Afghanistan

Zero Hunger Strategic Review

October 2017

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Hedayat Amin Arsala, former Vice President of Afghanistan and Lead Convener

ABBREVIATIONS AND ACRONYMS

ALCS	Afghanistan Living Conditions Survey
ANPDF	Afghanistan National Peace and Development Framework
BMI	Body-mass index
BPHS	basic package of health services
CADF	Common Agricultural Development Framework
CMAM	community-based management of acute malnutrition
CSO	Central Statistics Organization
EPHS	essential package of health services
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FSAC	Food Security and Agriculture Cluster
GDP	Gross Domestic Product
GNR	Global Nutrition Report
GoIRA	Government of the Islamic Republic of Afghanistan
HNO	Humanitarian Needs Overview
IDP	internally displaced person
IFAD	International Fund for Agricultural Development
IMAM	integrated management of acute malnutrition
IOM	International Organization for Migration
IPC	Integrated Food Security Phase Classification
IYCF	infant and young child feeding
MAIL	Ministry of Agriculture, Irrigation and Livestock
MoPH	Ministry of Public Health
MoRRD	Ministry of Rural Rehabilitation and Development
NAPA	National Adaptation Programme of Action
NEPA	National Environmental Protection Agency
NGOs	non-governmental organizations
NRVA	National Risk and Vulnerability Assessment
OCHA	Office for the Coordination of Humanitarian Affairs
PLW	pregnant and lactating women
RUSF	ready-to-use supplementary foods
RUTF	ready-to-use therapeutic foods
SDG	Sustainable Development Goals
SGR	Strategic Grain Reserve
UNEP	United Nations Environment Programme
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WASH	water, sanitation, and hygiene
WFP	World Food Programme
WHO	World Health Organization

EXECUTIVE SUMMARY

In 2015, the Government of Afghanistan committed itself to achieving the Sustainable Development Goals (SDGs), including SDG 2 (Zero Hunger) which calls on nations, by 2030, to "end hunger, achieve food security and improve nutrition, and promote sustainable agriculture." Although the country faces a protracted conflict and numerous other challenges including climate change, poverty, and gender disparities, it recognizes that addressing hunger is a critical investment to ensure that all Afghan citizens are able to achieve their full physical and mental potential, contribute to the economic growth and development of the country, and participate in a peaceful future. Afghanistan has demonstrated the ability to make progress on hunger in the past despite challenging circumstances and is already taking practical new steps to improve food security and nutrition. To better support its effort through 2030, it has commissioned this Afghanistan Zero Hunger Strategic Review.

BACKGROUND

The Strategic Review was launched in November 2016, under the stewardship of the Lead Convener, His Excellency Hedayat Amin Arsala, former Vice President of Afghanistan. An Advisory Committee, comprised of representatives of key Government ministries, national and international organizations, civil society, and the private sector, helped to guide the work. An independent, analytical and consultative process, the Strategic Review aims to support the achievement of zero hunger for all Afghans, regardless of whether they reside in government- or non-government-controlled areas, and is intended to serve two principal purposes:

- To enable the government to accelerate progress towards eliminating food insecurity and malnutrition in line with SDG 2.
- To inform national development planning processes and contribute to the efforts of all actors involved in food and nutrition security in Afghanistan.

The Strategic Review used a rigorous methodology. Extensive desk reviews explored the current food security and nutrition situation in Afghanistan using the most recent reports and data produced in the country and peer reviewed scientific literature. National and regional stakeholder interviews took place in Kabul and in the provinces with representatives of relevant line ministries, donors, civil society, and UN Agencies at the national level to understand existing priorities in nutrition and food security and the Government's plans to meet SDG 2. The community and household consultations, reaching people in 24 of the 34 provinces, discussed concerns related to food and nutrition security and potential solutions to resolve them.

Based on the findings emerging from this process, the Strategic Review identified the key challenges faced by Afghanistan to achieve zero hunger, analysed the current status of food security and nutrition, and provided prioritized recommendations for action for all humanitarian and development partners.

KEY CHALLENGES

The Strategic Review found that there are six broad challenges that are driving food insecurity and undernutrition in the country: protracted conflict, climate change and natural disasters, demographic shifts, gender disparities, limited job opportunities, and transparency and accountability concerns. A complex and protracted conflict has destabilized Afghanistan and contributed to widespread hunger, by causing displacement, disrupting livelihoods, and impeding efforts to provide assistance and

services. The country, with its mountainous terrain and fragile ecosystems, is also highly vulnerable to climate change and natural disasters, which will increasingly affect agriculture and hunger in rural communities in the coming decades.

At the same time, larger demographic trends, accelerated by conflict and the resulting displacement, have led to rapid urbanization, making more of the increasingly young population dependent on food purchases and vulnerable to food price fluctuations. However, the economy, affected by the instability, is struggling to provide the jobs to allow Afghanistan's citizens to meet their food and nutrition needs. The low levels of engagement of women in the workforce and girls in education significantly undermine a potential means to improve food security and nutrition for families. Transparency and accountability issues, including corruption, have also stymied efforts to respond effectively to the food security and nutrition needs in the country.

Each of these drivers has a two-way relationship with hunger and interactions between themselves. For example, recent studies suggest that hunger is not only caused by conflict but can significantly contribute to and exacerbate tensions. Therefore, the country is in danger of being caught in a negative cycle. Conflict creates hunger, while also disrupting basic services and limiting employment opportunities, especially for young people. The problem is exacerbated, particularly in rural areas, by climate change. Yet the hunger and resulting desperation may, in turn, contribute to tensions and conflict, reinforcing the cycle. Additionally, limited opportunities for women and girls and high levels of corruption undermine some key means for addressing the situation.

Food Security and Nutrition in Afghanistan

As a result of these challenges, Afghanistan currently faces high levels of food insecurity and undernutrition as measured by the SDG 2 targets, which are presented below.

- *SDG 2.1 refers to ending hunger and ensuring that people have access to sufficient and nutritious food all year round.* In a country struggling with frequent man-made and natural disasters, many Afghans face humanitarian crises, in which insufficient access to food forces them to engage in negative coping strategies and sometimes put their lives at risk. But even seasonal or transitory hunger can make it difficult to engage in work, whether in rural areas or urban centres, or to concentrate on learning at school. In 2014, about one-third of the population in Afghanistan was food insecure and by 2016 almost 44 percent were moderately or severely food insecure.
- *SDG 2.2 relates to ending malnutrition*. There are several types of malnutrition that are prevalent in Afghanistan. Over 41 percent of children are stunted, meaning they are too short for their age and this often prevents these children from reaching their physical and mental potential. Stunting cannot generally be reversed or treated, but it can be prevented. Approximately 9.5 percent of children are wasted, or too thin for their height, which develops as a result of recent rapid weight loss or a failure to gain weight. Wasting puts children at risk of illness and, in severe cases, death. Although they do not cause the physical sensation of hunger, micronutrient deficiencies in iron, iodine, and vitamin A, among others, can result in cognitive impairment, poor health, low productivity, and even death, and are widespread in Afghanistan, especially among women and children.
- *SDG 2.3 is about doubling smallholder productivity and income*. An estimated 85 percent of Afghans are involved in agriculture, either directly or indirectly. Supporting greater smallholder productivity and income is key to enabling the country to meet its food and nutrition needs. Yet

the average income of vulnerable families selling livestock and agricultural products is only USD 800 per year.

- *SDG 2.4 focuses on ensuring sustainable food production systems and implementing resilient agricultural practices in the context of climate change and other hazards.* Seventy percent of the country's agriculture is fed by rain or snowmelt, and water storage systems are poor. Agricultural productivity will likely decline as a result of increased temperatures and limited water resources unless measures are taken to build more resilient food systems.
- *SDG 2.5 involves maintaining the genetic diversity of seeds, cultivated plants, and farmed and domesticated animals and their related wild species.* Biodiversity is important for food security and nutrition. Some varieties are more nutritious and provide a larger range of micronutrients. Biodiversity is also protective against the increased temperatures and changes in precipitation from climate change. Yet there are currently only 64 crop varieties that are registered and protected in Afghanistan.

RECOMMENDATIONS

Despite the challenges of the current situation, there are real opportunities to build on existing initiatives to improve food security and nutrition and to create a positive cycle of zero hunger, greater peace, and development. The review has identified three complementary sets of recommendations – strategic, hunger-specific, and enabling environment-related – that should be prioritized as part of a comprehensive strategy.

STRATEGIC RECOMMENDATIONS

There are three main strategic recommendations emerging from the Review.

1. SDG 2 (Zero Hunger) should be **a key priority** for Afghanistan, not only because it is critical to ensuring that all Afghans are able to reach their full physical and mental potential, but also because addressing hunger will help create a positive cycle and have long-term, multiplier benefits for peace and development in the country.
2. Since hunger is a multi-dimensional problem, it requires a coordinated, multi-sectoral response, including relevant policies and multi-sectoral costed plans for all SDG 2 targets. The country therefore should fully support and resource the recently established **multi-stakeholder coordination platform**, the Afghanistan Food Security and Nutrition Agenda (AFSeN), for addressing food insecurity and undernutrition including the operationalization of the recently joined Scaling Up Nutrition (SUN) movement.
3. Afghanistan should focus on implementing the **hunger-specific recommendations** found in this report, but in a manner that is sensitive to and deliberately supports the longer-term transition in the country to peace and development.

HUNGER-SPECIFIC RECOMMENDATIONS

The analysis has also identified a number of key practical recommendations for achieving each of the SDG 2 targets. These interventions should be guided by a set of key principles:

- Humanitarian responses should be linked, whenever possible, with peace and development efforts.

- Interventions should be carried out in a context-sensitive manner that contributes to addressing, even in a modest way, the key drivers of food insecurity and undernutrition: conflict, climate change and natural disasters, demographic trends, limited job opportunities, gender disparities, and transparency and accountability concerns.
- The recommendations should benefit all Afghans, regardless of which side of the frontlines they reside.
- The efforts to address hunger should be linked to and consider the interactions with other closely related SDGs, including poverty, health, and water.

For **SDG 2.1**, Afghanistan should:

4. Ensure effective and timely **humanitarian responses** to meet the immediate food and nutrition needs of vulnerable households affected by natural disasters, climate change impacts, or conflict through the provision of an appropriate combination of specialized nutritious foods, fortified foods, and cash-based transfers.
5. Work towards the early recovery and creation of more predictable, **nutrition-sensitive, resilient safety nets** by strengthening coordination among key stakeholders involved in social safety net programs, with a prioritized focus on community-based interventions related to disaster risk reduction and resilience, and focus on the most vulnerable groups such as internally displaced persons (IDPs), returnees, children, widows, female headed households, and the elderly.
6. Improve the capacity of the **Strategic Grain Reserve** (SGR) mechanism to increase the stability of the food supply and ensure food access across the country during acute food shortages stemming from seasonality effects, climate change, displacement, emergencies and conflict; improved capacity can be achieved through the bilateral and multilateral agreements made by the Government with neighboring countries.

For SDG **2.2,** the country should:

7. With a focus on peace and development for all Afghans, there is a need to expand and implement multi-pronged, multi-sectoral programmes to ***prevent all forms of malnutrition***, (stunting, wasting and micronutrient) for all Afghans, with special focus on vulnerable groups such as young children and women of reproductive age. These programmes should include integration of community based nutrition interventions with other sectors (health, agriculture, water, sanitation and hygiene (WASH), education etc.) and frameworks such as the Citizen's Charter as well as consistent implementation of prevention activities under the basic package of health services (BPHS). Specific activities include:
    - Improving dietary diversity for all, counselling on infant and young child feeding (IYCF), scaling up water, sanitation and hygiene (WASH) programmes, increase screening and outreach services for health and nutrition;
    - Delivering school based interventions that include fortified snacks, home-grown school meals, gardens, and related nutrition activities;
    - Creating national-level public awareness and education campaigns on the benefits of a diverse diet and consumption of micronutrient-dense foods and fortified products;
    - National expansion of quality fortification programs;

- Address the unique **health and nutrition needs of women and adolescent girls** by: preventing micronutrient deficiencies, especially anaemia, and increasing access to women's education and empowerment, with a focus on conditional cash transfers or school feeding to help girls stay in school longer.

8. Scale up ***treatment*** of acute malnutrition in children less than five years of age and pregnant and lactating women (PLW) through an approach that includes implementing community-based management of acute malnutrition (CMAM) and integrated management of acute malnutrition (IMAM); increasing the supply of ready-to-use therapeutic foods (RUTF) and ready-to-use supplementary foods (RUSF), including local production; and improving local, homemade food recipes for the treatment of acute and moderate malnutrition, and training of caregivers to use these recipes.

For **SDG 2.3**, the country should:

9. Focus on improving and scaling up three **core crop/animal systems**, including: wheat, horticulture, and livestock, which may also counter opium poppy production.

10. Improve **natural resources** for farmers, particularly women farmers including: land by expanding and updating the land registration system, settling disputes, and encouraging orchard and crop production, particularly for women producers; and water by improving access to and efficient use of water resources.

11. Improve **extension services** across three areas: markets, by creating better access to market information systems and market channels for targeted crops and animal products; private sector, by building entrepreneurial relationships with private sector and public-private partnerships and employing youth as value chain actors beyond the farm gate; and women, by strengthening their role in agriculture, livestock, and horticultural production.

12. Improve rural infrastructure and strengthen **nutritional value chains** through public-private partnerships and focusing on: rural roads; prioritizing smallholder and subsistence farmer resiliency; investing in rural electrification; increasing the number of refrigerated trucks and cold storage facilities; improving postharvest storage infrastructure; encouraging greater investment in milling and fortification plants; and encouraging investment in modern slaughterhouses and ultra-high temperature processing (UHT) for milk.

