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of harnessing the power of the immune system to combat cancer, and is emerging as an important clinical tool. The remarkable success of CAR-T cell therapies demonstrate that cell based therapies are effective at eradicating hematological malignancies, and therefore hold great promise for other cancers. However, there are number of challenges that limit the full potential of cell based therapies, especially for solid cancers. T cells and NK cells represent major lymphocyte populations that are involved in immune surveillance and tumor eradication, and both are emerging as important players for cell based immunotherapy. Although they use different mechanisms for recognizing cancer cells, they complement each other during tumor eradication. NK cells have many functional similarities to T cells and represent the closest innate immune cell lineage to adaptive immune cell populations. Transcriptome analysis has also revealed similar phylogenetic origin of the two lymphocyte populations. The hurdles that impact therapeutic success of these cells include trafficking of lymphocytes to the tumor sites, recognition of solid tumors, and overcoming the inhospitable tumor microenvironment (TME) including the presence of suppressive

cells (Treg and MDSC) and immune suppressive cytokines (TGF). The full potential of cell based therapies may be realized once tools to overcome these barriers are developed. This Research Topic collects

Cell-based immunotherapy is based on the seemingly simple principle

articles critically examining these obstacles and the novel strategies being developed for cell-based therapies to overcome them.

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Cover -- Title Page -- Copyright Page -- Contents -- About the Editors Nota di contenuto

> -- List of Contributors -- Preface -- Chapter 1 Introduction to the Issue: Food Security -- References -- Chapter 2 Food Availability: Stock Maintenance Policies -- 2.1 Food Security and Food Availability -- 2.2 Food Availability -- 2.2.1 Food Availability Status -- 2.2.2 Demand and Supply-Case Studies from Asia and Sub-Saharan Africa -- 2.2.3 Sufficiency of Supply -- 2.2.4 Sufficiency of Supply and Agricultural Infrastructure -- 2.2.5 Food Stocks -- 2.3 Stock Maintenance Policies -- 2.3.1 Indian Case Study -- 2.3.2 Bangladesh Case Study -- 2.3.3 Pakistan Case Study -- 2.3.4 Chinese Case Study -- 2.4 Conclusions --References -- Chapter 3 Postharvest Losses as a Factor of Food Insecurity: The Case of Fruit and Vegetables in Pakistan -- 3.1 Introduction -- 3.2 The Horticulture Sector and Its Implications for Developing Countries -- 3.3 The Horticulture Sector in Pakistan -- 3.4

Fresh Produce Industry Analysis (2005-2015) -- 3.4.1 Area and Production (Fruits) -- 3.4.2 Area and Production (Vegetables) -- 3.5

Constraints on Production and Postharvest Management -- 3.6

Postharvest Losses -- 3.7 Factors Responsible for Postharvest Losses -- 3.7.1 Internal Factors -- 3.7.2 External Factors -- 3.8 Strategies to Reduce PHLs in Fruits and Vegetables -- 3.9 Recent Advances in Postharvest Technology -- 3.9.1 Breeding and Provision of Raw Material -- 3.9.2 Cold Supply Chain System -- 3.9.3 Processing Units -- 3.9.4 Development of Marketing Strategies to Address PHLs --References -- Chapter 4 Climate Change and Agricultural Productivity -- 4.1 Impacts of Climate Change on Food Security in Developing Countries -- 4.2 Case Studies -- 4.2.1 Climate Change and Food Security: Case Study of China -- 4.2.2 Climate Change, Natural Environment, and the People of Myanmar -- 4.2.2.1 Background. 4.2.2.2 Climate Change and Myanmar, A Societal Perspective -- 4.2.2.3 Concluding Remarks -- 4.2.3 Social Vulnerability to Climate Change in Urban India -- 4.2.3.1 Background -- 4.2.3.2 Natural Calamities and Adaptability -- 4.2.3.3 Exposure -- 4.2.3.4 Sensitivity -- 4.2.3.5 Adaptability -- 4.2.3.6 Vulnerability -- 4.2.3.7 Concluding Remarks --4.2.4 Climate Change Impacts on Agriculture-related Food Security in Pakistan -- 4.2.4.1 Background -- 4.2.4.2 Climate Change, Floods, and Food Insecurity -- 4.2.4.3 What Is Next? -- 4.2.4.4 Concluding Remarks -- 4.2.5 Climate Change and Vulnerability to Agriculture System: Case of Thailand -- 4.2.5.1 Background -- 4.2.5.2 Relationship Between Climate Change and Floods in Thailand -- 4.2.5.3 Flood Impacts on Agriculture of the Country -- 4.2.5.4 Flood Victims and Relevant Public Sector (Responses) -- 4.2.5.5 Concluding Remarks -- 4.3 Conclusions -- Acknowledgment -- References -- Chapter 5 Agricultural Revolutions and Food Security -- 5.1 Background -- 5.2 Agricultural Revolutions: Historical Perspective -- 5.3 The Green Revolution -- 5.3.1 The Green Revolution: Background -- 5.3.2 Benefits of the Green Revolution -- 5.3.2.1 Increase in Production and Export of Food Cereals -- 5.3.2.2 Poverty Reduction -- 5.3.2.3 Rise in Public Investments -- 5.3.3 Drawbacks of the Green Revolution --5.3.3.1 Challenge of Reduction of Rural Poverty and Income Inequality -- 5.3.3.2 Gender Inequality -- 5.3.3.3 Environmental Hazards --5.3.3.4 Land Degradation -- 5.3.3.5 Water Issues -- 5.3.3.6 Other Issues -- 5.3.4 Post-Green Revolution Situation -- 5.4 The White Revolution -- 5.4.1 Indian White Revolution: Operation Flood -- 5.4.1.1 Merits and Demerits of the Indian White Revolution -- 5.4.2 Pakistani White Revolution: Doodh Darya (The River of Milk) -- 5.4.2.1 Challenges Associated with Pakistani Dairy Industry. 5.4.2.2 Way Forward for "Doodh Darya" -- 5.4.3 Brazilian Experience of Dairying -- 5.5 Conclusions -- References -- Chapter 6 Dynamics of Income and Income Redistribution in Developing Countries -- 6.1 Historical Background -- 6.2 Concept and Measures of Income Distribution -- 6.2.1 Lorenz Curve -- 6.2.2 Gini Index -- 6.2.3 Gini Concentration Ratio -- 6.3 Global Trends of Income Distribution -- 6.4 Concept and Need of Income Redistribution -- 6.5 Different Redistribution Methods -- 6.5.1 Cash Transfers -- 6.5.2 Negative Income Tax -- 6.6 Case Studies of Developing Countries -- 6.6.1 Cash Transfers and Redistribution in Latin America -- 6.6.2 Redistribution in OECD Countries -- 6.7 Linkage Between Income Distribution and Food Security -- 6.8 Conclusion -- References -- Chapter 7 Market Availability -- 7.1 Introduction -- 7.2 Markets and Their Functions --7.2.1 Exchange Function -- 7.2.2 Price Determination -- 7.2.3 Resource Allocation -- 7.2.4 Policy Implementation -- 7.2.5 Value Addition -- 7.2.6 Employment Generation -- 7.3 Stakeholders in Agricultural Markets -- 7.3.1 Producers -- 7.3.2 Consumers -- 7.3.3 Traders -- 7.3.4 Trade Supporters -- 7.3.5 Trade Planners/Decision-Makers -- 7.4 Agricultural Marketing Systems in Developing Countries

