



सत्यमेव जयते

*Draft of
Biotechnology Policy Document
of Gujarat State*

Vision Document

*The most pathetic person in this world
is the one who has sight,
but has no vision.*

- Helen Keller



Gujarat State Biotechnology Mission

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PREAMBLE

*The determinants of Societal Prosperity, in addition to the Spirit of the people, are: **Enlightenment from knowledge**, which in itself has a nature of fast extending frontiers; **Ability to face challenges**, of devastating health enemies, depleting resources of nature, food-feed, etc; and also **Material Possessions**, which in turn is a function of wherewithal and technology.*

***Excellence in Technology** can not only make up for the deficiencies in the former but also empower mankind to face the said challenges & also elates by unraveling the nuances of the mysteries of 'life'.*

*The technology, closely knitted with 'life'- **Biotechnology**, has undoubtedly expanded our horizon of understanding of life and **Biotechnology** has also extended its canopy to wealth generation and has armed us to face the challenges.*

*The state government has thus, realized the true potential of **Biotechnology**, in the overall development of the state.*

This Public Policy document of the state symbolizes a distinct movement towards a synchronized effort to effect 'Development' of the state characterized by the progressive empowerment of the various components of the society so as to enable them to shape the futures of their vision..

*Through this document, the state Government of Gujarat, hereby, commits itself to such an overall socio-economic development of the state through this supreme leveler tool – **BIOTECHNOLOGY**.*

VISION STATEMENT

*‘To realize and harness the potential of
Biotechnology as a human endeavor for the
highest intellectual pursuit and an effective future
delivery system for creating a disease free,
nutritionally secure society living in safe, clean
environment, leading to overall socio-economic
growth, welfare and progress of the subjects of
Gujarat’*

1.0 MISSION

- *Strive to become a major Global player in biotechnology capabilities, strengths, products and services,*
- *Strive towards the solution to the Foods and Nutritional security for the subjects of the state through development of new and improvement of existing agro-food resources, processes, products, etc. using methods of biotechnology*
- *Strive towards the solution to disease-free environment through development of prognostic, diagnostic, preventive and remedial healthcare solutions based on conventional & modern biotechnology against major diseases affecting the subjects of the state*
- *Endeavor to achieve ecologically sustainable, safe and clean environment for the subjects of Gujarat*
- *Endeavor to achieve progressive growth in production and commercialization of bio-products, bio-processes and bio-services*
- *Strive for effective conservation of natural bioresources and biodiversity enabling sustainable utilization as a solution for current problem or a probable future use in the larger welfare of mankind*
- *Endeavor to make biotechnology, a socially acceptable popular scientific approach for wide adoption and application in general sphere of socio-economic development*
- *Realize the true potential of fundamental aspects of biotechnology to aid in the human endeavor for the highest intellectual pursuit*
- *Promote modern biotechnology on a precautionary principle*

2.0 STRATEGY

2.1 *Strive to become a major Global player in biotechnology capabilities, strengths, products and services, by*

- *Strengthening the research in all sectors of biotechnology to enable enhancement of knowledge for facilitating product development and technology transfer,*
- *Creating a pool of manpower, highly skilled in Biotechnology for taking the challenges of present and future,*
- *Creating an environment ideal for research & innovation as well as products & technology development in Biotechnology*
- *To adopt and develop new technologies for potential future use,*

2.2 *Strive towards the solution to the Foods and Nutritional security for the subjects of the state through development of new as well as improvement of existing agro-food resources, processes, products, etc using methods of biotechnology, so as to achieve:*

- *Increased productivity in the fields of agriculture, horticulture, animal husbandry, forestry and marine resources through manipulation of environment, genetic engineering, etc*
- *Improvement and augmentation in the nutritional values of agro- food and animal based products through genetic engineering*
- *Exploring and developing new sources of novel foods/feeds that are cheaper and/or with better nutrition,*

2.3 *Strive towards the solution to disease-free environment through development of prognostic, diagnostic, preventive and*

remedial healthcare solutions based on conventional & modern biotechnology against major diseases affecting the subjects of the state, by

- *Developing prognostic & diagnostic means such as early detection & diagnosis inclusive of pre-natal detection of genetic disorders, etc*
- *Developing preventive means such as vaccines inclusive of recombinant, DNA, etc vaccines*
- *Developing remedial & recuperative means inclusive of therapeutic means*
- *Promoting innovation for the futuristic technologies such as for the development of new, cost effective molecules; gene therapy, stem-cell research, etc; and popularize them and generate general awareness in issues related to the same.*

2.4 Endeavor to achieve ecologically sustainable, safe and clean environment for the subjects of Gujarat, by

- *Developing and providing bio-monitoring systems for ecologically damaged and disturbed processes, cycles and environment,*
- *Developing bio-remedial tools, techniques and processes for ecologically estranged zones like industrial areas, coastal areas, townships etc,*

2.5 Endeavor to achieve progressive growth in production and commercialization of bio-products, bio-processes and bio-services, by,

- *Facilitating product development and technology transfer in the various sectors of Biotechnology,*
- *Creating an enabling environment for commercialization of Biotechnology products and technologies,*

- *Providing an efficient institutional mechanism for effective and hassle-free environment for investment and development,*
- *Developing financial mechanism for incubation,*
- *Providing regulatory and safety framework,*
- *Providing legal and procedural framework for patenting,*

2.6 *Strive for effective conservation of natural bioresources and biodiversity enabling sustainable utilization as a solution for current problem or a probable future use in the larger welfare of mankind, by*

- *Developing strategies, techniques and program for conservation of animal, plant and microbial diversity at genetic and molecular level;*
- *Developing the strategies for screening the Plant /animal / microbial diversity for bio-molecules for medicinal and industrial interest,*
- *Developing the plant and microbial diversity as alternative for future energy needs,*

2.7 *Endeavour to make biotechnology a socially acceptable popular scientific approach for wide adoption and application in general sphere of socio-economic development, by*

- *Developing scientific awareness in the society,*
- *Providing science education on varied issues of biotechnology, inclusive of ethical, bio-safety and propriety aspects of biotechnology*