For **SDG 2.4**, Afghanistan should:

13. Invest in large-scale **afforestation** and prevention of deforestation.

14. Strengthen national **early warning systems** by addressing gaps in the generation of disaster risk information and the dissemination of early warning information to affected communities in a timely manner.

15. Support national and local institutions to enable farmer **management of climate risks** and adoption of Afghan agro-ecosystem-suitable agricultural practices, technologies, and systems that promote disaster risk reduction.

16. Formulate and enact a new **Food Safety and Quality Act** that builds the coordination and technical capacities of the Afghanistan National Standards Agency and sector-specific regulatory institutions.

For **SDG 2.5**, the country should:

17. Rebuild and secure the **national seed store** to avoid destruction during conflict.
18. Provide **training** that incorporates traditional knowledge on the management of genetic resources related to food and agriculture, and focuses on local seed banks, in situ conservation, and use of improved varieties (including wheat) of locally adapted species at the community level.
19. Improve **animal breeds** through importation and crossbreeding (e.g. creating hybrid heifers).
20. Improve **access to genetic resources** and benefit sharing, especially from the commercial utilization of genetic resources like medicinal plants.
21. Enhance conventional plant breeding to include/increase the use of iron, zinc, and other required **micronutrients** in the seeds of staple crops.

ENABLING ENVIRONMENT RECOMMENDATIONS

To have a lasting impact on hunger, and to ensure it has a multiplier effect and contributes to a positive cycle, it will be critical to address key issues in the enabling environment that will facilitate efforts to achieve SDG 2. Key recommendations include:

22. Build **human capacity in the areas of food security and nutrition** in the country including informal and trade training programs and formal education programs in secondary schools and universities.
23. Increase **national investment** toward nutrition and agriculture programming to a minimum of ten percent of gross domestic product (GDP), deliver on donor-funded food security and nutrition projects, and consider alternative economic agriculture-led growth in a post-conflict Afghanistan.
24. Establish an **independent body to fight corruption** with the public system with resources to act on behalf of farmers and vulnerable populations impacted by food insecurity and malnutrition.
25. Strengthen the **national data information system** for food security and nutrition with timely, reliable, accurate and useful data for policy decision making and program redesign and adjustment.

CONCLUSION

Despite the challenging environment, Afghanistan has the potential to achieve its targets under SDG 2 by 2030. Taken together, the recommendations of this Strategic Review can help guide its efforts to ensure that all its citizens are free from hunger. Addressing hunger will be a strategic investment in the future of the country. Not only will today's parents be better able to engage in the economy, but with improved food security and nutrition, their girls and boys will have the chance to grow to their full physical and mental potential and take advantage of educational opportunities. As a result, when they become adults, they will have fuller, more productive lives and will be better able to provide for their own children, helping the next generation move even further out of poverty. This progress will give households a greater sense of hope and a greater stake in the political development of the nation. These improvements for families, when aggregated at the national level, will have wider benefits for society as a whole: reducing poverty rates, creating the human capital required for sustained economic growth, and supporting the transition to stability and lasting peace.

PART 1: PURPOSE AND METHODOLOGY OF THE STRATEGIC REVIEW

PURPOSE

Under the stewardship of Lead Convener, H.E. Hedayat Amin Arsala, former Vice President of Afghanistan, and an Advisory Committee comprising representatives of key national and international organizations related to food security, nutrition, civil society, and the private sector, a Zero Hunger Strategic Review was undertaken to determine what needs to be done in Afghanistan to achieve Sustainable Development Goal 2 (SDG 2): "End hunger, achieve food security and improved nutrition, and promote sustainable agriculture" (See **Annex 1** for all national indicators). The Review serves both as a research exercise designed to give a consolidated picture of the hunger and nutrition challenges in Afghanistan and as a mechanism for supporting the Government in setting priorities and addressing gaps in actions and policies currently implemented in Afghanistan intended to achieve SDG 2. In turn, the Review will allow all stakeholders to anchor programs for achieving zero hunger in support of a clear set of Government priorities based on communities' needs.

To serve all stakeholders equally, the Strategic Review has been an independent, analytical, and consultative exercise aiming to provide a comprehensive and detailed understanding of the context of food and nutrition security in the country; identify key challenges in achieving zero hunger, including gaps in the response and funding arrangements; and propose actionable areas for the Government, development partners, private sector actors, and others to best support the country in making progress towards zero hunger. The Review serves two purposes:

- To enable the Government to accelerate progress towards eliminating food insecurity and malnutrition in line with SDG 2.
- To inform national development planning processes and contribute to all actors involved in food and nutrition security in Afghanistan.

METHODOLOGY

The Strategic Review consisted of three components: a desk review, national stakeholder interviews, and community consultations at the provincial level, to inform the overall report.

The **desk review** consisted of a review of the current food and nutrition situation in Afghanistan using the most recent reports and data produced in the country as well as an analysis of current policies and programs (See **Annex II**). Peer-reviewed scientific literature was also reviewed on key subject matters.

National stakeholder interviews took place in Kabul with representatives of relevant line ministries, donors, civil society, and UN agencies at the national level with a focus on existing priorities in nutrition and food security and the Government's plans to address these issues to meet SDG 2.

C**ommunity consultations** were undertaken at the provincial level to discuss priorities for food and nutrition security and identify solutions. Interactive dialogue-based research encouraged participants to reflect upon and share their own experiences in a way that demonstrated a critical understanding of food and nutrition security at household and community levels. This participatory action research approach also encouraged and allowed participants to take their own experiences and use them as a reference for identifying and exploring priorities and gaps in the Government's response at the national policy level so that any actions could be rightly identified and effectively implemented.

PART 2: AFGHANISTAN AND THE SDGS: A TRANSFORMATIVE AGENDA TOWARDS PEACE

OVERVIEW

"Even the tallest mountain has a path to the top." The resilience and strength of the Afghan people is embodied by this proverb, which is shared among many languages spoken in the country. Afghanistan is an ethnically and linguistically diverse country with a rich culture and history dating back thousands of years. But it is also a deeply fragile nation that has been mired in poverty and conflict for generations.

POVERTY

Despite significant foreign aid and rapid growth between 2007 and 2012, the poverty rate increased from 26 percent in 2008 to 39 percent in 2014 (World Bank, 2016). Poverty is regionally concentrated in the Northeast, West Central, and East regions of the country (World Bank, 2016).The plague of poverty is also strongly correlated with a high prevalence of child and maternal malnutrition and food insecurity, and Afghans are extremely vulnerable to food system shocks that can worsen intergenerational cycles of poverty and malnutrition.

EMPLOYMENT

Conflict has destroyed many employment opportunities in the country and finding work is very difficult for most people. In 2016, the unemployment rate was 19 percent, but 36 percent for women (CSO, 2017). Access to education is a large problem and many people do not have necessary skills including literacy with rates just over 35 percent for the total population but even lower, 20 percent, for women in 2016-2017 (CSO, 2017). Inability to find work is not just a problem for the uneducated but also for those with university educations (Lavender, 2011). However, employment is even more scarce for the most vulnerable including women and the rural poor. Furthermore, women who are employed are payed less than men are (Maletta, 2008). It is critical that the country increase and strengthen employment opportunities and ensure that these offer living wages. Job creation and new industries must be a top priority for the country. Unemployment not only fuels hunger and malnutrition but also poverty, illicit industries such as poppy production, and the Taliban.

POLITICAL INSTABILITY AND CONFLICT

Afghanistan has a long history of conflict, brought on by both foreign actors and domestic militant groups, which has had a destabilizing effect on the social cohesion of the country. In the early 2000s, the change of government brought about a new constitution, presidential elections, and the creation of a legislature. But the nascent state's development has been hampered by the Taliban's ongoing hostilities, as well as concerns over waste and corruption. Over the last three years, most international troops have withdrawn from the country but the achievement of stability and independent governance remains a work in progress; the country is vulnerable to the trends of global geopolitics and threatened by ongoing acts of violence and terrorism. Afghanistan still remains one of the most violent and conflict-ridden countries and in 2017, the number of people needing humanitarian assistance increased by 13 percent to 9.3 million (HNO, 2017a).

Conflict also prevents the government and NGOs from acting effectively and stifles development (World Bank, 2010). The most recent conflict has killed many civilians, including children, forced many

others to leave their homes and, in some cases, the country, and damaged or destroyed infrastructure making access to safe water, food, farmland, electricity, transportation, healthcare, and education difficult (Bosi, 2003). The conflict has often violated International Humanitarian Law with aid workers and civilians targeted as well as healthcare facilities and schools (HNO, 2017). Movement is also restricted by the destruction of roads and by landmines, which are still present in 32 provinces - the United Nations Mine Action Service (UNMAS) estimates that around 40 people are killed or injured every month (UNMAS, 2017). Since the start of the war in 2001, the security situation has fluctuated greatly and there have been many escalations of conflict and instability (USAID, 2012). In 2016, violence increased in 33 provinces and put 3.9 million people in areas of intense conflict (HNO, 2017).

DISPLACEMENT AND DEMOGRAPHIC SHIFTS

Displacement caused by poverty and conflict continues to be a challenge for the people of Afghanistan. The ongoing conflict has resulted in millions becoming refugees or internally displaced persons (IDPs). In 2015, approximately 180,000 Afghans sought asylum in Europe, an increase of almost 400 percent from 2014 (World Bank, 2016). An estimated 3.5 million Afghan refugees and asylum seekers currently live in Pakistan and Iran (World Bank, 2016). Over one million Afghans are displaced within the country (World Bank, 2016). The number of people displaced continues to grow and as of September 2017, 258,000 people have been displaced with a further 450,000 expected before the end of the year. (OCHA, 2017). The sheer number of people displaced creates many challenges for reaching people with services such as safe water, food, housing, healthcare, employment for adults, and school for children. Additionally, women and children are vulnerable to physical and sexual abuse and exploitation (HNO, 2017). This is exacerbated by the fact that 20 percent of the people displaced in 2016 and 18 percent of those displaced between January and July 2017 moved to areas that are not under government control and are hard to reach (HNO, 2017).

While many have been displaced since 2001, many are also returning to the country from Pakistan and Iran as well as other countries, presenting additional challenges. In 2016, 1.14 million people had returned from Pakistan and Iran (MoRR, 2017). The Ministry of Refugees and Repatriation (MoRR) is working to address these issues with support from the United Nations High Commissioner for Refugees (UNHCR), International Organization of Migration (IOM), UNICEF, WFP, and WHO. The Government has outlined an action plan that focuses on registering people at border Encashment Centres and Population Registration Offices and providing them services such as water, food assistance through direct cash transfers and WFP's SCOPE program, transportation, healthcare, skills training and employment assistance for adults with a focus on eliminating forced labour, trafficking, and slavery, and education for children (GoA, 2017).

The country faces high population growth, especially among its young people. Approximately half of its population is 15 or younger, which is the third highest "youth bulge" globally and makes Afghanistan one of the youngest countries in Asia. Rapid population growth (2-3 percent per year) is partly driven by high fertility rates (5.3 children per woman on average). Significant numbers of returning refugees and IDPs have also contributed to population growth (World Bank, 2016).

CORRUPTION

According to Transparency International (TI), six billion people globally live in countries plagued by serious corruption and Afghanistan is one of these countries (Millinski, 2017). In 2015, Afghanistan ranked 166 out of 168 countries on the Corruption Perceptions Index (Integrity Watch Afghanistan –

IWA - and TI, 2016). In Afghanistan, every level of government is hindered by corruption, including a lack of integrity, accountability, and transparency. The police and judiciary are ineffective because they favour people in positions of power and are not trusted by the people, leading to more than 50 percent of people who are victims of a crime not to report it (IWA and TI, 2016). Furthermore, the police are involved in bribery and drug-related corruption (Singh, 2014). Corruption prevents the public sector from effectively providing basic services. In 2012, half of people who requested services had to pay a bribe with the sum of these bribes totalling 3.9 million USD (IWA and TI, 2016).

While Afghanistan has the High Office for Oversight and Anti-Corruption, this body has not been able to work with the Attorney General's office. IWA and TI recommend fighting corruption by establishing and resourcing an independent body to fight corruption, appointing officials to positions such as Attorney General who are committed to fighting corruption, establishing an independent judicial services commission to select and training new judicial staff including judges. They also recommend to review current staff and reform the Independent Administrative Reform and Civil Services Commission to fight corruption in the public sector (IWA and TI, 2016). As a result, the Government has begun working towards measures to bring more transparency and has appointed a committed Attorny General and a Chief Justice, as well as establishing an Anti-Corruption Justice Centre.

CLIMATE CHANGE

Afghanistan's landscape is a tapestry of different topographical areas making it vulnerable to climate change. Its defining feature is the Hindu Kush mountain range, which bisects the country and determines its landforms. Over three-quarters of the country is mountainous. Distinct topographical areas include the northern plains, central plateau, southern valleys, and southwestern deserts (FAO 2012).

The country has experienced warming and changes in water availability that will continue to increase in the coming decades with potentially disastrous results for agriculture, food security, and nutrition. Drought and flood patterns have changed. Droughts can be caused by decreased spring rain from March to May and floods by earlier and faster snowmelt. The temperature has already increased 1.8 degrees C nationwide and 2.4 degrees C in the south since 1950. This has had beneficial impacts on agriculture, lengthening the growing season and resulting in increased food production. However, in the future, the temperature is expected to increase even further, which would have disastrous effects on food production (NEPA, 2016). Spring rain between March and May has decreased by almost one-third and is expected to decrease further, which will have a negative effect on rain-fed agriculture (NEPA, 2016).

