FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

Global Food Security Strategy (GFSS)
Nepal Country Plan

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Acronyms

ADS	Agriculture Development Strategy
AFU	Agriculture Forestry University
BCC	Behavior Change Communication
BMI	Body Mass Index
CCIR	Cross-Cutting Intermediate Result
CDCS	Country Development Cooperation Strategy
COVID	Coronavirus Disease
DPFSG	Development Partners Food Security Group
FAS	Foreign Agricultural Service
FtF	Feed the Future
G2G	Government to Government Assistance
GDP	Gross Domestic Product
GFSS	Global Food Security Strategy
GON	Government of Nepal
IR	Intermediate Result
JNSC	Joint National Steering Committee
JSR	Joint Strategic Review
MCC	Millennium Challenge Corporation
MFI	Microfinance Institution
MOALD	Ministry of Agriculture and Livestock Development
MOHP	Ministry of Health and Population
MPI	Multidimensional Poverty Index
MSD	Market Systems Development
MSME	Micro Small and Medium Enterprises
MSNP	Multi-Sector Nutrition Plan
NAP	National Adaptation Plan
NASA	National Aeronautics and Space Administration
NDHS	Nepal Demographic and Health Survey
NGO	Non-Governmental Organization
NPC	National Planning Commission
PBS	Population Based Survey
PMAMP	Prime Minister's Agricultural Modernization Program
PSE	Private Sector Engagement
SCRP	Scientific Cooperation Research Program
SUN	Scaling Up Nutrition
U.S.	United States

USAID	United Agency for International Development States
USDA	United States Department of Agriculture
USG	United States Government
WASH	Water, Sanitation and Hygiene
WFP	World Food Program
ZOI	Zone of Influence

Introduction

The United States Government (USG) Global Food Security Strategy (GFSS) 2022-2026, presents an integrated whole-of-government approach aiming to end global hunger, poverty, and malnutrition through the Feed the Future (FtF) initiative.[1] The corresponding GFSS Nepal Country Plan 2024-2028 is the third iteration of a national strategy to implement FtF in Nepal. It presents an overarching framework for integrated food security, nutrition, and resilience programming, building on the experiences and lessons learned during the implementation of previous multi-year strategic plans from 2011-2015 [2] and 2018-2022.[3]

A steering committee of interagency USG partners involved in food security and nutrition programming developed the latest Country Plan, following extensive consultation with stakeholders from government ministries, private companies, universities, research institutes, international and local NGOs, donors, and international organizations. The Country Plan reflects strategic pivots from the GFSS refresh that responded to rapid changes in the global context. This includes five new or elevated priority areas of emphasis and action:

- Equity and Inclusion;
- An Ambitious Approach to Climate Change;
- Proactively Countering the COVID-19 Pandemic's Long-Term Effects;
- Integration of Conflict Mitigation, Peacebuilding, and Social Cohesion; and
- Working Across the Entire Food System.

These pivots will facilitate the continuation and deepening of FtF's positive impact in Nepal, which was among the first strategic focus countries identified following FtF's launch in 2010. Between 2011-2022, FtF activities designed to impact target populations in the Zone of Influence (ZOI) invested over $172 million in food security programs and helped more than 800,000 Nepalis through improved agricultural productivity, increased sales, and enhanced nutrition. This contributed to poverty reductions of approximately 71 percent, and a 39 percent decrease in the prevalence of child stunting.[4] However, recent surveys indicate that these gains are backsliding, likely due to consecutive shocks like the COVID-19 pandemic, global price inflation sparked by the war in Ukraine, and an increased toll from climate change.[5] These

[1] U.S. Government Global Food Security Strategy 2022-2026

[2] FtF Multi Year strategy FY2011-2015

[3] Global Food Security Strategy (GFSS) Nepal Country Plan

[4] Feed the Future Nepal Zone of Influence Phase One Endline Assessment (2019)

[5] ICF. (2023). 2022 Feed the Future Nepal Phase Two Zone of Influence Midline Indicator Report. Reston, Virginia, and Washington, DC, USA: ICF. (forthcoming)

trends demonstrate that, in spite of significant accomplishments over the past 12 years of implementation, FtF remains critical to agricultural and food system transformation in Nepal.

A. Food Security and Nutrition Context in Nepal

A.1 Economic Context Overview

Nepal has enjoyed more than a decade of slow but steady economic development, with 4.4 percent average growth in gross domestic product (GDP) from 2011-2021. GDP growth peaked at 7.8 percent between 2017-2019, only to contract by -2.3 percent in 2020 due to impacts of the COVID-19 pandemic.[6] Originally expecting a rebound, the Government of Nepal (GON) later lowered annual growth projections for 2023 from 5.1 to 4.1 percent. Persistent inflation, which spiked after the Russian invasion of Ukraine and reached a high of 8.6 percent in September 2022, is a major factor tempering growth expectations. In spite of the Central Bank's efforts to control inflation through monetary policy, as of April 2023 it had remained above 7 percent for over a year.[7] Furthermore, Nepal qualified for graduation from a least developed to middle-income country in 2018. Although this would send a strong signal about Nepal's growth potential, in 2021 the country successfully petitioned to postpone graduation for the second time. In the request, the GON acknowledged stagnant gross national income per capita ($1,027) as a lingering impact of the COVID-19 pandemic. Factors such as these have contributed to uncertainty about whether Nepal can sustain its recent development trajectory, making it critical that FtF respond by doubling down on efforts to strengthen economic resilience.

A.2 Country Priorities

Following a decade of civil war from 1996-2006, Nepal ratified a new constitution in 2015. It unveiled sweeping political reforms, including a federalist structure of government that reorganized roles and relationships between three tiers of government authority at the federal, provincial, and municipal levels.[8] The new constitution enshrined Nepal's commitment to food security by establishing Nepalis' fundamental right to food, which was later formalized under the Right to Food and Food Sovereignty Act (2018), which frames the GON's legal responsibility to ensure food security for every citizen.[9]

[6] World Bank Development Indicators

[7] IMF Country Overview

[8] The Constitution of Nepal (2015)

[9] The Right to Food and Food Sovereignty Act (2018)

In tandem with GFSS, the Nepal Ministry of Agriculture and Livestock Development's (MOALD) Agricultural Development Strategy 2015-2035 (ADS)[10] aims to realize "a self-reliant, sustainable, competitive, and inclusive agricultural sector that drives economic growth and contributes to improved livelihoods and food and nutrition security." Like FtF, the ADS seeks to usher in a transformation of the agricultural sector that transitions Nepal's agriculture from a subsistence to a commercial basis.[11] The GON's commitment to create an enabling environment for agricultural transformation is also reflected in current efforts to revise the National Agriculture Policy and formulate a National Agriculture Bill. This legislation will realign Nepal's agricultural policies with the federalized structure of government and broaden the role of the private sector in agriculture value chains.

Nepal's Multi-Sector Nutrition Plan (MSNP) II (2018-2022), is another critical policy document that has shaped the environment for FtF in Nepal.[12] Developed by the National Planning Commission, it seeks to improve "maternal, adolescent and child nutrition by scaling up essential nutrition-specific and sensitive interventions and creating an enabling environment for nutrition." Development of MSNP III (2023-2030) is currently underway, and like the GFSS, it will feature an increased emphasis on strengthening systems to promote improved nutrition, equity, and resilience. Adaptation to the adverse effects of climate change is also a priority for the Government of Nepal. The country's National Adaptation Plan (NAP) sets out a framework for short, medium, and long term adaptation goals to address climate risks and vulnerabilities that threaten socioeconomic gains, agricultural production, and nutrition.[13] Together, the ADS, MSNP, and NAP are all reflected in the GON's 15th Periodic Plan (2019/20-2023/24), an overarching policy document which seeks to realize a vision of "Prosperous Nepal, Happy Nepali". [14]

The FtF interagency team in Kathmandu partners closely with the GON to implement the ADS, MSNP, NAP, and the 15th Periodic Plan, which are closely aligned with USG policies and strategies. This includes USAID/Nepal's Country Development Cooperation Strategy (CDCS), whose strategic goal is "a more self-reliant, prosperous, and inclusive Nepal that delivers improved democratic governance and health and education outcomes." One of the CDCS objectives is to foster broad-based economic growth by promoting inclusive, private sector-driven growth in agriculture, improving the business enabling environment, and integrating

[10] Nepal Agricultural Development Strategy (ADS) 2015-2035

[11] Government of Nepal, National Agricultural Policy 2061 (2004)

[12] Nepal Multi Sector Nutrition Plan II 2018-2022

[13] Government of Nepal, National Adaptation Plan (NAP) (2021-2050)

[14] Government of Nepal, National Planning Commission 15th Periodic Plan 2019/20-2023/24

marginalized communities into market systems. The CDCS also targets improved quality and access to health services (including nutrition), sustainable natural resource management, disaster risk management, and increased resilience of women, marginalized and vulnerable groups.

Meanwhile, Peace Corps Nepal's six-year (2021-2027) Food Security project seeks to facilitate a sustainable increase in agricultural productivity and diversification, agriculture-based income, and dietary diversity among smallholder farming households of rural communities. Peace Corps works closely with government line ministries and municipal governments in the design, implementation, and evaluation of the project. The U.S. Department of State advances FtF through the Indo-Pacific Strategy, which seeks to strengthen the region by making it more connected, prosperous, secure, and resilient. The U.S Department of Agriculture (USDA) participates in FtF through projects under the McGovern-Dole International Food for Education and Child Nutrition Program, Food for Progress, and the Scientific Cooperation Research Program (SCRP). The two McGovern-Dole projects focus on reducing hunger and improving literacy and primary education, by providing school meals, teacher training and related support, in a way that helps boost school enrollment, academic performance and children's health and learning capacity. The Food for Progress project seeks to strengthen productivity of the aquaculture sector by improving access to quality inputs, services, financing, and end-market linkages while utilizing climate smart technologies and expanding the trade of local aquaculture products. Finally, the SCRP supports joint research, extension, and education projects between U.S. and Nepal researchers.

A.3 Key Drivers of Poverty, Hunger and Malnutrition

Over the past 15 years, Nepal has achieved impressive reductions in poverty, lowering the headcount poverty ratio from 55.2 percent in 1995 to 8.2 percent in 2010.[15] The Multidimensional Poverty Index (MPI) headcount ratio has also decreased dramatically, from 59 percent in 2006 to 17 percent in 2019, representing just under five million people.[16] Much of this reduction in poverty is believed to have been driven by remittances, which accounted for 20.8 percent of Nepal's GDP in 2021/22, an increase of 4.8 percent over the previous year. [17] Other major MPI elements driving the reduction in multidimensional poverty include improved access to electricity and drinking water, increased school enrollment, and reductions in infant mortality. In spite of these achievements, disaggregated poverty statistics demonstrate

[15] World Bank, Poverty headcount ratio at $2.15/day

[16] Nepal Multidimensional Poverty Index Report 2021

[17] Nepal Rastra Bank Annual Report 2021/22

continuing geographic and demographic disparities. Multidimensional poverty in Nepal is predominantly rural, and highest in the provinces of Karnali (39.5 percent), Sudurpaschim (25.3 percent), and Madhesh (24.2 percent).[18] Gender, caste, and ethnicity-based social exclusions are deeply embedded in Nepali society and act as major determinants of poverty, hunger, and malnutrition. Historically marginalized groups like Dalit and Madhesi communities are among the poorest and most malnourished.

