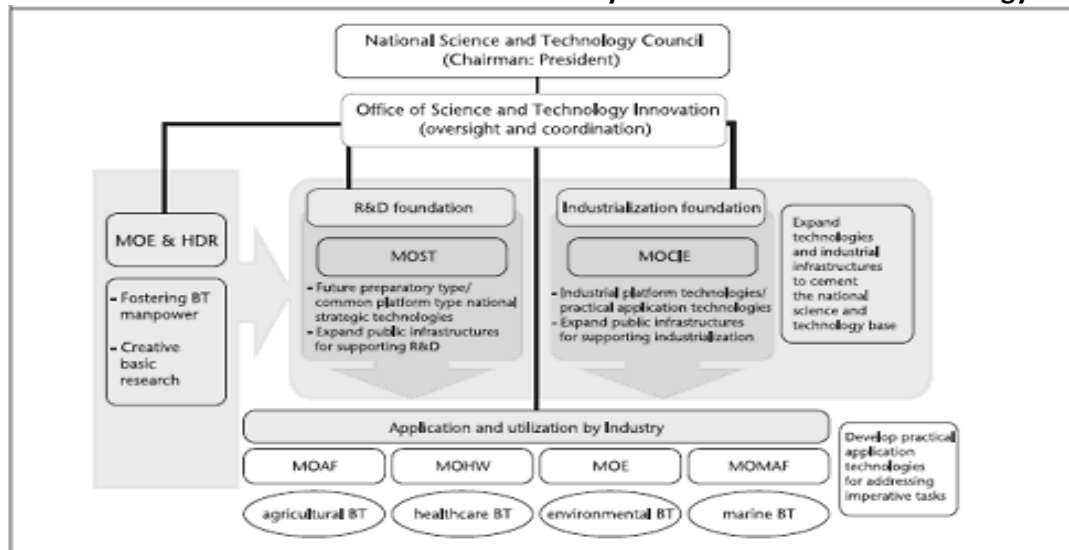
Regulatory System for Pharmaceutical



GOVERNMENT PROGRAMS AND POLICIES

- Korea is pushing to develop a National Innovation System aimed at achieving technological innovation at the national level in order to monitor its current position accurately and formulate the most suitable growth strategies.

Inter-ministerial Role in BT In line with the launch of the New Administration System for Science and Technology in 2007



* In 2008, MOST and MOE & HDR merged and became MEST(Ministry of Education, Science and Technology) and MOCIE changed its name to MKE(Ministry of Knowledge Economy)

1. Major R&D Programs (Ministry of Education, Science and Technology, MEST)

- 1) Basic Science Research Project
 - (A) Specific Basic Research Support Project
 - (B) Creative Research Promotion Project
 - (C) Basic Medical Science and Engineering Research Center
 - (D) Nation Core Research Center(NCRC) Project
 - (E) Excellent Research Centers
- 2) Specific R&D Project
 - (A) Nano and Biotechnology Development Project
 - (B) Next-generation Novel Bio Drug and Organ Project
 - (C) 21st Century Frontier R&D Project
 - (D) National Research Laboratory Project(NRL)

2. Pushing for the Development of Industrializing Technologies (Ministry of Knowledge Economy, MKE)

- 1) Formulation of a Roadmap for BT Technologies Industrializing
- 2) Intensive Investment in Industrialization-oriented BT R&D
- 3) R&D Project Pursuit for Creating Bio Stars

- Also, Korean government has been systematically promoting biotechnology through a national plan or “Biotech 2006”(Year 1994-2006), which has made a remarkable progress to date.
- Based on the assessment of the global technological environment as well as the success factors and the lessons learned from “Biotech 2006”, the Korean Government formulated “Bio-Vision 2016”(Year 2006-2016) in November 2006 to acquire competitive source technologies and expand industrial infrastructure over the next 10 years.
- The “Bio-Vision 2016” envisions Korea being a ‘healthy life’ and a ‘prosperous bioeconomy’ ranking it among the world’s top seven biotechnology powerhouses by 2016. The Korean government intends to actively support the country’s biotechnology sector to propel it into a position of global leadership, through steady implementation of “Bio-Vision 2016”

TOP TEN COMPANIES

Ranking of Pharmaceutical companies

(Unit : USD mil.)

Ranking	Company name	Total Sales('06)
1	Dong-A Pharm	571
2	Hanmi Pharm	422
3	Yuhan	412
4	Daewoong Pharm	382
5	Green Cross	367
6	Choongwae Pharm	343
7	Jeil Pharm	267
8	Il Dong	250
9	Chong Kun Dang	243
10	LG Life Science	221