The National Environment Protection Agency of Afghanistan (NEPA), the United Nations Environment Programme (UNEP), and WFP ran an analysis to determine where climate change would have the largest impact on livelihoods and food security. Agriculture provides some income for 60 percent of the country, so the impacts of climate change on agriculture also affect livelihoods. The largest effects are expected to be for pastoralists and smallholders who rely on rain-fed agriculture in the north and central highlands due to decreased spring rain as well as around Kabul due to lower river levels from changes in snowmelt. Many pastoralists have already been forced to settle and more are expected to do so (NEPA, 2016). Afghanistan is working to both mitigate and adapt to climate change through policies and programs such as the National Adaptation Program of Action (NAPA) but more technical and financial assistance will be needed.

WOMEN'S EMPOWERMENT

Women's status in Afghanistan has improved but there is still a lot of work to do on women's empowerment. During Taliban rule from 1996 to 2001, women were not allowed to move freely, access education, or work outside the home. Since the Taliban was overthrown in 2001, the situation for women has improved, in some cases only on paper but in others also in practice. Violence against women has been outlawed but is rarely reported or prosecuted. Marriage in girls younger than 15 and forced marriage have also been outlawed but are still common occurrences (OECD, 2017). Women's health is improving but there are still many health challenges. In 2002, maternal mortality was 1,600 per 100,000 live births and by 2015, maternal mortality had drastically decreased to 396 per 100,000 live births (WHO, 2015) which is still one of the highest in the world. However, as this is the national rate, there are concerns that in many parts of the country, the maternal mortality rate is much higher.

While women and girls now have the right to education, they face many challenges in accessing schools. Girls are meant be taught by female teachers but only 28 percent of teachers are women. Girls' schools and female teachers are also often targeted in attacks. These attacks as well as cultural norms such as early marriages all deter girls from education. The percentage of women with no education ranges widely across the country from 62 to 96 percent, with the highest rates in remote areas (USAID, 2012).

Women now also have the right to work and control their own income, which is becoming more acceptable for women to work in urban and peri-urban areas but it is still unacceptable for women to work in the vast majority of rural areas, making this a dangerous practice. This variation in participation is strongly influenced by regional social norms, where women are typically more externally involved in agricultural processes in areas of the central, northern, and western regions as compared to the South and East. (World Bank, 2014). Despite some advances, 85 percent of working age women are still under or unemployed, although 71 percent of these women are not looking for employment. (NEPA, 2016).

Reproductive work or care work often takes up the majority of women's daily time. With fertility rates that remain high at 5.1 children per woman, and with the burden of household chores compounded in many areas by a lack of proximate water and a lack of electricity among other infrastructural constraints, is already enormously labour-intensive. (World Bank, 2014).

For women who do paid work, the most common sectors are livestock (42 percent), manufacturing (24 percent), and farming (21 percent) (NEPA, 2016). Women play a large role in livestock, in herd management, ranging from caring for the newborn livestock to animal offtake for milk production and the processing of other dairy products. Whilst being seen as traditional role, increasing opportunities have allowed women to develop this role into an income generating opportunity that improves their socio-economic status and allows families, to have greater say over increase their ability to prioritize their own as well as their children's nutrition, health, and education.

PROGRESS AND THE PATH FORWARD

Amidst decades of protracted conflict and the effects of climate change, Afghanistan has achieved important progress for its people. Over the last decade, the prevalence of childhood malnutrition has declined significantly (NNS, 2013). The healthcare system has improved more broadly, with increases in the number of functioning health facilities and in the proportion of facilities staffed by women

(World Bank, 2017). Access to education has also improved, with far more children attending school today than a decade ago (World Bank, 2017).

Yet food security and nutrition remain major challenges for the country. Poor nutrition, especially in utero and during the first two years of life, prevents Afghanistan's children from developing to their fullest potential and has significant impacts on the country's ability to grow economically and to achieve all of the SDGs. Malnutrition's intergenerational cycle has wide-reaching implications for the future. Unable to reach their full developmental potential, undernourished girls mature into small women who are at a greater risk of delivering undersized, low-weight babies. Women who are undernourished struggle to be equal, participating citizens in the country's development and economic growth.

There is hope. The cycle of malnutrition can be broken and food security achieved for all. In Afghanistan, agriculture can make a difference. While 45 percent of people are directly employed in agriculture (ALCS, 2017), an estimated 85 percent of Afghans are involved in agriculture, either directly or indirectly (USAID, 2016). The country has a rich history of producing fruits, nuts, and livestock, but conflict and climatic change have limited agricultural capabilities and, in turn, shifted diets. Beyond producing more food and ensuring broader access to it, more nutritious and diverse foods are needed. With agriculture serving as the major contributor to livelihoods for Afghan citizens, incomes remain low among small family farms and marginal and tenant farmers, due to low crop yields, high input costs, poor market and credit access, inconsistent supplies, and low access to off-farm and non-farm employment.

The health and educations sectors play important roles as well. No matter how much food is available, people cannot be sufficiently nourished if they are plagued by infectious diseases, which inhibit the body's ability to absorb key nutrients and are largely preventable through good water and sanitation systems. Education empowers people to make the best nutritional decisions for their health and helps to resolve gender inequality, a key underlying determinant of malnutrition.

Afghanistan has made important progress in improving the quality of life for its people over the last fifteen years. The healthcare system has improved considerably, with corresponding improvements in the under-five and infant mortality rates (World Bank, 2017). Education is one of Afghanistan's greatest successes: far more children attend school today than in 2001, and the proportion of enrolled girls has increased greatly from 3 percent to 39 percent (World Bank, 2017).

While SDG 2 relates directly to food security and nutrition, many of the other 15 SDGs are also relevant to ending malnutrition and hunger. By addressing climate change and natural resources, education, and women's empowerment, many SDGs have the potential to affect the underlying causes of malnutrition.

The impacts of food insecurity and the multiple burdens of malnutrition have wider implications for the country in terms of human capital and the ability for the country to respond to climate change, natural resource degradation, demographic transitions, food system shocks, population pressure, and social unrest. Thus, it is critically important to address hunger, food insecurity and malnutrition in all its forms through SDG 2 not only for Afghans, but also as a multiplier effect for longer-term peace and development in the country. It is also essential to do so through a coordinated, multi-sectoral approach.

It will take profound political commitment and action, strong nationally appropriate interventions and implementation, and inclusive partnership approaches that take on a rights-based approach to ensuring adequate food and nutrition for all the people of Afghanistan – including in contested areas of the country. Food security and nutrition governance will be necessary at all levels through improved policy and regulatory frameworks and coordinated multi-sectoral actions that guide an enabling environment, targeted resourcing, and accountability and transparency. Accountability and transparency can be increased by working with international organizations and joining the global Scaling Up Nutrition (SUN) movement.

The need for nutritious, sufficient food for everyone is crucial and is a right for every citizen, and it will only become more urgent as time passes. Economic crisis and conflict are often more visible concerns, but addressing those problems cannot overshadow the need for food security and nutrition for everyone. The Afghan people cannot wait for an end to conflict before the work of SDG 2 is achieved; the country must act to combat malnutrition now, and in doing so, it will hasten the progress toward peace and stability.

PART 3: FOOD SECURITY AND THE NUTRITION SITUATION IN AFGHANISTAN

SDG 2.1 aims to end hunger by 2030 and ensure that all people have access to safe, nutritious, and sufficient food throughout the entire year.

CURRENT SITUATION

Hunger and food insecurity are widespread in Afghanistan. The Household Hunger Scale, which is used to evaluate the prevalence of hunger, found that 14 percent of households experienced moderate hunger and 0.9 percent had severe hunger. In addition, 18 percent of Afghans had borderline consumption in terms of dietary diversity and food frequency while 6 percent had poor household food consumption (NNS, 2013).

During the **community consultations**, the number of people who reported not being able to grow or buy enough food for themselves and their families was around two-thirds in most provinces with the lowest being around one-fourth of people in Balkh and Herat and the highest being 100 percent in Wardak.

More recent statistics show that 33 percent of the population in Afghanistan are food insecure and, of this population, 9.3 million faced chronic or transitory food insecurity and 3.4 million were severely food insecure (ALCS, 2014) while there are indications that food security is increasing. .

ANALYSIS

Vulnerability to hunger and food insecurity is influenced by weather patterns and conflict, as well as other economic and socio-cultural barriers. These factors affect the access, availability, utilization and stability of nutritious, sufficient food. Hunger and food insecurity affect a wide range of the country's population, though women, children, the displaced, returnees, and the poor are the most vulnerable.

Food access and availability is largely affected by physical and economic constraints, which are oftentimes worsened by conflict, recurring natural disasters and climate-related concerns. Most people (73 percent of rural households and 97 percent of urban ones) rely on markets to purchase staple foods (NEPA, 2016). However, the majority of the country's roads are in poor condition (85 percent) and relatively few are paved (36 percent), which is a major limitation on transportation (FSAC, 2016) what is exacerbated by conflict and climate-related disturbances. Such barriers prevent people and food from reaching markets (GoA, 2012) leading to higher food prices, due to dependence on regional markets and trade with neighbouring countries (GoA, 2012).

The stability of the country's food supply depends on its economic status and agricultural productivity. Afghanistan experiences a cereal deficit even in years with good harvests and must rely on imports (MAIL, 2017). Though food imports cover the production-demand gap, the country still experiences a "nutrition gap" (GoA, 2012). Agricultural productivity and economic well-being are also heavily influenced by conflict and climate: the country's complex political situation and long history of unrest present challenges to achieving economic success, which also has trickle-down effects on a relatively underserved agricultural system.

Weather patterns and seasonal fluctuations play a significant role in exacerbating hunger and food insecurity. Hunger increases during the pre-harvest season in winter and spring (CSO, 2014). During this time, nearly half of Afghan households experience inadequate household food consumption in terms of dietary diversity and food frequency. Food insecurity affects 40 percent of the population during this period as compared to during the summer, when 23 percent are affected (CSO, 2014).

Hunger and food insecurity disproportionately affect women, children, displaced persons, the poor, and those in rural areas (GoA, 2012). These groups are made vulnerable by socio-cultural and economic constraints. Female-headed households are more likely to experience a lack of income, security, and social protection. Socio-cultural barriers to education and literacy increase women's vulnerability to food insecurity (GoA, 2012). Households with more children, elderly, disabled, and others who are not able to work are also more at risk for food insecurity (GoA, 2012). Communities that host large numbers of IDPs or returnees are also at risk of food insecurity and depressed wages (GoA, 2017). Afghanistan's population has a high degree of vulnerability to shocks, meaning that even households with greater resources and wealth may also be affected by hunger and food insecurity (FSAC, 2016).

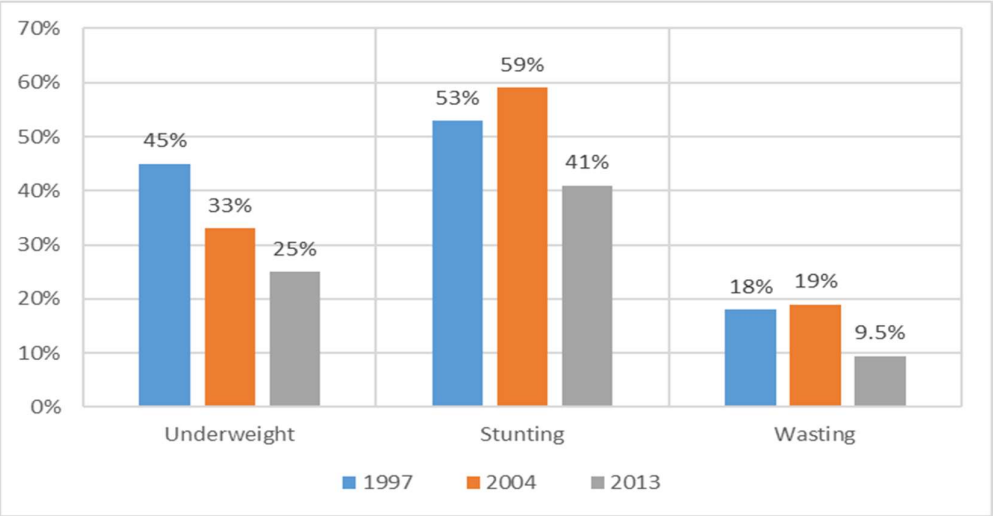
SDG 2.2 commits to ending all forms of malnutrition by 2030. This goal includes the achievement of the internationally agreed targets on stunting and wasting in children under five years of age by 2025, and a focus on the nutritional needs of adolescent girls, pregnant and lactating women, and older persons.

CURRENT SITUATION

Undernutrition is a nutritional status that includes underweight, stunting, and wasting. Children under five years of age are especially vulnerable to undernutrition. The 2013 National Nutrition Survey (NNS) found that 25 percent of the country's children were underweight. Although undernutrition has decreased considerably over the last two decades, the prevalence of stunting in children less than five years of age is still high, at almost 41 percent and wasting among these children is 9.5 percent (NNS 2013). **Figure 1** provides an overview of trends of all forms of undernutrition from 1997 to 2013 amongst children less than five years of age.

Child malnutrition was identified as a problem in every province during the **community consultations**. People also reported varying access to clinics and treatment. In Badghis, one person discussed their daughter being malnourished but not being able to get help at the clinic because they "didn't know any powerful person". This is directly affecting people who have to watch their children suffer and, in Kabul, one person described their daughter dying of malnutrition.