In terms of gender disparities, one indication of the systemic barriers to prosperity and independence for women is the divide in educational attainment, where 26 percent of women have had no formal education, more than triple the figure for men (8 percent.) [19] In Nepal, gender inequality is deeply entrenched in patriarchal sociocultural and legal traditions, with men taking a dominant role in both public and private spheres. Men have authority over a range of household decisions that affect women, including movement, reproduction, health care, and major purchases. Women are discouraged from participating in prominent positions of authority outside the home and are expected to bear the majority of unpaid domestic work, which limits their available time for socialization and opportunities to develop support networks. Among harmful traditional practices, women and girls experience *chhaupadi* (banishment during menstruation), child marriage, dowry, son preference, polygamy, discrimination against widows, accusations of witchcraft, and monastic separation. Almost a quarter of Nepali women report experiencing gender-based violence.

In spite of these challenges, Nepal has made steady progress combating hunger and malnutrition over the past two decades. Nepal's score on the Global Hunger Index has steadily improved from 37.4 in 2000 to 19.1 in 2022.[20] The Nepal Demographic and Health Survey (NDHS) found that 12.5 percent of the population had moderate or severe food insecurity in 2022, down from 32 percent in 2016.[21] A more recent survey conducted by the World Food Programme (WFP) found that 14.4 percent of the population was moderately or severely food insecure, and that more than 85 percent had an acceptable diet.[22] There are indications that improvements in food security reversed slightly in 2019/20 due to the COVID-19 pandemic. For example, USAID's FtF Population Based Survey found that moderate and severe food insecurity in the ZOI increased from 11.4 percent in 2019 to 14 percent in 2022. The effect was even more

[18] Nepal Multidimensional Poverty Index Report 2021

[19] Nepal Demographic Health Survey 2022, pg. 13, table 2

[20] Global Hunger Index Rankings Report

[21] Nepal Demographic Health Survey 2022

[22] FAO, *An Assessment of the Impact of the Global Crisis and Other Shocks on Household Food Security in Nepal* (2023)

pronounced among single female headed households, which experienced an increase of 4.5 percent[23]. Importantly, within the ZOI, household hunger varies more significantly by ethnicity and gender than by geography. For example, according to the 2022 NDHS, 67 percent of Brahmin/Chhetri women achieved minimum dietary diversity, compared to 43 percent of Dalits, 56 percent for Indigenous/Janajatis, and 49 percent for Madhesi women.

In the past two decades, Nepal has seen dramatic improvements in the nutritional status of the population. Among the most significant achievements, the rate of stunting in children under five, which reflects how well their needs are met for healthy growth, decreased precipitously from 57 percent in 2001 to 25 percent in 2022.[24] In the same time span, Nepal reduced child wasting from 11 to 8 percent, and underweight from 43 percent to 19 percent. Despite these advances, the prevalence of all forms of malnutrition remains high in relation to global targets, and roughly 52 percent of child deaths in Nepal remain associated with malnutrition.[25] Anemia is also a major nutritional concern, affecting 43 percent of Nepali children under five, and 34 percent of women of reproductive age. [26] Factors that contribute to the prevalence of malnutrition in Nepal include lack of maternal education, poor maternal nutrition status, infectious diseases, low dietary diversity, limited access to health services, unsafe water, lack of sanitation, and unhygienic behaviors.[27]

As with poverty, improvements in nutritional status have been markedly uneven, with significant disparities according to geography, socio-economic status, and caste/ethnicity.[28] The proportion of children who are stunted is highest in Karnali (36 percent) and Madhesh Provinces (29 percent). Wasting is highest in Lumbini (16 percent), followed by Madhesh (10 percent), which also has the lowest percentage of children fed an minimum acceptable diet (31 percent).[29] A secondary analysis of DHS data showed that the prevalence of stunting in 2016 was highest among children from the ethnicity categories Terai Madhesi (42 percent), Dalit (39 percent), and Muslim (38 percent), compared to 21 percent among Newar and 34 percent

[23]ICF. (2023). 2022 Feed the Future Nepal Phase Two Zone of Influence Midline Indicator Report. Reston, Virginia, and Washington, DC, USA: ICF. (forthcoming)

[24] Nepal Demographic and Health Survey 2022

[25] UNICEF, Unlocking Future Potential with Nutrition

[26] Nepal Demographic and Health Survey 2022

[27] Li et al., *Factors Associated With Child Stunting, Wasting, and Underweight in 35 Low- and Middle-Income Countries* (2020)

[28] Ghimire et al., *Inequalities in health outcomes and access to services by caste/ethnicity, province, and wealth quintile in Nepal* (2019)

[29] Nepal Demographic and Health Survey 2022

among Brahmin/Chhetri.[30] The MSNP's ambitious nutrition targets include a reduction in stunting below 14 percent by 2030.

In addition to the pernicious impacts of undernutrition, Nepal is witnessing a growing trend towards overnutrition, often associated with micronutrient deficiency. In 2022, the NDHS found that among adults aged 20-49, 34 percent of women and 32 percent of men were overweight or obese based on their BMI. That was up from 17 and 22 percent, respectively, in 2016.[31] Furthermore, the survey found that the prevalence of overweight or obesity increases with household wealth. Fifty-three percent of women in the highest wealth quintile are overweight or obese, as compared with 20 percent in the lowest. The emerging double burden of malnutrition is often attributed to increased exposure to unhealthy foods. For example, in 2022, more than half of all women were found to consume unhealthy foods, and the number rose above 70 percent for women between the ages of 15-19.

A.4 Major Constraints to Food and Agriculture Market Systems

Agriculture is a major economic driver, supporting the livelihoods of nearly two thirds of the population, and contributing 24 percent of GDP in 2022. However, Nepal is gradually transitioning away from an agrarian economy, with a 13 percent decrease in agriculture's contribution to GDP from 2012-2022. Meanwhile the contribution of the service sector increased from 45 to 62 percent. These figures indicate that structural transformations are already underway. At the same time, growth in the industrial sector is stagnant, generating some concern among economists that the nature of the current transformation will increase reliance on imports to meet demand for food and non-food goods[32]. Although the agriculture sector generated employment for one in five Nepalis in 2022, it remains oriented towards subsistence farming, with less than a quarter of producers selling commercially.[33] [34] Nepal's farming systems demonstrate low rates of technology transfer, including heavy reliance on traditional practices like livestock traction to clear land. Widespread utilization of low-yielding

[30] Karn et al., *Child Undernutrition and Feeding Practices in Nepal: Trends, Inequities, and Determinants*. DHS Further Analysis Reports No. 122 (2019)

[31] Nepal Demographic and Health Survey 2016

[32] MoF Economic Survey 2021/2022

[33] National Labour Force Survey 2017/2018

[34] Agriculture Development Strategy 2015-2035

varieties is reflected in seed replacement rates of 18 percent for rice, and 15 percent for maize and wheat in 2019. [35]

Arable agricultural land covers around 28 percent of Nepal, but only 21 percent of total land is cultivated.[36] At the same time, the country is experiencing a trend towards land abandonment, catalyzed by the ten-year civil war, urbanization, and out migration.[37] [38] The limited availability of additional agricultural land means that net gains in agricultural productivity must be driven by sustainable intensification rather than extensification. Agricultural productivity has been gradually increasing. However, in terms of total factor productivity, the country still lags behind neighbors like India and Sri Lanka, as well as averages for South Asia.[39] Similarly, average cereal crop yields fall below those of regional neighbors. Major binding constraints on agriculture-led growth in Nepal include land fragmentation and degradation, the disenfranchisement of women, labor shortages, heavy import dependence, weak penetration of extension services, knowledge gaps related to business skills, agronomy and natural resource management, a lack of key infrastructure, particularly for irrigation and marketing, and a policy enabling environment that is not sufficiently conducive to investment.

Increasing land fragmentation, propelled by Nepal's inheritance system, is one of the major challenges to agriculture-led growth. Average land holdings are just 0.68 hectares, and smallholdings of less than 0.5 ha comprise 53 percent of all plots.[40] This makes it difficult for farmers to achieve the scale required for successful commercial agriculture, and costly to adopt technological innovation like mechanization or land improvements. This, in turn, accelerates soil quality degradation and undermines stewardship and sustainable natural resource management. Land holdings by women account for just 19 percent, yet 75 percent of women work in agriculture, often as unpaid family laborers.[41]

Over the past few decades, Nepal's agriculture sector has undergone a dramatic shift towards increased reliance on women's labor. Overseas labor migration is the major driver of this trend,

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[35] Nepal Seed Sector Overview in the Context of Nepal Seed Vision 2013-2025

[36] Statistical Information on Nepalese Agriculture 2077/2078

[37] Subedi et al., *Agricultural Land Abandonment in the Hill Agro-ecological Region of Nepal: Analysis of Extent, Drivers and Impact of Change* (2021)

[38] Nepal Labour Migration Report 2022

[39] USDA, Agricultural Productivity Index (2020)

[40] Nepal Central Bureau of Statistics, Nepal Statistical Yearbook 2021

[41] FAO, Country Gender Assessment of Agriculture and the Rural Sector in Nepal (2019)

and it is estimated that fewer than 10 percent of Nepalis working overseas are women.[42] However, the percentage of women who work in agriculture peaked in 2005 and has been slowly decreasing since.[43] Some factors that may account for this are increased opportunities for economic diversification for women, as well as an uptick in female migration, both overseas and urban. Although an increasing number of women have taken on day-to-day autonomy of production decisions and control over resources, few women, particularly those from disadvantaged groups, are visible at higher levels in the value chains. Women face discrimination in access to agricultural extension and financial services, social prejudice, lower trust, and often do not receive prompt payment based on fair prices.[44] Women's Empowerment in Agriculture results from the 2019 FtF Population Based Survey (PBS) endline assessment[45] identified group membership, workload, and access to and decisions on credit as the top three constraints to women's empowerment. Without deliberate efforts to empower and engage women in more profitable business opportunities, they will remain in the lower nodes of the value chain, constraining Nepal's opportunities for agriculture-led growth. Although many rural Nepali women have micro-enterprises, their businesses are typically not registered, and they have limited control over productive assets, which impacts their ability to access finance and other business development services. Finance firms often consider smallholder women entrepreneurs as high risk, which translates to high interest rates for financing and overall higher transaction costs.

Limits on farmers' access to agricultural finance is another major constraint. Although the Central Bank proactively mandates that 10 percent of commercial banks' loan portfolio be allocated to agricultural ventures, low capital expenditure rates and slow public sector investment in infrastructure projects, such as roads and irrigation, impede agricultural growth and limit opportunities to attract more private investment.[46] Declining competitiveness, unpredictable trade flows, and policy vacuums limit public and private investment, slow the growth of agricultural GDP per capita, and hinder structural transformation of the economy. Low returns to factors of production (land, labor, and capital) deter investments in larger-scale or higher-value agriculture.[47]

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[42] Nepal Labour Migration Report 2022

[43] World Bank, Employment in Agriculture, Female, in Nepal (% of female employment)

[44] Nepal Labour Migration Report 2022

[45] Feed the Future Nepal, Zone of Influence Phase One Endline Assessment Report

[46] Nepal Rastra Bank, Monetary Policy for 2022/23

[47] Asian Development Bank Nepal Key Indicators Database

Lack of irrigation facilities is also a crucial impediment to agricultural development. More than 50 percent of Nepal's agricultural production is rainfed, and a recent report estimates that 70 percent of crop productivity is determined by climatic factors. [48] [49] The monsoon season lasts only three months and accounts for 80 percent of annual precipitation, making a lack of water storage and irrigation systems one of the most significant bottlenecks to improved agricultural productivity.[50] Furthermore, much of the water withdrawn by agriculture is also lost in evaporation and transpiration, due to inefficient water management, infrastructure, and conservation. Other major infrastructural constraints include low penetration of cold chain / cold storage facilities (exacerbated by an unreliable power supply in some areas), inadequate market infrastructure, and only one accredited food safety laboratory, the National Food and Feed Reference Laboratory in Pokhara.

