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Affordability Barriers to Healthy Diet across World Regions

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Abstract

Food insecurity is a foremost challenge affecting a large segment of world population. Unemployment, poverty and loss of agricultural productivity are some of the other reasons identified for this undesirable condition. Price and ability to maintain of healthy diet are important new parameters of food insecurity, and reveal that stable nourishing foods are comparatively expensive and unaffordable for many South Asians. Even though the global hunger decreased in 2025, the authorities should think about lowering the prices of fruits, vegetables and dairy as report shows 2.69bn people still cannot afford to eat well. The percentage of individuals who cannot afford a healthy diet remains very high, said Maximo Torero, chief economist of the Food and Agriculture Organization. The studies made by Food Data analysts shows that malnutrition is gradually used as edge for surging food-related violence. Government policies are mostly prioritising on granting aids for cereals and staples, rather than meat, dairy, fruit and vegetables. In this context, the present study attempts to understand the existing scenario of inability to afford healthy diet across the world regions and aims to help bring affordability of healthy diets into focus for policymakers around the world. The results have proved that regional economic circumstances, food schemes and strategy responses have influenced healthy diet affordability in a different way across the world, the data released by FAO is used for analysis and the results are presented in a textual format.

Keywords: Global, Food affordability, Healthy Diet, Policies, FAO.

Introduction

Humans have a physiological need for the nutrients supplied by food. Nutrition is therefore a crucial input in performance and wellbeing. Many expansion programs, projects and policies frame and work towards food security objectives. But healthy dietary food is a basis of joy apart from its physiological need (Christopher B. Barrett and Erin C. Lentz 2009). Thus, access to a healthy diet is a fundamental human need, yet a significant portion of the global population faces barriers to realizing it (Jonas Stehl et. al. 2025). With this

background, food safety has become more significant as it ensures that each individual has reliable access to necessary, safe and healthy food supply to support a vigorous life. Food security can be defined as “having physical and fiscal access to satisfactory, safe, nutritious food that meets the dietary needs and food preferences for an active and healthy life” (FAO, 1996). Nevertheless, the failure to have adequate money to afford healthy diet, a state where individuals or families do not have adequate monetary incomes to purchase a nutritionally acceptable and balanced nourishment that

encounters their day-to-day nutritive requirements, is one of the predominant obstacles in having healthy diet. Affordability of diets replicates food prices in comparison to an objective standard of income (FAO, 2020). This inability is a key indicator of food insecurity that reproduces the financial accessibility of healthy foods such as fruits, vegetables, dairy items, pulses, eggs, fish, and meat. Internationally, a sizable population is unable to have enough money to afford healthy diet by reason of poverty, increasing food prices, inflation, income disparity, joblessness and financial uncertainty. Consequently, several families relied on low-cost and poor nutrients consisting diets, rising the risk of undernourishment, micronutrient shortages, overweightness and non-infectious illnesses. The problem is mainly severe in underdeveloped and developing countries, particularly in parts of Africa and Southern Asia, where huge population faces economic hurdles in getting healthful food material. Among the several factors that influence the development of human health, food insecurity remains the most profound (Loukya Kotla and Nafeesa Mahmood, 2026). To manage the incapability to have enough money to afford a healthy diet needs harmonized efforts like growing family incomes from all sources, promoting social safety programs, ensuring agricultural efficiency, soothing food prices, encouraging nourishment-

sensitive strategies and safeguarding impartial access to affordable, harmless and nourishing diet. Increasing healthy diet affordability is important for attaining food security, improved civic health and the Sustainable Development Goals (SDGs), mainly Zero Hunger (SDG 2) and Good Health and Well-being (SDG 3).

Objectives

1. To scrutinise proportion of the population unable to afford a healthy diet.
2. To examine correlation between populations from different world regions based on percentage of population unable to afford a healthy diet.
3. To provide suggestions for managing the problem of inability to afford a healthy diet.

Methodology

The present study utilizes secondary data published by Food and Agriculture Organization, while additional information was obtained from government reports, research papers, text books and news articles. The Pearson correlation method was applied for statistical computation and the results are presented in a matrix form.

Results and Discussion

Table 1: Percent population unable to afford healthy diet

Group of Countries/ Year	2019	2020	2021	2022	2023	2024
Africa	64.1	65.2	64.7	64.8	66.2	66.6
Asia	35.3	37.3	33.2	31.5	29.8	28.1
Latin America & the Caribbean	28.1	29.3	30.3	27.8	27.7	27.4
Oceania	17.8	21.2	22.4	20.1	19.7	19.6
North America & Europe	6.2	5.8	5.0	5.3	5.2	5.0

Source: FAOSTAT: Cost and Affordability of Healthy Diet (CoAHD), FAO 2025
(Accessed on 28 July 2025) www.fao.org/faostat/en/#data/CAHD.