-- 7.5 Market Availability Options for Producers -- 7.5.1 Direct Marketing -- 7.5.2 Indirect Marketing -- 7.5.2.1 Secondary or Terminal Markets -- 7.5.2.2 Primary or Local Markets -- 7.5.2.3 Processors/Exporters/Retailers -- 7.5.2.4 Cooperatives -- 7.6 Markets Available to Consumers -- 7.6.1 Traditional Retail Markets -- 7.6.2 Modern Retail Markets -- 7.6.3 Problems of Markets in Developing Countries -- 7.6.4 Inequitable Returns -- 7.6.5 Predominance of Intermediaries -- 7.6.6 Problem of Transportation -- 7.6.7 Inadequate Storage and Warehousing Facilities -- 7.6.8 Lack of Credit. 7.6.9 Lack of Modern Marketing Knowledge -- 7.6.10 Outdated Measuring Equipment -- 7.6.11 Lack of Technical Knowledge -- 7.6.12 Lack of Organized Markets -- 7.7 Policy Measures for Improved Market Availability -- 7.7.1 Entrepreneurial Mindset -- 7.7.2 Market Governance -- 7.7.3 Institutional Innovations -- 7.7.4 Diversification -- 7.7.5 Standards and Certification Culture -- 7.7.6 Use of ICT -- 7.8 Conclusion -- References -- Chapter 8 Price Volatility and Food Security: Measurement and Implications -- 8.1 Introduction -- 8.2 Implications of Food Price Volatility -- 8.2.1 Price Volatility and Decision-Making by Stakeholders -- 8.2.2 Price Volatility and Market Integration -- 8.2.3 Price Volatility and Food Security -- 8.3 Measuring Price Volatility -- 8.3.1 Unconditional Price Volatility -- 8.3.2 Conditional Price Volatility -- 8.3.3 Price Volatility: A Case of Rice Sector in Pakistan -- 8.3.4 Salient Features of Regional Rice Prices Volatility -- 8.4 Conclusion -- References -- Chapter 9 Food Security. Food Safety, and Sanitation -- 9.1 Introduction -- 9.2 What Is Food Safety? -- 9.3 Impact of Food Safety on Food Security -- 9.4 Major Problems and Challenges in Food Safety -- 9.4.1 Food Hygiene -- 9.4.2 Impact of Climate Change -- 9.4.3 Kitchen and Equipment Sanitation -- 9.4.4 Personal Hygiene of Food Handlers -- 9.4.5 Globalization in Food Industry -- 9.4.6 Food Adulteration -- 9.4.7 Misuse of Food Additives -- 9.4.8 Use of Products past Their Expiry Dates -- 9.5 Food Safety at Different Stages -- 9.5.1 Food Safety at Production Stage --9.5.2 Food Safety at Processing and Packaging Stage -- 9.5.3 Food Safety at Transport and Distribution Stage -- 9.5.4 Food Safety at Consumption Stage -- 9.6 Sanitation and Personal Hygiene -- 9.6.1 Sanitation -- 9.6.2 Personal Hygiene -- 9.7 World Condition of Sanitation -- 9.8 Foodborne Illness.

9.9 Sanitation at Industrial Level -- 9.10 Sanitation at Household Level -- 9.11 The Impact of Sanitation on Food Security -- 9.12 Conclusion -- References -- Index -- EULA.

Sommario/riassunto

"Despite the fact that the world is producing a sufficient amount of food for all, about 11% (800 million) of the global population is malnourished. Developing countries are home to about 98% of the world's undernourished people. It is time to understand the dynamics of food security in these countries. Understanding three core issues in depth -- food availability, accessibility and utilization -- will help us to understand the phenomenon of food security and guide the policy process in developing countries. This book will bring together these three core food security issues in one volume, and provide readers with the opportunity to understand this complex and multifaceted problem. The book will help readers to think about the issue of food security in a comprehensive way, and will shed light on policy issues in developing countries in a way that will help policy makers and researchers to understand and further explore these areas."--