Weak linkages within agricultural value chains also create challenges, from production to processing. While there is variation across value chains, overall around a quarter of Nepali producers engage in commercial farming, and the remainder are subsistence farmers.[51] Many farmers that do operate on a commercial basis have limited business skills.[52] A lack of market information, combined with highly volatile farmgate prices hinder smallholder farmers from making informed decisions about what to produce, how much to supply, and how to set costs.[53] Buyers also face unreliable and unpredictable supplies and incur high transaction costs when procuring small lots from scattered farms because of inadequate collection, storage, and processing points.[54]

Owing to low productivity and supply constraints that reduce the availability of inputs, Nepal has become increasingly unable to meet its own food demands and more reliant on agricultural imports. In FY 2021/22, the total trade deficit increased 23 percent year on year (to roughly $13 billion), after increasing 27 percent in the previous year. The export-import ratio increased from 9.2 percent to 10.4 percent in the FY 2021/22.[55] Major agricultural imports from India, Nepal's

[48] Climate and Development Knowledge Network, Economic Impact Assessment of Climate Change in Key Sectors in Nepal (2014)

[49] Nepal ADS 2015-2035

[50] World Bank, Employment in agriculture in Nepal (% of total employment)

[51] Nepal ADS 2015-2035. Note: Staple commodities such as rice, wheat, potato and vegetables have higher commercialization rates (30-50%) than maize and fruits (15-25%). Commercialization rates are high for milk (60%) buffalo meat (80%) and goat meat (85%) reflecting the high value of these products.

[52] Basnett et al., *Structural economic transformation in Nepal* (2014), pg. 51

[53] Nepal ADS 2015-2035, pg. 116

[54] USAID/Nepal Private Sector Engagement Assessment - Agricultural Sector (2015)

[55] Nepal Rastra Bank, Current Macroeconomic and Financial Situation in Nepal

largest trade partner, have increased six-fold in a decade, going from around $180 million in 2011/2012 to over $1 billion 2021/2022.[56] The COVID-19 pandemic particularly accelerated Nepal's growing reliance on imported rice from India. Nepal imported 1.4 million metric tons of non-basmati rice from India in 2021/2022, valued at nearly $450 million, an increase from 141,000 metric tons worth $42 million just a decade earlier. [57] Trade restrictions such as India's ban on wheat exports in 2022, followed by a brief ban on rice later in the year, had serious economic consequences in Nepal. Although millers, processors, feed companies and consumers rely heavily on Indian grain imports to meet their needs, the volatility of agriculture trade flows with India act as a deterrent for domestic investment. Since Nepal is landlocked, it also depends heavily on imports to meet demand for key agricultural inputs, especially fuel and fertilizers, which are primarily supplied by India. Complex procurement and distribution systems and global price volatility in these markets also make this a vulnerability for Nepali agriculture. In particular, fertilizer shortages are a perennial constraint.

A food regulation, food standards, and food safety policy and framework exists in Nepal. However, the enforcement of regulations, laws, and policies is lacking, so that food moving along the supply chain is highly susceptible to contamination and spoilage. This contributes to a high incidence of foodborne diseases that undermine nutrition and health. Aflatoxin contamination is a particular concern. A study of food-borne bacterial pathogens in marketed raw meat in Eastern Nepal found a range of pathogens, including Coliforms in 84 percent of samples, along with other harmful bacteria such as S. aureus, Salmonella, Shigella, and Vibrio, and P. aeruginosa.[58] At the same time, as much as 50 percent of all Nepali produce is estimated to spoil before it ever reaches consumers.[59] Besides taking a heavy financial toll on Nepali fruit and vegetable farmers, this spoilage dramatically reduces the availability of nutritious foods in local, national, and regional markets. Critical investments in infrastructure and market systems that safeguard agricultural commodities post-harvest are needed to ensure that fresh produce reaches markets in a timely and sanitary manner.

Weak agricultural extension services are also a major constraint that stymies innovation, capacity building, and technology adoption that could improve the performance of the agriculture sector. GON's transition to federalism interrupted extension service provision by restructuring the system under the direction of Agricultural Knowledge Centers, which are located in district capitals that are often very distant from the farmers they are intended to

[56] AgriExchange, Agricultural and Processed Food Products Export Development Authority of India

[57] Ibid.

[58] Bantawa et al., *Food-borne bacterial pathogens in marketed raw meat of Dharan, eastern Nepa*l (2018)

[59] Bhattarai, *Postharvest horticulture in Nepal* (2018)

serve. One review conducted in 2018 found that each agricultural technician in Nepal would need to cover a catchment of 1,500 farmers.[60] The dearth of extension services is exacerbated by significant knowledge gaps related to agricultural science, financial literacy, business, and marketing that are critical to farmers' commercial success. Agricultural educational outlets do exist; however, the associated curricula are often out of date, and the employment market for technicians is grossly underdeveloped. Among higher education institutions in Nepal, the Agriculture and Forestry University (AFU) is the only one with an explicit technical focus on agriculture. A Human and Institutional Capacity Development analysis of AFU in 2018 demonstrated that specific obstacles to student success there included poor infrastructure, low faculty morale, and high graduate unemployment rates. The researchers noted these challenges in addition to critical topics affecting all higher education institutions in Nepal, such as rapid enrollment, under-financing, low managerial capacity, structural issues, and erosion of quality curricula. Women and farmers and entrepreneurs from indigenous communities are particularly disadvantaged by a lack of familiarity communicating in Nepali.

A.5 Risk and Resilience Context

With nearly 21,000 natural shocks recorded in the last five years, Nepal is one of the most hazard prone countries in the world. Since 1970, there have been more than 40 earthquakes above 4.5 on the Richter scale. Nepal is also prone to weather-related natural hazards, including floods, landslides, avalanches, forest fires, droughts, and glacial lake outburst floods. Annual flooding affects an estimated 157,000 Nepalis, with an annual impact on GDP of $218 million.[61] These weather-related hazards, which are increasing in frequency and severity due to climate change, negatively impact food security by damaging agricultural lands and critical market infrastructure, and by increasing soil erosion and the incidence of pests and diseases. Increasing heat intensity and rainfall variability has resulted in prolonged dry spells and droughts in certain regions, even during the monsoon. Weather variability, and a lack of climate information services like early warning systems, crop monitoring, and advisory systems, pose a significant threat to agricultural livelihoods and food security because these factors constrain farmers' ability to predict and plan for climate shocks. Climate change has also contributed to an increase in the risk of forest fires, which destroy an average of 400,000 hectares of forest area annually across the country.

A high prevalence of hazards coupled with the limited absorptive capacity makes Nepali communities particularly vulnerable to natural disasters, and repeated exposure has gradually

[60] Global Sustainable Research and Development Center, *Operation of Community Agriculture Extension Service Center and its Management* (2018)

[61] World Bank and Asia Development Bank, Climate Risk Country Profile: Nepal, pg. 12

eroded community resilience. One indication from a 2022 midline survey of the ZOI population found that index scores measuring respondents' perceived ability to recover from shocks and stresses had decreased significantly, with the most substantial reductions measured in the poorest wealth quintile and in the terai agro-ecological zone.[62] Furthermore, the survey found that only a quarter of respondents had obtained some type of insurance to mitigate impacts of shocks and stresses. Of those that did, the vast majority was health or life insurance. Only 17.5 percent obtained insurance for livestock and none of those surveyed had coverage for crop losses.[63] In the context of households with decreasing coping capacity, GON disaster risk management capacity is meanwhile also constrained by overlapping authorities and an unclear division of disaster risk management responsibilities under the new federalist structure of government. The FtF midline survey found that between 2019-2022, the percentage of households that believe local governments will help them cope with future shocks and stresses had decreased significantly from 95 to 55 percent.[64]

Nepali women in particular face higher risks related to natural disasters, often stemming from their heavy workload, both at home and in the field. Burdensome responsibilities often prevent women from participating actively in community disaster risk reduction activities and decision-making processes. As a result, their needs and voices are often overlooked. Literacy gaps, limited control over resources, and the simple fact that they are more likely to be in or near the home when a disaster strikes may also contribute to their heightened vulnerability to disasters. Finally, outright discrimination may also play a role. This might be a product of intra-household family dynamics or exclusion from disaster relief activities that is reinforced by social taboos that restrict women's freedom to express their needs to exogenous disaster preparedness and humanitarian workers in times of crisis. From an intersectional lens, poverty and caste also conspire to exacerbate disaster vulnerability, particularly because people from poor and marginalized households are most likely to occupy marginal lands that are generally more vulnerable to threats like floods and landslides.

Nepal's water sector faces challenges in quantity, quality, and reliability, compounded by substantial threats to water resources and human health posed by climate change. Changing rainfall patterns, temperature profiles, and climate-induced disasters are leading to the depletion of spring water sources, the primary source of drinking water in the mid hills, where

[62]ICF. (2023). 2022 Feed the Future Nepal Phase Two Zone of Influence Midline Indicator Report. Reston, Virginia, and Washington, DC, USA: ICF. (forthcoming)

[63]ICF. (2023). 2022 Feed the Future Nepal Phase Two Zone of Influence Midline Indicator Report. Reston, Virginia, and Washington, DC, USA: ICF. (forthcoming)

[64]ICF. (2023). 2022 Feed the Future Nepal Phase Two Zone of Influence Midline Indicator Report. Reston, Virginia, and Washington, DC, USA: ICF. (forthcoming)

discharge has declined over 30 percent in the last 30 years. [65] The agriculture sector is the major consumer of freshwater with 96 percent of the total consumption, while just under four percent is used for domestic purposes and the remainder is used by the industrial sector. [66] In 2007, Nepal was classified as experiencing "economic water scarcity" due to lack of investment and human and institutional capacity to plan and manage water supply in order to satisfy the demand.[67] Diminishing surface and underground water resources are also critical threats to Nepal's food security.

A.6 Partnership Landscape

FtF Nepal has prioritized close partnership with stakeholders across the ZOI that includes donors, the GON, and private sector partners. There are at least 11 agriculture and food security activities in the FtF ZOI sponsored by other bilateral and multilateral donors and the GON. Among the most relevant to the GFSS is the GON's $1 billion, 10-year flagship Prime Minister Agricultural Modernization Project (2016-2026). Its objective is to boost agricultural productivity and improve agriculture value chains through enhanced productivity and commercialization of major cereals, fisheries, fruits, and vegetables. Other activities implemented by the GON with donor support include the Agricultural Sector Development Program and the Value Chains for Inclusive Transformation of Agriculture Program, both International Food and Agriculture Development-funded; the World Bank-managed Food and Nutritional Security Project; the World Bank-funded Rural Enterprise and Economic Development Project; and the Rani Jamara Kulariya Irrigation Project. Most of the offices and directorates of the national, provincial, and municipal government in the ZOI have their own agriculture and food security priorities and activities. Where possible, FtF will leverage funds for agriculture and nutrition activities from grants administered by local government units. These funds are frequently underutilized and can bolster agriculture, health, forestry, and education programs.