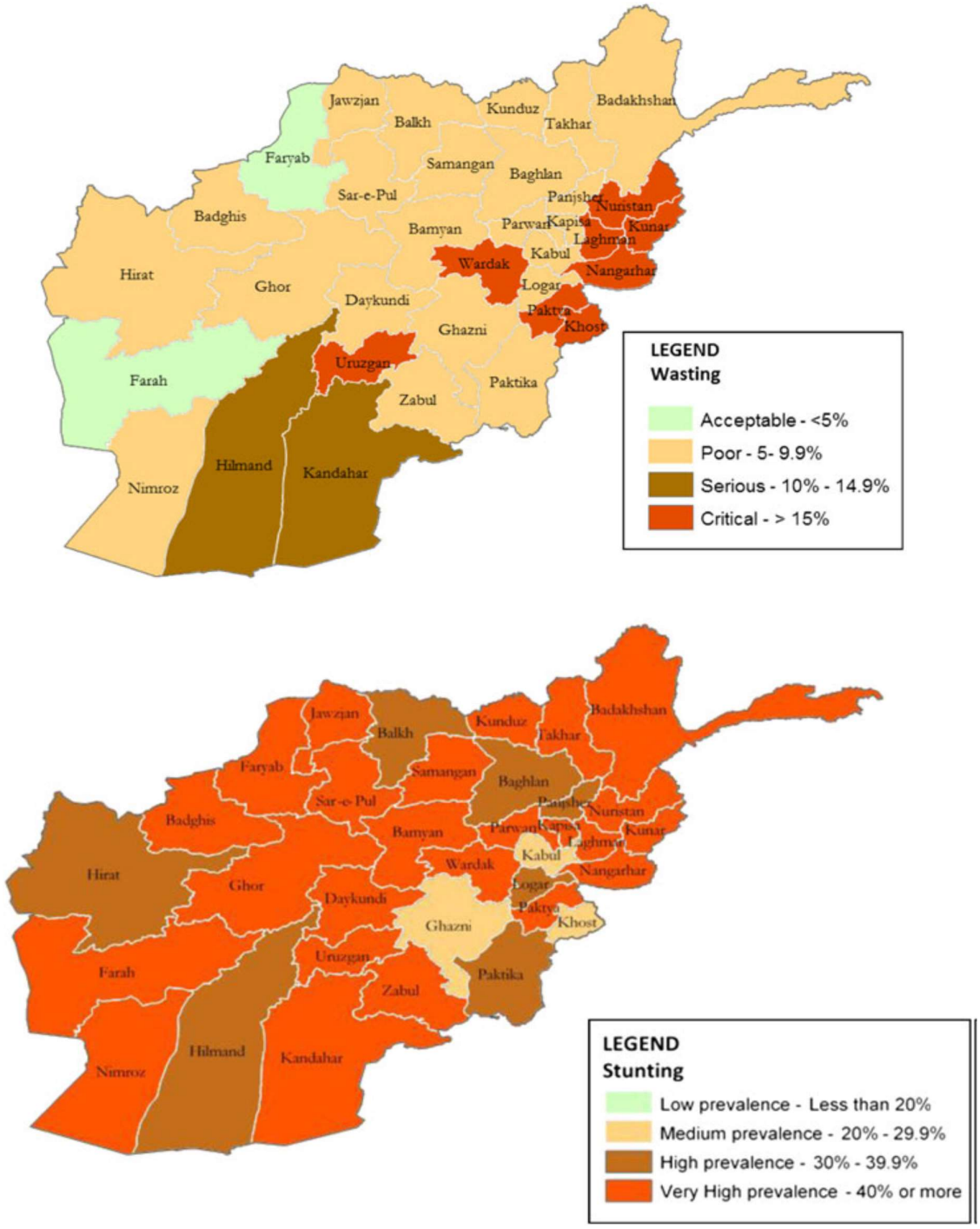
Figure 1: Trends in prevalence of undernutrition among children less than five years of age



Source: MoPH

The prevalence of stunting and wasting also varies by geographic region, as **Figure 2** shows. The under-five mortality rate is estimated at 102 per thousand live births; the risk of mortality is greater for children of women who are poor, uneducated, and/or live in rural areas (CSO, 2012).

Figure 2: Prevalence of wasting and stunting by province

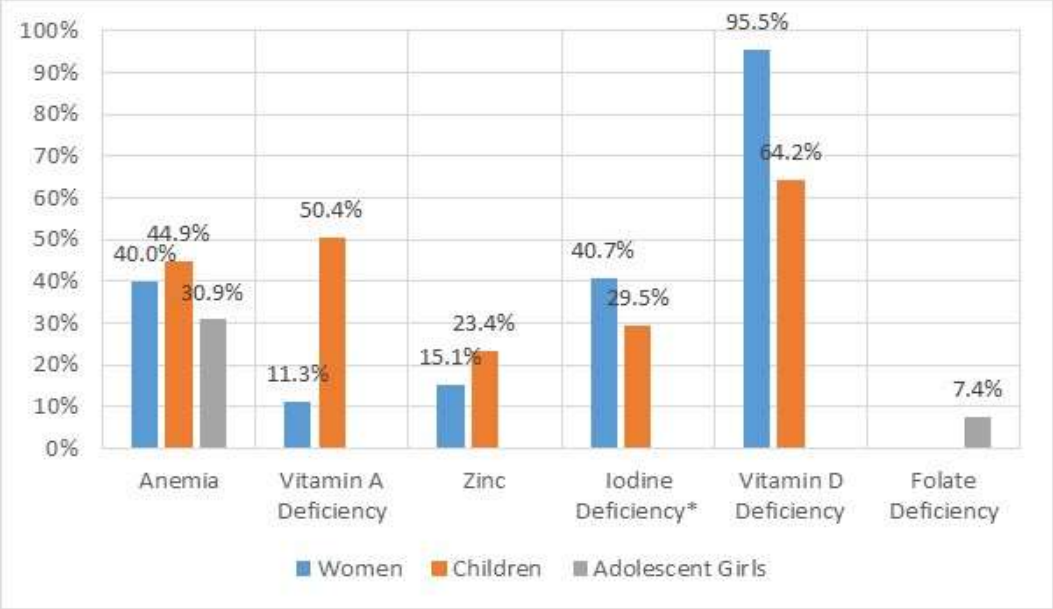


Source: NNS, 2013

Women are also at risk of undernutrition. Among women of reproductive age (15 to 49 years), 9.2 percent are thin or undernourished (BMI < 18.5 kg/m^2). The proportion of women with mild thinness is 6.7 percent and severe thinness is 2.4 percent (NNS, 2013). In addition, 8 percent of adolescent girls were thin and 1.5 percent severely thin (NNS 2013).

Children, adolescent girls, and women of reproductive age are also most vulnerable to micronutrient deficiencies, which can cause cognitive impairment, poor health, low productivity, and death. **Figure 3** shows that the high rate of anaemia among children less than five years of age and women of reproductive age is considered a severe public health problem, as is Vitamin A deficiency in children less than five years of age (NNS 2013). Deficiencies in zinc, iodine, and vitamin D are also concerning.

Figure 3: Micro-nutrient deficiencies among women of reproductive age, adolescent girls, and children less than five years of age and children ages 7-12 years*



Source: NNS, 2013

ANALYSIS

Malnutrition in Afghanistan is driven by a range of factors that include poor nutrient intake, disease, and lack of awareness on feeding practices, especially related to breastfeeding, complementary feeding, and maternal nutrition. Food insecurity is a major underlying cause of malnutrition: lack of availability and access to a variety of affordable, diverse food items is especially significant (NNS, 2013). Decades of conflict have led to a compromised healthcare system and six million Afghans with insufficient or non-existent access to care (HNO, 2016). Limited health care is another cause of malnutrition, especially as it relates to maternal and reproductive health and water, sanitation, and hygiene (WASH) (NNS, 2013). Embedded behaviours and cultural practices may also prevent households from making the best decisions for nutrition (NNS, 2013). Equity and geography also play a significant role; poverty is significantly associated with prevalence of stunting and wasting in children (NNS, 2013).

Women face a range of socio-cultural challenges that worsen the health and nutrition of themselves and their families. Women's education, low social status and employment, and stress, violence, and mental health are all important underlying factors of malnutrition (World Bank, 2011). Afghan women

experience limited independence and decision-making power (CSO, 2014). Literacy and education levels are low compared to men, as are employment and compensation (CSO, 2014). Infant, young child and maternal mortality rates are associated with being poor, uneducated, and living in rural areas (CSO, 2012). Poor nutrition before and during pregnancy directly contributes to child health burdens, especially stunting (NNS, 2013). Limited health coverage, especially antenatal care, is worsened by high rates of early marriage and childbearing: 15 percent of women of reproductive age married before age 15, while 46 percent were married before age 18 (CSO, 2012, 2014). Maternal and infant mortality rates are higher among teenage mothers (CSO, 2014). The lifetime risk of maternal death for all Afghan women indicates that 1 in 14 will die from either pregnancy or in childbirth (MOPH 2017).

Malnutrition is linked to a lack of dietary diversity, which is a major challenge to the predominant Afghan diet that relies on staple foods (CSO, 2014). The 2013 NNS found that cereals and oils/fats were the most commonly consumed food groups, while consumption of animal source foods was rare. A large share of dietary energy (77 percent) is derived from cereals, roots, and tubers that do not provide significant amounts of bioavailable protein or micronutrients (CSO, 2014). Urban households tend to consume a more diverse diet than rural ones (GoA, 2012). Unless otherwise supplemented, diets that lack diversity can lead to micronutrient deficiencies.

Young children are especially vulnerable to a lack of dietary diversity. Among children aged 6 to 23 months, only 16 percent met the threshold for a Minimum Acceptable Diet (dietary diversity and frequency of meals) and 24 percent met Minimum Dietary Diversity (MOPH, 2017). Dietary diversity in children is closely connected with infant and young child feeding (IYCF) practices, which, in Afghanistan, are heavily influenced by socio-cultural and economic factors, including poverty, large family size, poor WASH, social norms and attitudes related to women's workloads, and a lack of support and education for women. (GoA, 2015). Education and training on breastfeeding and complementary feeding for women or other caregivers is essential for combating child malnutrition and this needs to be provided to all caregivers, both rich and poor (NNS 2013).

Malnutrition is also influenced by WASH. High rates of severe and acute malnourishment in children under five occur in communities that have limited or non-existent WASH services (NNS, 2013). Improved WASH services remain subpar, despite improvements over the last decade. Just over one-third of households do not have access to drinking water from improved sources and about 60 percent have insufficient hygiene and sanitation (CSO, 2014). Displaced persons and households affected by natural disasters are more likely to experience limited or non-existent WASH services, which puts them at greater risk of disease outbreaks (HNO, 2016).

Undernutrition is also associated with health burdens that primarily affect young children. Malnourished children are three times more likely to die from communicable disease than their healthy peers are (HNO, 2016). Diarrhoea and acute respiratory infections are major concerns for young children while micronutrient deficiencies can also lead to weakened immune responses in children (NNS, 2013).

SDG 2.3 aims to double the agricultural productivity and the incomes of small-scale food producers, especially women, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment.

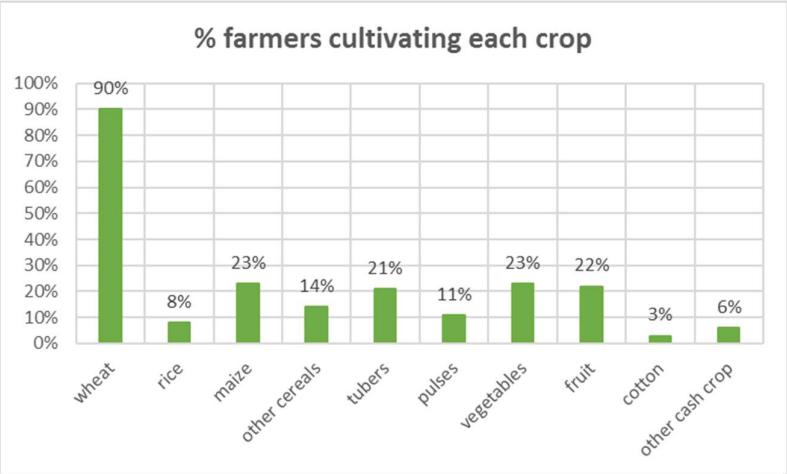
CURRENT SITUATION

The well-being of Afghanistan's people and its economy is highly dependent on agriculture production, which is a source of income for over 60 percent of all households and forms the primary source of income for 28 percent (CSO, 2014). Rural households are especially dependent on agriculture, and most are subsistence farmers with small holdings (NEPA, 2016). Women are also more likely to be employed in the agriculture and livestock sectors (21 percent and 42 percent), though women face significant discrimination in accessing land, knowledge, finances, inputs, and markets (NEPA, 2016).

Many people in the **community consultations** reported that agriculture was their only choice for employment and that it provided a better livelihood than other options but that it did not provide enough to live on.

