

National Confederation of Industry and Brazilian biotechnology development



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Bioforum
Brasilien-Deutschland
Brasil-Alemanha

Marileusa Chiarello - CNI

Characteristics of Brazilian biotechnology industries

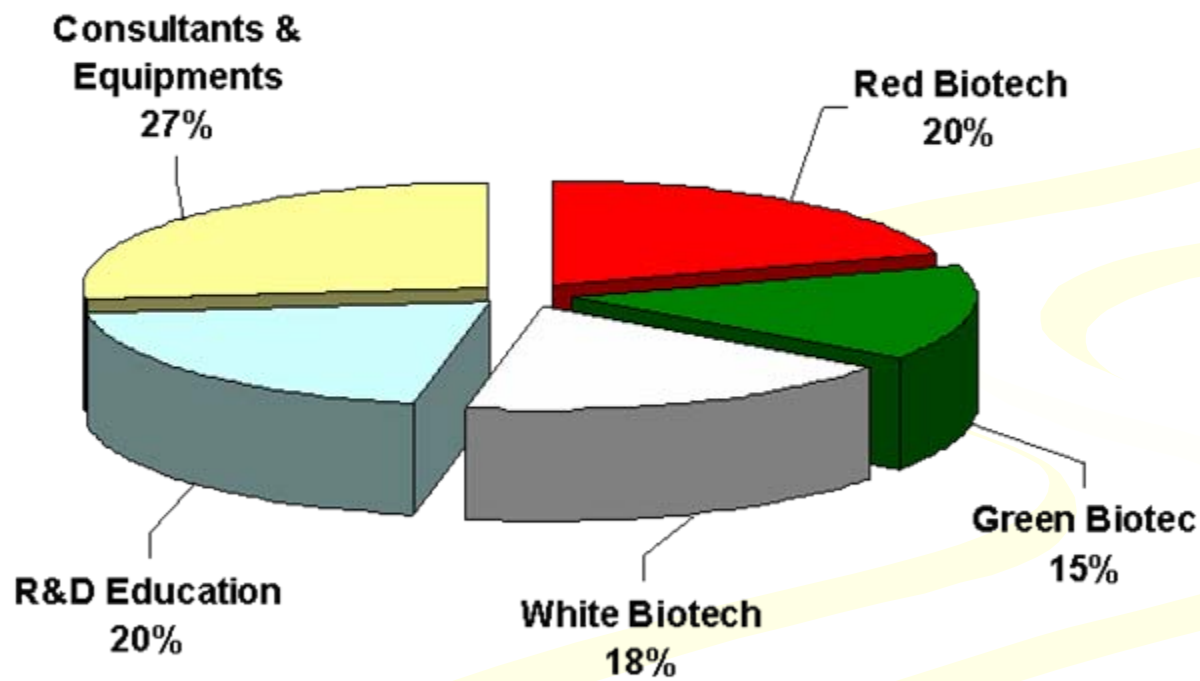
- Recently established
 - 1993: 76 companies
 - 2006: 500 companies
 - Interested in attracting
 - Foreign investments
 - Foreign suppliers
- 50% from diagnostics sector
- Company Size
 - 60% micro and small companies
 - 17% operating within the University Centers

Characteristics of Brazilian biotechnology industries

- Research & Development model
 - Majority has their own R&D division
 - 90% act in partnership with national & international universities and research centers
 - EMBRAPA
 - IAC
 - Agricultural research state institutions
 - Fiocruz
 - Butantã
 - Others

Characteristics of Brazilian biotechnology industries

Sectors



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Investments in Biotechnology

- Public funding modalities
 - Financial resources subject to reimbursement
 - FINEP
 - BNDES
 - Labor force training and education
 - CNPq
 - Capes
 - Research consortiums with private companies
 - Genome of *Xylella* (US\$ 15 millions)
 - Genolyptus (US\$ 4,1 millions)

Investments in Biotechnology

- Public funding modalities
 - Economic subsidies for R&D within companies
 - 2006: US\$ 160 millions
 - 2007: US\$ 325 millions (US\$ 75 millions for micro and small companies)
 - “Equalization of interest rate” and Programa Juro Zero (zero interest rate Program)
 - 150 companies beneficiaries during the last 2 years
 - 40 from biotechnology sector
 - Special Purpose Companies

