## Food insecurity – a growing cost

Food insecurity affects man in different spheres of his life, from issues of obesity, chronic non-communicable diseases, educational and social development.

In a 2013 study in the USA and published in the Nutrition Journal it was noted that "detrimental physical, psychological, behavioural, social, and educational functioning in children and adults" as a result of food insecurity. Research involving households in a Texas border town presented as a main conclusion that food insecurity resulted in students' lower level of "educational attainment" in comparison to their food secure counterparts.

Another study, done in Jimma Zone, Southwest Ethiopia in October 2011, was done so that scientists could test the effects of food insecurity on the population in lower income countries, "...because all other studies on food insecurity were done in high income countries."

At what stage of its development is a country, or area within a country, considered as having a food security problem?

The United Nations, at the World Food Summit in 1996, provided a guideline for the discussion, defining food security as "...all people at all times [having] access to sufficient, safe, nutritious food to maintain a healthy and active life". Broadly speaking, the definition deals with the supply of food, its accessibility, usage and the reliability with which the first three criteria met. When a country does not meet these requirements, it is said to be experiencing a food insecurity problem.

There is an economic cost to food insecurity. Even without the benefit of scientific studies on the effects of food insecurity on a people, the costs are readily apparent. It costs to manage obesity. Health insurance premiums are higher not just for the obese but everyone. Then a government must provide wider and sturdier seats in public spaces - stadiums, parks, bus stops, public toilets, etc. Tests must be done to determine impact of heavier body mass indexes on brakes and steering wheels of vehicles. More gasoline is used to transport bigger bodies, an April 2012 Reuters article reported – which means increased spending on public transport.

The Reuters's article, describing the economic cost of obesity as 'startling', focused on the American society and compared the Body Mass Index (BMI) of passengers in 1960 with those in the 21<sup>st</sup> century, stating that nearly a billion more gallons of gasoline is being used annually to transport passengers.

On the upside, a study reported by the AIDS journal found that the level of food insecurity decreased when patients took their HIV/AIDS medication. As these patients are able to turn out to work, they become more productive citizens and fend for themselves as they were able to secure their own food supplies, thus easing the economic burden on the society.

The factors resulting in food insecurity are far ranging and not all readily obvious. For one, absenteeism in schools increases food insecurity. The Center for American Progress reported on a study, *Hunger in America*, which states that in 2010, the American economy lost \$5.8 billion because of school absenteeism.

In calculating the cost of the "value of poor educational outcomes and lower lifetime earnings linked to hunger and food insecurity", the organization said \$19.2 billion was spent annually to deal with the problem of school absenteeism.

Studies show a strong correlation between missing school and incarceration. Thus, the level of students' absenteeism poses further burdens on the economy as repercussions can include deviant behaviours which then impinge on the justice and prison systems. A judge in California once told a parent of a third grader who had missed school for two months that the State looks at the number

of students who are absent from school at the elementary level to determine the number of cells to be built in the jails.

The assumption is that if the student absenteeism rate at the primary level is high then these students will most likely become school dropouts in their teenage years. There is also the cost added to the social security net with provisions having to be made to take care of this category of the pre-workforce population. Consequently, a major part of the country's budget caters to the needs of law enforcement and correctional institutions instead of developing the agricultural and manufacturing sectors, which would increase the country's level of food security.