On average, agriculture accounts for 25 to 33 percent of Afghanistan's GDP but this is highly variable and lower in drought years (MAIL, 2017). Agriculture accounted for around half of economic growth in 2016 and over the year, agricultural output increased by 6 percent, making it the largest contributor to real GDP growth. The strong growth in agriculture was primarily driven by an increase in fruit production of more than 30 percent due to favourable precipitation and rainfall throughout the year. However, the production of cereals declined by 4.8 percent, with the production of wheat dropping by 2.5 percent. This decline was primarily due to pests and diseases that negatively affected cereal harvests (World Bank, 2017). Agricultural products account for approximately 80 percent of total licit exports; major products include fresh and dried fruits and nuts (CSO, 2016/17). Although the agricultural sector has shown sustained growth in recent years, it has yet to make up for losses experienced during the conflict period (FAO, 2012) extending over the last four decades. Afghanistan also struggles to be agriculturally self-sufficient: the Cereal Import Dependency ratio remains high in comparison to other regional countries (MAIL, 2017).

Figure 4: Crop cultivation by percentage of farmers



Source: CSO, 2016.

Only 12 percent of the country's land is categorized as arable, with 46 percent of the country's total land mass estimated to be under permanent pasture (CSO, 2016/17), which is almost four times the area covered by arable land (NEPA, 2016). Among cereals, wheat dominates for consumption, production, and planted area; other cereal crops include rice, maize, and barley (as shown in **Figure 4**) (CSO, 2016/17).

Livestock is an important source of food and income for many households (CSO 2016/17). Horticultural crops are grown by nearly one-quarter of all farmers, most commonly in irrigated areas (NEPA, 2016). This high value sector also has high domestic demand and offers the greatest return on irrigated land (ARTF, 2014). Illicit agriculture production of mainly opium also remains a source of livelihood for many poor and landless households, providing a high profit margin in comparison to other crops (CSO, 2016/17).

ANALYSIS

The main constraints to increasing agricultural productivity, and therefore contributing to increased social development, include limited access to arable land, water management and associated infrastructure development, agricultural inputs, and rural finance. These constraints are further amplified by the challenges in enforcing land tenure security, improved extension outreach, poor engagement of women in agriculture and the promotion of climate smart practices based upon local knowledge.

Only 12 percent of the country's land is suitable for cultivation and 46 percent is used as rangeland for livestock (MAIL, 2017). Rain-fed and irrigated agriculture are equally common, but irrigated farming is more economically critical for livelihoods and food production and accounts for 70 percent of agricultural output and produces 80 percent of cereals (NEPA, 2016). However, only 43 percent of households own or have access to irrigated land (CSO, 2017).

Afghanistan's climate is semi-arid and arid, highly vulnerable to climate change, being dependent upon snowmelt more than precipitation alone. Within the central areas of Afghanistan, the mountain ranges provide substantial snow cover, with numerous glaciers storing water which provides rivers with the required surface water, and ultimately most of the country's irrigation, but precipitation from these sources can be highly variable (NEPA, 2016). Outdated, ineffective integrated crop water management technology and water supply systems worsen this challenge: only ten percent of irrigated land uses properly engineered systems (GoA, 2012).

The country's history of conflict is closely linked to issues of land tenure. Since 2002, land disputes have increased as people return to their original homes or resettle elsewhere (FSAC, 2016). Poor and displaced populations are especially vulnerable to the country's outdated and limited land registration system (FSAC, 2016). Land tenure issues also weaken the potential for long-term investment in agricultural production by undermining incentives and leading to evictions, especially of smallholders in water-stressed areas (World Bank, 2016).

Low productivity is another major constraint for Afghanistan's agriculture sector. This results from a number of factors such as a lack of pest and disease control and quarantine, insufficient irrigation infrastructure, and limited access to knowledge and improved technology for producers (ARTF, 2014). The availability of drought tolerant and high yield seed varieties is limited, as are other agricultural inputs such as fertilizer, pesticides, agro-machinery, and tools (ARTF, 2014). Current agricultural

practices, such as poor crop rotation, tilling, and overgrazing, have also led to lowered yields and contributed to soil erosion and ineffective use of water (ARTF, 2014).

Limitations in post-harvest operations and commercialization of products also present problems for Afghan farmers. Storage and processing are limited by substandard facilities, technologies, and human capacity. Food safety is also a concern, especially regarding hygiene, quality control, and labelling and packaging (MAIL, 2015). In addition, poor transportation infrastructure and a lack of cold storage continues to hinder sectoral growth (GoA, 2012). Farmers suffer from limited access to markets as well as connections to wholesalers and exporters (GoA, 2012). Access to financial services and credit for investments or working capital is also extremely limited (GoA, 2012).

People in the **community consultations** reported low yields due to conflict, a lack of land, water, fertilizer, pesticides, and machinery, as well as crop diseases. Low yields lead to food insecurity and lower incomes.

SDG 2.4 ensures sustainable food production systems by 2030. It implements resilient agricultural practices that: increase productivity and production; help maintain ecosystems; strengthen capacity for adaptation to climate change, extreme weather, drought, flooding, and other disasters; and progressively improve land and soil quality.

CURRENT SITUATION

Afghanistan's food production system faces significant challenges from natural hazards, extreme weather, and climate change. From 1998 to 2006, the country experienced the worst drought in known climatic history in terms of duration and strength (World Bank, 2017). In the last decade, an estimated 400,000 people have been affected by natural disasters each year (GoA, 2012).

Climate change and extreme weather are serious concerns that are projected to worsen over time. Existing historical records indicate that, since the 1960s, the country has experienced an increase in average annual temperatures by 0.6°C, an increase in the frequency of hot days and nights, and a more frequent drought cycle. By the 2060s, it is projected that average annual temperatures will increase by 2°C (NEPA, 2016). Warming is expected to occur more rapidly in spring and summer, and the number of hot days and nights will likewise increase. Drought conditions will likely become the norm, rather than a cyclical occurrence, while flash flooding will likely increase as a result of earlier and more rapid snowmelt in the springtime (USAID, 2016). Overall precipitation will also decline in the long term (NEPA, 2016).

ANALYSIS

Afghanistan is especially vulnerable to the effects of climate change and natural disasters: these impacts will be felt throughout a range of sectors and will inflict further harm upon the country's most vulnerable populations. Agricultural productivity will likely decline as a result of increased temperatures and limited water resources. In addition to declines in crop yields, it is also likely that livestock will increasingly starve or be sold (USAID, 2016). Drought-hardy crops, such as poppies, may be given preference over water-intensive crops, such as wheat (FSAC, 2016).

Natural disasters have significant implications for nutrition and food security: crop failures and increases in food prices often accompany natural disasters. Drought is especially harmful to agricultural productivity, although flooding results in the greatest economic damage; both affect households' abilities to procure enough nutritious food (MAIL 2015).

These changes have the potential to heighten food insecurity and the spread of communicable diseases, which can negatively affect an individual's nutritional status (USAID, 2016). The country's ecosystem, governance mechanisms, and infrastructure are also at risk from the effects of climate change; as all these systems are threatened, the potential for conflict increases, which in turn creates a vicious cycle with potentially disastrous consequences for health and nutrition (USAID, 2016). Women are among the most vulnerable to climate change, as they are especially reliant on livestock and responsible for household tasks that will likely be affected by climate change, such as collecting water and firewood (Thomas, 2016). The poor, and those living just above the poverty line, are the most at risk of shocks related to water, agriculture, and natural disasters (GoA, 2012).

SDG 2.5 aims to maintain genetic diversity of seeds, cultivated plants, farmed and domesticated animals and their related wild species by 2020. This goal is to be accomplished through soundly managed and diversified seed and plant banks at national, regional, and international levels. SDG 2.5 also ensures access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge as internationally agreed.

CURRENT SITUATION

Afghanistan's gene bank is maintained by the International Agricultural Research Centres under the auspices of the FAO. The in-country seed bank was destroyed in 2001 amidst the overthrow of the Taliban (Kugbei, Panjsheri, and Bishaw, 2011). In 2005, the Government implemented the National Seed Policy and, in 2009, signed the National Seed Law. As part of these legislative activities, the Government has invested considerable research into improved seed varieties (MAIL, 2015).

ANALYSIS

Although important progress has been made in improving seed varieties, the focus of this research has been uncoordinated, patchy, and limited and there are important concerns about availability and species diversity, as well as quality. Research has primarily focused on wheat without giving equal attention to horticulture. Inclusion of farmers has been a priority, but there is an insufficient supply of improved wheat varieties and of varieties adapted to local conditions. Access to improved livestock varieties is limited (World Bank, 2011). The Government intends to give attention to local species that are especially important to rural populations, but there is also concern that the promotion of select high-yielding crops has contributed to the loss of local species diversity (MAIL, 2015). In addition, laboratories, equipment and trained staff have not been developed in a methodical manner, further reducing the opportunities of relevant national institutions and authorities taking the lead in future research and conservation.

During the **community consultations**, people reported having difficulty accessing seeds. Most farmers bought seeds but some also saved their own. When the Government or NGOs did provide seeds, there were reports that they did not reach the farmers who needed them or that they were distributed at the wrong time so they were not useful.

THE MOST VULNERABLE IN AFGHANISTAN

In terms of food insecurity, the most vulnerable Afghans are women and children, followed by the elderly and the disabled (Viola et al., 2007). Undocumented returnees are also very vulnerable, as they do not typically receive any type of assistance upon departure from Pakistan or Iran while on arrival they received insufficient support (IPC Afghanistan, 2016). Results of the 2014 ALCS show a

huge gap between urban and rural households in terms of access to services. The difference is more than 26 percent for maternal health, 32 percent in terms of access to safe drinking water, and 47 percent in terms of access to improved sanitation. Generally, food insecurity is more severe in rural areas where 36 percent of households are food insecure compared to 30 percent of urban (ALCS, 2014). Further, another study shows a correlation between food insecurity and elevation where households living at higher elevations have greater difficulty accessing livelihoods and food and thus are more food insecure. (Viola et al., 2007). The Central Highlands and the extreme Northeast have consistently been observed as food insecure (CSO, 2014).

- **Rural poor:** Poverty and household food insecurity are most severe in rural areas where a majority of the population lived. The rural poor and food insecure population includes subsistence farmers, Kuchi (nomadic or semi-nomadic herders) and casual labourers.
- **Women and children:** According to the preliminary analysis of the 2011/2012 NRVA, at least 40 percent of female-headed households are food insecure compared to 27 percent of those headed by men. Female household heads and their children are most at risk of undernutrition and, in the absence of a male, such households tend to experience lack of income, security, and social protection. A major contributing factor to this is the socio-cultural barrier to educational advancement. Their literacy rate was lower (23 percent versus 47 percent for men), as were the net primary and secondary attendance rates of girls: 42 percent versus 60 percent for men and 24 percent versus 34 percent for men, respectively (AFSeN, 2012).
- **Internally displaced persons (IDPs) and returnees:** During the last two and a half decades, eight million Afghans have become refugees and/or internally displaced due to security threats, ethnic conflicts, political conflict, economic problems and natural disasters. Since 2002, about 5.7 million refugees have returned to Afghanistan from Pakistan and Iran, with an estimated 480,000 Afghans becoming IDPs. Many returnees often find their homes destroyed or occupied and land unworkable or squatted on, preventing the transition to normalcy and promoting exposure to food and nutrition insecurity.
- **Poor urban dwellers**: Unable to re-establish their lives in rural areas, many IDPs and returnees move to urban areas where they have to cope with uncertain and expensive housing, high food prices, and lack of employment. More often than not, many end up falling into the class of poor and food insecure urban dwellers. An estimated 30,000 of these poor urban dwellers live in informal settlements in Kabul province alone.
- **Other vulnerable households:** Larger households with more than ten persons and those whose main income sources are Zakat, remittances, or opium production and those who are borrowers, wage labourers, or seasonal migrants are all at risk of losing these less reliable sources of income and becoming vulnerable to food and nutrition insecurity. Those with disabled and/or sick members unable to work and in need of medical care are also at risk of becoming food and nutrition insecure.

PART 4: SUMMARY OF THE CONSULTATIONS

NATIONAL CONSULTATIONS

National consultations were carried out between January 4 and May 3, 2017 in Kabul, with the following stakeholders:

- *Government*: President's Economic Office; CSO; Ministry of Finance; Ministry of Commerce and Industries; MOPH, MAIL, MRRD, MOLSAMD, Ministry of Counter-Narcotics; Ministry of Women's Affairs
- *Donors*: European Union; GIZ; World Bank; Asian Development Bank;
- *UN agencies*: WHO; UNICEF; WFP; FAO
- *NGOs*: Move Welfare; Hand in Hand; Action Against Hunger; AfghanAid; Aga Khan Health Services; Bu Ali Rehabilitation and Aid Network;
- *Private sector*: Rana Agribusiness;
- *Academia*: Academics in economics and in food security.

This section is only a representation of the content of the interviews. A more detailed summary is found in **Annex III**, which is a stand-alone supplement to this report.

Conflict, employment, health care and women's empowerment:

- Conflict has destroyed jobs and incomes and led many people to be unemployed or unable to live on. Improving the economy and creating jobs also need to be priorities.
- Conflict has also destroyed health facilities, making them harder for people to access. There need to be more health facilities as well as mobile clinics to provide more coverage, especially for displaced people.
- Women need to be a central focus of any program in order for it to be successful. There needs to be increased access to information, training, credit, and markets for women who are working in agriculture.

Capacity, data, monitoring, and evaluation:

- Problems in capacity range from institutional to human capacity with low Government salaries, especially at the community level, making it difficult to recruit qualified employees and leads to high turnover.
- There is a need for surveillance and data collection to understand and analyse the country's current situation and design policies and programs to address the specific challenges that the country faces. This should be standardized, possibly through the MAIL or MoPH Nutrition Division.
- There is a need for monitoring and evaluation to increase the efficacy of policies and programmes.

