NUTRITION AGENDA FOR ACTION
A POLICY PAPER ON SCALING UP NUTRITION INTERVENTIONS IN EGYPT
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Cairo, 2017
The Ministry of Health and Population has taken important steps towards strengthening the commitment to scaling up nutrition actions for the betterment of the health and wellbeing of the Egyptian population over the past years. Egypt's Nutrition Landscape Analysis of 2012, was the first to shed light on the importance of addressing the existing gaps in the nutrition system, and call for short, medium, and long term actions to gradually build capacity to respond to the challenges of malnutrition in the country.

This has been driven essentially by the concerning rise in the ‘double burden’ of malnutrition, encompassing undernutrition and obesity and affecting mostly children and women within reproductive age.

As a result, the Ministry of Health and Population and UNICEF have developed a road map outlined in this Nutrition Agenda for Action policy document to assert the commitment of the government to prioritize and take nutrition action to scale. An important output of this agenda for action road map, is the implementation of a nutrition stakeholder mapping analysis for maternal and child nutrition, results of which will inform the strategic planning for nutrition.

The next steps for this Agenda to take action is to update the National Nutrition policy and strategy of Egypt (2017-2025), and its operational multi-stakeholder costed plan based on the results of the nutrition stakeholder mapping and a series of consultations with partners. The MoHP will lead the process in collaboration with UNICEF to identify the nutrition targets in line with the global nutrition targets endorsed by the WHA 2014. A conceptual framework for ‘The first 1000 days model’ leading implementation of a stunting prevention protocol of action at the primary health care level is another important step which will support evidence based policy decisions for nutrition over the upcoming years.

Both MOHP and UNICEF are committed to building on the momentum created to scaling up nutrition actions in Egypt for the prevention and management of malnutrition, with the ultimate goal of contributing to better early childhood development and preserving the whole country’s development potential.

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1. EXECUTIVE SUMMARY

The population of Egypt is facing serious problems with a double burden of malnutrition with persistent high levels of undernutrition and micronutrient deficiencies now combined with rapidly increasing problems of overnutrition and obesity.

Malnutrition has a long series of devastating effects on the growing child causing premature deaths and impairments and presents considerable risks for mothers and women in general. Overnutrition leads to increased risks of obesity, heart conditions, diabetes and several other non-communicable diseases (NCDs), and this fact is already affecting the health care needs and costs in Egypt.

Taken together, all the effects of malnutrition significantly limit the developmental potential of the country and a recent ‘Cost of Hunger’ analysis in Egypt concludes that the total losses associated with malnutrition are 20.2 billion EGP (3.7 billion USD) or 1.9% of GDP using 2009 as a reference year.

Malnutrition is consequently a major cause of poverty, but poverty also leads to malnutrition. This viscous cycle of poverty and malnutrition must be broken in order to achieve social justice for all and there are many good examples from both within and from outside Egypt that demonstrate that this can be done.

The World Health Assembly in 2011 adopted the following nutrition targets for each country to achieve by 2025:

1. Reduction of chronic undernutrition in children under 5 years by 40%
2. Reduction of anemia in women of child-bearing age by 50%
3. Reduction of Low Birth Weights by 30%
4. No increase of overweight in children under 5 years of age
5. Increase in exclusive breast-feeding during the first six months by 50%
6. Reduce and maintain childhood wasting to less than 5%

Egypt at present is not on track to achieve any of these targets. Chronic undernutrition, “stunting”, remains above 20% since the 1990s; anaemia in women of child-bearing age (15-49 yrs) is high at 25%; overweight in children is shooting up from 5.6% (2000) to around 15% (2014); exclusive breast feeding (EBF) is rapidly declining instead of improving, where EBF rates at 4-5 months is only 13%; acute malnutrition is increasing and stands at 8% (2014) with half of those children classified as severe acute malnutrition. Anaemia in children 6-59 months is 27% with significant variations among regions. Birth weights are not systematically measured and monitored, a challenge to the detection of child malnutrition at its early stages.

Despite the disquieting nutrition situation and trends in Egypt at present, it is worth noticing that impressive gains have been made in terms of child and maternal mortality which indicate that the country, indeed, has capacity for positive change in social indicators. The challenge is to harness these capacities to also bring the problems of malnutrition in Egypt under control.

In response to the need to redress the nutritional developments in Egypt, the Ministry of Health and Population, MoHP, who is the designated Government of Egypt lead sector on nutrition matters requested the support of UNICEF to undertake a “Nutrition Landscape Analysis” to assess the problems of malnutrition as well as the preparedness and capacity of Egypt to address these problems. The Landscape Analysis was conducted in collaboration with the National Nutrition Institute (NNI), and the report was issued in 2013 arriving at several important conclusions and recommendations. These recommendations were subsequently elaborated and translated into an “Agenda for Action”.

The Agenda for Action policy paper was prepared for the main purpose of defining a feasible and practical ‘road-map’ that would transform government-led nutrition policies and programs and mobilize harmonized multi-sector as well as a multi-stakeholder support to scaling-up of nutrition actions. Central to this process will be the formulation of an updated National Nutrition Policy and Strategy which will be aligned to important national and global commitments such as the Egypt Vision 2030, the Sustainable Development Goals as well as the above mentioned WHA nutrition targets for 2025.

In addition to the formulation of updated policies and plans, the Agenda for Action proposes a number of immediate actions, including decisive measures to reverse the downward trends in breast-feeding and launching a major public nutrition education and communication initiative. Important improvements are also required to strengthen nutrition management structures and information systems, including mapping and monitoring of ongoing and planned nutrition activities by different stakeholders. For the Ministry of Health and Population itself, there is an urgent need to revise existing nutrition services and activities into a ‘standardized protocol of action’ which establishes a clear focus on the first 1000 days of life (from conception to 2 years of age) when most of the physical, mental and physiological capabilities of the developing human being are established and where failure to provide adequate nutrition will have long-lasting and irreversible consequences.

1 Cost of Hunger studies are carried out in several African countries by the Economic Commission for Africa, ECA, and World Food Programme.
2 Using standardized WHO methodology
2. BACKGROUND

In recent decades, new trends have emerged in Egypt, influencing and often challenging the country's development potential. These include social changes such as rapid population growth, ageing populations, changes in disease patterns, urbanization and migration as well as changes in poverty trends. They also include environmental changes due to climate change; technology developments; economic shocks such as the food and fuel price crises and the global financial crises between 2008 and 2010; and political turbulence. The resultant changes in lifestyles, food consumption and behavioural patterns have stretched existing resources and support systems at both national and household levels while negatively affecting the nutritional status of many Egyptians. These developments have highlighted the increasing importance of preventive approaches and resilience-building, particularly for nutritionally vulnerable groups and communities.

Alongside this, there has also been a rapid progression in the global understanding of issues relating to maternal and child nutrition building on scientific evidence through research and on programmatic learnings. In 2008, the Lancet series on Maternal and Child nutrition helped quantify the problems of malnutrition, associated risk factors and underlying causes. Its follow-up series in 2013 further highlighted the short and long term impact of malnutrition on health as well as educational and economic attainments. Findings of both series, have given greater insight into the most critical period of vulnerability of a child’s life as being between conception and a child’s second birthday (the first “1,000 days of life”). This is the period when most of the mental, physiological and physical functions are shaped in the developing human being – commonly referred to as the ‘1000 Days Window of opportunity’ for nutrition action. The authors of the Lancet series also highlighted the short and long-term impact of undernutrition during these 1000 days, including the likely irreversible and costly consequences to the individual, their families and society in terms of health, educational, economic attainment, as well as the country’s economic potential.

The Lancet series further provided evidence on the need for more integrated, multi-sectoral approaches to tackle nutritional challenges. The reason why multi-sectoral approaches are becoming recognized as a critical part of the long-term solution for nutrition security is because factors contributing to malnutrition emanate from multiple and linked causes including food availability, preparation and intake, access to water and sanitation practices, access to health services and care practices, institutional and environmental factors among others. Ultimately, all causes of malnutrition are rooted in basic or ‘structural’ conditions in the society, including poverty, gender, power structures and governance as further elaborated below in and Figure 1. What is new – and also indicated in Figure 1 – is that these basic conditions in the society are, themselves, determined by the nutritional status of the members of that society! Hence, improved nutrition is not only an outcome of poverty alleviation and social justice but it is also a key driver of these developments!!

The 2013 Lancet series also sought to evaluate efforts to combat malnutrition at both global and local levels and highlighted the growing prevalence in low-income and middle-income countries (LMICs) of a “double burden of malnutrition”, where longstanding undernutrition (stunting) coexists with overweight and obesity.

The series further noted the importance of combining nutrition-specific and nutrition-sensitive interventions across sectors, including particularly health, food security, WASH, education, social protection and gender, in order to facilitate more holistic, integrated and sustainable means of improving maternal and child nutrition. Key to making progress is also an enabling environment, where the political climate is one that facilitates and sustains momentum for nutrition focused programmes in the context of equity and human rights.

Egypt stands as one of the 36 countries where 90 percent of the global burden of malnutrition falls. It is further

8 Nutrition-specific interventions are those whose primary objective is to address nutrition and so target the immediate causes of undernutrition that affect fetal and child development; issues relating to adequate food and nutrient intake; feeding, caregiving and parenting practices, and the impact of certain infectious diseases. Examples of nutrition-specific interventions include targeted supplementary and complementary feeding; dietary supplementation; promotion of optimum breastfeeding; diversification and micronutrient supplementation or fortification for children; treatment of severe acute malnutrition; disease prevention and management; and nutrition in emergencies.
9 Nutrition-sensitive interventions are those whose primary objective is not necessarily nutrition, but they have the potential to improve the nutrition security of those targeted. Such interventions tend to include activities that have an impact nutrition by addressing the underlying causes of undernutrition, such as agriculture and food security, access to health care, education, water and sanitation etc.
noted that Egypt is not on track to achieve any of the nutrition targets for 2015 which were globally agreed by the World Health Assembly in 2011. Hence, despite the national efforts across the health sector and the notable decline in child mortality in Egypt, the nutrition situation remains challenging. This paper reviews the underlying and predisposing factors that are contributing to the continued concerning nutrition situation in Egypt and aims to further help guide the selection of interventions and actions to address malnutrition in the short, medium and long-term perspectives. The effort is guided by the need to give a stronger focus on the ‘first 1,000 days’ as well as to pave the way for longer term integrated nutrition interventions at scale to achieve sustainable nutrition security.

