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The National Bio-technology Policy of Bangladesh provides emphasis on generation of transgenic crops/agro-forestry plants with improved traits, bio-tech derived therapeutic/diagnostic kits, drugs, anti-biotics, and vaccines for animal husbandry, improvement of animal nutrition by application of modern feed bio-technology, development of genetically manipulated fish for enhanced growth and disease resistance, development of genetically engineered vaccines against devastating fish/shrimp pathogen, etc.

In order to implement the bio-tech policy the National Institute of Bio-technology (NIB) has to be made vibrant and competent. In the last few years local and expatriate bio-technologists have made many recommendations and suggestions as to how to make NIB the kind of institute it should be.

The Green Revolution brought high-yielding semi-dwarf wheat and rice varieties to millions of small-scale farmers worldwide. In spite of initial wide skepticism, the Green Revolution taught us that technological innovation can bring enormous benefits to the poor through enhanced efficiency, higher incomes and lower food prices.

The countries that could reap most of opportunities presented by the Green Revolution were those that had, or quickly developed, strong national capacity in agricultural research to make the necessary local adaptations to ensure that the improved varieties suited the needs of their farmers and consumers and this remains true even today for new bio-technologies.

For more than a decade, bio-tech crops have consistently performed well and delivered significant economic, environmental, health and social benefits to both small and large farmers in developing and industrial countries. Much of the previous confusions have already been eroded and the scientific communities are concerned to wipe away the existing confusions in near future.

Accordingly, bio-technology holds great promise for bringing revolution in agriculture, healthcare, industrial processing, and environmental sustainability for our country, too. However, with an ever-decreasing arable land area and more vulnerability to climatic challenges and increasing unpredictability in agricultural practices, we also need to give more emphasis on sectors of possible economic growth that require less land. We need a shift in balance between an agriculture- and non-agriculture based economy. Small scale bio-technology-based industries, which is most suited for the country, therefore, must also be encouraged for more balanced economic growth.

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