Coordination, local control and funding:

- There is coordination on paper but not in practice - different groups have different priorities and are working separately to achieve their own goals without thinking about what the country needs. Programs often overlap and cover the same areas multiple times while leaving other areas uncovered. Ministries must work together, especially MoPH and MAIL. A separate

coordinating body could lead and manage this collaboration planning, clear definition of roles, and accountability systems.

- Planning should be decentralised to the provincial level where provinces develop their own policies and programmes and then Parliament and the Ministry of Finance can fund them.
- There is a need for more funding overall as well as more consistent funding for nutrition. Challenges exist when relying on donor funding, ranging from inconsistency to poor allocation. Funding could go directly to the Nutrition Division and they could fund programs directly.

SDG 2:

- For stakeholders working on SDG 2, the focus was on decreasing hunger and malnutrition with little to no discussion of sustainable agriculture or genetic diversity. They also felt that the targets were unrealistic and that Afghanistan needs to set its own targets.

Agriculture and food security:

- The first priority in improving food security and nutrition should be increasing agricultural production, which would increase the food supply and increase famer's incomes. Strategies include increased mechanization, irrigation, machinery access, seed provision, livestock vaccination, and extension services. There is also a need for storage, especially cold storage, food processing, rural finance and market access.
- Food insecurity is driven by low agriculture productivity and food availability, difficulty accessing markets, and low incomes.
- Food aid is often not targeted to the most needy communities and MoPH should be coordinating food aid. Household gardens and livestock can increase food access.

Nutrition:

- There should be better nutrition surveillance and NGOs should take the lead on malnutrition assessments and programme design. Acute malnutrition needs to be diagnosed and treated earlier, which would require more action in the most underserved communities as well as more access to supplementary and therapeutic foods.
- There also should be increased access to fortified foods through price incentives and education.
- There is a rise in obesity and non-communicable diseases due to low fruit and vegetable intake and increasing sugar-sweetened beverage and processed food consumption as well as low physical activity.
- There should be a focus on preventative health and nutrition education to address this and this work needs to occur through public awareness campaigns using print media, radio, and television and face to face education for behaviour change. Education should also focus on how to grow and prepare nutritious food and include cooking demonstrations with a focus on women.

PROVINCIAL AND COMMUNITY CONSULTATIONS

Community consultations were carried out in eleven provinces: Badghis, Balkh, Bamyan, Daykundi, Herat, Laghman, Kabul, Uruzgan, Paktia, Kunduz, and Wardak. These results are not meant to be a comprehensive discussion of all issues but a representation of the content of consultations.

Agriculture:

- Many people said agriculture was the only job available even though it did not pay enough to survive. Climate change was more important for smallholders relying on rain-fed agriculture as decreased rain and droughts and the impact on their yields.
- Water is a common problem throughout the country and most people do not have enough to meet their needs. It is less of an issue in provinces with better access to irrigation such as Balkh, Laghman, and Paktia but irrigation access is often hindered by crumbling infrastructure.
- Farmers also need more access to seeds and farm machinery, especially tractors. Most smallholders reported not having access to extension services.
- Access to insurance and formal loans is also low, especially for poor and women farmers.
- Lack of storage, including cold storage, is also a large problem and leads to post-harvest loss. Being unable to store food means farmers have to sell when prices are low and anything not consumed or sold is lost. In many provinces, post-harvest loss was reported at over 50 percent.
- While rudimentary food processing including drying and milling is available, not all farmers have access and more processing facilities and equipment are needed.
- Most farmers sell at local and regional markets but they reported difficulty accessing these due to long distances, poor roads, limited access to transportation, and conflict. Farmers also wanted to sell at more regional markets because prices were better but are unable to due to poor access.
- Recommendations to improve agriculture included increased access to machinery, followed by increased access to seeds. Other top priorities include increased access to fertilizer, training and financing/loans.

Food security:

- Between half and two-thirds of all families in the provinces reported not being able to grow or buy enough food to meet their needs. Most people have difficulty accessing markets due to long distances, poor roads, and limited access to transportation, and conflict, with some people reporting having to pay the Taliban to use the roads.
- Recommendations to improve food security is job creation, followed by food aid, increased agriculture development and financial support.

Nutrition:

- Causes of child malnutrition include a lack of food for pregnant women and children, a lack of safe water, poverty, and low education.
- Treatment for child malnutrition varies, with greater access to clinics and therapeutic feeds in some provinces.
- People had accurate perceptions of which foods were healthy with most listing meat, dairy, beans, vegetables, and fruit. Fewer people listed fish, eggs, and nuts. Many also discussed the importance of protein.
- The most common recommendation was for education, followed by jobs, financial support, food aid, and schools.

PART 5: PATH FORWARD AND RECOMMENDATIONS

SUMMARY

The recommendations for Afghanistan are grounded in the five targets of SDG 2 – which are to end hunger, achieve food security and improve nutrition, and promote sustainable agriculture. These recommendations should be implemented in a way that addresses the broader challenges impacting the country outlined earlier in this Review, around conflict and climate change as well as poverty, livelihoods and employment, demographics, corruption, and gender inequalities.

The recommendations were formulated using the latest evidence of what has made an impact on hunger, food insecurity, nutrition vulnerability, and unsustainable food systems. In addition, the recommendations were formulated based on other national or expert reports that have assessed the food security and nutrition situation in Afghanistan as well as what has worked in other country settings.

Each recommendation is linked to other SDG 2 recommendations as well as to the other SDGs (**Figure 5**). In order to address all 17 SDGs, the goals should be thought of as all being connected, with SDG 2 at the core. Each section of SDG 2 is important and Afghanistan should commit to all of the recommendations in order to improve the country's food security and nutrition and overall food systems.

Figure 5: The Sustainable Development Goals

While it is important to make progress towards SDG 2, it should not be done at the expense of progress on other SDGs. The SDG 2 goal in and of itself is dependent on many of the other SDGs that should be implemented and scaled up. The connections between the SDGs are meant to improve the welfare of people and promote dignity, peace, and justice, while ensuring planetary health and prosperity, since these are all interconnected. Some examples of the connections are shown below (ICFS 2017):

- **SDG 2 and SDG 1:** ***Eradicating poverty*** in Afghanistan cannot be achieved without ensuring ***food and nutrition security*** for all. Increasing agricultural production, productivity, and incomes and the issues of unemployment require complementary policies that benefit the

poor and vulnerable communities in rural areas of the country and reduce their exposure to adverse environmental and conflict shocks.

- **SDG 2 and SDG 3:** ***Health and well-being*** cannot be achieved without access to a ***sufficient quantity and quality of food***. Activities that increase agricultural production and productivity will have a major influence on air, water, and soil quality, which are key environmental determinants of health. Achieving SDG 3 also supports SDG 2 because a healthy population is essential for achieving nutrition and agricultural production targets.
- **SDG 2 and SDG 5:** Achieving the targets related to ***access to food, quality nutrition for all,*** and agricultural incomes will support the enabling conditions for ***women's empowerment and gender equality*** as they provide economic development opportunities for Afghan women. Conversely, gender equality and enhancing women's rights can enhance the role of women in agriculture.
- **SDG 2 and SDG 6:** ***Food production*** is strongly dependent on and affects the ***quality and availability of water*** because increased agricultural production can increase water withdrawals and worsen land and water degradation. Moreover, achieving nutrition targets requires access to clean water and sanitation. This require sustainable agricultural systems and practices, and enhanced water governance to manage growing and competing demands on water resources.
- **SDG 2 and SDG 13:** ***Agriculture*** is an important source of greenhouse gas emissions and so contributes to ***climate change*** in which Afghanistan is incredibly vulnerable. Conversely, extreme weather events as well as long-term climatic changes (such as warming and precipitation changes) can significantly constrain the achievement of SDG 2. Sustainable agricultural practices such as improving soils and land quality, genetic diversity, and bioenergy, play an important role in climate adaptation and mitigation
- **SDG2 and SDG16:** ***Peace*** is essential to ensure and instil ***food security and nutrition***. The protracted conflict in Afghanistan will only inhibit the ability for the country to truly address hunger and malnutrition in a sustainable way. Food secure populations with good nutrition are also less likely to experience desperation and unrest and thus can be catalysts for peace.

STRATEGIC RECOMMENDATIONS

There are three main strategic recommendations emerging from the Review.

1. SDG 2 (Zero Hunger) should be **a key priority** for Afghanistan, not only because it is critical to ensuring that all Afghans are able to reach their full physical and mental potential, but also because addressing hunger will help create a positive cycle and have long-term, multiplier benefits for peace and development in the country.
2. Since hunger is a multi-dimensional problem, it requires a coordinated, multi-sectoral response, including relevant policies and multi-sectoral costed plans for all SDG 2 targets. The country therefore should fully support and resource the recently established **multi-stakeholder coordination platform**, the Afghanistan Food Security and Nutrition Agenda (AFSeN), for addressing food insecurity and undernutrition including the operationalization of the recently joined Scaling Up Nutrition (SUN) movement.

3. Afghanistan should focus on implementing the **hunger-specific recommendations** found in this report, but in a manner that is sensitive to and deliberately supports the longer-term transition in the country to peace and development.

HUNGER-SPECIFIC RECOMMENDATIONS

The analysis has also identified a number of key practical recommendations for achieving each of the SDG 2 targets. These interventions should be guided by a set of key principles:

- Humanitarian responses should be linked, whenever possible, with peace and development efforts.
- Interventions should be carried out in a context-sensitive manner that contributes to addressing, even in a modest way, the key drivers of food insecurity and undernutrition: conflict, climate change and natural disasters, demographic trends, limited job opportunities, gender disparities, and transparency and accountability concerns.
- The recommendations should benefit all Afghans, regardless of which side of the frontlines they reside.
- The efforts to address hunger should be linked to and consider the interactions with other closely related SDGs, including poverty, health, and water.

SDG2.1 RECOMMENDATIONS

*By 2030, **end hunger and ensure access by all people**, in particular the poor and people in vulnerable situations, including children, to safe, nutritious and sufficient food all year round.*

WHY IS IT IMPORTANT?

Food insecurity is increasing in Afghanistan. In 2014, 33 percent of the Afghanistan population was food insecure (ALCS, 2014) and by 2017, preliminary findings indicate a significant increase in food insecurity. The 2014 ALCS also reported that, on average, Afghans consumed less than 2,100 kcal per person per day, which is below the minimum average daily food energy requirement. In low- and middle- income countries, social protection is a critical policy option to address poverty and vulnerability, especially through social safety nets (World Bank, 2015a).

Food access means both physical and economic access. In Afghanistan over 30 percent of the population cannot meet their daily requirements in kilocalories, mostly due to poor economic access. Many people in Afghanistan are unable to find jobs that pay living wages and improving livelihoods would be an important long-term solution to poor economic access to food. Another underlying cause of poor economic access to food is a high reliance on imported food and fluctuating market prices, with severely and moderately food insecure households relying on market purchase for nearly all of their cereal consumption (ALCS, 2014). Reliance on national production levels, supplier country trade/political policies, transit, and seasonality results in unstable market prices. Furthermore, transportation costs further exacerbate market prices in remote districts of Afghanistan. While there needs to be a scale up efforts for in country production of staple foods, there is also a need to highlight the importance of quality control of food imports to ensure the food commodities are safe and nutritious.

Afghanistan has local grain reserves that are an important strategy to address seasonal food insecurity, which affects 40 percent of the population during the pre-harvest period as compared to

23 percent during the summer (CSO, 2014). These reserves could also be improved with shared community ownership with a focus on increasing smallholder and women owners and links to local millers who can transform the grain to fortified wheat flour.

Social protection and nutrition are intrinsically linked because poverty is the most important root cause for malnutrition (FAO, 2015). Social protection is especially important in the face of climate change and is critical in the wake of natural disasters. Since social protection programs do not necessarily translate into malnutrition reductions, these can be redesigned to be more nutrition-sensitive and generate higher economic returns throughout the life cycle (IFPRI, 2016). Nutrition-sensitive social protection interventions should always consider women as the recipients of these benefits, especially in the case of food or cash transfers in Afghanistan (FAO, 2015). Afghanistan has made progress through school feeding programs and these are a key response to malnutrition in children and increase the incentive for school attendance.

There are three major modalities for food transfers: in-kind transfers, value vouchers, and direct cash. Cash-based transfers (CBT) are increasingly used as a mechanism for improving household access to various foodstuffs as a safety net or in response to an emergency. CBT responses have the potential for strengthening markets for local Afghan producers and stimulating the production of certain foods, where such production is feasible (FAO, 2015).

RECOMMENDATIONS

4. Ensure effective and timely **humanitarian responses** to meet the immediate food and nutrition needs of vulnerable households affected by natural disasters, climate change impacts, or conflict through the provision of an appropriate combination of specialized nutritious foods, fortified foods, and cash-based transfers.
5. Work towards the early recovery and creation of more predictable, **nutrition-sensitive, resilient safety nets** by strengthening coordination among key stakeholders involved in social safety net programs, with a prioritized focus on community-based interventions related to disaster risk reduction and resilience, and focus on the most vulnerable groups such as internally displaced persons (IDPs), returnees, children, widows, female headed households, and the elderly.
6. Improve the capacity of the **Strategic Grain Reserve** (SGR) mechanism to increase the stability of the food supply and ensure food access across the country during acute food shortages stemming from seasonality effects, climate change, displacement, emergencies and conflict; improved capacity can be achieved through the bilateral and multilateral agreements made by the Government with neighbouring countries.

SDG 2.2 RECOMMENDATIONS

*By 2030, **end all forms of malnutrition**, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.*

WHY IS IT IMPORTANT?