The FtF interagency team works closely with MOALD, the Ministry of Health and Population (MOHP), and National Planning Commission (NPC), including provincial directorates and district offices, to support local implementation of food security and nutrition programs. To ensure the development and dissemination of productivity enhancing technologies, FtF Nepal will coordinate with FtF Innovation Labs, centrally funded research programs, international and regional research organizations, the Nepal Agricultural Research Council, agricultural

[65] NAP, pg. 30

[66] Climate Adaptation and REsilience for South Asia Project, W*ater Sector Policies and Guidelines of Nepal Review Report* (2021)

[67] International Water Management Institute, *Water for Food, Water for Life* (2007)

universities, and other technology scaling actors, which include private sector firms and extension agencies. In pursuit of improved nutrition, FtF partners with hygiene workers, community health workers, female community health volunteers, mother's groups, and other civil society associations and local non-governmental organizations.

Over the course of FtF implementation in Nepal, partners engaged in food security and nutrition policy and programs have been gradually coalescing around the concept of *Food Systems Transformation* as an organizing conceptual basis for cross-sectoral collaboration and action. This lens for examining relationships between "the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products," takes a broad view of the systemic relationships that link outputs from one part of the system and their role as inputs into other parts. In preparation for the United Nations Food Systems Summit in 2021, Nepal's National Planning Commission organized a series of Food Systems Dialogs in Nepal, which aimed to identify actions, synergies and trade-offs that could contribute to more equitable, resilient and sustainable food systems.[68] This effort resulted in the articulation of six discrete action tracks, which are aligned with the achievement of the 2030 Sustainable Development Goals.[69] While the action tracks do not align perfectly with the FtF results framework, each entails significant intersection with FtF goals. As such, the Food Systems Dialog serves as an important backdrop for FtF partner engagement in Nepal.

As part of the consultation and planning for Nepal's GFSS Country Plan 2024-2028, the USG co-sponsored a two-day multi stakeholder workshop with over 100 food security and nutrition stakeholders from GON, civil society, farmer cooperatives, and the private sector. This group agreed on five priority recommendations to address hunger, malnutrition, and poverty in Nepal:

1. Develop a food systems approach;
2. Prioritize agricultural digitalization;
3. Expand FtF's focus to a wider range of value chains;
4. Increase targeted funding for women farmers and entrepreneurs;
5. Strengthen evaluation metrics, with more emphasis on impacts; and

[68] National Planning Commission, Nepal's Food Systems Transformation: Context, Pathways, and Actions (2021)

[69] Nepal food system transformation: context, pathways and action: outcomes of the National and Provincial Food Systems Dialogues as a part of the UN Food Systems Summit 2021. The six action tracks are: 1) Ensure access to safe and nutritious food for all; 2) shift to sustainable consumption patterns; 3) boost nature-positive production at scale; 4) advance equitable livelihoods; 5) build resilience to vulnerabilities, shocks and stresses, and 6) the right to food and food sovereignty.

6. Enhance emphasis on building the capacity of extension services.

These priorities also align with USG and FtF approaches and have been incorporated into the Targeting and Program Components of the Country Plan.

B. Targeting

B.1. Demographic Overview

According to the Nepal Census 2021, the country is now home to nearly 30 million people, a 10 percent increase in the last decade, with 67 percent living in urban municipalities, up from 63 percent.[70] Across three distinct agro-ecological belts spanning the country from east to west, six percent live in the mountains, 40 percent in the hills, and for the first time, a majority (54 percent) now live in the Terai, the wide swath of agriculturally fertile plains in southern Nepal that run the width of the country along the border with India. [71] The Terai constitutes around 23 percent of Nepal's land area and around 56 percent all arable land. This population shift into the Terai is driven by a variety of factors, notably, urbanization, increased trade, and economic integration with India, coupled with growing disaster risks and a lack of broad-based economic opportunities in the hills and mountains. Although Nepal's overall population has been increasing for several decades, in 2021, the census reported a slightly decreasing annual population growth rate of 0.93. This reduction was precipitated by factors like a higher cost of living, increased parental employment, improved literacy, and wider access to birth control. Average family sizes are now 4.3 people, down from 4.8 a decade earlier.

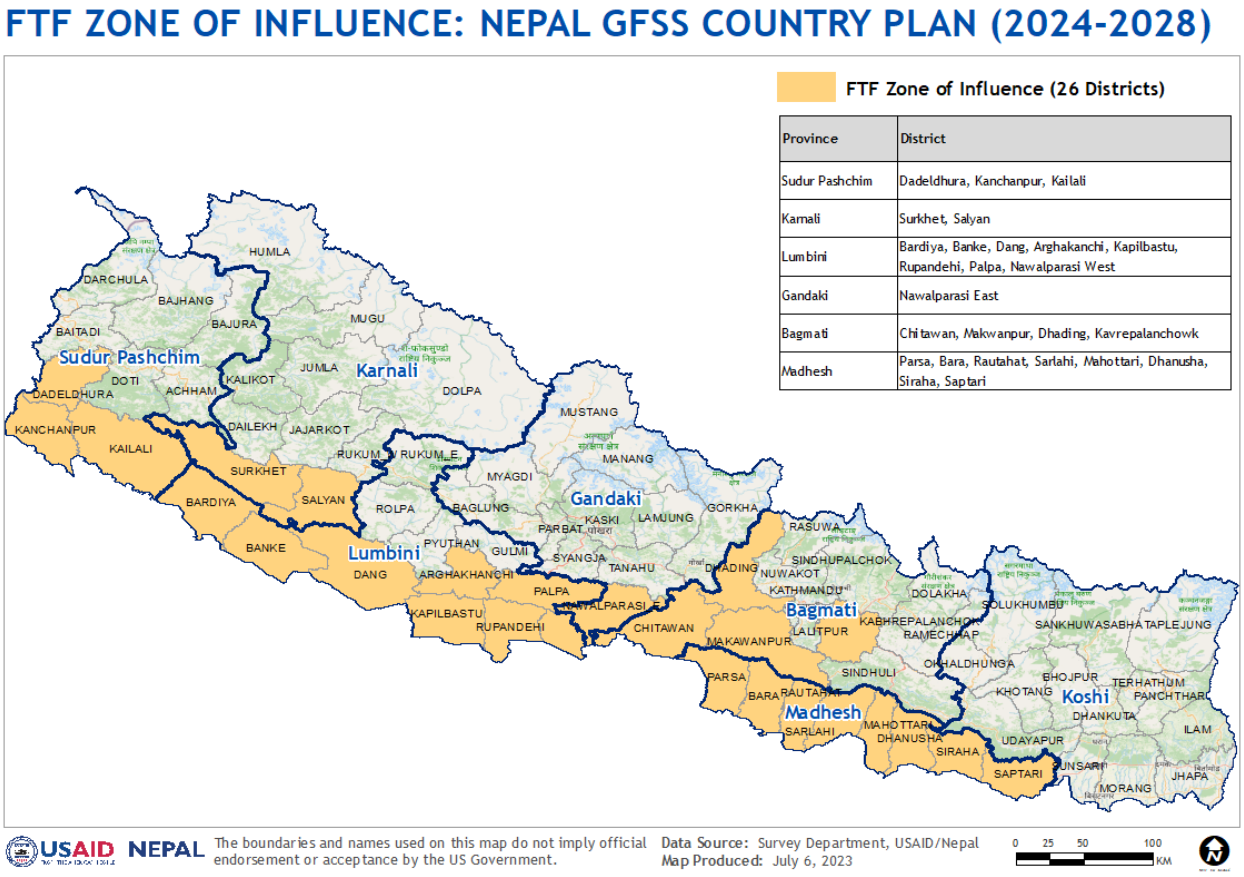
B.2 Targeted Districts and Populations

The GFSS Nepal Country Plan 2024-2028 establishes a new ZOI boundary designed to optimize the impact of FtF investments. The new ZOI includes 13 districts covered in the previous version of the plan, removes 12 districts, and adds 13 new ones, creating a contiguous area of 26 districts, covering most of the Terai, and a selection of hill districts in Sudurpaschim, Karnali, Lumbini, Gandaki, Bagmati, and Madhesh provinces. According to the most recent census data, nearly 15 million people live within this geographical area, representing just over half of the population of the country (51.2 percent). Around 49 percent are male, and 51 percent are female.

[70] Nepal Census Report 2021

[71] Observer Research Foundation, New census data creates ripples in Nepal (2023)

B.3 Map of Zone of Influence



The table below presents the districts included in the ZOI, arranged by province. The proportion of the provincial population represented by selected ZOI districts is shown in parentheses.

Table 1: List of Provinces and Districts in the ZOI

Provinces & Proportion of Population in ZOI	Districts
Sudurpaschim / Province 7 (58%)	Dadeldhura
	Kanchanpur
	Kailali
Karnali / Province 6 (39%)	Surkhet
	Salyan

Provinces & Proportion of Population in ZOI	Districts
Lumbini / Province 5 (85%)	Bardiya
	Banke
	Dang
	Arghakanchi
	Kapilbastu
	Rupandehi
	Palpa
	Nawalparasi West
Gandaki / Province 4 (15%)	Nawalparasi East
Bagmati / Province 3 (31%)	Chitwan
	Makwanpur
	Dhading
	Kavrepalanchowk
Madhesh / Province 2 (100%)	Parsa
	Bara
	Rautahat
	Sarlahi
	Mahottari
	Dhanusha
	Siraha
	Saptari

B.4 Primary Targeting

The first stage of data analysis for ZOI targeting involved consideration of data representing three separate domains:

- Opportunity for Agriculture-led Growth
- Level of Need
- Contextual Drivers

Thematically, the first two dimensions broadly reflect GFSS objectives related to agriculture-led growth and nutrition, while the resilience objective is represented by data spanning across all themes.

In the Opportunity for Agriculture led Growth Category, the analysis was shaped by datasets related to:

- Farming System Characteristics [72]
- Aggregate Yield Achievement Ratio[73]
- Land Cover (% cropland)[74]
- Market Access (places near to cities but not cities themselves) [75]
- Ecological Zone (Terai highest, then hills, then mountains)[76]
- Exposure to Multi-Hazards[77]

The Level of Need Domain was shaped by data related to

- Incidence of Multidimensional Poverty [78]
- Stunting rates [79]
- Prevalence of Poor and Borderline Food Consumption[80]

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[72] FAO and World Bank. Summary: Farming Systems and Poverty: Improving Farmers' Livelihoods in a Changing World

[73] FAO and IIASA. Global Agro Ecological Zones version 4 (GAEZ v4). Accessed 6/1/2023

[74] Department of Survey Nepal, Digital polygon data of Geographic regions of Nepal

[75] Weiss et al., *Global maps of travel time to healthcare facilities*. Nature Medicine 26, 1835–1838 (2020)

[76] Department of Survey Nepal, Digital polygon data of Geographic regions of Nepal

[77] Rieger, *Multi-hazards, displaced people's vulnerability and resettlement: Post-earthquake experiences from Rasuwa district in Nepal and their connections to policy loopholes and reconstruction practice* (2021)

[78] Nepal Multidimensional Poverty Index 2021

[79] Nepal Demographic and Health Survey Key Indicators Report 2022

[80] World Food Programme. *Impact of Current Shocks on Household Food Security in Nepal: Sixth Round of mVAM Household Livelihoods, Food Security and Vulnerability Survey* (2022)

Among contextual drivers, the geospatial analysis included parameters related to:

- Population Density[81]
- Prevalence of Drought
- Climate Vulnerability[82]

In terms of balancing the agricultural opportunity domain against level of need, the analysis ascribes a 75 percent weight to the Agriculture Opportunity domain. This decision aligns with the intention to design and implement FtF activities that emphasize agricultural transformation as a key driver for broader food system transformation. The weighting also helped to ensure that the ZOI selection targets areas of higher population density and maximizes zones where FtF investments can expect to have a better return on investment, given the level of market and connective infrastructure, the opportunity to enhance existing GON programs, and a greater prevalence of needs that FtF can reasonably expect to meet sustainably.