Investments in Biotechnology

- Venture Capital
 - Recent modality
 - Three biggest companies investing in Brazilian biotechnology
 - Votorantim Ventures (US\$ 300 millions)
 - FIR Capital (US\$ 45 millions)
 - Rio Bravo (US\$ 10 millions)
 - Development of research activities with Brazilian universities
 - Accelerate start up of biotechnology companies

Brazilian biotechnology market

- Human diagnosis
- Pharmaceuticals
- Seeds
- Generic and veterinary medicines

US\$ 14,6 billions/year

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National Confederation of Industry - CNI

- The top organization representing Brazilian industries
- 27 state Industry Federations
 - Coordination of National Industry Forum
 - More than 1.000 employers organizations
- A unique Brazilian business organization with penetration in all areas of biotechnology

CNI's Actions in Biotechnology Area

1. Policy formulation

- Brazilian Industrial, Technological and Foreign Trade Policy (PITCE)
 - Biotechnology is a strategic field
- Brazilian National Program of Biotechnology (PNB)
- Brazilian National Plan of Biodiversity (Panbio)

CNI's Actions in Biotechnology Area

2. Industrial representation

– Presidency of the Republic

- National Council of Industrial Development (CNDI)
- Brazilian Agency for Industrial Development (ABDI)
- National Council of Science & Technology (CCT)

– Ministry of Science & Technology

- FINEP Advisory Body
- Represents industrial interests on Sector Funds Committees
 - Biotechnology
 - Agribusiness
 - Firms Innovation (FVA)
- National Biosafety Technical Commission (CTNBio)

CNI's Actions in Biotechnology Area

2. Industrial representation

- Ministry of Development, Industry and Foreign Trade (MDIC)
 - Forum of Competitiveness in Biotechnology
 - CODEX *Alimentarius* Committee
- Ministry of Agriculture, Livestock and Supply (MAPA)
 - Sector Chamber of Oilseeds and Biodiesel production chain

CNI's Actions in Biotechnology Area

2. Industrial representation

– Ministry of Health (MS)

- Brazilian Sanitary Surveillance Agency (Anvisa)

– Ministry of Environment (MMA)

- National Biodiversity Commission (Conabio)
- National Genetics Heritage Management Council (CGEN)
- National Council of Environment (Conama)

CNI's Actions in Biotechnology Area

3. Support to the new regulatory framework

- Sectorial Fund Laws (2001)
- Biosafety Law (2003)
- Innovation Law (2004)
- Tax Law (2005)
- National Scientific & Technological Development Fund Law (FNDCT Law) (2007)

CNI's Actions in Biotechnology Area

4. Mobilization of industrial sector for innovation on biotechnology

- Central discussion in 1st & 2nd Brazilian Congress for Industrial Innovation (2005 e 2007)
 - Governmental policies
 - Intellectual Property Rights
 - Regulatory framework
 - Funding mechanisms

CNI's Actions in Biotechnology Area

5. Support for biotechnology companies' competitiveness

- National Industrial Training Service (SENAI)
 - Labor force technological training
 - Technological services
- Euvaldo Lodi Institute (IEL)
 - Business executives' training

CNI's Actions in Biotechnology Area

5. Support for biotechnology companies competitiveness

- Brazilian Network of International Business Centers (Rede CIN)
 1. Support for internationalizing businesses
 2. Trade intelligence
 3. Business training
 4. Business promotion
 5. Website – www.cin.org.br
- “Exporta CIN”
 - Strategic and operational support from commercial experts specially hired for the program

CNI's Actions in Biotechnology Area

6. Funding for Micro and Small Biotechnology companies

– Micro and Small Companies

Competitiveness Program (Procompi)

- Cooperation between CNI and the Brazilian Micro and Small Companies Support Service (Sebrae)
- US\$ 25 million / 5 years / for all sectors
 - Biotechnology cluster of Metropolitan Region of Belo Horizonte (MG)

Challenges and Perspectives

- Improvement of the regulatory framework during next years
- Increasing market for biotechnological inputs and products
- New modalities and increased volume of funding will facilitate
 - *Start up* of innovative firms
 - Reduction of risk associated to innovation in biotechnology sector

Thank you very much!



mchiarello@cni.org.br