Although malnutrition has decreased considerably over the last two decades, the prevalence of chronic undernutrition, or stunting, in children less than five years of age is still high at almost 41 percent and while the prevalence of acute malnutrition, or wasting, is 9.5 percent (NNS, 2013).

Chronic undernutrition has long-term effects on a child's growth and developmental potential that can also affect future generations. A child's nutritional status is closely connected to that of its mother: poor nutrition often begins in utero and extends, particularly for girls and women, well into adolescent and adult life. Undernutrition that occurs during early childhood, adolescence, and pregnancy has an additive deleterious impact on the birth outcomes of infants (ACC/SCN, 1992). These intergenerational effects are cyclical, reinforcing, and often devastating. If improvements in nutrition of women, adolescent girls, and children less than 2 years of age could be accelerated, multiple impacts and positive feedback linkages could be a reality, including: avoidance of early pregnancies at a young age, declines in low birth weight and better birth outcomes, improvements in child growth (e.g. decreases in chronic undernutrition also known as stunting) for healthy, well-nourished children, and productive, active woman. Addressing stunting requires coordinated multisectoral efforts in agriculture, health, education, and others in order to increase the quantity and quality of the food available to increase consumption as well as dietary diversity with a focus on foods rich in micronutrients. This can be done through nutrition-sensitive agriculture as well as promoting home gardens, livestock, small animal rearing, and aquaculture.

Home food demonstrations can also focus on nutritious food processing and preparation to minimize nutrient loses. Education is also needed on to promote maternal nutrition and consumption of nutritious diets as well as counselling on IYCF practices both at health facilities and in communities with a focus on the first 1,000 days of a child's life. Activities on improving health including growth monitoring and promotion (GMP), the prevention and treatment of infectious diseases, WASH and women's empowerment are also important. It is also important to address wasting because of its linkages to increased morbidity and mortality (Black et al., 2013). As with stunting, wasting is more prevalent among poor households (Higgins-Steele et al., 2016). Integrated management of acute malnutrition (IMAM) has been shown to be effective in treating moderate and severe acute malnutrition.

Micronutrient deficiencies are a form of undernutrition often called "hidden hunger" because deficiencies in iron, folic acid, and vitamin A can result in cognitive impairment, poor health, low productivity, and even death, affecting multiple generations. Thus addressing micronutrient deficiencies among women and children is imperative for reducing the overall burden of undernutrition.

Therefore, food systems should be strengthened so that everyone, especially the most vulnerable, has access to sufficient, nutritious, and diverse foods. This can be done through crop diversification, increased in national fortification, including fortification of vegetable oil with Vitamins A and D, expanded salt iodization, and continued fortification of wheat. Increasing the nutrient density of cereal porridges for IYCF, providing fortified snacks at schools and ensuring that people can access and afford these fortified foods are also required to address micronutrient undernutrition throughout the life cycle.

RECOMMENDATIONS

7. With a focus on peace and development for all Afghans, there is a need to expand and implement multi-pronged, multi-sectoral programmes to ***prevent all forms of malnutrition***, (stunting, wasting and micronutrient) for all Afghans, with special focus on vulnerable groups such as young children and women of reproductive age. These programmes should include integration of community based nutrition interventions with other sectors (health,

agriculture, WASH, education etc.) and frameworks such as the Citizen's Charter as well as consistent implementation of prevention activities under the basic package of health services (BPHS). Specific activities include:

- Improving dietary diversity for all, counselling on infant and young child feeding (IYCF), scaling up water, sanitation and hygiene (WASH) programmes, increase screening and outreach services for health and nutrition;
- Delivering school based interventions that include fortified snacks, home-grown school meals, gardens, and related nutrition activities;
- Creating national-level public awareness and education campaigns on the benefits of a diverse diet and consumption of micronutrient-dense foods and fortified products;
- National expansion of quality fortification programs;
- Address the unique **health and nutrition needs of women and adolescent girls** by: preventing micronutrient deficiencies, especially anaemia, and increasing access to women's education and empowerment, with a focus on conditional cash transfers or school feeding to help girls stay in school longer.

8. Scale up ***treatment*** of acute malnutrition in children less than five years of age and pregnant and lactating women (PLW) through an approach that includes implementing community-based management of acute malnutrition (CMAM) and integrated management of acute malnutrition (IMAM); increasing the supply of ready-to-use therapeutic foods (RUTF) and ready-to-use supplementary foods (RUSF), including local production; and improving local, homemade food recipes for the treatment of acute and moderate malnutrition, and training of caregivers to use these recipes.

SDG 2.3 RECOMMENDATIONS

By 2030, ***double the agricultural productivity and incomes of small-scale food producers****, in particular women, smallholder farmers and pastoralists, including through secure and equal access to land, other productive resources and inputs, knowledge, rural financial services, markets and opportunities for value addition and off-farm employment*

WHY IS IT IMPORTANT?

Based on the agriculture production trend analysis, Afghanistan is a food deficit country where, in a typical year, the cereal deficit is estimated at over one million tonnes, reaching two million tonnes in a poor agriculture year (World Bank, 2014; CADF, 2016). Such variations are the result of primary reliance on rain-fed agriculture practices. Agriculture-led economic growth and agriculture-based solutions can make important contributions to reduce undernutrition (Webb and Block, 2011) by increasing dietary diversity and micronutrient sufficiency (Masset et al., 2012).

Because many poor and undernourished people are smallholder farmers (IFAD, 2016), it is often assumed that diversifying production will improve dietary diversity within the household. However, for Afghanistan, rural areas are often particularly difficult to reach, land holdings tend to be small, access to technologies is limited, and markets are often geographically scattered. Therefore, it may be better for them to invest in monoculture and cash crops, and use that income to purchase more nutritious foods (Fanzo, 2017).

Solutions to increase farm and dietary diversity include home gardens and other homestead food production models (Onley et al., 2015), intercropping and mixed landscapes (Kerr et al., 2007),

irrigation (Burney et al., 2010), aquaculture (Murshed-E-Jahan et al., 2011), and animal production systems including poultry, goats, and cattle (Carletto et al., 2015). Rangeland management and improved animal feeding practices are key in Afghanistan since poor pasture conditions decrease productivity. Studies also indicate that animals and fish are critically important for livelihoods, as well as diets and nutrition (HLPE, 2016). Children living in livestock-owning households are often less likely to be stunted, regardless of household poverty levels (Carletto et al., 2015). Further results indicate that expanded livestock ownership can improve livelihoods (Banerjee et al., 2015) and can shift the entire local food economy in that it influences food consumption by households that lack farm animals (Jodlowskiet al., 2016).

Women lack the resources and opportunities to make the most productive use of their time, while facing much higher constraints than men in accessing productive resources, markets, and services (FAO, 2011). Increasing access to water, energy, and transport are particularly beneficial in decreasing women´s workload and improving their health (IFAD, 2016). If women had the same access as men to farming inputs, female farmers could achieve the same yields, resulting in reductions in hunger and poverty (FAO, 2011). Women's contribution in agriculture production is significant in Afghanistan; however, their role varies based on cultural practices.

Improved access to information and knowledge, as well as stronger links to other actors along the value chain would benefit Afghan farmers by strengthening existing advisory institutions that provide support to rural populations (GFRAS, 2012). For example, by using radio programs and text messaging, MAIL can ensure that the smallholder farmers' information needs are being met, while enabling them to achieve food security in the face of risk and uncertainty. Continued extension and outreach to farmers also seeks to address environmental deterioration, off-farm rural employment, as well as nutrition, in addition to agricultural production. However, these additional goals and responsibilities have created a need for a new type extension services provision that is equipped with a diverse set of capacities to respond effectively (Sulaiman and Davis, 2012; Fanzo et al., 2015). It is also important to increase the diversity of extension workers, especially to increase women extension workers.

Due to the lack of adequate and affordable cold storage capacity and infrastructure to support robust value chains, Afghanistan's perishable horticulture produce cannot be kept during off-seasons, thus limiting access to horticulture produce during off-seasons and compelling growers to sell their production during peak seasons when prices are typically low. However, as a result of MAIL interventions, Afghanistan's cold storage capacity is expected to increase by 40,000 MT in 2017, leading to significant lower operation costs, which will help import substitution and access to food during the off-season. In terms of coordination, reflecting upon the Citizen's Charter, MAIL has established Farmer Resource Centres at the district level to coordinate the linkages between producers (farmer's groups, associations, etc.) and the private sector along with micro-finance institutions and commercial lenders, thus reinforcing engagement in public-private partnerships. This requires an initial investment in appropriate rural finance packages that include low levels of collateral, Business Development Support services, and start-up windows for micro and small enterprises. These activities will lead to increased off-farm employment and income generation both seasonally and on a more permanent basis, providing opportunities for women, the youth, IDPs, and returnees. A value-chain approach will need to be institutionalized based upon collaboration between several National Priority Programs (NPPs) such as the Citizens Charter, Women's' Economic Empowerment, Irrigation/Infrastructure, and the Comprehensive Agricultural Development

Framework (CADF). This will avoid duplication of resources and capitalize upon shared targets and already allocated budgets

RECOMMENDATIONS

9. Focus on improving and scaling up three **core crop/animal systems**, which may also counter opium poppy production, including: wheat, horticulture, and livestock.
10. Improve **natural resources** for farmers, particularly women farmers including: land by expanding and updating the land registration system, settling disputes, and encouraging orchard and crop production, particularly for women producers; and water by improving access to and efficient use of water resources.
11. Improve **extension services** across three areas: markets, by creating better access to market information systems and market channels for targeted crops and animal products; private sector, by building entrepreneurial relationships with private sector and public-private partnerships and employing youth as value chain actors beyond the farm gate; and women, by strengthening their role in agriculture, livestock, and horticultural production.
12. Improve rural infrastructure and strengthen **nutritional value chains** through public-private partnerships and focusing on: rural roads; prioritizing smallholder and subsistence farmer resiliency; investing in rural electrification; increasing the number of refrigerated trucks and cold storage facilities; improving postharvest storage infrastructure; encouraging greater investment in milling and fortification plants; and encouraging investment in modern slaughterhouses and ultra-high temperature processing (UHT) for milk.

SDG 2.4 RECOMMENDATIONS

*By 2030, **ensure sustainable food production systems and implement resilient agricultural practices** that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.*

WHY IS IT IMPORTANT?

Afghanistan also faces serious environmental challenges: land and water resources have been significantly diminished over time, in part by the mismanagement of natural resources such as petroleum, coal, natural gas, and precious stones, among others. The country's land has been overgrazed and deforested, which in turn has caused soil degradation and erosion.

Afghanistan's agriculture is especially vulnerable to the effects of climate change and natural disasters throughout a range of sectors. Agricultural productivity will likely decline as a result of increased temperatures and limited water resources as 70 percent depends on rain or snowmelt, and water storage systems remain inadequate. In addition, it is also likely that livestock will increasingly starve or be sold. More frequent natural disasters will exacerbate shocks to the food system, which calls for an investment in early warning systems.

More rural farmers are engaged in subsistence farming which may have less impact on the environment but faces many challenges such as low productivity, and limited connection to markets (HLPE, 2016) There is a need for more sustainable food systems that are adapted to local conditions and involve diversification and integration and should be less labour intensive, less dependent on

external inputs and that rely more on nutrient recycling. They could lead to less homogenous food products distributed through shorter supply chains (IPES Food, 2016). In the short term, this will entail ongoing support for the existing subsistence farming model while also supporting sustainable farming practices, until surpluses can be produced, leading to improved food availability and access and a reduced dependence upon food imports.

Simultaneously, greater investment is needed for interventions that support and promote sustainable forest management, rangeland management, improving production and strengthening value chains for medicinal plant cultivation and enforcing protected areas and indigenous wildlife. In addition, links will also need to be developed between rural and peri-urban communities to build social awareness of the value of urban eco-systems and the provision of greenery for major cities to reduce air pollution levels. This strategy should be supported by a capacity development allows the Government of Afghanistan to shifts ownership of common assets to the communities, and identification of key areas of medium to long-term income generation for communities that are reliant on forest and non-forest products.

RECOMMENDATIONS

13. Invest in large-scale **afforestation** and prevention of deforestation.
14. Strengthen national **early warning systems** by addressing gaps in the generation of disaster risk information and the dissemination of early warning information to affected communities in a timely manner.
15. Support national and local institutions to enable farmer **management of climate risks** and adoption of Afghan agro-ecosystem-suitable agricultural practices, technologies, and systems that promote disaster risk reduction.
16. Formulate and enact a new **Food Safety and Quality Act** that builds the coordination and technical capacities of the Afghanistan National Standards Agency and sector-specific regulatory institutions.

SDG 2.5 RECOMMENDATIONS

*By 2030, **maintain the genetic diversity of seeds, cultivated plants, and farmed and domesticated animals and their related [39]indigenous species**, including through soundly managed and diversified seed and plant banks at the national, regional, and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.*

WHY IS IT IMPORTANT?

Afghanistan's gene bank is maintained by the International Agricultural Research Centres under the auspices of the FAO while the in-country seed bank was destroyed in 2011 (Kugbei, Panjsheri, and Bishaw, 2011). Since implementing a National Seed Policy in 2005 and signing the National Seed Law in 2009, the Government has invested considerable research into improved seed varieties but which has primarily focused on wheat without giving equal attention to horticulture (World Bank, 2011). In addition, laboratories, equipment, and trained staff have not been developed in a methodical manner, further reducing the opportunities of relevant national institutions and authorities taking the lead in future research and conservation.

