

## NUTRITIONAL STATUS OF MOTHER AND CHILDREN THEN AND IS NOW: Comparison of NNS 2011 and NNS 2001

### Introduction:

Pakistan signed on to achieve the millennium development goals, which include MDG 4 (child health) and MDG 5 (maternal health). Considerable evidence suggests that malnutrition is adversely affecting attainment of these and larger development goals.

Worldwide, malnutrition contributes directly or indirectly to 35% of all under-5 deaths and Vitamin A deficiency contributes to 2.2 million deaths worldwide each year from diarrhea among children under 5 and nearly 1 million deaths from measles<sup>1</sup>. In Pakistan, approximately 30-36% children from urban middle and upper middle class families and 35-45% from rural areas were stunted in the national health survey (1990-94)<sup>2</sup>. The same survey showed that 51% of the population was food insecure and consumed less than 2,100 kcal per day. Two thirds of these severely food insecure people lived in rural areas<sup>3</sup>. There are concerns that these problems of malnutrition have been worsening. This policy brief explores changes in maternal and child nutritional status over the time by comparing the findings from National Nutritional Surveys of 2001 and 2011.

### Issues Identified & Recommendations

The key finding among children is that for many indicators, previously alarming state of malnutrition has persisted and some indicators such as anemia and vitamin A deficiency, it has worsened markedly. Similar findings hold true for mothers. Key salient findings from the comparison are:

- Iodine deficiency among women and children has decreased (improved).
- Anemia among children and Iron deficiency anemia among women have worsened.
- Wasting and stunting situation among children has worsened.
- Both women and children have showed many folds increase in the prevalence of Vitamin A deficiency.

<sup>1</sup> Robert E Black, Saul S Morris, Jennifer Bryce. Where and why are 10 million children dying every year. *The Lancet*. 2003; 361:2226-34.

<sup>2</sup> Jalil F, Karlberg J, Hanson LA, Lindblad BS. Growth disturbance in an urban area of Lahore, Pakistan related to feeding patterns, infections and age, sex, socio-economic factors and seasons. *Acta Paediatr Scand Supply* 1989; 350:44-54.

<sup>3</sup> Gary Bickel, Mark Nord, Cristofer Price, William Hamilton, John Cook, "Guide to Measuring Household Food Security" Revised 2000. USDA.

### SALIENT POINTS

- Iodine deficiency among women and children has decreased (improved).
- Anemia among children and Iron deficiency anemia among women have worsened.
- Wasting and stunting situation among children has worsened.
- Both women and children have showed many folds increase in the prevalence of Vitamin A deficiency.
- The proportion of unemployed heads of households has doubled in last ten years.
- Food insecurity has increased over the years.

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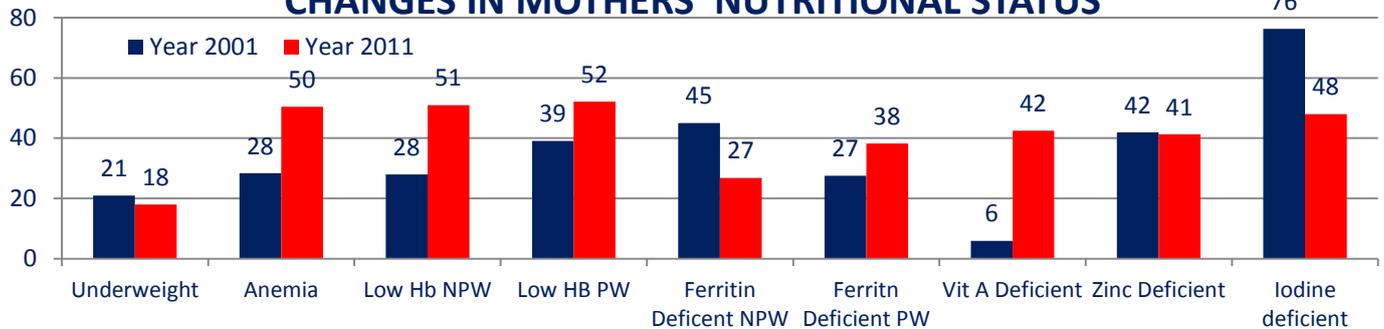
### Women Nutritional Status

In last ten years women's nutritional status has become worsened in terms of both anthropometric (height and weight measurement) and biochemical indicators. Also the situation of hemoglobin deficiency for both pregnant and non-pregnant women has become poorer. The comparison of pregnant and non-pregnant women shows that non-pregnant women have better indicators compared to pregnant women of reproductive age. The prevalence of anemia has almost doubled in the last decade. Although some of the micronutrient deficiencies such as Iodine have decreased to 48% from 76% in the NNS 2001; other micronutrient deficiencies such as Vitamin A have significantly worsened over ten years (from 5.9% in 2001 to 42.5% in 2011); while the prevalence of zinc deficiency has remained unchanged in the last ten years (41.9% in NNS 2001 to 41.3% in NNS 2011).