GLOBAL AND LOCAL INITIATIVES IN SUPPORT OF SCALING UP NUTRITION ACTIONS

The heightened recognition of investing in and improving the nutritional status of a population as key to a nation’s development has been encouraged through the launch of global initiatives such as the Scaling Up Nutrition (SUN) movement and REACH partnership. These serve as platforms and frameworks bringing together stakeholders from a variety of disciplines and sectors to pursue the common goal of nutritional improvement through integrated combined policies, legal frameworks, strategies and results frameworks that are jointly resourced and pursued. The motivational aim of these global networks has rendered positive results in over 60 countries that have so far joined the movements and are pushing their nutrition agenda forward.

Globally, the heightened recognition of nutrition trends is also reflected in the multi-faceted nature of the recently adopted Sustainable Development Goals (SDGs). Recognizing the cross-cutting nature of nutrition, several of the SDGs are related to nutrition, in particular SDGs 1: End Poverty in All its Forms, 2: End Hunger, Achieve Food Security, Improved Nutrition, and Sustainable Agriculture, 3: Ensure Healthy Lives, 4: Ensure Quality Education and Learning, 5: Achieve Gender Equality and Empowerment, 6: Ensure Sustainable Water and Sanitation, 12: Ensure Sustainable Consumption and Production Patterns, and 17: Revitalize Global Partnerships.

In Egypt, changes that have occurred in the last decade (detailed in the following sections) provide both opportunities and challenges for nutrition-related action in terms of addressing gaps and capacity to act. Opportunities do exist at present with new leadership and enthusiasm for new development directions. This is essential in order to regain momentum in addressing nutritional issues, i.e. by recognizing its critical value in the overall national development agenda through strengthening nutrition governance, identifying the accountability structure through improved coordination among relevant stakeholders as well as to scale up best practices in a sustainable manner.

13 WHA (2011)
This policy document aims to provide a brief strategic review of the existing nutrition programming context and planning capacity in Egypt. It also aims to document, in line with the recommendations of Egypt’s Nutrition Landscape Analysis Report\(^\text{16}\), challenges and opportunities posed by existing policy, institutional frameworks and systems as well as coordination mechanisms across the various sectors contributing to nutrition efforts.

The Ministry of Health and Population (MoHP) is currently being supported by UNICEF in a process of institutionalizing and scaling up nutrition interventions with a focus on maternal and child health and in the context of the newly adopted SDGs. The process includes providing evidence-based policy analysis, and related action planning in support of accelerating nutrition interventions, as well as the development of enabling institutional frameworks and related capacity building.

This paper will argue that in light of the sizeable nutrition challenges and existing strong foundations in terms of nutrition programming – particularly within the health system - Egypt does, indeed, have the capacity to take nutrition action to scale. Recent political changes in Egypt may cause initial delays; however, the interim provide an opportunity to lay the ground work in terms of action-planning and scoping out areas for potential scale-up and further integration. In the process, there is need to provide further evidence on cost-effectiveness of different interventions both in relationship to specific nutrition problems as well as to the health and development of the Egyptian people.

Accordingly, this document puts forward a series of strategic recommendations to guide joint efforts by the MoHP and other government institutions as well as UNICEF and other partners in scaling-up nutrition actions and working towards an effective multi-sector stakeholder coordination mechanism that will foster a systematic and comprehensive approach to nutrition nationally. The Agenda for Action anticipates formulation of an updated National Nutrition Strategy with an operational action plan that will translate policy priorities and recommendations into actionable national nutrition interventions with measurable and time bound results and targets.


4. APPLYING UNICEF’S CONCEPTUAL FRAMEWORK FOR ADDRESSING DETERMINANTS OF MALNUTRITION IN EGYPT

The conceptual framework in Figure 1 underpins both the structure and the strategic considerations in this paper. It highlights that the determinants of child undernutrition are multifaceted and include a likely combination of immediate, underlying and basic causes of undernutrition. Immediate causes of undernutrition include inadequate dietary intake and disease. These in turn, are influenced by a number of underlying causes which can be grouped as 1) household food insecurity, 2) inadequate care and support to children and women, and 3) unhealthy household and surrounding environments and poor access to health care. It is important to recognize that that “food”, “health” and “care” are all necessary but each by itself not sufficient condition for acceptable nutritional status. Hence, there is no use of increasing access to food if there is nobody there to feed the child or take the child to the clinic; just like there is not much a mother can do – even if properly advised – if there is not enough food of good quality available at home and there is no access for her to critical health services or water. This important principle of ‘necessary but not sufficient’ underlines the critical need for a multi-sector approach that can help ensure that adequate “food”, “health” and “care” are all available at the right time and place to support the nutrition developments of the child and, indeed, the mother as well.

Underlying causes are similarly a result of basic causes of poor nutrition, such as societal structures and processes resulting in poverty limiting or denying vulnerable population groups access to essential resources and services, i.e. food, health and care. As already mentioned, at the same time as being a result of poverty, malnutrition will also contribute to poverty, where in the short term the risk of mortality and morbidity is increased while in the longer term it results in higher risk of poor pregnancy outcomes, underweight, overweight and other forms of malnutrition. i.e. conditions that increase risks of infectious and Non-Communicable Diseases (NCDs) as well as impaired cognitive development that may hinder educational performance and result in reduced economic productivity and earnings. In Egypt, the presence of both undernutrition and overnutrition within the same households and communities is an example of the increasing phenomenon of “double-burden” of malnutrition in the country.

Figure 1: UNICEF conceptual framework of the determinants of child undernutrition

Source: UNICEF, UNICEF's approach to scaling up nutrition programming for mothers and their children, (Cairo, 2014)

19 “Food security” is defined in line with the Food Security Framework agreed to by the Committee on World Food Security, “when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life”. Food security results from adequate food availability (where sufficient quantities of food of appropriate quality, supplied through domestic production or imports, are available in a country) and access (or adequate purchasing power to acquire appropriate food for a nutritious diet) as well as proper food utilization (through an adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where physiological needs are met); Food and Agriculture Organization of the United Nations (FAO), Rome Declaration on World Food Security and World Food Summit Plan of Action, 1996, http://www.fao.org/docrep/003/W3613E/W3613E00.HTM; FAO, Declaration of the World Summit on Food Security, 2009, ftp://ftp.fao.org/docrep/fao/Meeting/018/k6050e.pdf.
20 Breisinger et al, IFPRI and WFP, Tackling Egypt’s Rising Food Insecurity in a Time of Transition (Cairo, 2013).
Building a nutrition system: towards strengthening an enabling environment

Critical to establishing large scale and systematic actions to control all forms of malnutrition are an enabling socio-cultural environment and an effective institutional framework. Captured from Egypt’s 2012 Landscape Analysis,21 Figure 2 below identifies the requirements of an enabling nutrition system that include commitment to overarching nutritional objectives and capacity to act on these. In the Egyptian context, stewardship relates overwhelmingly to the national and governorate level leadership and related activities, while health care service provision is undertaken largely at district and community levels. Issues of capacity are equally relevant at all these levels. The Landscape report reflects that the ‘nutrition system’ in Egypt is highly centralized with a hierarchical management structure and with resourcing determined centrally. Such centralised planning poses challenges in responding to specific local needs and affects readiness and speed of action. As is currently experienced during times of change at the central level, such hierarchical system can hinder action on the ground. Accordingly, the policy recommendations in this paper re-emphasize the findings from the Landscape report that propose a more enabling system in Egypt which should strengthen operational level management of critical nutrition actions.

Figure 2: Functions of the nutrition system which can define commitment and capacity for action


5. NUTRITION TRENDS IN EGYPT

“Nutrition challenges and food insecurity in Egypt are associated with poor access to a balanced diet among the poorest sections of society, as well as poor dietary habits, lifestyle and lack of nutritional awareness across the population, as opposed to issues of food availability”.  

Among the poorest groups, this has been compounded by a steady rise in poverty rates in last the two decades with 26.3 percent of Egypt’s population (some 22 million Egyptians) living in extreme monetary poverty in 2012/2013 in households with consumption levels below the lower national poverty line.  

This compares to 25.2 percent (21 million) in 2011 and represents an increase from a low of 16.7 percent (or 9.9 million Egyptians) in 1996. 

The combination of a series of shocks during the last decade (including the financial and food price crises of 2007–09 and 2010) and the turbulent socio-political context in the wake of the 2011 revolution saw a steady increase in food and fuel prices that eroded the purchasing power of the poorest in society. 

The decline in purchasing power also resulted in worsening dietary diversity (35 percent of Egyptians suffer from poor dietary diversity, rising to 58.3 percent for the poorest segments of the population). Of note is that while the highest poverty rates remain in rural Upper Egypt (51.5 percent of the population against a national average of 25.2 percent), significant pockets of poverty have emerged in other urban areas where poverty increased by nearly 40 percent between 2009 and 2011. Key contributors to Multi-Dimensional Poverty in rural areas are poor sanitation (among 65 percent of households) and lack of access to health services (for 23 percent), while in urban areas the main association is with poor health services (for 27.4 percent). 

In addition, the child poverty rate in 2012/2013 was 28.8 percent, which indicates that households with children are even more vulnerable to poverty than those without children.

The high malnutrition rates, particularly among children combined with the large population, is making Egypt one of the 36 high-burden countries globally where 90 percent of malnourished children live. Equally concerning is the rise in the double burden of malnutrition where under-nutrition coexists with high and rising obesity rates. 

