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NUTRITIONAL PROFILE OF DEVELOPING WORLD

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ABSTRACT

Stunting affects approximately 195 million children under 5 years old in developing world, or about one in three. Africa and Asia have high stunting rates – 40 per cent and 36 per cent, respectively – and more than 90 per cent of world's stunted children live on these two continents. Afghanistan and Yemen have highest stunting rates: 59 per cent and 58 per cent, respectively. Ten per cent of children in developing world are severely underweight. The prevalence of underweight among children is higher in Asia than in Africa, with rates of 27 per cent and 21 per cent, respectively. In 17 countries, underweight prevalence among children under 5 years old is greater than 30 per cent. The rates are highest in Bangladesh (41%), India (43%), Timor-Leste (54%) and Yemen (58%), a number of African and Asian countries have wasting rates that exceed 15 percent, including Timor-Leste (25%), India (20%), Bangladesh (17%) and Sudan (16%). Out of 134 countries with, 32 have wasting prevalence of 10 per cent or more among children under 5 years old. More than one third of developing world's children who are wasted lives in India. In Georgia, Guinea-Bissau, Iraq, Kazakhstan, Sao Tome and Principe, and the Syrian Arab Republic, 15 per cent or more of children under 5 years old are overweight.

Key words: Stunting, underweight, Wasting, Overweight.

INTRODUCTION

WHO suggests that globally there are at least a half a billion children with PEM (WHO). Protein-energy malnutrition (PEM) represents a spectrum, with kwashiorkor and marasmus at the one extreme and stunting and underweight representing the more chronic and mild to moderate forms of PEM (Jelliffe et.al., 1986). The level of child and maternal under nutrition remains unacceptable throughout the world, as ninety per cent of the developing world's children who are chronically undernourished (stunted) are residing in Asia and Africa. Under nutrition continues to be widely prevalent in both developing and industrialized countries, to different degrees and indifferent forms. It is estimated that more than one-third of under-five deaths are attributable to under nutrition (Black et.al., 2008). Nutritional deficiencies are particularly harmful while a woman is pregnant and during a child's first two years of life. A large number of deaths also occur among moderately and mildly undernourished children who may otherwise appear healthy. Compared to children who are severely undernourished, children who are moderately or mildly undernourished have a lower risk of dying, but there are many more of the latter (Pelletier, 1993). This silent form of malnutrition can have devastating impacts on fetal growth and on the health, growth, and development of children of all ages, particularly young children (Scrimshaw, 1994). During this period, they pose a significant threat to mothers and to children's survival, growth and development, which in turn negatively affects

children's ability to learn in school, and to work and prosper as adults.

The combination of malnutrition and infection is the leading cause of death among young children in developing countries. Malnutrition alone is estimated to account for over half of children's deaths annually.⁶ Many of the Millennium Development Goals (WHO, 2003, UNDP, 2003, UNICEF, 2004, WHO, 2003 and Govt. of India, 1998), (MDGs) – particularly MDG 1 (eradicate extreme poverty and hunger), MDG 4 (reduce child mortality) and MDG 5 (improve maternal health) – will not be reached unless the nutrition of women and children is prioritized in national development programmes and strategies. With persistently high levels of under nutrition in the developing world, vital opportunities to save millions of lives are being lost, and many more children are not growing and thriving to their full potential. Stunting remains a problem of greater magnitude than underweight or wasting, and it more accurately reflects nutritional deficiencies and illness that occur during the most critical periods for growth and development in early life. Most countries have stunting rates that are much higher than their underweight rates, and in some countries, more than half of children under 5 years old are stunted. In terms of numbers, the bulk of the worlds under nutrition problem are localized.

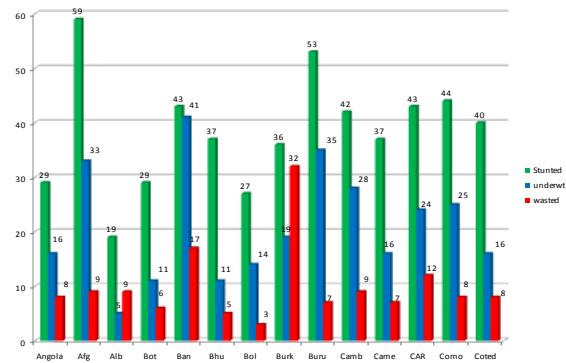
Twenty-four countries (Figure-1, Figure-2, Figure-3 & Figure- 4) account for more than 80 per cent of the global burden of chronic under nutrition, as measured by stunting (low height for age). Although India does not

have the highest prevalence of stunted children, due to its large population it has the greatest number of stunted children. Stunting affects approximately 195 million children under 5 years old in the developing world, or about one in three. Africa and Asia have high stunting rates – 40 per cent and 36 per cent, respectively – and more than 90 per cent of the world’s stunted children live on these two continents. Of the 10 countries that contribute most to the global burden of stunting among children, 6 are in Asia. These countries all have relatively large populations: Bangladesh, China, India, Indonesia, Pakistan and the Philippines. Due to the high prevalence of stunting (48 per cent) in combination with a large population, India alone has an estimated 61 million stunted children, accounting for more than 3 out of every 10 stunted children in the developing world. There were 925 million undernourished people in the world in 2010, an increase of 80 million since 1990, despite the fact that the world already produces enough food to feed everyone — 7 billion people — and could feed almost double — 12 billion people. Today, an estimated 129 million children under 5 years old in the developing world are underweight – nearly one in four. Ten per cent of children in the developing world are severely underweight. The prevalence of underweight among children is higher in Asia than in Africa, with rates of 27 per cent and 21 per cent, respectively.