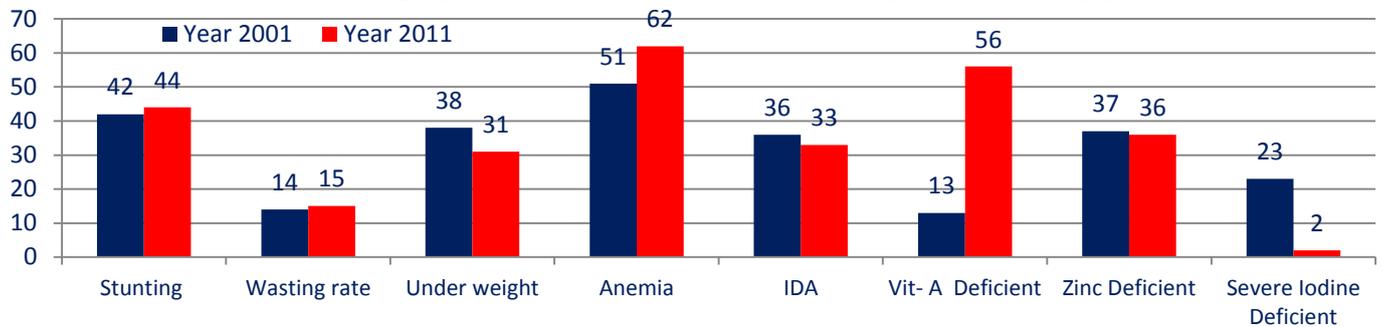
### Child Nutritional status

Pakistan's rate of stunting (44%) is second only to Afghanistan. In terms of stunting and wasting, the situation of child nutritional status has worsened (from 42% to 44%) during the last decade in almost all of the provinces. Similar trends observed for wasting which increased from 15% in NNS 2011 to 14% in NNS 2001. However, underweight rates remained constant during last decade (32%), along with a massive improvement in the prevalence severe iodine deficiency status which has markedly

## CHANGES IN MOTHERS' NUTRITIONAL STATUS



## CHANGES IN CHILDREN'S NUTRITIONAL STATUS



decreased from 23% to only 2% at national level. However the status of anemia has worsened during this time period, raising the question about protein deficiency and other causes of anemia. Another alarming finding is the four fold increase in Vitamin A deficiency in last one decade.

The indicators for chronic malnourishment i.e. stunting and wasting both have increased slightly during the last decade except for the acute indicator of underweight.

### Food Security

At National level about 58% of the households are food insecure and most of them are living in rural areas. Among provinces Sindh had the highest food insecurity (72%), followed by Baluchistan where 63% of the households were food insecure. The proportion of heads of households that are unemployed have doubled in the past decade.

### Possible Reasons for Malnutrition

A number of reasons may have contributed to persisting malnutrition and food insecurity in Pakistan. There was a global food crisis during 2007-8 among developing countries including Pakistan. This has fuelled higher food prices globally and in Pakistan. Pakistan also suffered from widespread destruction from floods in the past 5 years. Finally a stagnant economy in recent years has further diminished the purchasing power of the people.

### Key Findings:

- Very little has changed in terms of maternal and child nutrition
- Indicators of chronic malnutrition fared worse than acute and micronutrient malnutrition
- While it is easy to say that people should be educated about nutrition, the fact that over of households are food insecure speaks of the inability of people to buy food and reflects an

overall economic failure. It is difficult to devise a government program to overcome this short of direct food subsidies or massive economic reforms that improve the livelihood and therefore purchasing ability of the poor.

- Given the fact that food production in Pakistan has risen steadily over the years and has kept pace with the increases in population, this malnutrition seems to be more distributive than due to actual food shortage.

### Possible Solutions:

- Targeted nutrition support, may be directed at the poorest individuals in the society.
- Nutrition policies must be conceived in the larger context of development and economy. All too often, maternal and child malnutrition is a manifestation of the larger problems with the economy as a whole.

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