Stunting rates (low height-for-age) among children under five were 21 percent in 2014, down from a high of 29 percent in 2008 but similar to the 23 percent recorded in 2005 and 2000. Stunting results from lack of adequate nutrition over a long period of time and/or the effect of chronic illness, and the rate is peaking among children age 18-23 months (25 percent). Other factors leading to stunting include poor child care, poor access to health services and an unhygienic environment.

With regards to regional and geographic disparities, EDHS 2014 Data suggests that children in urban areas are slightly more likely to be stunted than in rural areas (23 and 21 percent, respectively), with the highest incidence occurring in urban Upper Egypt (30 percent), and amongst children whose mothers have not attended or completed primary school. This information should guide implementation of nutrition sensitive social protection programs targeting the vulnerable populations and should lead to stronger focus on poor urban settings and ensure equity focused nutrition programming within primary health care facilities.

Another important trend in the prevalence of stunting in Egyptian children can be derived from a comparison of the age distribution of stunting among the children under 5 years between the two most recent DHS surveys in Egypt (Figure A and B below). In 2008 (upper curve), it is apparent that a significant increase in stunting occurs in the age group 6 – 24 months (which is consistent with most countries in Sub-Saharan Africa) while this peak is almost absent in the data from 2014 (lower curve). This suggests that presently stunting is primarily caused during pregnancy and early infancy and then remains virtually constant up to when the child is 5 years of age, whereas 2008 (and probably earlier) the combination of poor complementary feeding and poor hygiene and infections during the 6-24 months period were major contributing factors to elevated levels of child stunting.

The implication of this is that for now we need to maintain our focus on Infant and Young Child Feeding, IYCF, and Hygiene in children 6-24 months but we need to strengthen our efforts to address malnutrition/stunting during the foetal phase and during the first 6 months in the life of the child. This means that maternal health and nutrition, including ‘pre-conceptual care’ in adolescent girls, and early neonatal health and nutrition, including early initiation of breast-feeding, need to be given higher priority in order to contain the continued serious problem of stunting in Egypt.

23 Egyptian Central Agency for Public Mobilization and Statistics (CAPMAS), Household Income, Expenditure and Consumption Survey, (Cairo, 2012/13).
24 Data from corresponding editions of Egyptian Central Agency for Public Mobilization and Statistics (CAPMAS), Household Income, Expenditure and Consumption Surveys.
25 Poor dietary diversity remains a key driver of food insecurity with poorer households reducing the consumption of more expensive food items (e.g. meat, poultry, dairy, vegetables and fruit) and have shown overreliance on cheap and calorie-dense foods with limited nutrient content, including subsidized commodities, all of which have a correlation with obesity in adults. WFP: Status of Food Security and Vulnerability in Egypt, (Cairo, 2013).
Figure 3: Stunting, wasting and underweight among children under 5 according to EDHS 2008

Figure 4: Stunting, wasting and underweight among children under 5 according to EDHS 2014
Trends in child wasting (weight-for-height) and underweight (weight-for-age), between 2000 and 2014, have shown an increase from three to eight percent and from four to six percent, respectively. The level of severe acute undernutrition (severe wasting) stands at 3.8% and need verification (measurement errors common). If indeed, these high levels of severe acute malnutrition are true then establishment of ‘therapeutic feeding’ capacity needs to be scaled up urgently since this is a condition associated with significant increase in mortality risk for the child.

Figure 5: Trends in the Nutritional Status of Young Children, Egypt 2000-2014

At the same time as the levels of undernutrition remains high, there is an alarming increase in over-nutrition in young children, adolescents and adults in Egypt. 15.3 percent of male children and 14.3 percent of female children under five years of age are classified as overweight (>2SD from median weight for height), slightly higher among children living in urban (16.1 percent) relative to rural areas (14.3 percent) and peaking in urban Lower Egypt (17.3 percent) (Egypt DHS 2014). While overweight (BMI 25-29.9) among ever-married women aged 15-49 years stands at 36.5 percent in 2014, obesity rates (BMI more than or equal to 30) reached 48 percent in 2014 which means that a total of 84.5 percent of women are overweight or obese.

Looking at consumption patterns, the 2011 Egypt Household Income, Expenditure and Consumption Survey (HIECS) noted that overweight and obesity were associated with over-reliance on cheap calorie-dense foods by poorer households and low nutritional awareness across all population groups.

High levels of anaemia remain a critical issue of micronutrient deficiencies affecting children below five years, women of reproductive age and adolescents. Some 27.2 percent of children under-5 in Egypt have some degree of anaemia, with 9.5 percent being moderately anaemic and the remaining 17.8 percent mildly anaemic. These rates are higher in rural relative to urban areas (29 and 23 percent respectively), peaking among children in the three Frontier Governorates (Matrouh, Red Sea, New Valley) and in rural Upper Egypt (45 and 30 percent, respectively). Despite a slight reduction in some forms of malnutrition recently, including reduction of Iodine Deficiency Disorders, the rates nevertheless remain high and concerning. Many of the underlying factors for these trends have been noted above but may need to be summarized: Hence, per the nutrition causality framework presented in section 4, the potential linkages to 1) household food insecurity appears primarily caused by poor access to an adequate diet (particularly in terms of poor dietary diversity driven by low

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30 ‘The percent of children more than two standard deviations above the median for weight for age provides a measure of the extent of the problem in Egypt. the percentage of children more than two standard deviations above the median from weight for age provides another estimate to obesity and overweight and is useful for comparison with other data sources that did not measure height;’ Egypt Ministry of Health and Population, El-Zanaty and Associates, Egypt Demographic and Health Survey 2014, (Cairo, 2014).
32 WFP, Status of Food Security and Vulnerability in Egypt, (Cairo, 2013)
household purchasing power); 2) poor care and feeding practices are caused by women and caretakers who - despite improved education - are losing their traditional family support systems in rapidly changing social patterns largely driven by high workload and urbanization; and 3) accessing adequate health services is difficult in sparsely populated and new settlement areas while the basic services provided need to be revised to better respond to the challenges of chronic undernutrition, anaemia and overnutrition. In other words, all three of the basic conditions for adequate nutrition, i.e. food health and care, remain challenging for many Egyptian mothers and children – especially in impoverished areas.

The declining trends in breast-feeding warrant specific mention and would appear to be the most obvious ‘easy win’ in any effort by the Egyptian government and leadership to turn the nutrition situation around. The results of the 2014 DHS survey show a decline in breastfeeding practices (BF) from the previous surveys, where Exclusive BF rates in infants 4-5 months have shown an alarming decline (per the respective DHS surveys) from 33.5% in 2000, to 28.8% in 2008, and 13.3% in 2014. Apart from providing the best possible protection against malnutrition and infections for the new-borns and in young children up to 6 months (exclusively) and beyond (increasingly complemented by well-balanced and hygienic foods), breast-feeding has also recently been shown to be effective in prevention of childhood obesity. However, contrary to popular belief, breast-feeding is not just a decision by the mother but she needs to be supported by the family, the community and society at large providing the lactating mothers with health and nutrition support as well as conducive space (e.g. ‘lactation corners’) and time (maternity leave) to allow her to make this critical contribution to the well-being and prosperity of the whole nation!

Egypt’s progress – moving towards the SDGs

Egypt’s impressive progress against the MDGs on the health front, including reaching the goal to reduce under-five mortality rate by two-thirds, is well recognized and acknowledged to be a result of investment in child health care. The under-five mortality rate fell from 81 deaths per thousand live births in 1995 to about 27 deaths in 2014, a decrease of 66 percent over the period. Egypt has also met its target of halving, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation; key contributors to nutrition. This target has been reached at national level and at the level of most governorates, with the proportion of households nationally with access to safe drinking water (through the public network) rising from 79.9 percent in 1992 to 94.7 percent in 2009. Nevertheless, more than 7 percent of households are still not connected to water utilities, and only half of all households in Egypt have access to safe sanitation services (falling to only 24 percent in rural areas). Challenges remain in reaching other key MDGs that pertain to nutrition, specifically across MDGs 1, 3 and 6 relating to eradicating extreme poverty and hunger, gender equality and female empowerment and combating HIV/AIDS, malaria and other diseases respectively. MDG 1 turned out to be the most challenging where Egypt failed to halve the proportion of the population below the national poverty line by 2015 relative to the base year 1990/1991. In fact, during this period poverty rose from 24.3 to 26.3 percent, meaning it is now twice the rate of 12.1 percent targeted to be achieved by the end of 2015.

Moreover, a study on the “Implications of Child Undernutrition on the Social and Economic Development of Egypt” highlighted the substantive economic cost of malnutrition in Egypt, in terms of the drop in future earnings in adulthood and negative impact for the state through higher health costs and higher education costs due to greater class repetition and drop-out from schools. Based on 2009 data, the study estimated the social and economic cost of child undernutrition in that year alone to have been 20.3 billion Egyptian pounds, equivalent to 1.98 percent of the country’s GDP. The study also concluded that without measures to combat and eliminate undernutrition, this cost is expected to increase by about 32 percent by 2025 to reach 26.8 billion EGP. For more details on the specific estimated impacts of nutritional challenges, see Annex 2.

Despite the clear links between nutrition and MDGs 1, 4 and 5, and SDGs 1, 2, 3, 4, 5, 6, 12 and 17, it is widely considered that nutrition does not receive the prioritisation it requires in Egypt, both in terms of policy-making or resourcing. The lack of prominence given to nutrition issues in the national debate and, therefore, limited associated resourcing overall is associated with a lack of leadership, unclear roles and responsibilities in taking forward the nutrition agenda and poor coordination and mobilization of key actors in a concerted effort to jointly address nutrition challenges. Underpinning this lack of attention to nutrition matters are the sizeable capacity gaps that limits opportunities to put in place critical actions for scaling up nutrition. These challenges are addressed in section 6 below, with suggestions for the ways forward mapped out in Section 7.

