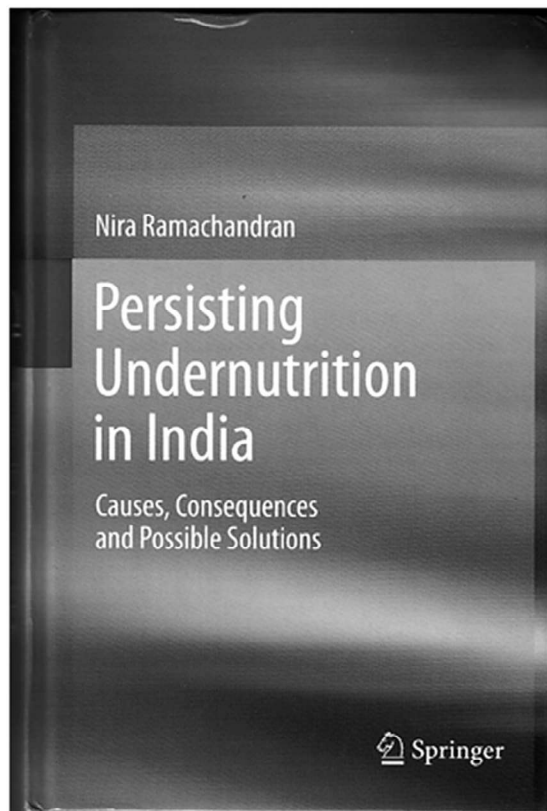


## Book Review ... 1

### Nira Ramachandran

“Persisting Undernutrition in India: Causes, Consequences and Possible Solutions”, Springer, New Delhi, Heidelberg, New York, Dordrecht, London ISBN 978-81-322-1831-9, Springer India 2014, xxv + 241 p., price: e-book \$ 99.00, hardcover \$ 129.00



Malnutrition and under-nutrition of children as well as adults remains a haunting problem of the Indian society. In her book “Persisting Undernutrition in India”, Nira Ramachandran has discussed, at length, the diverse facets of this problem in the Indian context. Based on the findings of a major research project, involving several field studies, scanning of earlier reports existing on the theme, and supported by an analysis

of volumes of data, Nira, has evaluated the manifold aspects of malnutrition including their regional and geographical implications.

The book presents a seriously researched text, well documented and logically structured, as reflected in the sequential arrangement of the different topics in the list of contents. The text is presented in four parts: Part I ‘Introduction’ with two chapters, Part II ‘Issues and Concerns’, which includes seven chapters, Part III ‘In Search for Solutions’ divided into three chapters and Part IV offering the ‘Conclusions’. Each chapter, but for the conclusions, carries references at the end. Numerous tables, diagrams and maps aptly illustrate the text. It is very useful to find an index of numerous abbreviations used in the text, in the opening pages of the book.

The Introduction, though a bit long – running into 28 pages - sets the pace of the book. In fact, it represents, qualitatively the ‘concern, the spirit and the purpose’ of the book. With catchy ‘in-box’ texts like ‘The South Asian Enigma: why is under-nutrition in South Asia so much higher than in Sub-Saharan Africa?’ the introduction clearly outlines the compelling need for such a book. The first chapter - ‘India’s Nutrition Scenario: Issues and State Response’ acquaints the reader with startling facts, such as ‘a third of the Indian adults, and

an even higher number of children have a chronic protein energy malnutrition, that sufficient food on a daily basis evades 0.4 % of the rural 1 % of the urban households, and that 43 % of the children, under 5 years of age, are underweight' The author emphasises the vicious circle developed between malnutrition, stunted development of children, poor health, frequent disease and consequent loss of productivity of individuals. In economic terms, Gross National Product loss (GDP) due to malnutrition can be as high as 2 to 3 %. It further emerged that the rate of economic growth, as expressed in GDP, in India has not shown a corresponding decline in the level of under-nutrition.

The question, the author poses, 'why in spite of important government schemes to reduce malnutrition, the results are not satisfactory?' As compared with India, undernourishment declined at a faster rate in China, sub-Saharan Africa and even Bangladesh. The author reasons out that 'the availability of food is not enough, the capacity to absorb food, which depends on a number of factors, is of prime importance'. The poor nutritional status of the expectant mother and the consequent low birth weight of the newborns and poor hygiene and sanitation of women in lower economic group, are some of the reasons for a slow progress on the nutritional front in South Asia. An important part of this chapter is an evaluation of the government response to hunger and malnutrition through a policy framework and timely interventions to ensure food availability. These interventions started with the introduction of Public Distribution system: and over the years, an increasing number of nutrition-programs designed for different target groups, from

pregnant and lactating mothers to children in different age groups, including the Mid Day Meal scheme for schoolchildren, adolescent girls and adults, have been introduced.

The origin of 'the Right of Food' lies in the Universal Declaration of Human Rights (1948, Article 25, 1). Over the last sixty-five years, and through a number of related international and national conventions, the Right to Food was gradually recognised as a part of Human Rights. In India, the final recognition of this basic right was established through the National Food Security Act of 2013. The reader can find the provisions of this Act appended at the end of the chapter.