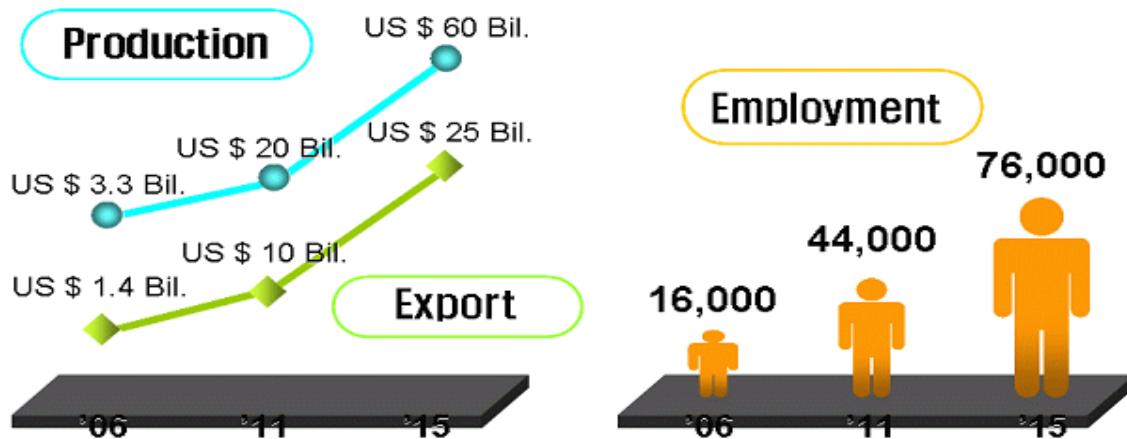
Ranking of biotech companies

Ranking	Company name	Total Sales ('06)
1	Sewon Cellrontech	80
2	CTC BIO	44
3	Optomagic	34
4	Solco biomedical	28
5	Bioland	27
6	NK Bio	23
7	INFOPIA	21
8	SD	18
9	Medi-post	14
10	Biospace	12

ECONOMIC CONTRIBUTION & MARKET CAPITALISATION

- Korea's biotechnology industry rapidly grew from \$1.2 billion in 2000 to \$3.3 billion (0.38% of GDP) in 2006. As of 2006, the import into Korea's biotechnology industry was estimated at US\$ 935 million (22% of total supply). The industry's exports amounted to US\$ 1.35 billion.
- As a future growth engine industry, Korean market of biotechnology industry is expected to reach \$60 billion in 2015.

2015 Bioindustry Promotion Strategy by Ministry of Knowledge Economy (MKE)



RESEARCH AND DEVELOPMENT

- In line with global trends, Korea's biotechnology is strengthening its R&D capacity in genomics, proteomics, and bioinformatics. The annual average investment has increased at a hefty rate of 23%, which shows the strong will of the Korean government to promote the biotechnology sector.

BUSINESS CLIMATE

Investment Climate in general

- The Korean government support programs for foreign direct investment are more diverse than in any other OECD country. The Korean government offers a variety of tax benefits, advantages for locating a particular area that are virtual giveaways and cash grants, while continually improving the business and living conditions for foreign companies and their expatriate personnel.
- Korea grant investment tax credits for corporate income tax, personal income tax, acquisition tax, registration tax, property tax and aggregate land tax to foreign investors of high-tech businesses, industrial occupants service businesses, businesses designated as Foreign Investment Zones, occupants of Free Trade Zones, and developers of Free Economic Zones.
- In addition, Customs duties, special excise taxes and value-added taxes are exempted on capital goods carried in by a foreign-invested company as a contribution to company capital, provided that certain requirements are met.
- There are four kinds of incentives for land;
 - [1] The government will designate, upon request, a particular site as an Foreign Investment Zone [FIZ].
 - [2] Free Economic Zones [FEZs], which aim to improve the business and living environment for foreign-invested companies, are currently designated in Incheon, Busan/Jinhae, and Gwangyang Port., and
 - [3] An initiative of the central government, Free Trade Zones[FTZs] offer the inexpensive leasing of factories and factory sites to foreign investors.

Investment Climate in Biotechnology

- Scientific quality of Korean biotechnology is confirmed from outstanding infrastructures through increasing innovative researchers, scientific publications and patents registration. In addition, the aging brings about increase of healthcare expenditures. Recently in Korea the number of clinical trials for the new drug development is growing with the highly motivated medical doctors/hospitals and advanced IT infrastructure. Korean government is focusing on the innovation of national biotechnology promotion policy and accelerating globalization of bioindustry.

KEY NATIONAL EVENTS

- Event Name : BIO KOREA
- Period : Annual
- Upcoming Event : Oct. 8~10 2008
- Location : Osong [ChoongBook Province], South Korea
- Website : www.biokorea.org

INDUSTRY ORGANISATIONS



Name : Korea BioVenture Association (KOBIOVEN)
Established : July 14, 2000
The Number of members : 260(As of July, 2008)
Major Business under progress
- Company establishment & Development Supporting Project
- International Cooperation Project
- Research / Publishing & Information Cooperation Project
- Policy Proposing & Cooperation Project
Website : <http://eng.kobioven.or.kr>
Email : kobioven@kobioven.or.kr
Address : F8th Seo-il Plaza, #703-5, Yeoksam-Dong, Kangnam-Gu, Seoul(135-513)
TEL +82-2-552-4771 FAX +82-2-552-4840



Name : Bioindustry Association of Korea (BAK)
Established : November 4, 1991
The Number of company members : 65(As of July, 2008)
Major Business under progress
- Programs for Development of Bioindustry Platform
- Programs for International Cooperation
- Submission of Policies to the Government
- Survey and Publication
Website : www.bak.or.kr
Email : bioindus@chol.com
Address : 6th Fl., Daelim Office Valley, 97-3, Guro 6-dong, Guro-ku, Seoul(152-841), ROK
TEL +82-2-855-7993 FAX +82-2-855-7006