The data on proportion of population unable to afford a healthy diet across five world regions during the period from 2019 to 2024 is depicted in table1. The table shows significant regional differences in food affordability, indicating variances in earnings, food prices, monetary growth and the efficiency of food security strategies. Africa steadily noted the maximum percentage of the populace incapable to pay for a healthy diet during period selected for present study. The percentage raised from 64.1% in 2019 to 66.6% in 2024, signify that about two-thirds of the people continued to encounter with the hurdles in getting healthy food. The regular rise advocates insistent food insecurity led by poverty, inflation, global warming climate change and supply chain disturbances.

Asia showed a decreasing tendency later a temporary increase throughout the COVID-19 epidemic. The values of parentage increased from 35.3% in the year 2019 to 37.3% in the year 2020, however further weakened progressively to 28.1% in the year 2024. This advance replicates financial regaining, reinforced communal protection actions, enhanced agrarian efficiency, and administrative interventions that improved healthy food affordability in most of the countries in Asia. Latin America and the Caribbean presented restrained instabilities during the period selected for present study. The percentage improved from 28.1% in 2019 to 30.3% in 2021, possibly indicating the monetary influences of the epidemic, earlier decreasing to 27.4% in 2024. The steady recovery designates enhancements in economic situations and food support programmes, though a substantial percentage of the

population up till now struggles to have enough money afford a healthy diet.

Oceania gone through visible instabilities, growing from 17.8% in 2019 to 22.4% in 2021, after that a steady weakening to 19.6% in 2024. Whereas the region upheld lower heights of food unaffordability than Africa, Asia and Latin America, the epidemic and growing food prices for the time being declined access to healthy diets. North America and Europe steadily documented the lowermost proportion of the populace incapable to have enough money to afford healthy diet. The percentage declined from 6.2% in 2019 to 5.0% in 2024, with few slight fluctuations throughout the period selected for the present study. This indicates comparatively high-income levels, durable social wellbeing schemes, steady food supply chains and influencing policies devoted to food security.

In essence, the data depicted in the table validates that Africa found as the most prone region, whereas North America and Europe stay to practice the uppermost levels of food affordability. Most of the regions showed a decline in affordability in 2020–2021, overlapping with the COVID-19 epidemic and worldwide financial disturbances, after those gradual advances in succeeding years. Nevertheless, the determination of high percentages in Africa and parts of Asia and Latin America specifies that attaining worldwide access to affordable healthy diets remains a main universal problem, necessitating targeted investments in poverty alleviation, agronomic resilience, nourishment-sensitive strategies and social safety programmes.

Table 2: Pearson Correlation Matrix

Region	Africa	Asia	Latin America & Caribbean	Oceania	North America & Europe
Africa	1.000				
Asia	-0.726	1.000			
Latin America & Caribbean	-0.464	0.604	1.000		
Oceania	0.036	0.139	0.775	1.000	
North America & Europe	-0.610	0.756	-0.016	-0.541	1.000

Source: Compiled by Authors

Table 2 reveals that Africa and Asia ($r = -0.726$) show a strong negative correlation between them, indicating that while Africa experienced a gradual increase in the proportion of people unable to afford a healthy diet, Asia showed a declining trend over the same period. Africa and Latin America & Caribbean ($r = -0.464$) indicate a moderate negative correlation suggests contrasting affordability patterns between these regions. In case of Africa and Oceania ($r = 0.036$) there is a negligible positive correlation indicating that changes in Africa were largely unrelated to those in Oceania while Africa and North America & Europe ($r = -0.610$) show a moderate to strong negative correlation representing that Africa's worsening affordability contrasts with the relatively stable and low levels in North America and Europe.

The world regions Asia and Latin America & Caribbean ($r = 0.604$) reveal a moderate positive correlation indicating that both regions generally followed similar improving affordability trends while Asia and Oceania ($r = 0.139$) confirm weak positive correlation suggesting only a slight similarity in trends. Asia and North America & Europe ($r = 0.756$) however indicate a strong positive correlation specifying that both regions experienced similar overall movements toward improved affordability over time.

Latin America & Caribbean and Oceania ($r = 0.775$) disclose a strong positive correlation suggesting both regions experienced similar fluctuations, including increases around the pandemic period followed by gradual improvements. Latin America & Caribbean and North America & Europe ($r = -0.016$) however indicate virtually no correlation, meaning the two regions followed independent affordability trends. Nevertheless, Oceania and North America & Europe ($r = -0.541$) specify moderate negative correlation reflecting differing changes in affordability between the two regions.

Suggestions

1. The disparity in correlation values specify that the inability to afford a healthy diet deviates meaningfully throughout the regions. Consequently, administrators should accept region wise approaches as an alternative of an even worldwide approach. Region-specific food security strategies should be given priority.
2. Africa region steadily accounts for the large segment of population powerless to afford a healthy diet. State and central governments along with international organizations would reinforce social safety schemes, increase agricultural and allied sector's efficiency and increase access to affordable nourishing food material. Interventions in Africa are necessary.
3. The powerful negative correlation between Africa and Asia ($r = -0.726$) proposes different trends. Fruitful strategies applied in many countries in Asian viz. Agricultural modernization, targeted food subsidies and poverty alleviation programs may offer valuable teachings for other developing countries. In view of this it is expected to promote successful practices from Asian countries.