The 2015 Global Nutrition Report highlighted as a key message, that a reduction in malnutrition is key to sustainable development for any nation, therefore countries need to include nutrition as a key aspect of their development agendas. While there has been some reduction in malnutrition globally, progress remains slow; in fact, some forms of malnutrition, such as obesity and overweight, are increasing. Accountability in pursuing agreed objectives remains one of the main challenges that requires greater focus by all key stakeholders. These issues apply equally in the case of Egypt, where accountability for nutrition actions, including the need to address increasing trends of obesity and overweight, will pose considerable challenges to efforts to sustain and scale up progress in nutrition.

34 WHO, e-Library of Evidence for Nutrition Actions (eLENA): Exclusive breastfeeding to reduce the risk of childhood overweight and obesity (last updated 15 June, 2017)
35 Egyptian Ministry of Planning and UNDP, Egypt’s progress towards the Millennium Development Goals (Cairo, 2013).
6. CURRENT CAPACITY CONSTRAINTS IN RESPONDING TO NUTRITION CHALLENGES IN EGYPT

This section summarizes and elaborates the major capacity constraints – according to the Landscape Analysis Report - that need to be addressed in order to accelerate and refocus nutrition actions in Egypt.

STRATEGIC DIRECTIONS IN NUTRITION, LEADERSHIP, GOVERNANCE AND IMPLEMENTATION

An opportunity to combat the multiple and multifaceted nutrition challenges facing Egypt, was created with the initiation of a comprehensive 10-year Food and Nutrition Policy and Strategy 2007–17, (see Box 2 below) and the establishment of an inter-Ministerial Committee on Nutrition under the Prime Minister’s oversight. Both reflected a willingness to scale up nutrition action, by raising nutrition to the highest decision-making level with senior leadership and a mechanism to bring together the multiple stakeholders and sectors (including the key Ministries of Education, Social Affairs and Agriculture and led by the National Nutrition Institute) required to create concerted and coordinated action on nutrition, as well as the aim to raise public awareness through the media and other channels.

Table 1: National Food and Nutrition Policy and Strategy (2007-17)

The National Food and Nutrition Policy and Strategy covers the following policy areas:
1. Promoting intersectoral collaboration for universal access to adequate food and nutrition;
2. Incorporating nutrition objectives into National Development Policies, Plans, Strategies, Programmes, or activities to facilitate achievement of the Millennium Development Goals
3. Improving Household Food Security
4. Monitoring the food and nutrition situation
5. Improving the quality and safety of food services
6. Enhancing the prevention and control of nutrition infectious diseases
7. Enhancing assistance for the socio-economically deprived and nutritionally vulnerable
8. Undertaking institutional and community capacity building and development for nutrition
9. Enhancing prevention and control of non-communicable/chronic diet-related diseases (NCDs)
10. Enhancing infant and young child feeding and breastfeeding practices
11. Enhancing the prevention and control of micronutrients deficiency
12. Promoting healthy dietary practices and life styles with a focus on school-aged children and adolescents

Source: Adapted from UNICEF & MoHP, Egypt Nutrition Landscape Analysis Report, (Cairo, 2012).
However, an absence of leadership and lack of clear delegation of roles and responsibilities has compromised the plan of having a governance structure and accountability framework that focuses on targeted planning and immediate action on nutrition. Thus, the momentum for nutrition action was not sustained long enough with a resultant lack of implementation of the Strategy, including the fact that the Inter-Ministerial Committee was never convened.

Among the challenges is also the absence of a translated ‘actionable version’ of the Strategy in Arabic and the simple fact that the Strategy was never widely disseminated, hence not known by the key implementers and decision-makers nor the public in general.

On the leadership side, challenges have included limited attention at the highest inter-ministerial level, lack of technical presence with decision-making powers on the Inter-Ministerial Committee, its narrow thematic focus on medical curative approaches with limited emphasis on prevention and absence of the Ministry of Finance representation to ensuring resourcing for actions agreed.

The political changes that have been occurring over the past few years have further aggravated and compounded the above challenges. Loss of institutional memory among ministries and realignment of priorities have also emerged as constraints that required significant change of course and review of the nutrition policy and strategy that was once adapted. The delays also meant that actions that were designed to suit the context back in 2008 are no longer applicable or effective. There is, hence, a great need and an opportunity to update the national nutrition policy, strategy and action plans while building on policies, legal provisions, institutional frameworks and nutrition programming that are already in place or emerging. This initiative is a particularly pertinent and timely as Egypt looks to reinvigorate its economy with investment in its people as the key requirement for success.

A significant bottleneck identified by the Landscape report was that within the MoHP itself, coordination and communication needs to be strengthened to facilitate oversight in setting nutrition priorities and standards, and to ensure implementation and monitoring. Moreover, the MoHP Nutrition Unit should be reviewed and strengthened in terms of its strategic focus, positioning, mandate, decision-making powers, thematic focus and technical capacity. Currently, the Nutrition Unit is positioned within the MCH department at national level and consequently has very limited authority to coordinate or even liaise with other sectors in the MoHP let alone key sectoral budgets and ministries.

**COORDINATION MECHANISMS AND ACCOUNTABILITY**

Coordination and communication remains limited among the multiple stakeholders and sectors, where numerous and uncoordinated mechanisms exist for government, donors and agencies implementing programming on nutrition-related issues. Examples include, the Food Security Committee, where discussions largely focus on issues relating to availability of food through domestic production while the dialogue should also feed into the wider nutrition considerations leading to strengthened nutrition sensitive programming on a wider scale. Similarly, addressing nutrition-related issues with sectoral ‘silos’ has meant that some specific issues relating to nutrition have been under-reflected in policy and programme considerations, such as on food safety challenges or issues of environmental (including water and sanitation) pollution, climate, regulation of food commercials, school children and adolescents’ nutrition, marketing of breastmilk substitutes, as well as issues around media involvement in raising public awareness on nutrition-related issues.

**BUDGETING AND FINANCING OF NUTRITION SYSTEM**

The absence of a clearly allocated budget and funding linked to the Nutrition Strategy or agreed priority nutrition interventions poses further challenge to action, although funding for smaller and more disparate programmes exists across the country. At national level there is budget allocation for nutrition specific activities such as primary health care nutrition activities, micronutrient supplementation and fortification, and several individual agencies allocate significant proportions of their budget for nutrition-related activities. However, these activities only account for a small proportion of total requirements. The absence of an integrated and explicit financial/budgetary framework for the nutrition strategy with allocated resourcing and implementation responsibilities is a main challenge to achievement of accelerated and scaled-up nutrition actions. Moreover, the health sector already remains greatly underfunded with only six percent of the 2014/15 national budget allocated for healthcare (without specific allocations for nutrition), which is well below the 15 percent commitment made to the African Union’s Abuja Agreement. The proportion of the national budget allocated to health has remained largely static over the last decade with unpredictable cuts making commitments to long-term capacity building challenging. Key parts of the budget, such as for training, are not sufficiently broken down into thematic areas making it challenging to guarantee specific capacity building activities such as for nutrition.

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39 Landscape Analysis Report (ibid. p. 14)
42 An African Union (AU) decision at the Kampala assembly saw a decision to: “Provide sustainable financing by enhancing domestic resources mobilisation including meeting the 15% Abuja target, as well as, mobilising resources through public-private partnerships and by reducing out-of-pocket payments through initiatives such as waiving of user fees for pregnant women and children under five and by instituting national insurance.” African Union, Assembly of the Union, Fifteenth Ordinary Session. Actions on maternal, new born and child health and development in Africa by 2015. (Kampala, 2010). Expenditure on health in Egypt has hovered around four to six percent of annual budgets in the last decade.
43 Ministry of Finance, Financial Monthly, (May, 2014)
Hence, nutrition budgeting and donor fund contributions need to be structured and predictable, with clarity on funding allocations towards nutrition-specific and nutrition-sensitive programmes. This requires clear and agreed national nutrition policies and plans.

With regards to capacity, the health system faces sizeable capacity gaps to both assess and monitor as well as to effectively address current nutrition challenges as well as to scale-up and intensify nutrition actions. Specifically, the system is challenged by a lack of nutritionists/nutrition counsellors at all levels – particularly at family health unit and community levels - to allow for proper screening, early detection, primary and secondary prevention. This is further compounded by unequal geographical distribution of existing health workers, while limited use of nutrition data and follow up of indicators at the health care unit leaves many pregnant mothers and under-five children without proper early detection and follow up of nutritional problems. There is also limited capacity at the community level and NGOs regarding nutrition specific interventions, particularly in areas where there is insufficient coverage of health care services. Gaps in availability of resources, materials and commodities at health facilities were also identified by the Landscape analysis report. A separate analysis by the MoHP and UNICEF revealed inputs related to programmes for micronutrient deficiencies, stunting and obesity were less than 20 percent available, and that in some facilities key supplies such as iron, folic acid and Vitamin A were limited. A thorough analysis of these issues should be undertaken to reveal bottle-necks and inform protocols of interventions and adoption of critical indicators for follow-up.

A main issue of capacity is the lack of a functioning nutrition surveillance system (NSS). With only a limited set of sentinel sites providing updated information on nutrition developments and no national representation, it is very difficult to detect changes and trends in nutrition developments.. A strong nutrition information system should be able to adequately inform policy formation and resource allocation and, thereby, national nutrition programming. Two other health information systems, i.e. the national Health Information System (HIS) and the Monitoring of Results for Equity Systems (MoRES), are additional sources of nutrition data that need to be considered in a much-needed review of nutrition data monitoring and validation in order to establish an ‘real-time’ national nutrition management information system that will enable nutrition managers at all levels to take action and monitor the outcomes of these actions and existing programmes with minimum time delays.