Agricultural biodiversity is the basis of the food and nutrition value chain and is important for climate change resilience. This includes species with under-exploited potential for contributing to food security, health, income generation, and ecosystem services. Conservation and sustainable use of agricultural biodiversity, underutilized crops, and local and traditional foods can be powerful tools to combat poverty and malnutrition while preserving healthy ecosystem as some local varieties are more nutritious and provide a larger range of micronutrients. Biodiversity is also protective against the increased temperatures and changes in precipitation from climate change, thus increasing the resilience of agricultural systems and as well as yields. Certain crops and varieties are more heat and drought resistant and have better protection against pests and diseases (Khoury et al., 2014; FAO, 2016). This is especially true for indigenous varieties (Swiderska et al., 2011).

Globally, food systems are becoming more homogenous and thus most of the foods consumed are from only 200 crops and five animal species (FAO, 2004). While the focus on growing a few cereal and oil crops in intensified monocultures has increased the short-term productivity of these crops, it has decreased biodiversity and some varieties have been lost completely in this process, along with their unique nutritional and environmental characteristics (Khoury et al., 2014).

An example of this is the maintenance of seed banks to conserve and protect crop species for future generations. Seed banks can be run on an international, regional, national, or local level. All of these levels have a role but local programs that are controlled by the communities themselves are essential (Tapia, 2000). These local programs vary in size from informal seed collections maintained by single farms to larger and more formal community seed banks. Regardless of size or structure, all of them are important in maintaining biodiversity and providing farmers with more options for varieties to grow as well as a source of seeds during shortages. This increases food security and the resilience of the food system as well as empowers farmers and contributes to food sovereignty (Shrestha, 2012).

RECOMMENDATIONS

17. Rebuild and secure the **national seed store** to avoid destruction during conflict.
18. Provide **training** that incorporates traditional knowledge on the management of genetic resources related to food and agriculture, and focuses on local seed banks, in situ conservation, and use of improved varieties (including wheat) of locally adapted species at the community level.
19. Improve **animal breeds** through importation and crossbreeding (e.g. creating hybrid heifers).
20. Improve **access to genetic resources** and benefit sharing, especially from the commercial utilization of genetic resources like medicinal plants.
21. Enhance conventional plant breeding to include/increase the use of iron, zinc, and other required **micronutrients** in the seeds of staple crops.

ENABLING ENVIRONMENT

To have a lasting impact on hunger, and to ensure it has a multiplier effect and contributes to a positive cycle, it will be critical to address key issues in the **enabling environment** that will facilitate efforts to achieving targets under SDG2.

WHY IS IT IMPORTANT?

According to the Afghanistan Food Security and Nutrition Agenda (AFSeN), the goal is to ensure that no Afghan suffers from hunger and every Afghan is well nourished at all times (AFSeN, 2012).

Achieving Zero Hunger requires establishing linkages between stakeholders from various sectors such as agriculture, health, education, infrastructure, and addressing crosscutting concerns like gender mainstreaming and climate change and environmental sustainability. Economic and livelihood development are also essential as many people are unemployed and for those who do work, wages often are not high enough to achieve food security, especially for women. People also borrow for food purchases, agriculture investments as well as for ceremonies such weddings and funerals, often with very high interest rates. The AFSeN (2012) indicates that appropriate food security and nutrition policy and strategy design necessitates use of a 'food and nutrition security lens' that considers all key factors, institutions and organizations, and policies, strategies and programs that are important to meeting all five pillars.

Reasons for uncoordinated and weak programme implementation and management, inadequate adoption, and ineffective implementation of the comprehensive strategic framework for food security and nutrition include: limited capacity, inadequate scientific evidence, and reliable data on implementation and effectiveness of the policies and programmes, lack of monitoring and evaluation, harmonised approaches, limited geographic coverage of interventions, lack of effective policies and regulations, newly established but overwhelmed and weak institutional arrangements, weak human resource, inadequate or lack of appropriate policies and programmes, lack or inadequate financial resources for the designed policies and programmes, missed opportunities to leverage food security and social assistance programmes to address malnutrition and inadequate gender mainstreaming. Afghanistan can take key steps to improve nutrition policy by strengthening the Public Nutrition Directorate, finalizing the National Nutrition Strategy with a costed plan of action, and operationalising Afghanistan's recent membership in the SUN movement.

RECOMMENDATIONS

22. Build **human capacity in the areas of food security and nutrition** in the country including informal and trade training programs and formal education programs in secondary schools and universities.
23. Increase **national investment** toward nutrition and agriculture programming to a minimum of ten percent of gross domestic product (GDP), deliver on donor-funded food security and nutrition projects, and consider alternative economic agriculture-led growth in a post-conflict Afghanistan.
24. Establish an **independent body to fight corruption** with the public system with resources to act on behalf of farmers and vulnerable populations impacted by food insecurity and malnutrition.
25. Strengthen the **national data information system** for food security and nutrition with timely, reliable, accurate and useful data for policy decision-making and program redesign and adjustment.

PART 6: CONCLUSION

We started this report with an Afghan proverb, which says, “Even the tallest mountain has a path to the top.” In many ways, this report is about helping Afghanistan find that path. Because of numerous challenges related to conflict, climate change, gender inequality, demographic shifts, and accountability and transparency concerns, the country currently suffers from high levels of food insecurity and undernutrition. It is hoped that the recommendations in this report will provide strategic advice on the way forward and will serve as the basis for an SDG 2 Action Plan to implement these findings.

The implementation of the recommendations will need to take a ‘whole of country’ approach. A multi-stakeholder platform, such as the AFSeN, should guide inter-ministerial and partner efforts to address this multi-dimensional problem. Goals and targets should be aggressive, but also realistic and achievable with appropriate timeframes, and there will need to be sufficient financial resources dedicated to these efforts. It will also be critical to ensure that the Strategic Review and Action Plan serve all Afghans: people who reside on both sides of the frontlines, hard-to-reach populations, and the most vulnerable – particularly women, children, the displaced, and returnees.

Ultimately, addressing hunger is a strategic and critical investment in the future of Afghanistan. If children have the right food and nutrition at an early age, they will be able to grow to their full physical and mental potential. As a result, when they become adults, they will have fuller and more productive lives, and will be better able to provide for their children. These inter-generational effects will allow families to escape poverty, engage in the economy, and fully participate in political processes. However, the impact will go beyond individuals and households.

Progress towards zero hunger will have multiplier benefits for society as a whole, contributing to significant reductions in national poverty, building the human capital required for long-term economic growth, and supporting broader efforts to achieve stability. The enhanced growth and expanded opportunities will enable the country to invest more in hunger reduction and other development gains, creating a virtuous cycle. Although the mountain is high, it is hoped that Afghanistan, with the support of this Strategic Review, will soon be on the path to zero hunger, economic growth and development, and lasting peace.

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ANNEX I: AFGHANISTAN SDG 2 INDICATORS

SDG Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

***2.1.1**: Prevalence of undernourishment*

***2.1.2**: Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)*

SDG Target 2.2: By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.

***2.2.1**: Prevalence of stunting (height for age <-2 standard deviations from the mean of the World Health Organization (WHO) Child Growth Standards) among children less than 5 years of age.*

***2.2.2**: Prevalence of malnutrition (weight for height + 2 standard deviations from the mean of the WHO Child Growth Standards) among children less than 5 years of age, by type (wasting and overweight)*

SDG Target 2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

***2.3.1:** Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size.*

***2.3.2:** Average income of small-scale food producers, by sex and indigenous status*

SDG Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

***2.4.1:** Proportion of agricultural area under productive and sustainable agriculture*

SDG Target 2.5: By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.

***2.5.1:** Number of plant and animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities*

***2.5.2:** Proportion of local breeds classified as being at risk, not-at-risk or at unknown level of risk of extinction*

SDG 2.A: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks to enhance agricultural productive capacity in developing countries, in particular least developed countries

2.A.1: *The agriculture orientation index for government expenditures*

2.A.2: *Total official flows (official development assistance plus other official flows) to the agriculture sector*

SDG 2.B: Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round

2.B.1: *Producer Support Estimate*

2.B.2*: Agricultural export subsidies*

SDG 2.C: Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, to help limit extreme food price volatility

2.C.1: *Indicator of food price anomalies*

ANNEX 2: POLICIES AND PROGRAMMES SUPPORTING SDG2

CURRENT ENACTED POLICIES AND FRAMEWORKS

- **Afghanistan National Peace and Development Framework (ANPDF), 2017-2021:** The ANPDF is a five-year strategic plan through which country self-reliance is envisioned. This framework is meant to guide the country to a sustainable development in cohesive way with the security and stability pillars, which this was not the case in the previous strategies.
- **Afghanistan National Health Policy 2015-2020:** Aims to increase healthcare to reach universal coverage and treat infectious diseases and decrease maternal mortality and to increase health through lifestyle modifications aimed at decreasing noncommunicable diseases. It also aims to increase quality control for both food and drugs.
- **Afghanistan Essential (EPHS) and Basic Packages of Health Services (BPHS):** Were created in 2003 but revised in 2005 and 2010 and aim to equitably increase both access to and the quality of basic health services with the ultimate goal of decreasing mortality in women of reproductive age and children under five years old. The goal of the EPHS is to improve equity, accountability, efficiency, and result in more effective healthcare. The BPHS defines which health services should be provided at every level of the health care system.
- **Afghanistan Food Security and Nutrition Agenda (AFSeN):** Reflects the policy statements of the Afghan Government, assuring its determination to tackle the underlying causes of hunger and malnutrition in a coordinated manner.
- **National Comprehensive Agriculture Development Priority Program (NCADPP), 2016-2020:** The NCADPP is a five-year agriculture priority program inspired by the SDGs. It focuses on a growers'-centric view rather than an institutional one. Investment is going to be made in programs with potential and high returns. The aim is to achieve sustainable agriculture, food and nutrition security.

CURRENT PROGRAMMES

The following are programmes and projects currently in place to work towards achieving the Government's targets under SDG 2.

Programme/Project	Funding and Management	Expected Results
Comprehensive Agriculture and Rural Development Facility (CARD-F)	UK Department for International Development (DfID)	To provide support for the Afghanistan National Development Strategy and Rural Development cluster through stronger incentives for engaging in local economy and move away from illicit crop production, covering 12 provinces
Afghanistan Agriculture Development Fund (ADF)	USAID $100 million, MAIL	To provide Afghan farmers and agribusiness entrepreneurs with access to credit.
National Horticulture and Livestock Project	$190 million, MAIL	To promote adoption of improved production practices by target farmers with gradual rollout of farmer-centric agriculture services system and investment support.

On Farm Water Management Project	$70 million, MAIL	To improve agricultural productivity in the project areas by enhancing the efficiency of water use.
Irrigation Rehabilitation and Development Project	$118.40 million, MAIL	To increase agriculture productivity and production.
Afghanistan Agriculture Input Project	$74.75 million, MAIL	To strengthen the institutional capacity for safety and reliability of agricultural inputs and sustainable production of certified wheat seeds.
Rural Enterprise Development Programs	$39.2 million, MRRD	To improve employment opportunities and income for rural men and women and ensure sustainability of local enterprises.
National Solidarity Program III	$1107.26 million, MRRD	To build, strengthen and maintain community development councils (CDCs) and effective institutions for local governance and social-economic development.
Afghanistan Rural Access Project	$207 million, MRRD	To enable rural communities to benefit from all season road access to basic services and facilities.
CASA Community Support Program	$40 million, MOE	To provide access to electricity and other social and economic infrastructures service to communities.
Citizen Charter Afghanistan Project	$500 million, Inter-ministerial	To improve the delivery of core infrastructure and social services to participating communities through strengthened CDCs
Strengthening Watershed and Irrigation Management	$78.9 million, USAID, AEC	To increase productive and sustainable use of water in agriculture; strengthen the water regulatory framework in Afghanistan; strengthen the capacity of local entities to manage water resources.
Regional Agriculture Development Program East, West, South, North	$260 million, USAID	Sustainable agriculture, increase productivity, reduce loses, create enabling environment.
Afghanistan Food Fortification Project	$3.17 million, USAID	Establish and strengthen the regulatory framework for food fortification; strengthen the quality control system of the involved industry; strengthen public sector enforcement mechanisms
Afghanistan Agriculture Extension Project II	$20 million, USAID	Strengthening MAIL/DAIL offices' capacity to assess farmers' needs and identify interventions and design prioritized training; provide training for extension workers on agriculture research; empower women working for MAIL; coach thematic workgroups and training; organize farmer field schools; and facilitate on-farm demonstrations.
Commercial Horticulture and Agriculture Market Program	$61 million, USAID	Improve pre- and post-harvest methods for fresh fruits to meet market requirements; link farmers with traders and traders with domestic and international markets; facilitate the export of selected fresh and dry fruits and nuts to

		regional and international markets; build agribusiness exporters to comply with international market requirement.
Kandahar Food Zone	$45 million, USAID	Improve irrigation management systems and rehabilitate existing irrigation infrastructure; undertake alternative development activities that target existing and new perennial crops, improve yields and share best practices in greenhouse management; and improve government coordination and build capacity.
Initiative for Hygiene, Sanitation, and Nutrition (IHSAN)	$75.5 million, USAID	5 percent reduction in stunting in children under five; 10 percent reduction in anaemia in women of reproductive age; and capacity building of Government of Afghanistan.
Enhancing community access and utilization of zinc and ORS for the management of childhood diarrhoea in Afghanistan	$15 million, USAID	Build capacity of health workers, midwives, nurses and doctors at the primary health care level for appropriate management of diarrheal diseases among the community