B.5 Secondary Contextual Considerations

Based on the initial map developed through geospatial analysis, other considerations that factored into the determination of which districts to include in the ZOI were:

- Partnership opportunity;
- Market systems development potential;
- Sustainability, scalability, and prior experience; and
- Right sizing for relevance to current and planned FtF activities.

In terms of partnership opportunities, one of the main considerations was building on two-way opportunities to support GON flagship agricultural development programs like the PMAMP. Suitability for Private Sector Engagement (PSE), and the availability of established market systems actors such as millers, processors, and agricultural input suppliers (agrovets) was also a key consideration, which links to the second factor, potential for market systems development (MSD). Since a majority of FtF activities adopt a "facilitative" MSD approach that works with market actors across the food system rather than through direct engagement with farmers, it was essential to establish a zone of influence that can leverage the proliferation of nascent micro, small, and medium enterprises (MSMEs) operating across the Terai and in districts surrounding Kathmandu. The MSD approach ties in directly with sustainability, since strengthening public and private sector engagement in market systems helps to sustain economic growth and build self-reliance. Enhancing the resilience of market systems also

[81] Nepal 2021 Population and Housing Census Support Project Report

[82] BIPAD Portal, Data Visualization of Climate Vulnerability

creates an exit strategy for FtF activities by contributing to an inclusive food system that is better positioned to sustain a reliable supply of nutritious food and accessible livelihood opportunities. The concepts of rightsizing and building on prior experience also had a major influence in shaping changes to the ZOI. Historically, FtF has focused on the expansion of commercial farming and food-based enterprises. The districts included in the new ZOI were selected to facilitate this focus.

B.6 Right Sizing

In consideration of rightsizing, districts from Koshi province were not included in the ZOI, despite having some similarities to targeted areas in terms of level of need and degree of opportunity for agriculture-led growth. Additionally, some of the areas where FtF activities have had the least engagement over the course of FtF implementation were removed from the map. This mainly includes 10 mid-hill districts in the western provinces of Sudurpaschim, Karnali and Lumbini. Given the persistence of multidimensional poverty and malnutrition, especially in the more isolated parts of these districts, this was not an easy decision. However, the move into areas of greater opportunity for agriculture led growth will facilitate the piloting and packaging of sustainable market systems approaches that can be adapted and replicated for the benefit of these hard-to-reach areas. It will also improve FtF activities' ability to engage with emerging public and private sector actors to develop transformative private sector-led approaches that can be scaled outward. Given the intention to expand into Madhesh province (see below), removing districts from the previous ZOI helps to limit FtF's geographic footprint and focus benefits across a broader population catchment. Declining population density nearing the mountains, combined with the magnitude of infrastructure investment needs there, significantly increases the cost of operations and reduces the scale of impact. Instead of working in high-need hill and mountain districts where a number of other donors and humanitarian partners are operational, FtF will balance eastward expansion into Madhesh with a tightened geographical focus in the western provinces. Some of the concerns about exiting certain districts can be offset by the concept of "Windows of Opportunity", described below, which encourages innovative investment outside of the geographic and value chain targeting approach defined in this Country Plan.

B.7 Justification for ZOI Expansion

Overall, the geographic expansion of the ZOI involves a substantially larger population catchment than the previous version, with an increase in the percentage of the population living in the ZOI from 29 to 51 percent. However, it must be noted that FtF activities are not designed to comprehensively reach all members of the population within a certain geography,

so these figures are not truly representative of the scale of FtF's direct impact. At the same time, the increased population density will significantly reduce the transaction cost of activities in the new ZOI as compared to the old one, allowing FtF investments to reach more people per dollar spent. This has the added benefit of making a more compelling rationale for the private sector to invest funds that FtF agencies can leverage for greater impact and sustainability. Successfully increasing the number and diversity of non-traditional partners, the amount of leverage funds, and planning for the handover of FtF activities to public and private sector partners for expansion are all critical strategic pivots for achieving impact at scale across this broader geography.

Madhesh Province: A decision to move the FtF ZOI into all eight districts of Madhesh province was driven by the high level of need, coupled with a high potential for agriculture-led growth. Madhesh is a Terai province that runs horizontally along Nepal's southern border. It constitutes around 21 percent of the total population of Nepal but only 6.5 percent of the land area, and contributes 20 percent of national cereal grain production, the second highest of any province.[83] [84] Madhesh faces a history of social, economic, and political marginalization, ethnic discrimination, and the relatively strong legacy of a caste system that Nepal formally dismantled in 1963 but continues to have a pervasive influence. This has resulted in a high degree of deprivation, social exclusion, and weak political integration for the people of the province. For example, Madhesh also contains the highest number of people who are multidimensionally poor, the lowest rates of literacy, and the second highest prevalence of wasting among children under five, a primary measure of acute malnutrition.[85] [86] By almost every measure of deprivation, Madhesi Dalits and Madhesi other castes have the most unequal access to the kinds of support they need for successful economic development.[87] The province has the lowest economic growth rate (4.82 percent) and the lowest GDP per capita ($868) among all of the seven provinces of Nepal. [88]

In spite of this, Madhesh has immense potential for agriculture-led growth due to its geographical accessibility and abundance of fertile arable land. It is the second largest and fastest growing province of Nepal, and agriculture constitutes 34 percent of the province's contribution to GDP–10 percent higher than the national average. Roads and transportation

[83] Statistical Information on Nepalese Agriculture 2020/2021

[84] Nepal Statistical Yearbook 2021

[85] Nepal Multidimensional Poverty Index 2021

[86] NDHS 2022

[87] Central Department of Anthropology, Tribhuvan University, State of Social Inclusion in Nepal 2018

[88] Government of Nepal, Ministry of Finance Economic Survey 2022

networks are well established there, and it has significant irrigation potential. The Inclusion of Madhesh province within the ZOI aligns with USAID/Nepal's ambitions to work cross-sectorally across the province, and it shows great potential for FtF to contribute to market systems development by engaging with farmers, agro-processors, and MSMEs. In particular, federalism has opened new opportunities to collaborate with political and market actors in Madhesh, by increasing autonomy to plan and budget according to local priorities, and creating an environment that encourages more private investment.[89]

Madhesh province has the highest levels of migration nationwide, although proportionally the lowest number of permits granted to women–less than 2 percent in 2021/2022.[90] This situation reflects strict cultural norms that discourage women from migrating. It often results in married women whose husbands are working abroad being confined to the houses of their in-laws, where they may suffer from discrimination and a lack of autonomy. Overall, the remittance economy has widened opportunities for consumption and investment and offers a potential for increasing outreach and engagement to women as market actors. Furthermore, there is potential to attract young people in agricultural businesses who have returned from abroad with capital, motivation, confidence, and advanced technological knowledge. USAID's promotion of returnee youth as machinery service providers in rural communities provides a successful example of this approach. The credit flow from banks and financial institutions to the agricultural sector of Madhesh stands over $400 million as of 2022/23, 12.6 percent of the total loan investment there.

Bagmati Province: Following the massive earthquake in 2015, FtF agencies agreed to expand the ZOI to include four earthquake-affected districts in Bagmati province. This sub-zone included hilly and mountainous areas surrounding the Kathmandu Valley where the effects of the earthquake were more acute. Today, this area remains the fastest growing urban population hub in the country. In the period since the earthquake, reconstruction and recovery efforts have mostly concluded or abated, making it less critical to maintain these districts within the ZOI strictly from a level of need perspective. However, FtF engagement with producers, marketers, and entrepreneurs in these densely populated peri-urban districts surrounding the Kathmandu valley proved to be a fruitful opportunity to engage and incubate ideas for scaling to other parts of the country. Given the rapid growth of subnational metropolitan and sub-metropolitan population hubs across the Terai, (for example, Dhangadi, Bhutwal, Birgunj) the interagency FtF team decided to include four peri-urban districts from Bagmati province that

[89] Khan et al, *Challenge of Inclusive Federalism in Nepal: A Political Settlements Analysis of Madhesh Province* (2022)

[90] Nepal Labour Migration Report 2022

provide a high degree of opportunity to enhance, learn, and build on market-led agricultural development processes that enhance access to and availability of nutritious foods. These areas are also particularly suitable for greater investment in the development of digital solutions that streamline innovations across the food system.

The new targeted area includes two earthquake-affected districts in the original selection: Makwanpur and Kavrepalanchowk, as well as two new districts: Dhading, and Chitwan. Taken together, these four districts account for nearly 13 percent of the total population of the country. Meanwhile, Nuwakot and Sindhupalchok were removed because they are less densely populated and offer fewer opportunities to build on market system innovations. Adding Chitwan is an important pivot because it serves as a regional market hub for adjoining districts like Makwanpur, Nawalparasi, and Parsa, thereby linking eastern and western Nepal with Kathmandu markets. Its inclusion offers the additional benefit of being home to AFU, Nepal's only technical higher learning institution dedicated to agriculture. Meanwhile Makwanpur has emerged as an important locus for off-season vegetable production and commercialization approaches that can be replicated to other areas of the ZOI. Lastly, the inclusion of Makwanpur, Chitwan and Nawalparasi create a continuous geographic shape that facilitates the two-way east-west flow of FtF approaches across the ZOI.

B.8 Other Targeting Considerations

Windows of Opportunity: In an effort to provide greater flexibility for FtF programming, encourage innovation, and address the needs of populations living outside of the ZOI, FtF will broaden its geographic focus to seize on windows of opportunity in geographies across the country. The FtF steering committee proposes to allocate roughly 20 percent of FtF funding for these windows of opportunity located outside of the ZOI. This includes areas that were removed from the last iteration of the ZOI map, as well as hill and mountain districts where humanitarian actors have traditionally been more active. It also includes Koshi Province, where there is a considerable scope for investing in new value chains such as tea, ginger, cardamom, and other export-oriented cash crops.

Leveraging localization to improve hunger and malnutrition of the most marginalized: The ZOI selection was also shaped by opportunities to engage local organizations and local government entities in locally-led development. Some of the areas included in the ZOI expansion were specifically prioritized due to untapped organizational capacity in those areas. Other areas – notably in Madhesh Province – were selected because FtF has not previously engaged with local organizations there or had the chance to support their capacity development. Furthermore, under the new federalist structure, municipal governments have greater authority to plan,

budget, and implement solutions that match residents' local priorities. The new ZOI selection also provides opportunities for FtF activities to leverage government budgets to support agriculture markets and strengthen policy implementation at the local level, explicitly targeting smallholder farmers from marginalized groups for inclusion in agricultural and off-farm economic activities related to the food system. Additionally, the ZOI selection is designed to overlap with administrative units covered under planned Government to Government (G2G) assistance that will improve GON's capacity to plan and execute agricultural development activities across Federal, Provincial, and Municipal levels. Specifically, this G2G assistance will aim to strengthen the policy enabling environment, improve technical capacity, increase access to improved inputs, technology, and practices, improve market linkages and coordination, and enhance effective and efficient extension services within the ZOI.