PARTNERSHIP FOR NUTRITION

While there are numerous ongoing nutrition-related programmes in Egypt, many are run on a small scale, do not link up strategically under one comprehensive plan and have mixed, sometimes even overlapping, services and results. Nutrition-related programming, especially in the areas of nutrition sensitive programmes, spans across several sectors and areas and includes national programmes such as food fortification, food subsidies and social safety nets as well as feeding programmes in schools and health facilities. Other nutrition programmes include, provision of technical assistance (by e.g. the UN) at all levels, including supporting research, monitoring and awareness-raising activities and wider capacity building; community-based nutrition programmes in poorer, particularly rural, areas; MoHP programmes targeting vulnerable groups such as pregnant and lactating women, infants and children, and specific sub-groups such as street children and those exposed to child labour; and support provided to baby-friendly facilities, as well as interventions by international and national NGOs. Targeting of these programmes is largely in areas of greatest need, with an emphasis on poorer rural areas. However, it should be noted that as poverty and health challenges are on the increase in poorer urban areas, stronger focus is required in these population groups as well. A collective and coordinated action plan among all relevant stakeholders is key to more harmonized efforts and should be combined with building joint accountability mechanisms which will greatly support scaling-up of nutrition interventions.

In taking nutrition programmes to scale, particularly through engagement of key stakeholders like NGOs and the private sector, it is critical to ensure that the objectives of all stakeholders are clearly linked to national policies and efforts. For example, reviews of food safety, food labelling and advertising as well as expansion of the fortification programme should ideally go beyond immediate stakeholders to also include the private sector in their supply role. Similarly, reforms to the extensive food subsidy system that reaches 79 percent of the population and has cushioned the people who are poor from rising food prices should also bring in a wider range of stakeholders when reviewing the food basket and expansion to a wider range of safety nets. Moreover, reforms should balance economic considerations with nutrition requirements, noting for example that the current food basket adds to a trend of poorer households consuming cheap calorie-dense foods. Reforms should look to improve targeting (reducing inclusion and exclusion errors) to focus on the most vulnerable and providing them with truly nutrition-enhancing support.

44 The report also found an absence of registers for Antenatal Care and Integrated Management of Childhood Illnesses in some facilities, and in an analysis of health worker knowledge, that only 45 percent of those interviewed knew the Vitamin A supplementation schedule for children according to Egyptian nutrition protocols; knowledge was higher on issues around breast feeding and complementary feeding. UNICEF, MRC South Africa, WHD and Egyptian Ministry of Health and Population, Egypt Nutrition Landscape Analysis Report, (Cairo, 2012).
45 WFP, Status of Food Security and Vulnerability in Egypt, (Cairo, 2013)
46 Fortification programmes that are relatively low cost and with extensive reach include using wheat fortified with iron and folic acid in subsidized Baladi bread, accessed by 79 percent of the population, the cost benefit ratio of which programme is estimated to be about 1:23. World Food Programme, Economic Benefits of Flour Fortification in Egypt: Applying Global Evidence to the National Environment (Cairo, 2010). Similarly, subsidized cooking oil is fortified with vitamins A and D.
47 World Bank, Egypt’s Food Subsidies: Benefit, Incidence, and Leakages (Cairo, 2010)
THE UNFINISHED AGENDA OF RESEARCH

Research on nutrition in Egypt has been substantial, but has not has not fully been translated into corresponding and sustained actions. The NNI’s mandate\(^{48}\) leans towards research; however, increased consideration and resourcing is now required to build its capacity to support key government sectors and agencies to develop and operationalize much needed new programmatic directions that more effectively address the changing nutrition situation in the country. For example, there have been a considerable number of nutrition surveys\(^{49}\) carried out by NNI but these are infrequent and cannot replace the need for a functioning ‘nutrition management information system’ as described above and where the technical capacity of NNI will be required for design, oversight and operations as well as for validation and interpretation of the data.

Focus and investment within the health system to date is often directed to curative approaches, while the rise of new nutrition challenges requires greater emphasis on prevention. Table 2 below summarises the key nutrition-related World Health Assembly targets, highlighting that Egypt is off-course to meet key targets including under-5 wasting, under-5 overweight, exclusive breastfeeding and anaemia among women of reproductive age.\(^{50}\) As commented below, stunting performance is also not satisfactory in a longer-term perspective if compared to earlier data from 2000 and 2005. The fact that birth weights are not systematically monitored and reported is another serious shortcoming as it provides a good indication of maternal health and nutrition and, indeed, the early stunting outcomes of the ‘intra-uterine phase’ of the 1000 days. Hence, nationwide recording and reporting of birth weights should be initiated immediately and is very feasible in the context of the Egypt health system.

It is also important to note that the emergence of newer dimensions of malnutrition, the ‘Nutrition transition’, relating to the rise of obesity and related non-communicable diseases (NCDs), requires the health system to adjust to addressing these newer diet-related trends.\(^{51}\) Constraining factors include the lack of nutritionists or nutrition-trained health workers in primary health care facilities, lack of capacity for early and proper detection and response at the operational level, as well as capacity for monitoring of malnutrition problems and trends that provides ‘real time’ management information that will lead to appropriate policy, programme and operational actions by the designated decision-making mechanisms.

### Table 2: Egypt’s progress against World Health Assembly targets

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Stunting (%)</th>
<th>Low Birth Weight</th>
<th>Overweight (%)</th>
<th>Wasting (%)</th>
<th>Exclusive Breastfeeding (%)</th>
<th>Anemia (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>On course?**</td>
<td>Not reported</td>
<td>Off course</td>
<td>Off course</td>
<td>Off course: Reversal</td>
<td>Off course</td>
</tr>
</tbody>
</table>

**Note: the assessment of stunting reduction being ‘on course’ is based on the reduction from 2008 to 2014; however, as apparent from Figure 3, stunting has remained stagnant around 23-21% since 2000 with an inexplicable peak in the 2008 EDHS. Hence, the progress is not really ‘on course’.

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\(^{48}\) The NNI’s mandate includes: Planning and implementation of medical, laboratory and nutrition research to identify nutritional challenges; planning nutrition-related national programmes and monitoring their implementation; implementing applied research for management of health and nutrition problems; early diagnosis and treatment of diseases of malnutrition through NNI general and specialized outpatient clinics, field surveys and nutrition surveillance systems; providing training courses and food and nutrition-related advisory services to the different sectors; training and capacity building of health and other professionals and strengthening the nutrition competence of researchers; organization of activities to raise public awareness about healthy and safe diets; investigating special foods and their analysis through the relevant scientific committees; contributing to formulation of legislative texts through membership in concerned national and international Codex Alimentarius Commission committees to serve as a basis for the quality and safety of foods consumed in Egypt; participation in collaborative food and nutrition research projects at the regional and international levels with exchange of scientific data and expertise. NNI is considered the technical arm of the MoHFP for nutrition.

\(^{49}\) Including the Demographic Health Survey (DHS), CAPMAS’s Household Income, Expenditure and Consumption Survey and previously the IDSC’s Egyptian Food Observatory.


\(^{51}\) World Bank, Repositioning Nutrition as Central to Development: A Large Scale Action (Washington, 2006).
7. POLICY RECOMMENDATIONS

In conclusion, as stated by e.g. Gillespie, S. et al (2013)\textsuperscript{52}
‘Acceleration and sustaining of progress in nutrition will not be possible without national and global support to a long-term process of strengthening systemic and organizational capacities.’ This includes a clear governance and accountability framework to facilitate commitment to scaling-up of nutrition actions across several key government sectors. Concurrently, better coordination will also improve the utilisation of existing policies, programmes and institutional capacity, and there are short-term as well as longer-term gains to be realised by better coordination of existing programmes. It remains crucial that actions in nutrition generate evidence that supports adaptation of nutrition interventions to the different and changing contexts and hence improve efficiency in delivery of nutrition actions.

Across all nutrition actions there is a need to adopt a “life cycle approach”, encompassing nutrition developments and challenges in childhood, adolescence and for women of reproductive age as a seamless progression of human development. This is particularly important for prevention of chronic undernutrition, stunting, which evolves during a ‘1000 days’ (i.e. almost 3 years) period and it certainly also applies to prevention of overweight, obesity and related Non-Communicable Diseases (diabetes, hypertension, heart conditions, etc.) which is a life-long process but which also have critical origins during the ‘1000 days’ period.

The recommendations for an Agenda for Action to accelerate nutrition improvements in Egypt are summarised in Table 3 below and then expanded on in the subsequent text.