4. In case of Latin America and the Caribbean, the moderate positive correlation with Asia ($r = 0.604$) and strong positive correlation with Oceania ($r = 0.775$) show that these regions may experience same changes over a period of time. Creating monetary support, food distribution measures and diet-sensitive farming can advance affordability of healthy diet. Importance should be given to improved economic resilience in Latin America and the Caribbean.
5. Though Oceania does not demonstrate a strong relationship with Africa ($r = 0.036$), its influential positive association with Latin America and the Caribbean suggests that financial or climatical shocks might likewise impact food affordability. Constant one-to-one care and climate-resilient agricultural strategies are the superlative option for these regions. Monitoring growing risks in Oceania may recover the condition.
6. There is a need to maintain affordability in North America and Europe. The solid positive correlation with Asia ($r = 0.756$) and negative correlation with Africa ($r = -0.610$) highlight changing aspects at regional level. Sustained investment in constant food supply chains, inflation regulator and nourishment supporting programs will support withstand affordable healthy diets.
7. There is a requirement of strengthening global collaboration. Subsequently quite a few regions show moderate to solid correlations, intercontinental partnerships through knowledge sharing, technology transference and harmonized food security enterprises can advance worldwide resilience contrary to food price shocks.
8. Data collection and continuous monitoring is important to reinforce the capability of individuals to have enough money to afford healthy diet. Rigorous monitoring of food affordability indicators and nutritional outcomes is essential to recognize emergent tendencies, evaluate policy efficiency and support evidence-based decision-making.

Conclusion

The Pearson correlation analysis shows dissimilar regional forms in the affordability of healthy diets during the period from 2019 to 2024. Asia, Latin America & the Caribbean and North America & Europe commonly displayed alike or rising affordability tendencies, while Africa tracked a different pattern characterized by persistently high and growing unaffordability. Latin America & the Caribbean and Oceania shared the strongest positive relationship ($r = 0.775$), whereas the strongest inverse relationship was experienced between Africa and Asia ($r = -0.726$). These conclusions prove that regional economic circumstances, food schemes and strategy responses have influenced healthy diet affordability in a different way across the world, highlighting the requirement for region-specific interventions to advance food security and nourishment. The food affordability tendencies differ significantly across world regions, reflecting differences in

economic growth, farming systems, social safety and food strategies. Governments should adopt targeted, region-specific interventions while enhancing international cooperation to ensure that healthy diets become affordable and accessible to all populations.

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References

1. Amerzadeh M, Takian A, Pouraram H. *et al.* Economic barriers and gaps to reach the desirable consumption of salt, sugar, and fat in Iran: a qualitative study. *J Health Popul Nutr.* 2023; 42:8.
<https://doi.org/10.1186/s41043-023-00348-8>
2. Andrea Cattaneo, Ahmad Sadiddin, Sara Vaz, Valentina Conti, Cindy Holleman, Marco V. Sánchez, Máximo Torero, Viewpoint: Ensuring affordability of diets in the face of shocks, *Food Policy*, 2023, 117.
<https://doi.org/10.1016/j.foodpol.2023.102470>.
(<https://www.sciencedirect.com/science/article/pii/S0306919223000684>)
3. Christopher B. Barrett and Erin C. Lentz Food Insecurity, Chapter for the International Studies Compendium Project, Robert A. Dene mark *et al.*, Editors Wiley-Blackwell publishing, forthcoming, 2009, 2.
4. Derek headey, Kalle Hirvonen, Harold Alderman, Saskia De Pee, Kalyani Raghunathan, Diet Affordability, Understanding the High Cost of Healthy Diets, International Food Policy Research Institute (IFPRI) Book Chapters
5. FAO. Rome Declaration on World Food Security and World Food Summit Plan of Action. Rome, 1996.
6. FAO. AgEcon Search - Cost and affordability of healthy diets across and within countries, Background paper for The State of Food Security and Nutrition in the World, 2020, 1.
7. FAO. FAOSTAT: Cost and Affordability of Healthy Diet (CoAHD). [Accessed on 28 July 2025].
www.fao.org/faostat/en/#data/CAHD.
8. Herforth A, Venkat A, Bai Y, Costlow L, Holleman C, Masters WA. *et al.* Methods and options to monitor the cost and affordability of a healthy diet globally Background paper for The State of Food Security and Nutrition in the World 2022. Unknown, 2022.
<https://doi.org/10.22004/AG.ECON.324075>
9. Jonas Stehl, Lutz Depenbusch, Sebastian Vollmer. Global poverty and the cost of a healthy diet, *Food Policy* 132 (2025) 102849, Elsevier Ltd., 2025, 1.
10. Loukya Kotla and Nafeesa Mahmood. Food Insecurity: Governmental Policies and Health Complexities, Laurie M. Tisch Centre for Food, Education, and Policy Teachers College, Columbia University [Accessed on 19 July 2026].
11. theguardian.com/global-development/2026/jul/21/Healthy-diet-too-expensive-for-one-in-three-people-globally, UN report
12. Worldbank.org/en/programs/ICP/brief/food-prices-for-nutrition-Food Prices for Nutrition Data Hub: global statistics on the Cost and Affordability of Healthy Diets