B.9 Targeted Value Chains

Based on geospatial analysis, stakeholder consultations, and experience from previous FtF activities, this third iteration of the Nepal country plan will expand on the definition of FtF strategic value chains. The previous version of the Nepal Country plan named five strategic value chains, namely rice, maize, lentils, vegetables, and goats. These five value chains will continue to be the main focus of FtF efforts moving forward. However, in keeping with the transition to a systems approach, this version of the Country Plan reorganizes the targeting of agricultural product markets around three critical production subsystems. Each group has different goals and provides different functions in support of food system transformation. These are:

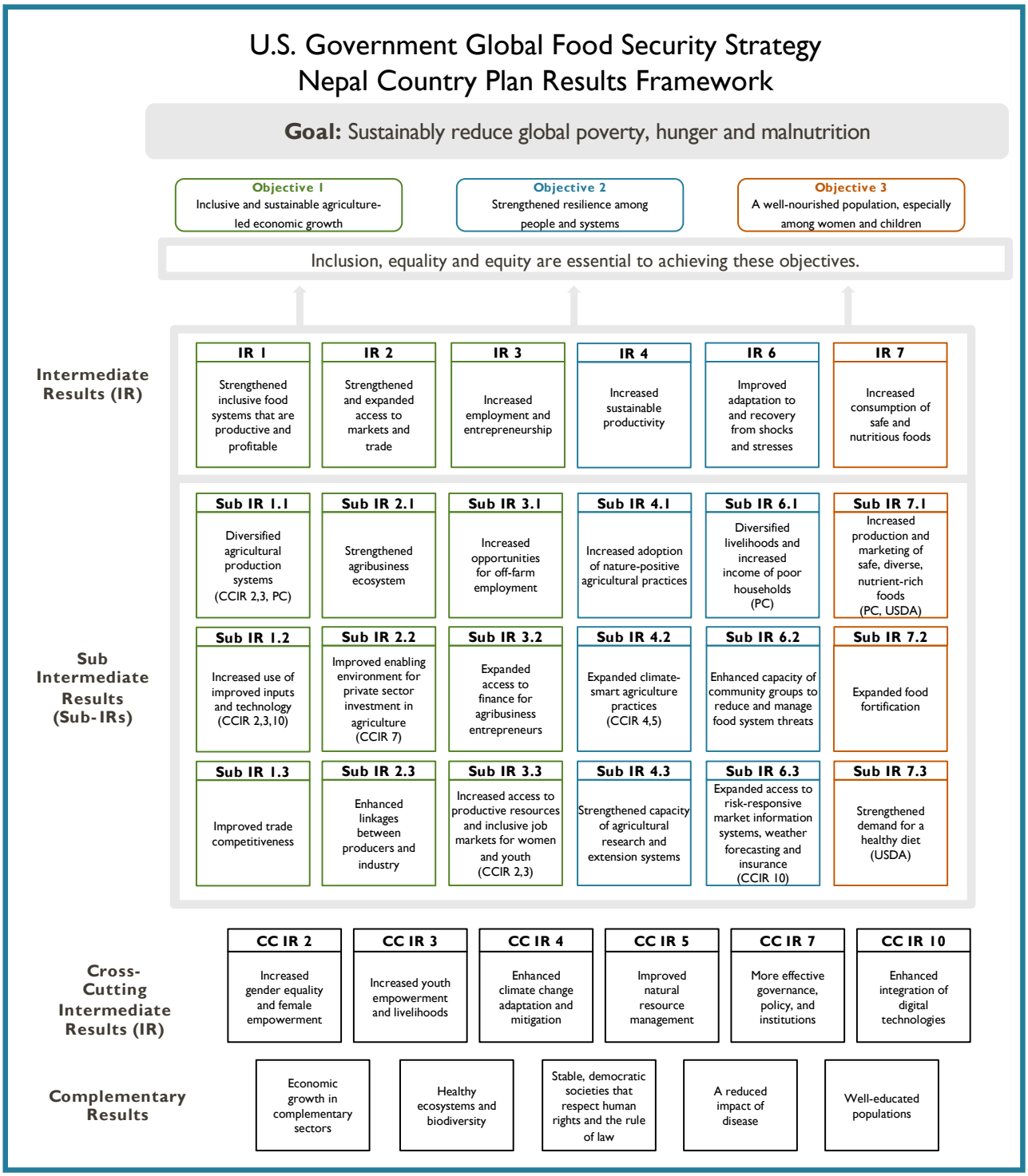
- Staple Production: - this includes previous focus commodities like rice, maize, and lentil, but opens the possibility of expanding into wheat, potato, and soybeans, especially where these crops are included in target farmers' cropping pattern.
- Nutritious and High Value Commercial Production: this encapsulates the previous focus on vegetables and goats but permits expansion into other high-value cash crops, particularly if they contribute to a healthy diet. This can include investments in dairy, poultry, fish, and fruits.
- Export-oriented Production: This incorporates current FtF efforts to promote ginger and cardamom, and permits expanded focus on tea, natural fibers, and medicinal or aromatic plants.

FtF activities that focus on value chains not mentioned in the examples above can be considered on a case-by-case basis under the windows of opportunity approach described above. It is important to note that previous FtF Value chains were selected based on careful evaluation of factors like demand, production potential, government prioritization, nutrition,

uptake by marginalized groups, and geographic suitability. These factors are still relevant and important, and implementers who seek to expand beyond the five original value chains must demonstrate how they have considered these factors. The new orientation towards production subsystems means that prospective FtF activities will designate their specific value chain foci through a collaborative co-design process, based on an analysis of empirical evidence about how the investment will contribute to strengthening the larger food system in ways that sustainably reduce hunger, poverty, and malnutrition. There are some loose linkages between the geographic and value chain targeting approach in this plan. For example, staple production is more suited to the Terai, high value goat rearing, and vegetable production are apt for hilly areas, etc. However, there is no rigid overlap between the geographic and value chain targeting approaches described in this plan.

C. Results Framework

C.1 Results Framework Figure



C.2 Problem Statement

Poverty, hunger, and malnutrition in Nepal stem from economic, institutional, environmental, and cultural factors that limit sustained availability, access, and utilization of safe, nutritious foods, and constrain livelihood opportunities that permit households to withstand shocks and prosper. Significant disparities in economic opportunity and nutritional status vary across geographies and the intersections of caste, ethnicity, and gender. Low agricultural productivity and market dysfunctions reduce earning potential for farmers, discourage private sector investment, and limit the capacity of the food system to sustain healthy populations and environments. Urbanization and migration are driving structural transformations in Nepal's economy that have some negative ramifications for households. In the agricultural sector, these consequences include a heavier labor burden for women, land fragmentation and abandonment, and an increasing prevalence of diet related non-communicable diseases. At the same time, the country's transition to a decentralized federalist system of government continues to disrupt many governance processes involved in planning, policymaking, regulation, and social protection. Confusion about the roles and responsibilities of different governmental authorities and structures has caused interruptions in service delivery and contributed to policy incoherence. A high prevalence of natural hazards, coupled with limited absorptive capacity, makes Nepali communities particularly vulnerable to natural disasters, and repeated exposure to economic shocks and stresses, including the COVID-19 pandemic, have gradually eroded market system resilience.

C.3 Goal

GFSS Nepal Country Plan 2023-2028 seeks to address these challenges by capitalizing on the opportunities for change that they present. The new Country Plan will build on successes from the 2011-2015 Feed the Future (FtF) Multi-Year Strategy[91] which aimed to "improve productivity in targeted value chains and expand market access for marginalized and disadvantaged groups", as well as the 2018-2023 Country Plan[92], which sought to "strengthen markets and catalyze investment from the private sector to sustainably reduce hunger, malnutrition, and poverty". **The overall goal of the new 2024-2028 GFSS Nepal Country Plan is to accelerate agriculture and food system transformations that sustainably reduce global poverty, hunger, and malnutrition.** The interagency GFSS steering committee considers these to be separate but related transformative processes. The agricultural transformation can be characterized as a widespread transition from subsistence to commercial agriculture, enhanced

[91] FtF Multi Year strategy FY 2011-2015

[92] GFSS Nepal Country Plan 2018

by productive technology, and accompanied by a shift towards off-farm livelihoods with more inclusive access to improved earning opportunities. This agricultural transformation can be seen as a necessary component of an even broader food system transformation that fundamentally reorients the relationships between different elements of the food system[93] - namely the food supply, the food environment, and food and water utilization – in order to improve development outcomes. In pursuing this overall goal, this Nepal Country Plan explicitly seeks to lay a foundation for eventual FtF graduation.

The Results Framework for the GFSS Nepal Country Plan includes the three primary objectives drawn from the global framework, six Intermediate Results (IRs), 18 Sub-IRs, and six Cross-Cutting IRs. The IRs and Cross-Cutting IRs (CCIRs) that were selected for inclusion in the results framework align closely with agriculture programming in Nepal implemented by USAID, USDA Foreign Agricultural Service, the U.S. International Development Finance Corporation, and the Peace Corps. This GFSS Nepal Country Plan seeks to complement and strengthen, rather than duplicate interventions designed to achieve USG's strategic goals in disaster risk reduction, nutrition and hygiene. Accordingly, three intermediate results from the global-level GFSS-R were not included in this country plan:

- Improved proactive risk reduction, mitigation, and management;
- Increased use of direct nutrition interventions and services; and
- More hygienic household and community environment.

C.4 Theory of Change

Improvements in technology transfer and inclusive marketing of inputs will drive increases in yields and the diversification of agricultural production systems that meet the broad demands of diverse consumers and processors, making agriculture more productive and profitable (IR1, CC IRs 1, 2). Efforts to improve the policy enabling environment and strengthen the agribusiness ecosystem will crowd-in private sector firms and service providers, tightening market linkages and eliminating inefficiencies throughout the food system, with an emphasis on the use of digital technologies (IR 2, CC IRs 5, 6). With improvements in technology and production efficiency, labor demands in agriculture will decrease. This, along with improved access to financial resources, especially for urbanizing women and youth entrepreneurs, will facilitate private sector development of off-farm employment opportunities in the food system related to processing and marketing that meets diverse consumer demands (IR 3, CC IR 2). At the same time, increased adoption of production systems and climate-smart production

[93] USAID/RFS Food Systems Conceptual Framework

adaptations will facilitate natural resource management and safeguard biodiversity that is crucial to achieving and sustaining human and ecosystem health and resilience (IR 4, CC IRs 3, 4). Market system strengthening that supports more diverse, informed, and shock-responsive livelihoods will help to counter long term effects of recent shocks and speed up recovery from new shocks and stresses (IR 5, CC IR 6). Explicit efforts to make markets more inclusive and equitable will create win-win situations for sellers and buyers as an increase in the meaningful participation of women, youth, and disadvantaged groups as active participants and leaders will expand overall market value, profitability, and competitiveness (IRs 2, 3 CC-IRs 1, 2, 5). Production diversification, technology transfer, reduced post-harvest losses, and greater investment in high-value agricultural production and marketing will improve the supply of safe, diverse, and nutritious foods, while also increasing incomes that improve access to an affordable, nutritious diet. Together these improvements in availability and access, along with behavior change communication (BCC), inclusive marketing, and large-scale food fortification will drive increased consumption of healthy foods and improve nutrition outcomes (IRs 1, 3, 6).

D. Program Components

Component A: Inclusive and sustainable agriculture-led economic growth

Programmatic Approach: Nepal FtF activities will advance the first GFSS objective – *inclusive and sustainable agriculture-led economic growth* – through inclusive market systems development approaches that emphasize facilitative rather direct implementation methodologies. To achieve this, FtF will engage public and private sector actors to activate investment levers that drive sustainable market systems and catalyze agricultural transformation. The first way FtF will do this is by **strengthening inclusive food and agriculture systems that are productive and profitable (IR 1)**.

Specifically, FtF activities will focus on improving the productivity of staples, nutritious high-value products, and export-oriented commercial products by working through agricultural service providers to supply more diverse agricultural inputs that commercial producers require in order to compete in national and international markets. FtF will pay particular attention to improving equitable participation in production systems and markets by increasing access to improved technologies and addressing knowledge gaps among smallholders, women farmers, and members of marginalized groups.