Table 3: Scaling up nutrition in Egypt - a summary of policy recommendations

<table>
<thead>
<tr>
<th>Thematic area</th>
<th>Time frame</th>
<th>Budget Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strengthening leadership and coordination in nutrition, clarifying MoHP mandate and reinforcing cross-sector national leadership, technically supported by the MoHP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Finalize a National Nutrition Action Plan that links cross-sector coordination mechanisms with supra-sectoral decision-making on policy and resource allocation</td>
<td>Short term</td>
<td>-</td>
</tr>
<tr>
<td>1.2 Establish a National Nutrition Multi-Sectoral Coordinating Committee, NNMSCC</td>
<td>Short term</td>
<td>↑</td>
</tr>
<tr>
<td>1.3 Advocate for the reactivation of the Inter-Ministerial Committee on Nutrition under the prefecture/PMO to oversee and support the NNMSCC</td>
<td>Short term</td>
<td>-</td>
</tr>
<tr>
<td>1.4 Communication/Advocacy to elevate nutrition as a visible priority across Government, including within the MoHP</td>
<td>Short term</td>
<td>-</td>
</tr>
<tr>
<td>1.5 Establish an agreed hierarchy and decision-making/accountability mechanism on nutrition (and health) related matters within the MoHP</td>
<td>Short term</td>
<td>↑</td>
</tr>
<tr>
<td>1.6 Strengthen coordination and information sharing between actors supporting nutrition initiatives across Government and partners in the short-term, to facilitate an enhanced and more comprehensive nutrition system in the longer term</td>
<td>Short term</td>
<td>-</td>
</tr>
<tr>
<td>1.7 Review and clarification of NNI’s mandate and functions, to be overseen by a National Nutrition Multi-Sectoral Coordinating Committee</td>
<td>Medium term</td>
<td>-</td>
</tr>
<tr>
<td>1.8 Strengthen MoHP capacity to effectively fulfil its normative and regulatory (and monitoring/inspection) role and policy formulation functions in nutrition-related fields; strengthen cross-sector accountability for delivering on nutrition priorities</td>
<td>Medium term</td>
<td>↑</td>
</tr>
<tr>
<td>2. Updating and actualizing the National Nutrition Strategy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Undertake a review of and update the 2007-17 Nutrition Strategy</td>
<td>Short term</td>
<td>-</td>
</tr>
<tr>
<td>2.2 Promote the adoption of the ‘life cycle approach’ in policy and programming</td>
<td>Short term</td>
<td>-</td>
</tr>
<tr>
<td>2.3 Update MoHP policy and strategies for management of each of the micronutrient deficiencies that are of public health importance in Egypt</td>
<td>Short term</td>
<td>-</td>
</tr>
<tr>
<td>3. Financing and resource mobilization to implement the National Nutrition Strategy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Advocate to Ministry of Finance for specific budget to fund the nutrition strategy</td>
<td>Short term</td>
<td>↑</td>
</tr>
<tr>
<td>3.2 Seek interim donor funding to help scale up existing nutrition programming with particular emphasis on the “first 1000 days”</td>
<td>Short term</td>
<td>-</td>
</tr>
<tr>
<td>3.3 Develop an integrated financial framework for the Nutrition Strategy to facilitate accelerated nutrition action</td>
<td>Short term</td>
<td>-</td>
</tr>
<tr>
<td>3.4 Seek and explore funding opportunities from the private sector</td>
<td>Short term</td>
<td>-</td>
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<tr>
<td>4. Strengthening the capacity of the health system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 Invest in strengthening and maintaining the national breast feeding program</td>
<td>Short term</td>
<td>↑</td>
</tr>
<tr>
<td>4.2 Review and update Nutrition protocols and training programs of health care workers</td>
<td>Short term</td>
<td>↑</td>
</tr>
<tr>
<td>4.3 Ensure all health facilities are appropriately stocked with nutrition materials and supplies</td>
<td>Short term</td>
<td>↑</td>
</tr>
<tr>
<td>4.4 Current nutrition data collection and surveillance system should be reviewed to identify the nutrition data collection, validation and coverage modality which can facilitate the design and initiation of a multi-sectoral Nutrition Management Information System</td>
<td>Short term</td>
<td>↑</td>
</tr>
<tr>
<td>4.5 Agree on and collect a selection of appropriate nutrition-related data through the national health information system of the MoHP, institutionalizing nutrition within the supervisory and monitoring system</td>
<td>Short term</td>
<td>↑</td>
</tr>
<tr>
<td>4.6 Establish an efficient screening, detection, and management system for malnutrition focusing on the ‘first 1000 days’ within the primary health care system</td>
<td>Medium term</td>
<td>↑</td>
</tr>
<tr>
<td>4.7 Create a long term research agenda reflecting the major causes of child malnutrition in Egypt and in support of relevant prevention and control programmes</td>
<td>Medium term</td>
<td>↑</td>
</tr>
<tr>
<td>4.8 Create (permanent) local cadres of nutrition counsellors/ nutritionists to provide technical capacity at local and district levels</td>
<td>Medium-long term</td>
<td>↑</td>
</tr>
<tr>
<td>4.9 Undertake comprehensive capacity building at primary health care unit level based on a needs assessment of health workers</td>
<td>Medium term</td>
<td>↑</td>
</tr>
</tbody>
</table>
4.10 Enhance nutrition training in the educational curricula of medical and nursing faculties, and advocate for the training of more nutritionists for the MoHP

4.11 Integrate breastfeeding curricula into medical and nursing curricula and training

5. Scaling up nutrition programming

5.1 Scale up existing programming focusing on ‘the First 1000 days’

5.2 Strengthen nutrition monitoring capacity and data validation in the ‘First 1000 days’ including child growth monitoring in the first two years

5.3 Ensure the ‘life cycle approach’ shapes programming

5.4 Encourage increased investment in prevention programming to address nutritional challenges, while continuing to support curative approaches

5.5 Encourage nutrition-sensitive programming that links up with wider nutrition programming as part of an Agenda for Action. For example, a ‘nutrition sensitive’ social protection and WASH approach, together with primary health actions noted above, can serve as effective means of addressing both under and over-nutrition. Key areas of focus could include:

- Institutionalize the First 1000 Days initiative within the primary health care sector;
- Ensure a particular focus on stunting screening, detection and prevention programming;
- Plan and implement a strong exclusive breast-feeding campaign designed to overcome identified barriers and constraints, building on researched barriers and incentives to behaviour change;
- Replicate successful community based nutrition programmes that focus on mothers and the preschool child and improve young child feeding practices;
- Use the planned implementation of the national school-feeding programme to improve the health and nutrition literacy of school children and their families;
- Implement regular deworming, prevention and control of intestinal parasites activities;
- Design of programmes to address the nutrition needs of adolescents and the elderly (to complete the life cycle);
- Assess the magnitude of all micronutrient deficiency problems and scale up programmes and interventions on their treatment, prevention, and control;
- Strengthen the capacity and coverage of the MoHP’s food safety services;
- Review and propose low cost and nutritionally diverse food baskets;
- Coordinate and develop synergies with the National Programme for the Prevention and Control of Diet-related NCDs and obesity;
- Identify health-damaging dietary habits and practices of children and adolescents; formulate an action plan to improve them;
- Upgrade all nutrition education tools, instruments and materials;
- Develop a comprehensive nationwide awareness-raising nutrition campaign in close coordination with mass media, including community outreach;
- Scale up support to mother and baby-friendly facilities;
- Revitalize educational kitchens at primary health care facilities and for pregnant women

5.6 Encourage nutrition-sensitive programming that links up with wider nutrition programming as part of the Agenda for Action

6. Advocacy – policy

6.1 Based on ongoing policy review and updates, ensure a continuous policy dialogue and advocate;

6.2 Increase awareness-raising and social mobilisation campaigns on nutrition, working closely with national and local media, covering both rural and urban areas

6.3 Establishing a dialogue with the agro-food industry, inviting media and private sector support, to influence food consumption patterns and improve diets

Ongoing and cross-cutting policy review

Source: Authors’ compilation.

Note on budget impact and need: ↑ = budget increase required; ↓ = likely less budget required; = without extra budget requirements.

53 Maintaining an open and continuous policy dialogue is key in order to readily respond to and adapt to the contextual challenges; this process needs to build on the momentum of this ‘Agenda for Action’
The policy options outlined above are elaborated below.

1. **Strengthening leadership and coordination in nutrition, and clarifying the mandate of the MoHP and reinforcing cross-sector national leadership, technically supported by the MoHP**

**Short term**

- Finalise a National Nutrition Action Plan that should reflect cross-sector coordination mechanisms with supra-sectoral decision-making power on policy and resource allocation. The Action Plan should ideally include details of specific activities required and define stakeholders that can implement these, and through a multi-stakeholder workshop agree their specific roles and responsibilities with clear indicators and targets of progress against each action. This is critical to ensuring success of action to allow for scaling up both nutrition-specific and nutrition-sensitive action, given its multifaceted and multisectoral nature. The plan must prioritise strengthened leadership of a cohesive health (and nutrition) system that recognizes the intersectoral nature of health and nutrition action and that strengthens the interface with the other sectors.

- **Multi-Sectoral Coordination:** It is envisaged that this can be supported through the establishment of a National Nutrition Multi-Sectoral Coordinating Committee, which in the short to medium term can oversee a process of drafting of an updated policy and strategic plan with defined roles and responsibilities of key sectors (such as agriculture, education, social solidarity, WASH, etc.). That in turn will facilitate a process of reviewing the MoHP mandate and related policies in the medium term, including clarifying the role of the NNI, and advocating for resourcing required to scale up nutrition interventions in the medium to longer term (see medium term action below).

- **Advocacy and communication support:** Critical to ensuring the elevation of the nutrition agenda back to national priority status, is to advocate for the reactivation of the Inter-Ministerial Committee (IMC) once the current round of post-election political change settles, to also include the Ministry of Finance to be involved in resourcing discussions and in the medium term ideally include more technical (nutrition) experts who are granted some decision-making authority.

- **Nutrition needs to be elevated as a visible priority across Government, including within the MoHP** to ensure appropriate resourcing for the scaling up of related activities.

- The currently evolving Agenda for Action provides an opportunity to set out in the short term and in the medium to long term establish an agreed hierarchy and a decision-making mechanism on nutrition (and health) related matters within the MoHP, and more importantly on a national level within the Council of Ministers. Where new regulation may impact negatively on health and/or nutrition, the MoHP’s mandated responsibility should be recognised to advocate against this or take measures to reduce the health and nutrition damaging impact.

- **Nutrition information and data sharing:** Strengthen coordination and information sharing between actors supporting nutrition initiatives in the short-term as an enhanced and more comprehensive nutrition system is worked towards in the longer term. Both vertical and horizontal coordination of all stakeholders and of existing programming (particularly relating to nutrition, food security, education and health, particularly for women and children) should be strengthened by identifying synergies to be enhanced and areas of overlap that can be diminished. In particular, coordination roles for oversight of scaling up action on nutrition need to be clearly allocated, given that this is not the role of the NNI, with a need for strengthening intra-departmental communication. Moreover, a link between initial national SUN/nutrition efforts and the REACH secretariat would help networking and intensify mutual collaboration in the field of nutrition.

**Medium term**

- **Review and clarification of the mandate and function of the NNI** to look at its role beyond its current technical function, and the ways in which it can facilitate the realization of nutrition objectives. This can be overseen by a National Nutrition Multi-Sectoral Coordinating Committee that also facilitates a process of bringing together and coordinating relevant stakeholders across the spectrum of nutrition-sensitive activities.

