Food Science and Technology: A Panacea for National Development

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Protocol

The Chairman of the Occasion,
President and National Executives of NIFST,
Chairperson and Members of the East Central Chapter of NIFST,
Distinguished Fellows, Scholars, and Industry Experts,
My Lords Spiritual and Temporal,
Distinguished Guests, Ladies and Gentlemen,

It is with great honour and a sense of responsibility that I stand before you today to deliver this keynote address on the theme: "Food Science and Technology: A Panacea for National Development." I thank the organizers of this summit for the invitation, and I congratulate you all on the hosting of this important gathering at such a critical time in our national journey.

Introduction

The search for sustainable development in Nigeria — and indeed in many developing nations — cannot be meaningfully pursued without addressing the fundamental issue of **food security**. However, food security is not merely about producing enough food; it encompasses availability, accessibility, safety, nutritional value, and sustainability. This is where **Food Science and Technology (FST)** steps in — not as an abstract discipline, but as a *vital engine for national development*.

Understanding Food Science and Technology

Food Science and Technology is the application of scientific principles to the **processing**, **preservation**, **packaging**, **distribution**, **and utilization of food**. It intersects with multiple disciplines — chemistry, microbiology, engineering, nutrition, biotechnology, and economics — making it a powerful tool for innovation and problem-solving in the food sector.

The Nigerian Context

Nigeria is blessed with abundant natural resources and agricultural potential. Yet, we remain plagued by post-harvest losses, foodborne diseases, malnutrition, and poor food handling and storage infrastructure. According to the FAO, Nigeria loses up to 40% of its agricultural produce post-harvest due to inadequate preservation and processing techniques. This is where Food Science and Technology becomes indispensable.

FST as a Catalyst for National Development

Let us consider the ways in which FST contributes to national development:

1. Food Security and Nutrition

FST enhances the shelf-life, safety, and nutritional content of food. Through fortification, novel processing, and packaging technologies, we can combat malnutrition and food spoilage, especially in rural and underserved communities.

2. Industrialization and Employment

Food processing and manufacturing industries provide a gateway to industrial growth. The food industry is one of the largest employers of labour globally. In Nigeria, small- and medium-scale food enterprises can serve as a bedrock for economic empowerment, especially for women and youth.

3. Innovation and Research

FST drives research into functional foods, alternative proteins, waste-to-wealth strategies, and climate-resilient food systems. Such innovation not only improves our food landscape but also enhances our global competitiveness.

4. Reduction of Post-Harvest Losses

Through improved preservation techniques such as drying, canning, irradiation, and cold chain logistics, FST reduces losses that would otherwise undermine agricultural productivity and profitability.

5. Public Health and Safety

Foodborne illnesses have significant health and economic consequences. FST ensures food hygiene standards, hazard analysis, and quality assurance systems that safeguard public health.

6. Export and Foreign Exchange Earnings

Value-added food products are better suited for export than raw commodities. By leveraging FST, Nigeria can diversify its economy and reduce its dependence on oil by tapping into the lucrative global food trade.

The Role of Institutions and Policy

It is imperative that academic institutions like IMT, research bodies, and professional associations such as NIFST collaborate closely with policymakers. Curricula must be industry-driven, research must be applied, and policies must support local food industries through access to finance, technology, and training.

Furthermore, regulatory agencies must strengthen enforcement of food safety standards to build consumer confidence and foster export readiness.

Challenges to Address

While the potential of FST is undeniable, we must confront certain challenges:

- Limited investment in R&D and infrastructure.
- Brain drains and inadequate capacity building.
- Poor linkage between academia, industry, and government.
- Inconsistent food policy implementation.

These are not insurmountable. With vision, coordination, and commitment, we can turn these hurdles into steppingstones.

Call to Action

Let me close by emphasizing this: **Food is not just a basic need; it is a strategic resource.** Any nation that cannot feed itself sustainably cannot truly be sovereign. Therefore, let us prioritize food science and technology as a central pillar of national development. Let us invest in it, teach it, apply it, and elevate it.

To my colleagues in academia, I urge you to inspire innovation.

To policymakers, I call for enabling environments.

To industry players, I encourage partnerships and local capacity building.

And to our future food scientists, I say: you are not just feeding the nation; you are shaping its destiny.

Conclusion

In conclusion, Food Science and Technology is not a luxury — it is a necessity. It is a cornerstone for achieving food security, economic diversification, industrial development, and public health in Nigeria.

Let this summit be a springboard for renewed commitment, strategic collaborations, and actionable outcomes.

Thank you all and may the fruits of this gathering nourish our nation.

God bless NIFST and God bless the Federal Republic of Nigeria.