Secondly, FtF will **strengthen and expand access to markets and trade (IR 2)** by building the capacity of agri-businesses, creating a more conducive enabling environment, and removing constraints to their investment and growth. In doing so, FtF activities will also improve the integration of value chain actors, advance economic diversification, access to financial services, increasing outreach and engagement as market actors and reduce labor burden particularly focusing on producers who are women, youth, or members of marginalized communities, while also strengthening linkages between farms and agro-industries. Lastly, FtF will seek to **increase employment and entrepreneurship (IR 3)** contributing to increased off-farm employment that hastens Nepal's agricultural transformation and serves as an entry point for broad-based economic growth.

Technical Considerations for IR 1: Strengthened inclusive food and agriculture systems that are productive and profitable. To unlock the productivity and profitability of Nepali agriculture, FtF activities will focus on diversifying agricultural production systems (Sub-IR 1.1), increasing access to and the use of improved inputs and technology (Sub-IR 1.2), and improving trade competitiveness (Sub-IR 1.3). Across all of these efforts, enhancing equity in production systems is a necessary cross-cutting element for success. The diversification of agricultural production systems refers, first of all, to an increase in the variety of agricultural products generated by Nepali farmers, including both primary farm outputs and value-added processed foods. It also involves diversifying the practices that farmers employ to meet market demands, and the range of agricultural services they use and supply (for example, machinery services, soil testing, artificial insemination, etc.). By expanding the availability of improved seed varieties and livestock breeds that are more productive, climate-smart, and nutrition-sensitive, FtF activities will not only diversify the production system but also accelerate agricultural technology adoption. The broader approach for increasing the access to and adoption of agricultural technology relies on strengthening market systems that provide critical inputs like irrigation, seeds, fertilizer, and mechanization. In tandem with these efforts, FtF will pursue key policy reforms that facilitate the dissemination of agricultural inputs and technologies, and deploy digital tools and advisory services that provide multidirectional channels for communication and triangulation.

Improving trade competitiveness requires fortifying linkages between producers, aggregators, processors, and exporters to ensure that producers have access to the market information they need to supply the type, quantity, and quality of products needed to meet national and international market demands. It also requires helping government actors and regulators to adopt international science-based and risk-based quality control standards, along with infrastructure and systems to maximize product quality and food safety. Lastly, without efforts to address constraints on equitable participation from women and members of marginal

groups, the productivity of the agricultural sector will always perform suboptimally. FtF will enhance equity in agricultural production systems by addressing barriers to the participation of women, youth and members of marginalized groups, especially by broadening access to loans for underserved populations, providing basic skills development and training opportunities that build human capital, and facilitating the development of digital tools that equalize access to market information and productive technologies.

Technical Considerations for IR 2: Strengthened and expanded access to markets and trade. Strong linkages between market actors is a key component of an effective market system. To build capacity on the supply side, producers and entrepreneurs who comprise Nepal's agribusiness ecosystem need to develop their business and marketing skills, overcome technical gaps and barriers, build human capital, and develop strategies to assume and manage risks (Sub-IR 2.1). Agricultural enterprises, both on and off-farm, need to capitalize on opportunities for value-creation and value-addition that are market-responsive, scalable, and facilitated by public-private collaboration. To implement the country plan, relevant USG agencies will need to leverage their convening power to engage diverse stakeholders across the three tiers of government, private sector, civil societies, academic institutions, and other actors such as farmer groups/cooperatives, and women, youth, and marginalized groups to advance the establishment of an evidence-based policy environment for inclusive agribusiness (Sub-IR 2.2). For example, the establishment of policy dialogues will contribute to structural reforms that catalyze agriculture and food system transformation. Working in broad partnership, FtF will unlock critical constraints that constrain equitable access to markets, both physical and economic, and impede market system functionality. To achieve this, FtF will focus on creating new incentives for private investment in agro-enterprises and invest in digital tools that expand the reach of market information to actors throughout the food system.

Agriculture-driven industrialization is another strategy for accelerating growth, by establishing complementary relationships between producers and industries that can generate a stable demand for industrial raw materials and guarantee markets for agricultural products (Sub-IR 2.3). Enhanced linkages between farms and industry will also facilitate increased engagement, advocacy, and compliance from private sector actors in their dealings with GON authorities on a range of relevant policy goals including nutrition, food safety, environmental sustainability, and trade.

Technical Considerations: for IR 3: Increased employment and entrepreneurship
To optimize agriculture's potential to drive economic growth and catalyze food system transformation, FtF will accelerate the generation of off-farm employment opportunities in post-harvest food processing enterprises, and tertiary food system services related to food

distribution and marketing (Sub-IR 3.1). Alongside this effort, FtF will deploy interventions that expand access to financing for food system entrepreneurs and businesses and promote financial inclusion for women, young people, and marginalized groups (Sub-IR 3.2). FtF will also build the capacity of commercial banks and microfinance institutions (MFIs) to serve farmers and enterprises across the food system. This includes expanding access to financing for fixed assets and cash-flow, increasing line-of-credit support, brokering diversified financial products for agricultural clients, expanding the use of digital finance tools, and removing specific barriers to access for women, youth, and members of marginalized groups including language and codified cultural norms. Employment opportunities for Nepali women, youth, and socially excluded minorities will be accelerated through gender empowerment and social inclusion approaches like establishing networks where women, youth, and marginalized entrepreneurs can forge linkages and share resources, promoting them in leadership roles, and by supplying socio-cultural education and behavior change communication targeting all sections of the populace (Sub-IR 3.3).

Component B: Strengthened Resilience Among People and Systems

Programmatic Approach: FtF will advance GFSS Objective 2: *strengthened resilience among people and systems,* by enhancing their capacity to manage shocks and stresses by implementing nature-positive conservation and adaptation approaches across the food system. Building on agriculture-led economic growth achieved under objective one, FtF activities under Component B will focus on **increasing sustainable productivity (IR 4)** by promoting nature-positive agriculture practices, expanding climate-adaptive water technologies and integrated pest management, and by strengthening the capacity of agricultural research and extension systems. This IR also advances Component A by improving agricultural productivity, a key element for agricultural transformation and agriculture-led growth. Under this component FtF will also **improve adaptation to and recovery from shocks and stresses (IR 5)** by diversifying livelihoods and increasing incomes of poor households, enhancing community capacity to reduce and manage food system threats, and expanding access to risk-responsive market information systems, longer-term weather forecasting system in the area of rainfall in partnership with local research centers and the GON hydrometeorology department, and insurance. FtF activities will pursue these results through a market systems development approach that utilizes market actors, for example, by improving last mile distribution of technologies, and by brokering contract farming arrangements that garner private investments in technology and extension services for farmers.

Technical Considerations for IR 4: Increased sustainable productivity: FtF will increase sustainable productivity by promoting the adoption of nature-positive agriculture practices that reduce the degradation of soil and water resources by promoting improved land stewardship and enhancing the efficiency of agricultural input utilization through data-driven and precision application techniques (Sub-IR 4.1). The expansion of climate-adaptive irrigation technologies includes increasing the diffusion of water lifting irrigation technologies like electric pumps, and efficient distribution systems like micro-drip irrigation (Sub-IR 4.2). FtF will accomplish this by improving the depth and breadth of distributors and vendors' capacity to reach farming communities and by incentivizing them to provide farmers more specific to women and marginalized communities, advice on using technologies that improve water use efficiency and balance productive and consumptive water resource utilization. Importantly, this includes expanding irrigation and mixed-use water systems in ways that balance competition between drinking water and productive uses, and smooth the impacts of weather variability. FtF activities will also promote the conservation of watersheds by increasing protection for spring sources, creating riparian buffers, promoting land management practices that increase groundwater recharge and prevent soil erosion, and utilizing data to guide site selection for wells and surface water pumps to mitigate the impact of water withdrawals for farming.

Similarly, FtF will work through the private sector to promote integrated pest management practices that are designed to proactively monitor and respond to increases in the incidence of harmful pests - often driven by shifting climate patterns – using biological control techniques that minimize the threats posed by pesticides to human and environmental health. Safeguarding biodiversity is particularly important for pollinators and other animals that provide ecosystem services for farming, and as a way to mitigate against crop and animal diseases. FtF will promote nature-based solutions that support agro-biodiversity and healthy ecosystems, for example, through mixed farming systems, nutrient cycling, and sustainable aquaculture. Finally, FtF activities will increase sustainable production practices by strengthening the capacity of research and extension services (Sub-IR 4.3). FtF will engage with national institutions to research sustainable productivity; disseminate findings more widely in credible, peer-reviewed mediums; and apply research findings through extension services to expand their implementation, particularly for identified focus commodities and value chains. FtF will also pursue enhanced linkages between research and extension through the functional integration of public and private sector actors in setting demand-driven research priorities, and co-leveraging resources for planning, implementing, monitoring, and upscaling applied research for sustainable impacts.

Technical Considerations for IR 5: Improved adaptation to and recovery from shocks and stresses. Livelihood diversification that increases income and distributes risk is a key approach

that FtF will deploy to help farming households and communities adapt and recover from shocks and stresses (Sub-IR 5.1). Building on past successes, FtF will deploy push-pull approaches that "push" by removing constraints to engagement in markets and higher income generating production activities for smallholders, women, youth, and members of marginalized communities. FtF will help farmers to step up their agricultural production by deploying improved inputs, climate-smart mixed farming systems, and more profitable commercialization strategies. To achieve this, FtF will leverage lead firms, input suppliers, public sector extension providers, and private sector change agents to help educate and coordinate farmers towards more successful commercial results that increase buyer-processor productivity, lower farmers' production costs, and strengthen market links and networks. Business and literacy training will also be deployed to integrate women, youth, and disadvantaged groups into the market system. FtF will balance this with "pull" approaches that expand the diversity and quality of accessible economic opportunities by strengthening market demand. Specifically, FtF will seek to scale up the Rice Mill Model, Maize Commercial Model, and Lentil Multi-Stakeholder Platform approaches, all of which help link buyers and processors of strategic FtF staple value chains with local producers. Over time, FtF will work to empower officials from the Government of Nepal to take on responsibility for these push-pull market system models for replication and nationwide scaling. Where relevant, FtF will help commodity off-takers increase the share of commodities they procure from local farmers, especially by facilitating loans and business development services that help them increase their capacity to process locally produced commodities and improve incomes for poor smallholders.

Natural disasters including floods, landslides, droughts, and fires pose significant threats to food security and livelihoods in the ZOI, but the effects of weather variability and climate change on agricultural production and markets can also be catastrophic. FtF will work with community groups like cooperatives, women's groups, and associations to help them reduce and manage climatic impacts and capitalize on improved incomes and remittance flows to fuel rural investments in productivity enhancing technologies and off-season market development activities that make market systems more resilient (Sub-IR 5.2). FtF activities will also improve the capacity of local institutions for planning, accessing funds, and implementing climate change adaptation measures, especially by helping producers and food system market actors elaborate and voice their perspectives within adaptation and plans and agriculture development strategies at the local, provincial, and national level.

FtF will also expand adaptive capacity by being strategic in leveraging government and private sector cost-sharing in irrigation, mechanization, and financing. By buying down the risk of climate-smart investments, adopting catalytic partnership approaches such as leveraging, and making grants, FtF will enable local businesses to respond to shifting market demands and

remain competitive. FtF will also use digital tools to enhance two-way communication between farming communities and policymakers, and expand access to risk-related market information systems, weather forecasting, and insurance that improves farmers and entrepreneurs confidence in adopting risk reduction and risk management measures (Sub-IR 5.3). This includes use of information communication technology to provide farmers with up-to-date price information that improves their ability to navigate their market participation in the face of shocks and stresses. Finally, a wider range of accessible insurance products, including weather indexed insurance and group insurance approaches will build the confidence of farmers and entrepreneurs to take risks while also improving their recovery times in the event of a disaster.