- **Strengthen the MoHP’s capacity to effectively fulfil its normative and regulatory (and monitoring/inspection) role and policy formulation functions and responsibilities in nutrition related fields.** This should include extension of this function to cover those entities that have food and nutrition activities that may be outside the health sector and this is one of the pillars of the national food and nutrition system and a basic component of a nutrition agenda. A particular emphasis should be places on accountability, and ways in which different stakeholders across Government and beyond can be held to account for delivering on nutrition objectives. Specifically, the role of the MoHP’s Nutrition Unit will need to be reviewed and strengthened, including in terms of its strategic focus, positioning, mandate, decision-making powers, thematic focus and technical capacity. This is the first step to strengthening accountability within health care system.
2. Updating and actualizing the National Nutrition Strategy

**Short term**

- **Undertake a review of and update the 2007-17 Nutrition Strategy** to take account of more recent trends, and political and contextual changes, and linking to the current action plan that is being developed. This should be done through a fully consultative process, with a related budget and the updated plan of action that allocates clear roles, responsibilities and timelines. Moreover the Strategy document should be translated into Arabic and a dissemination process be undertaken at all levels.

- **Promote the adoption of the ‘life cycle approach’** to inform policy and subsequently programming.

- **Update of the MoHP policy and strategies for management of each of the micronutrient deficiencies in Egypt that are of public health importance**, based on evidence provided by newly generated data that bridge the long standing information gaps in this area.

3. Financing and resource mobilization to implement the National Nutrition Strategy

**Short term**

- **Advocate to the Ministry of Finance for a specific budget to fund the nutrition strategy**, making the economic case in terms of the sizeable costs of malnutrition to the country and the implications for the nation’s development and security.

- **In the meantime, donor funding can be sought to help scale up existing nutrition programming** with a particular emphasis on the “first 1000 days”.

- **Develop an integrated financial framework for the Nutrition Strategy** and to facilitate accelerated nutrition action. This should include clear budget lines to ensure funding for nutrition is protected and that expenditures against this budget line will be tracked. This should also allow for improved analysis to avoid duplication and identify funding gaps. Moreover, clear capacity building budget lines should be included in the medium term.

- **Opportunities exist to seek funding from the private sector**, acknowledging that this is unlikely to be on the scale of government resourcing and that it should complement aspects of the strategy pertaining to the private sector.

4. Strengthening the capacity of the Health system

**Short term**

- **Invest in strengthening and maintaining the national breast feeding program**

- **Review and update Nutrition protocols and training programs of health care workers**; including update of training and capacity gaps to meet the operational needs of executing the updated protocols.

- **Ensure all health care facilities are appropriately stocked and equipped for delivering nutrition services**

- **Support the creation of (permanent) local cadres for nutrition counsellors/ nutritionists to provide technical capacity at local and district levels.** These will be essential in supervising and supporting malnutrition reduction activities at peripheral level. To facilitate this process, detailed terms of reference including training provision need to be developed by the MoHP; this could be upgraded to a higher certified course/diploma for empowering staff, ensuring capacity, and sustainability.

- **Review and strengthen the nutrition data and information management system**; Review the current nutrition data collection and nutrition surveillance system to identify the nutrition data collection, validation, and coverage modality, which can then facilitate design and initiation of a multi-sectoral Nutrition Management Information System. Ensure the development and use of mechanisms and tools that ensure analysis of collected data and their utilization for evidence based policy and strategy formulation. Key also is ensuring that learnings from existing nutrition programming are shared between stakeholders.

- **Institutionalizing nutrition within the supervisory system and monitoring functions of the MoHP/PHC sector**

- **Strengthening monitoring capacity at district level**; Enforcing the decision making and feedback loop, data use at the district level

**Medium-long term**

- **Establish an efficient screening, detection, and management system for malnutrition focusing on the ‘first 1000 days’ within the primary health care system.**

- **Create a long-term research agenda reflecting in particular the identification of the major causes of child malnutrition in Egypt** (causal analysis) and in support
of programmes for prevention and control of the major manifestations of malnutrition. This could be pre-empted by an institutional review of the NNI's research priorities to ensure they are aligned to the identified nutritional challenges which require a health systems strengthening approach and community nutrition initiative. Support can be sought from international research bodies.

- **Undertake comprehensive capacity building at the level of primary health care units** based on a needs assessment targeting health care workers, doctors, nurses, and community health workers (tailored to the specific terms of references of each group).

**Long term**

- **Enhance nutrition training in the educational curricula** of medical and nursing faculties, and advocate for the training of more nutritionists for the MoHP.

- **Integrate breastfeeding curricula into medical and nursing curricula and training programmes.** Here UNICEF’s strong capacity can be drawn on given current work being undertaken on Maternal and Baby-Friendly Hospital Initiatives, BMS Code reinforcement etc.

**5. Scaling-up nutrition programming**

**Short-term**

- **In the short-term scale up existing programming focusing on ‘the First 1000 days’;** learning lessons from current interventions at the primary health care level supported by UNICEF and other development partners (USAID, Save the Children, and others). Specifically, the Perinatal Care model can serve as a platform to build upon through extending the scope to the “first 1000 days”. This will need to include a systematic PHC approach to stunting reduction, and with a particular focus on improving urban nutrition sensitive PHC systems.

- **Strengthen nutrition monitoring capacity and data validation in the ‘First 1000 days’ including child growth monitoring in the first two years.** An opportunity exists to build on the MoRES conceptual approach to move towards more outcome-oriented monitoring within an equity focus to improve nutrition outcomes.

**Medium term**

- **Ensure the ‘life cycle approach’ shapes programming** in the medium to longer term, encouraging close collaboration between key Ministries and stakeholders. For example, coordination with the Ministry of Education to maintain focus on high school enrolment for girls, the introduction of programmes for positive parenting or ‘healthy motherhood craft’ that can contribute to and increase the impact of the ‘First 1000 Days’ approach. Moreover, scale-up to nationwide coverage should be encouraged for the school feeding programme (which currently only has partial coverage) with its accompanying nutrition education programme, the school canteen services. Moreover, there should be a drive for a healthy and hygienic school environment, including around WASH facilities and awareness-raising, nutrition and health education etc, to ensure across the board synergies.

- **Encourage increased investment in prevention programming to address nutritional challenges,** while continuing to support curative approaches

- **Encourage nutrition-specific programming** as part of the Agenda for Action, ideally including:
  - institutionalize the First 1000 Days initiative within the primary health care sector;
  - ensure a particular focus on stunting screening, detection, management prevention programming;
  - plan and implement a strong exclusive breast-feeding campaign designed to overcome identified barriers and constraints, building on researched barriers and incentives to behaviour change;
  - replicate successful community based nutrition programmes that focus on mothers and the preschool child and improve young child feeding practices through introduction of innovative approaches, investing in partnerships to improve capacities at community level and support the implementation of nutrition programs being implemented at the FHU facility level;
  - use the planned implementation of the national school-feeding programme to improve the health and nutrition literacy of school children and their families;
  - implement regular deworming, prevention and control of intestinal parasites activities;
- Design of programmes to address the nutrition needs of adolescents and the elderly (to complete the life cycle);

- Assess the magnitude of micronutrient deficiency problems and scale up programmes and interventions or their treatment, prevention, and control. With anaemia a critical public health challenge in Egypt, moves to re-start the iron fortification of the ‘low extraction’ Baladi bread that primarily targets on the poorest population groups, but is more extensively available, should be encouraged. In addition, MN supplementation programs within PHC facilities need to be strengthened by reviewing protocols, addressing gaps, and challenges, for prevention and treatment of MN deficiencies, mainly anaemia. MN supplementation for adolescent girls as they enter puberty (for example through schools), should be explored;

- Strengthen the capacity and coverage of the MoHP’s food safety services;

- Review and propose low cost and nutritionally diverse food baskets to help families make the right choices with their limited resources; link to subsidy and social safety net programs.

- Coordinate and develop synergies with the National Programme for the Prevention and Control of Diet-related NCDs and obesity;

- Identify health-damaging dietary habits and practices of children and adolescents and formulate an action plan to improve them;

- Upgrade all nutrition information, communication, education tools, instruments and materials; Recognising that public understanding of the process and impact of stunting in particular is very poor and, therefore constitutes an obstacle to efforts to improve nutrition in Egypt, an emphasis of stunting awareness-raising and its impact is critical;

- Develop a comprehensive national awareness-raising nutrition campaign in close coordination with mass media, social media, and including community outreach;

- Scale up support to Mother and baby-friendly facilities;

- Revitalize educational kitchens at primary health care facilities and include pregnant women.

- Encourage nutrition-sensitive programming that links up with wider nutrition programming, as part of an Agenda for Action. This includes adopting, a ‘nutrition sensitive’ social protection and WASH approach, in combination with the primary health actions noted above, can serve as effective means of addressing both under and over-nutrition.

6. Evidence-based advocacy

- Based on ongoing policy review and updates, ensure a continuous policy dialogue to build on the momentum of national commitment and support;

- Increase awareness-raising and social mobilisation campaigns on nutrition, working closely with national and local mass media to increase public awareness of nutrition issues. Nutrition messages should feature regularly in different media platforms covering both rural and urban areas.

- Establishing a dialogue with the agro-food industry and inviting the support of the public media and private sector. This can provide valuable support for protecting the health (and nutrition) and wellbeing of children and for enhancing the efforts deployed for prevention of obesity and NCDs. The inclusion of the agro-food industry, the advertising industry as well as the public media reflects their important influence on food choices and consumption patterns of Egyptians, especially the children and adolescents.
8. CONCLUSION

In conclusion, given the continued high malnutrition rates that exist in Egypt, the high social and economic costs of not tackling these and the sizeable opportunities that exist to build on existing programming, the case for scaling up and accelerating nutrition interventions in the country remains a strong one, particularly during the “first 1000 days”. Recognising the current systemic and institutional limitations that exist, this will necessarily need to be done in a phased approach. This can include more detailed action-planning and scoping out existing programming areas for potential scale-up and further integration in the short term. In the medium term, a more comprehensive review and revision of policy, MoHP mandate and strategy, can be coupled with strengthening coordination and leadership to bring together stakeholders from across all sectors, including the private sector. Such systemic change and advocating for the elevation of nutrition in the national policy agenda will facilitate the process of securing appropriate resourcing to allow for a more structure and systemic capacity-building and scale-up in the longer term.

