Chapter 5 Conclusions

As part of its mandate to raise awareness of nutrition problems and mobilize commitment to solve them, the United Nations System Standing Committee on Nutrition (UNSCN) periodically produces reports that describe and analyse the global food and nutrition situation. This sixth report on the world nutrition situation returns to some of the themes and regional trend analyses which were pioneered in the first three reports, and focuses on developing countries. The main conclusions of the sixth report are highlighted below.

Vitamin A deficiency affects some 160 million pre-school children in low-income countries, with prevalence estimated at about 30%. This prevalence – measured as low serum retinol – is improving at somewhat less than 0.5 percentage points per year. At that rate, it will take low-income countries more than 50 years to get to levels typical of industrialized countries. Eye signs of the deficiency have a prevalence of about 1–2%. By both measures, more countries (with repeated comparable surveys) are improving than not. More effective intervention, including expanded fortification with vitamin A, will be needed to reduce vitamin A deficiency at an accelerated rate.

The extent of **anaemia** is not changing substantially, and affects more than half the women of reproductive age in large parts of Asia. Prevalence in children, as has recently been recognized, is even higher in many populations – in Africa it is estimated to be up to 60%. Some 500 million women and 250 million children are anaemic.

Control of **iodine deficiency** is a success story, although one still in progress – iodized salt now covers an estimated 70% of households. Without iodized salt, it can be calculated that some 2 billion people would show signs of iodine deficiency; whereas the actual number is around 700 million. But the 30% of households without iodized salt are likely to be more vulnerable and difficult to reach, living in remote areas, or with multiple salt sources. Elimination of iodine deficiency, with its risks to cognitive development and function, requires sustained efforts.

Growth retardation in children – measured as *stunting* or *underweight* – starts before birth, and substantially affects growth in childhood. Differences in rates of *low birth weight* between populations and over time have been tracked, in relation both to maternal thinness, measured as low body mass index (a determinant), and to child underweight (a result). For example, low-birth-weight rates in south Asia of around 30%, which are double those of Africa, have fallen substantially since the UNSCN's first estimates in the 1980s, and child underweight prevalence is falling in proportion. In contrast, low birth weight in Africa remains around 15%, and underweight has changed little. In parallel, prevalence of low maternal body mass index (<18.5) has fallen in south Asia, but is still double that of African women. African children's higher birth weight and lower underweight prevalence is in part a result of the greater body size of their mothers.

Child underweight and stunting prevalence are falling significantly in most countries, except in Africa. This indicator is used to assess progress towards MDG1 (on hunger and malnutrition), and a number of countries are improving fast enough to meet this goal. Overall, African countries show insufficient progress to achieve MDG1, whereas many Asian countries as well as Latin American (and Caribbean) countries are on track to achieve it (or have already achieved it). In central and south America, stunting is the more widespread form of child growth retardation – whereas in other regions the prevalences of stunting and underweight move in parallel. Globally, 17% of preschool children are underweight, with 28.5% stunted.

Transitions from steady high prevalence of underweight, falling at 1–2 percentage points per year, to sustained low prevalence (less than, say, 10%) over a few decades have now been observed in a number of countries, from Brazil to China to Thailand. Some countries are in mid-transition – Indonesia and Viet Nam are examples. There are signs that some African countries are beginning this process, judging by recent results from, for example, Ethiopia and the United Republic of Tanzania. It is important to understand how such transitions happen, so that they can be replicated.

This sixth report on the world nutrition situation calls for a renewed effort to invest in **maternal nutrition** in a sustainable and holistic manner. The intergenerational cycle of growth failure continues to claim and compromise lives: it needs to be turned into a virtuous cycle. Improving birth weight contributes to improving child growth in the first two years of life. This results in less stunting at two years of

age, which is eventually reflected in increased adult height. Improved cognitive function and intellectual development across the life-course are associated with an increase in birth weight and a reduction in stunting.

The good news is that turning the intergenerational cycle of growth failure into a virtuous one can be done, as seen in the close tracking of low women's body mass index, low birth weight, and child underweight.