In 17 countries (Figure-1, Figure-2, Figure-3 & Figure- 4), underweight prevalence among children under 5 years old is greater than 30 per cent. The rates are highest in Bangladesh, India, Timor-Leste and Yemen, with more than 40 per cent of children underweight. Children who suffer from wasting face a markedly increased risk of death. According to the latest available data, 13 per cent of children under 5 years old in the developing world are wasted, and 5 per cent are severely wasted (an estimated 26 million children). A number of African and Asian countries (Figure-1, Figure-2, Figure-3 & Figure- 4), have wasting rates that exceed 15 per cent, including Bangladesh (17 per cent), India (20 per cent) and the Sudan (16 per cent). The country with the highest prevalence of wasting in the world is Timor-Leste, where 25 per cent of children under 5 years old are wasted (8 per cent severely). Out of 134 countries with available data, 32 have wasting prevalence of 10 per cent or more (Figure-1, Figure-2, Figure-3 & Figure- 4) among children under 5 years old. At such elevated levels, wasting is considered a public health emergency requiring immediate intervention, in the form of emergency feeding programmes. Ten countries account for 60 per cent of children in the developing world who suffer from wasting. The top eight countries all have wasting prevalence of 10 per cent or higher. More than one third of the developing world’s children who are wasted live in India. In developing countries, 16 per cent of infants, or 1 in 6, weigh less than 2,500 grams at birth. Asia has the highest incidence of low birth weight by far, with 18 per cent of all infants weighing less than 2,500 grams at birth. Mauritania, Pakistan, Sudan and Yemen all have an estimated low birth weight incidence of more than 30 per cent. A total of 19 million newborns per year in the developing world are born with

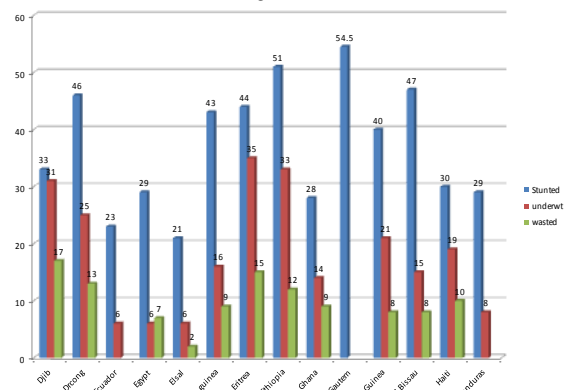
low birth weight, and India has the highest number of low birth weight babies per year: 7.4 million.

Fig:-1. Percentage of under five children who are stunted underweight and wasted



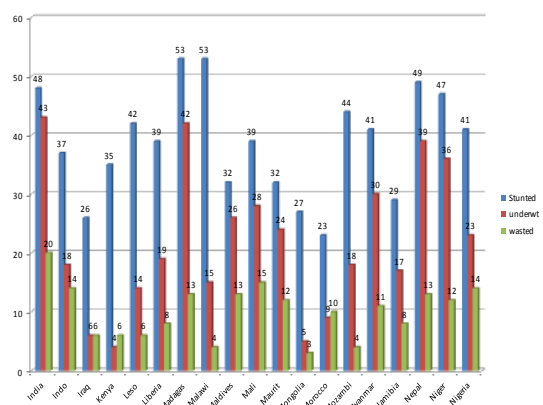
Note:-Afg-Afganistan; Alb-Albania; Bot-Botswana; Ban-Bangladesh; Bhu-Bhutan; Bol-Bolivia; Burk- Burkina Fasco; Camb- Cambodia; Came- Cameroon; CAR- Central African Republic; Como-Comoros; Coted-Cotedivoire

Fig:-2. Percentage of under five children who are stunted underweight and wasted



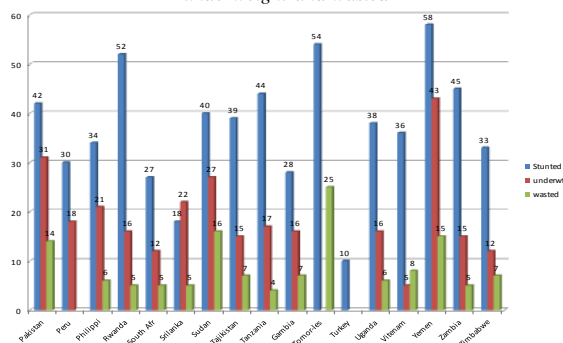
Note:-Djib-Djiboutis; Drcngo-DR Congo; Elsal- El Salvador; Eq.guinea- Equitorial guinea; Gautem- Gautemala; G.Bissau- Guinea Bissau;

Fig:-3. Percentage of under five children who are stunted underweight and wasted



Note:-Indo-Indonesia; Leso-Lesotho; Madagas- Madagascar; Maurit- Mauritania; Mozambi- Mozambique

Fig:-4. Percentage of under five children who are stunted, underweight and wasted



Although being overweight is a problem most often associated with industrialized countries, some developing countries and countries in transition also have high prevalence of overweight children. In Georgia, Guinea-Bissau, Iraq, Kazakhstan, Sao Tome and Principe, and the Syrian Arab Republic, for example, 15 per cent or more of children under 5 years old are overweight. Some countries are experiencing a ‘double burden’ of malnutrition, having high rates of both stunting and overweight. In Guinea-Bissau and Malawi, for example, more than 10 per cent of children are overweight, while around half are stunted.

CONCLUSION

With persistently high levels of under nutrition in the developing world, vital opportunities to save millions of lives are being lost, and many more children are not growing and thriving to their full potential. Ninety per cent of the developing world’s children who are chronically undernourished (stunted) are residing in Asia and Africa. Some countries are experiencing a ‘double burden’ of malnutrition, having high rates of both stunting and overweight.

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