9. NEXT STEPS

In line with the recommendations highlighted above, next steps will entail shorter term, medium term and longer term action. Focus in the short term will necessarily need to be on official adoption of the Agenda for Action plan, including the MOHP inviting the other key sectors and the Government coordinating bodies to agree on the process of formulating an updated National Nutrition Plan of Action and establishment of multi-sectoral coordinating mechanisms. Once the coordinating mechanism is in place and the key sectors have agreed to engage in formulating their respective parts of the National Action Plan, a national workshop should be organized in order to solicit broad participation in and ownership of the action plan. The national workshop will define explicitly how different sectors and actors will contribute to the improvement of nutrition in Egypt and start listing the corresponding specific actions and resource needs.

It is thus envisaged that the process of formulating a multi-sectoral National Nutrition Plan of Action will be supported through the establishment of a National Nutrition Multi-Sectoral Coordinating Committee, which in the short to medium term will oversee a process of drafting an updated policy and strategic plan with defined roles and responsibilities of key sectors (such as agriculture, education, social solidarity, WASH, etc.). The role of the Multi-Sectoral Coordinating Committee in the longer term will be to oversee the implementation of the plan through regular review meetings that will analyse and respond to progress reports on expenditures, implementation, outcomes and impact as provided by the improved National Nutrition Information System. The work of the Nutrition Multi-Sectoral Coordinating Committee (chaired by MoPH) will be supervised and supported by the proposed Inter-ministerial Committee under the Prime Minister’s Office.
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ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>EGP</td>
<td>Egyptian Pounds</td>
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<tr>
<td>MoHP</td>
<td>Ministry of Health and Population</td>
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<td>NCD</td>
<td>Non-Communicable Disease</td>
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<td>NNI</td>
<td>National Nutrition Institute</td>
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<td>NSS</td>
<td>Nutrition surveillance system</td>
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<td>MDG</td>
<td>Millennium Development Goal</td>
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<td>SDG</td>
<td>Sustainable Development Goal</td>
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<td>WHA</td>
<td>World Health Assembly</td>
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Annex 1: Organisational Structure of the Ministry of Health and Population

The Minister of Health and Population

The General Organisation for teaching hospitals and educational institutes
- The national nutritional institute

Service and support units
- Outpatient clinics
  - General clinics
  - Specialized clinics

The scientific institutes departments

Medical departments
- Department of surveys and field studies
- Department of clinical nutrition
- Department of nutritional needs and growth

Laboratory department
- Section of central lab.
- Section of food health

Technical units

Primary health care and preventive medicine Sector
- The General Directorate of Comprehensive Health Care
  - Department of mother and child care
  - Department of School aged child health
  - Department of childhood illnesses programs
- The Central Department of Preventive Affairs
- Department of Nutrition Programs
- Section of food sciences
- Section of nutritional chemistry and metabolism
Annex 2: Nutrition’s contribution to achieving the Sustainable Development Goals

**SDG1: End Poverty in All its Forms**

Malnutrition diminishes human capital, reduces resilience to shocks and lowers productivity (through impaired physical and mental capacity). Globally, productivity losses from undernutrition have been estimated to reduce lifetime earnings of individuals by some 10 percent or more. Losses to national productivity can also be as high. Conversely, the economic gains from investing in tackling malnutrition can result in a benefit-cost ratio of 15, so every US$1 invested in evidence-based nutrition interventions can generate average returns of US$15 making a strong economic case for nutrition action.

Specifically for Egypt, research based on 2009 HIECS data found some 40 percent of adults in Egypt to be stunted, or more than 20 million people of working age who are unable to achieve their potential as a consequence of child undernutrition. In rural Egypt, where most people are engaged in manual activities, it is estimated that in 2009 alone, 10.7 billion Egyptian Pounds (EGP) of potential production value was lost due to lower physical capacity from this group. Moreover, an estimated 857 million working hours were lost in 2009 due to absenteeism from the workforce as a result of nutrition-related mortalities, representing 5.4 billion EGP (equivalent to 0.5% of the country’s Gross Domestic Product).

**SDG2: End Hunger, Achieve Food Security, Improved Nutrition, and Sustainable Agriculture**

There is an increasing focus on the importance of bringing together policies and investments that link agriculture with improved health and nutrition. Nutrition-sensitive agricultural activities can have a positive nutritional impact by increasing the availability (including diversity), access to and quality (in terms of nutritional content and safety) of agricultural produce. As noted for Egypt, malnutrition rates still tend to be higher in poorer rural areas and affects the productivity of those working in agriculture. For people to be well-nourished at all times, it is therefore necessary to enhance short and longer term access to a healthy and more diverse diet, improve knowledge around food consumption choices and preparation, and strengthen the resilience of food systems to economic, climatic and man-made shocks (where agriculture in Egypt is seen as vulnerable to climate change through rising temperatures).

Egypt saw an increase in the prevalence of food insecurity from 14 percent of the population in 2009 to 17.2 percent (13.7 million people) in 2011. This was driven largely by rising poverty rates and a succession of shocks and crises from 2005 with economic implications. Food insecurity in Egypt remains an issue of household access to food driven by purchasing power.

**SDG3: Ensure Healthy Lives**

Malnutrition is one of the key drivers of child mortality; 45 percent is attributable to undernutrition. Good health is not possible without good nutrition. Malnutrition is also associated with key risks to maternal mortality, where maternal health is undermined by inequitable access to food, health and care. Malnutrition also undermines resistance to infections and hastens the onset of certain diseases, such as AIDS amongst the HIV-positive.

Investment in the “First 1,000 days”, including prevention of low birth weight and promoting exclusive breastfeeding, will both benefit individual child and future generations. Globally, the cost of implementing evidence-based nutrition interventions is estimated at some US$370 per life-year saved.

In Egypt losses to the health sector due to increased child morbidity were equivalent to 1.17 billion EGP in 2009. In addition undernutrition was associated with 11 percent of all cases of child mortality, which represented over 6,000 child deaths in 2009, and over 28,102 between 2004 and 2009.

**SDG4: Ensure Quality Education and Learning**

Malnutrition reduces cognitive capacity and educational attainment. On average, being stunted at age six carries the risk of losing four grades of schooling through poor test performance. Female education in particular has been shown to directly link to improved nutrition of their children, and others.

In Egypt, 2009 data found that stunted children register poorer test scores and a higher grade repetition rate of 7.4 percent relative to non-stunted children (5.4 percent), which was estimated to cost families and the state some 271 million EGP in one year alone. Stunted children are also more likely to drop out of school, with the average schooling achievement for a person who was stunted as a child being 0.2 years lower than for a person who was not stunted. This labour market disadvantage is estimated to have associated private costs of 2.7 billion EGP in potential productivity in Egypt in 2009 alone.

Moreover, some 10 percent of all grade repetitions in school are associated with the higher repetition incidence among stunted children compared to non-stunted children. This incurred a cost borne by families and the education system of 271 million EGP in 2009. Furthermore school drop outs in that year cost the labour market losses of about 2.7 billion EGP. Losses to the productivity were quantified at 10.7 billion EGP due to stunted adults contributing lower workforce capacity. Without adequate measures to combat and eliminate child undernutrition, the total cost of 20.3 billion EGP in 2009 due to reduced capacity, is expected to increase by about 32% by 2025 to reach 26.8 billion EGP.

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55 An increasing population, limited arable land where only 5 percent of Egypt’s land can be cultivated, land degradation, desertification and climate change are seen as key challenges to food security in Egypt. In Upper Egypt, 51.5 percent of the population are poor and experiencing weather and crop failures; food production is expected to decline by a further 30 percent by 2050 as a result of climate change. See: https://www.adaptation-fund.org/project/building-resilient-food-security-systems-benefit-southern-egypt-region-and-CAPMAS-Household-income,-expenditure-and-consumption-survey, (Cairo, 2011).

56 WFP, Status of Food Security and Vulnerability in Egypt, (Cairo, 2013)
SDG5: Achieve Gender Equality and Empowerment

Gender equality and empowerment (particularly for girls, adult women and marginalized vulnerable populations), is a key contributor to good nutrition. Laws and policies that facilitate equality and empowerment can enable better nutrition for all. Undernourished girls and women are often less able to take advantage of and perform in school or get paying jobs because of lower work capacity and sickness. This is also passed on to their children.

SDG6: Ensure Sustainable Water and Sanitation

Globally, about 14 percent of the total fall in stunting between 1970 and 2010 resulted from improved sanitation. Nutritional improvements are associated with better food quality, educational access, preventative health-seeking behaviours, and a voice in development, there is greater practice of appropriate hand-washing practices, personal hygiene, and sanitation. Nutrition-sensitive programming is therefore key alongside nutrition-specific activities to achieve improved nutrition outcomes.

SDG12: Ensure Sustainable Consumption and Production Patterns

To ensure food security for all, the food system in its entirety needs to function appropriately to facilitate improved dietary access and utilization. All forms of malnutrition, undernutrition and overweight reflect the nature of local food environments in enabling appropriate consumption choices. For example, improved food supply chains can reduce or stabilize food prices improving access to food, while extending the seasonal availability of nutrient-rich foods or improving information flows or enforcing food safety standards can improve food utilization. Shocks to the food system, for example the food price crises of 2008-10, require safety nets to protect consumption and nutrition for the most vulnerable.

SDG17: Revitalize Global Partnerships

Global partnerships for development and nutrition have seen movements such as Scaling Up Nutrition (SUN) grow through a collaborative process of consensus building on how to scale up nutrition interventions. These offer a platform to focus political priorities and enable critical actions. However, ongoing reinvigoration of such commitments is required at the highest political level.

Leaders across the public and private sectors are realizing investment in nutrition can strengthen national economic and social development. However, sustained efforts are required to ensure best practices and a focus on the needs of the most nutritionally vulnerable.