The second chapter deals with the 'Changing Calorie Consumption and Dietary Pattern'. The nutritional status of the population is determined by applying the BMI or Body Mass Index, and, most significant, looking at the dietary pattern – in India dominantly cereal based - and the household expenditure. A BMI under 18.5, taken as a critical level for Protein Energy Malnutrition (PEM), is one of the important indices used throughout the book to identify the vulnerable population groups, male, female or child population, rural or urban population, in a state wise analysis. The results are presented in a tabular form, ranking the states according to their percentage share of underweight population groups, ranging from best performing states of Sikkim, Mizoram, Kerala and Punjab to worst performing states like Jharkhand and Madhya Pradesh

Part II entitled 'Issues and Concerns' takes a closer view of different aspects of under-nutrition. It examines gender disparity with respect to nutrition and

health, especially in the case of children, and the economic implications of such an underweight adult population. One of the important points made in the study is the observation about the assumption that a higher economic growth would lead to an improved nutritional status of the undernourished'. This, according to the author, is only partly true, as there exists a considerable time lag between the two. She advocates a reverse strategy starting with the elimination of poverty and malnutrition first. This could be more effective, for the cost of under-nutrition and ill health constituted not only a burden to the individual household but to the economy as a whole. Then, there is an analysis of the debilitating effect on work output of undernourished humans and hence on their livelihood and the cost of underweight adults to the economy of India. For those obsessed with economic growth and GDP, the author presents state wise estimates of losses to the exchequer, in terms of the Gross National Income and the Net State Domestic Product (NSDP) lost, due to adult underweight, which can range from more than two (minimum estimate) to more than four percent (maximum estimate) of the NSDP in the case of Bihar.

There is a special focus on child malnutrition, on the dietary pattern, the role of the educational level of the mother, the childcare provided and the utilisation of the Integrated Child Development Services (ICDS). The prevalence of anaemia in India – i. e. 75 % of the children below five years of age and about 50 % of the women - is discussed in another chapter. Iron deficiency negatively affects the mental and physical growth of children and their behaviour; lowers their resistance to infection and leads to increase in infant

mortality. It also influences and negatively the work performance of adults, and keeps pregnant and young mothers at greater risk. Iron deficiency is a severe health problem in India and different national programmes and strategies try to prevent or at least reduce the occurrence in the vulnerable population groups. As already mentioned, India has developed different nutrition interventions works, starting with PDS, the Mid-day Meals, the ICDS, etc. After evaluating a number of case studies in the field, the author advocates a greater flexibility in the way the programmes are carried out, and considers the recognition of the local context and needs, of prime importance.

Rightly, global warming and the likely impact of a changed weather pattern on the nutrition scenario in South Asia found a place in the book. South Asia is one the most natural disaster prone regions in the world, be it floods, hailstorms, droughts or earthquakes. At the same time, the South Asian countries have a high share of undernourished population, especially children. Thus, the author emphasises that the likely impact of climate change could make the already vulnerable sections of the population extremely vulnerable to diseases, starvation and death, and advocates long-term strategies to cope with such an adversity.

In Part III - 'In Search of Solutions', the author puts forward the hypothesis that poverty can be more effectively reduced by a family based approach to nutrition, than by focusing only on the most vulnerable groups, namely young children and women in their reproductive years. For this purpose, gender disparity in BMI were analysed on a regional, and, in case of India, a sub-regional level. The result could show that

male under-nutrition is comparable to that of female adults, and in the case of certain countries like Bangladesh or Vietnam and Indian states like Assam, Kerala, Rajasthan, male under-nutrition is even higher and requires remedial actions. In another chapter, the performance of the Integrated Child Development Services (ICDS), India's largest nutrition programme, is assessed and special recommendations to enhance its performance are suggested. How some developing countries successfully reduced malnutrition and poverty is discussed in the last chapter, giving the example of China, Thailand, Brazil and Mexico.

The conclusions 'Fast tracking Nutritional Improvements in India' are presented under very short and clear headings. They emphasise those findings, which were of great concern to the author, like a family based approach, a region specific approach to nutrition, a community involved approach. The factors that could improve the nutritional scene in a shorter time are pinpointed in the final recommendations.

The above paragraphs can give only a short glimpse of the book on 'Persisting Undernutrition in India' by Nira Ramachandran. Documented by appropriate tables, diagrams and figures, the author has been able to present in a balanced and very objective way the nutritional status of a large section of the Indian population. Comparisons with South Asian and other developing countries are very useful. The book is well organised, the arguments presented in the text are cogent and convincing and the observations seemingly irrefutable. It is a text that gives a very clear picture of India's health and nutrition problem, offering at the same time some suggestions to remedy the situation.

Based on incisive research, it should be read and consulted by all those who are concerned with health and nutrition of our nation. For students specialising in health and nutrition, the book could be ready reference for the Indian situation.

The book - Persisting Undernutrition in India - is a short but well documented reference as well as text book, throwing light on the lingering problem of malnutrition in India.

A well written good book, highly recommended.

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