Improved maternal nutrition, even for small adult women during pregnancy, improves birth weight. Improving the diet in quantity and quality can help achieve this. The effects seem to be greater if the mother is reached either during or preferably before the first semester of pregnancy. Such interventions do not endanger the mother and do not increase the risk of maternal mortality as there is no evidence of increase in cephalo-pelvic disproportion even if food supplements are provided to adolescent mothers whose birth channels are still not mature.

For adolescent mothers, improving the birth weight of their babies benefits greatly by delaying the first pregnan-cy beyond 18 years of age. Nutrition in the early months of pregnancy has the greatest benefit on birth outcomes. Tackling anaemia during adolescence should get much greater programmatic attention. Together such interventions would go a long way towards breaking the intergenerational cycle of growth failure.

So why has there not been more progress in maternal nutrition? Part of the answer lies in the focus on interventions that produce short-term gains in child survival.

The sixth report on the world nutrition situation calls for: improved understanding, reinforcement and revitalization of the importance of growth and development outcomes:

- revival of a focus on birth weight;
- renewed attention to maternal nutrition for mothers' own health and development;
- increased programmatic support for prevention of teenage pregnancies, including sex education and family planning services for adolescents, together with an enabling societal environment – where community norms and values concerning early marriage, sex education and family planning need to change.

Renewed investment in maternal nutrition and nutrition for adolescent girls will contribute significantly to the progressive realization of the rights of the girl child and of the adolescent mother in the context of the Convention on the Rights of the Child and the Convention on the Elimination of All Forms of Discrimination against Women, as well as making important contributions to achieving Millennium Development Goals 1, 4 and 5.

Achieving **sustainable food and nutrition security** is the only viable and long-term solution for ending hunger and improving levels of nutrition. Although food and nutrition problems are complex and not the responsibility of agriculture alone, the sector plays a fundamental role in their solution. This is because of the essential role food has for good nutrition, as well as the importance the food and agriculture sector has for reducing poverty and improving livelihoods in many countries, especially those where a large proportion of low-income groups continue to depend upon farming and related activities for their survival.

In these countries, supporting smallholder production systems is one direct route to improving food and nutrition security. Essential actions include increasing availability of seeds, tools and other inputs, and improving knowledge and application of technologies for sustainable development of land and water resources, conservation of biodiversity, and reducing post-harvest losses. Additional measures include promoting smallholder cooperatives, improving access to credit, and supporting small-scale animal production and fisheries. Especially when coupled with "nutrition-sensitive" initiatives such as cultivation of local micronutrient-rich foods, these strategies represent a significant improvement over current production systems in terms of both social welfare and environmental viability.

However, if food and nutrition security is to be achieved, policies and programmes must also target landless labourers, low-income groups in urban areas, and other vulnerable populations who are net food purchasers. Broadening the income base of these groups through livelihood support and job creation, and establishing and strengthening social assistance programmes with a focus on maternal and child health, is integral to improving food and nutrition security for all.

For all populations, education and social marketing are crucial components of national, municipal and community efforts for sustained improvements in food and nutrition security. These activities are often essential to realizing the potential for nutrition improvement of many agricultural development projects and programmes. They are also important in countries where obesity and non-communicable diseases are increasing.

Lack of technical and institutional capacity in monitoring and evaluation, assessing needs, designing and delivering interventions, and providing operational and managerial support is a serious constraint in many developing countries. There is a shortage of qualified personnel at every level – national, district, municipal and local. Community nutrition workers are often limited or non-existent. Agricultural extension workers and health staff receive either basic or no training in nutrition, and typically have weak skills in communicating nutrition information to specific population groups. Building capacity at all levels of government should thus be priority.

The report concludes that nutrition-friendly, sustainable agricultural development is key to improving food and nutrition security. Regulatory frameworks should reflect this, as well as setting standards for responsible foreign direct investment, promoting policies designed to protect and expand smallholder rights, increasing incentives to produce and market micronutrient-rich foods, and prioritizing the needs of low-income groups who are net consumers. Important emerging themes for nutrition-friendly agriculture as part of a broader nutrition-sensitive develop-ment framework include pro-poor food production systems, social assistance, livelihood diversification and other supportive policies and programmes, environmental sustainability, capacity building to improve nutrition, and setting higher standards in agricultural trade and development.