

## Biotechnology for a better world

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### ABSTRACT

Biotechnology is a manipulation technology of living organisms and organic material to serve Human Needs. To make a better world some basic need (sufficient food, healthy life, eco-friendly/anti-polluted environment and employment) of the people should be fulfill. For that biotechnology can be used to struggle with these issues.

**Keywords:** Basic need, Biotechnology, Better world.

### INTRODUCTION

The world will be better if the peoples of the world are happy with their life. They will happy if they have sufficient food, healthy life, eco-friendly/antipolluted environment and having employment to maintain their life. For these the following problems can be minimize or solve by the application of biotechnology:<sup>[1]</sup>

- World hunger
- Health care problems
- Pollutions
- Unemployment

### WORLD HUNGER

Ronald Cantrell of the International Rice Research Institute in the Philippines says: "To still have hunger in our world of abundance is not only unacceptable, it is unforgivable". Yet while biotechnology may not be the only solution, but it can be a valuable tool in the struggle to feed a hungry world. On one side, the developing countries celebrate the World Food Day to rejoice the tremendous prosperity and food abundance,<sup>[2]</sup> on the another side not all people around the world enjoy the same safe, bountiful food supply that they do in the developing countries. While modern biotechnology able to offers this great opportunity to only fifteen developing countries (and ten developed countries) have commercially approved the planting of genetically-engineered (GE) crops. Six national science academies of U.S., Britain, Brazil, China, India, Mexico and the Third World Academy of Sciences, issued a joint statement about the need of biotechnologies to develop the world.<sup>[3]</sup>

### HEALTH CARE PROBLEM

Biotech is helping to heal the world and make it a healthier place by developing new medicines that dramatically reduce rates of infectious disease, serious case, life-threatening conditions and save millions of children's lives. Some of the gifts and facility are given below:<sup>[10,11]</sup>

- "Golden rice" a gift of modern biotechnology will help more than 100 million children worldwide who suffer from vitamin A deficiency and 400 million women of childbearing age who are iron deficient.
- Research is already underway on fruits and vegetables that could one day deliver lifesaving vaccines - such as a banana for the vaccine of Hepatitis B, and a potato that provides immunization against the Norwalk virus.<sup>[4]</sup>
- Personalized medicinal treatment of the biotechnology will be more effective, accurate, safe and cheaper.
- Regenerative medicine of biotechnology will help to create new organs.
- Genome sequencing is another unbelievable gift to the mankind for advanced healthcare.<sup>[5]</sup>

### POLLUTIONS

Carbon dioxide and other carbon molecules are seen as a culprit in pollutions as well as global warming, and day-by-day it is increasing very fast. This problem can be minimizing by using biotechnology which are as follows:<sup>[6]</sup>

- **Seawater bioprocesses to produce fuel:** For instance, new bioprocesses can turn some types of seaweed grown in the oceans into biofuels.
- Bacteria and microalgae that live and grow in seawater can be used to produce fuels.
- Agricultural biotech helps reduce fuel use and CO<sub>2</sub> emissions by requiring less tillage.
- Industrial biotech offers an alternative and safer form of global energy instead of diminishing and volatile fossil fuels.<sup>[7]</sup>

#### UNEMPLOYMENT

Although we do not always realize it, biotechnology is a huge part of our everyday lives; biotech must continue to play an invaluable role in meeting our needs. For giving this facility the wide range of manpower are required and it will decrease unemployment; some of the evidence are given below:<sup>[8,9]</sup>

- Healthcare biotech comprises more than 1700 companies. It creates jobs.
- Industrial biotech provides approximately 22 million jobs in Europe alone across sectors as diverse as agriculture, forestry, fisheries, food, chemicals and biofuels.

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