Component C: A Well-Nourished population, Especially Among Women and Children

Programmatic Approach: FtF will advance this objective by facilitating food system transformations that increase the availability of nutrient-dense foods and improving access to safe, diverse, and nutritious foods. By improving on and off-farm livelihood opportunities that offer increased income, households will have more money to purchase high quality nutritious foods. As experience shows, higher incomes do not necessarily lead to better nutrition. Other factors that contribute to poor nutritional status include poor practices related to water, sanitation, and hygiene (WASH), maternal health and nutrition status, infection in young children, gender inequality, adolescent pregnancy, poverty, poor access to quality health services, inadequate dietary intake, lack of food safety, price fluctuations, and irregular food market access. Comprehensive food system interventions that consider both supply and demand are required to **increase the consumption of safe and nutritious foods (IR 6)**. This includes investments in marketing, food safety, and dietary behavior change that effectively leverages the role of the private sector.

The Mission Multi Sectoral Nutrition Plan (2022-2026) aims to improve nutrition outcomes through both improved food and health service delivery. Development Assistance (DA) funds from FtF will be used to foster a healthy food system and improve nutrition through production, income, and women's empowerment pathways and will complement the Global Health Program funded direct nutrition and WASH interventions which focuses to extend the reach and quality of comprehensive nutrition programming through: 1) improving maternal nutrition, infant and young child feeding practices, and essential WASH practices; 2) supporting the scale-up and implementation of integrated management of acute malnutrition; 3) improving the quality and coverage of nutrition related services including vitamin A and breastfeeding counseling and support; 4) strengthening the capacity of nutritional professionals

and service providers; and 5) strengthening the capacity of municipal and community level stakeholders to plan, manage, and implement multi-sectoral nutrition programs.

Technical considerations for IR 6: Increased consumption of safe and nutritious foods.

The first way FtF will increase the consumption of safe and nutritious foods is by increasing the supply of safe, nutrient dense foods (Sub-IR 6.1). Since evidence shows that farmers consume a portion of their produce, improving productivity has the potential to improve nutritional intake at the household level. FtF's past focus on good agricultural practices related to rice, maize, lentils, vegetables, and goat production significantly increased productivity in these value chains and created higher marginal profits. This can also improve nutrition by providing additional income for purchasing nutritional foods. High-value vegetable and animal sourced protein production is notably appropriate for farmers who only have access to marginal lands or landholdings, and expanding access to the production in these value chains can offer a pathway out of poverty for women and people from disadvantaged castes, ethnicities and social groups. Under the new value chain targeting approach, these will remain important value chains for enhancing nutrition, but FtF activities will have more flexibility to impact a wider range of nutritionally important products, including dairy and other animal source proteins. Most of these new value chains fall within the focus on high-value production that brings particular benefits – such as increased financial autonomy – to women, who are generally more engaged in their production and marketing. At a population level, improving women's financial autonomy often has the additional benefit of improving household nutrition, since women are more likely to prioritize the health and well-being of their children.

Enhancing food safety by catalyzing private sector investments in transportation, storage, and basic processing is another approach that will improve nutrition by reducing exposure to enteric pathogens like bacteria and mycotoxins, while also increasing the supply of nutritious but perishable foods by reducing food loss and waste.

FtF will facilitate the convergence of government and private sector stakeholders in the implementation of large-scale food fortification to address micronutrient gaps (Sub-IR 6.2). Currently, the government of Nepal has mandatory wheat flour fortification standards in larger mills and has recently finalized national standards for the fortification of rice. However, roles and responsibilities for implementing the standards are not clear, and standards targeting other key commodities for fortification need to be developed. Making progress on large-scale food fortification will require USG agencies involved in FtF to draw on their convening power to bring stakeholders together and develop a consensus on how to responsibly meet international standards and protocols for fortification by Nepali mills and food processing industries. Doing so could improve consumption of a range of micronutrients and minerals and address

deficiencies of iron, vitamin A, folate, zinc and B12, and improve nutritional status at a population level.

Hand in hand with these approaches, FtF activities will seek to help build demand for healthy foods by improving the quality and marketability of agricultural products so that consumers have increased awareness about the benefits of healthy foods and are more motivated to buy safe, tasty, affordable, and locally produced nutritious foods (Sub-IR 6.3). FtF will work closely with private sector actors from farm to fork, strengthening their capacity to implement and amplify behavior change communication about food safety practices that reduce contamination and improve profits. FtF activities will also seek to change behaviors related to the consumption of unhealthy foods by strengthening the marketing of healthy alternatives, making them more available and affordable, and by helping retailers demonstrate to consumers – particularly women, adolescents, and youth – the health advantages of eating unprocessed and minimally processed foods. FtF activities will deploy these nutrition-sensitive interventions in coordination with direct nutrition programming, in the context of a larger multi-sectoral strategic approach to nutrition.[94]

Component D: Addressing Constraints to a Productive Enabling Environment

Programmatic Approach: FtF investments in the following CCIRs are required for the successful implementation of the GFSS Nepal Country Plan:

- CCIR 1: Increased gender equality and female empowerment
- CCIR 2: Increased youth empowerment and livelihoods
- CCIR 3: Enhanced climate change adaptation and mitigation
- CCIR 4: Improved natural resource management
- CCIR 5: More effective governance, policy, and institutions
- CCIR 6: Enhanced integration of digital technologies

Social exclusion, inequalities, discrimination, and marginalization underpin the tenets of Leave No One Behind of the United Nations Sustainable Development Goals; and they are primary constraints to the overall GFSS Nepal Country Plan goal of food system transformation. At every turn, FtF must critically examine assumptions about the degree to which results achieved are equitably distributed and take explicit action to remove constraints and facilitate transformative participation from underserved, disadvantaged, and marginalized populations in

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society. Increased integration of digital tools offers more than just a means for efficiency; they can also be leveraged for greater transparency and accountability of market systems to provide equitable opportunities for women, youth, and members of marginalized groups. To improve governance, policies and institutions, digital tools should be deployed in a way that enhances two-way communication between farmers and policymakers.

Climate change is another critical constraint that must be addressed across all FtF activities in order to achieve agriculture and food system transformation. It is essential that market systems are developed in a way that protects the natural resource base and takes advantage of opportunities to build on natural solutions to reduce the impacts of climate change. FtF activities will improve natural resource management by building capacity to collect data and implement evidence-based decisions on natural resource utilization, balancing profitability with long term sustainable management. One-way FtF will achieve this is by increasing the participation of women, youth, and marginalized communities in decision making bodies like community forest user groups and farmers associations, so that resource utilization reflects the comprehensive range of needs. To enhance the resilience of agriculture, livestock, and food systems, allowing them to thrive under increasing temperatures, greater climate variability, and changing trends in precipitation, FtF activities will promote and increase the adoption of scalable climate-smart technologies, practices, and approaches, particularly those that improve water use efficiency and soil health. FtF will partner with government, cooperatives, and community-based water user associations to establish monitoring and management systems that prevent over extraction of water and facilitate aquifer recharge.

Under Component D, the Nepal Country Plan aims to create an enabling environment for agricultural investment and growth by implementing existing policies and supporting the GON to take the lead on developing additional policies that support growth, poverty reduction, and resilience. Working in partnership with the GON, FtF will prioritize policy changes that facilitate agricultural transformation by contributing to enhancements in productivity, investment, and safe, environmentally sustainable job creation.

E. Stakeholder Engagement

E.1 Interagency Contribution

The Country Plan will leverage FtF interagency funding and/or expertise to ensure an integrated approach to USG programming at post, including USAID, the State Department, and the Peace Corps. The Country Plan will also create an opportunity for agencies that cover Nepal remotely or from a regional post, such as the U.S. Department of Agriculture's Foreign Agricultural

Service (USDA-FAS), the National Aeronautics and Space Administration (NASA), and the U.S. International Development Finance Corporation (DFC) to support the Mission's food security and nutrition activities and multiply the USG potential impact on target communities. Implementation of the Nepal Country Plan will be indirectly supported by the Millennium Challenge Corporation's (MCC) investments in the energy and transportation sectors.

E.2 Stakeholder Engagement Platforms

Stakeholder engagement and coordination is essential to the success of the GFSS Nepal County Plan. The FtF interagency team engages in high level coordination among the key stakeholders through a Joint National Steering Committee (JNSC) for USG-funded FtF activities, in order to ensure close coordination with GON-managed activities and to monitor progress of project implementation. The JNSC is chaired by the Secretary of the Ministry of Agriculture and Livestock Development (MOALD), with committee members drawn from key GON ministries and the private sector. The Technical Committees serve as a platform for maintaining relationships and providing technical guidance for FtF activities. The GFSS team participates in local government planning committees, including Provincial Government Coordination Committees, municipalities, and rural municipalities to support the implementation of district level food security and nutrition programs. This engagement not only helps align USG's objectives with the GON's priorities, but also generates funds for agriculture and nutrition activities from grants administered by local government units, which are frequently underutilized. At the national level, the interagency GFSS steering committee members support the GON in agricultural policy reform, particularly by building the capacity of the Parliamentary Committee on Agriculture, and by engaging civil society and private sector actors in policy discussions.

Within the USAID/Nepal Economic Growth Office, members of the Feed the Future team constitute an integral part of the Development Partners Food Security Group (DPFSG), a donor coordination body for sharing information about activities and initiatives designed to improve food security and nutrition. The USAID FtF Team supported MOALD in the establishment of a joint operational framework to improve coordination around the achievement of GON's ADS objectives and enhance mutual accountability. USAID's FtF partners also demonstrated support for federalism by working with MOALD to establish Provincial Agriculture Development Strategies (PADS) for Lumbini and Sudurpaschim provinces. In collaboration with MOALD, USAID's FtF team also established a Joint Strategic Review (JSR) process that MOALD has since incorporated into their national agricultural programming and the National Agriculture Policy. The JSR platform serves as a forum for conducting performance assessments of all national agriculture and food security activities, creating a mechanism for increased mutual

accountability. Within the JSR platform, stakeholders can weigh in on development priorities for the agriculture sector and contribute to policy formulation and implementation. It also provides opportunities to build synergies and improve coordination with the GON and other development partners working in the food security and nutrition space, and to deconflict and reduce duplication.

In the nutrition governance space, USAID's FtF stakeholders pursue high level coordination by participating in coordination and policy setting platforms such as: Scaling Up Nutrition (SUN), The High-Level Nutrition and Food Security Coordination Committee, the National Food System Dialogues, the UN Emergency Nutrition, Food Security Cluster, and Humanitarian Country Team (when activated). USAID also established a Multisectoral Nutrition and Food Security Working Group, and an Integrated Watershed Management Group to discuss cross-sectoral nutrition and WASH priorities and challenges, ensure programming synergy, and strategize on the productive engagement of both public and private sector actors and resources.

F. Annexes

F.1 Stakeholders Consulted

Nepal GFSS-R Stakeholder Consultation Participant Lists - National and Provincial

F.2 Targets

1. Value of annual sales of producers and firms receiving USG assistance
2. Value of financing accessed by female FTF participants per $1 of financing accessed by male FTF participants
3. The number of cultivated hectares under climate adaptation/climate risk management practices and technologies with USG assistance
4. Value of new private sector investment leveraged by the USG to support food security and nutrition
5. Percent of women consuming a diet of minimum diversity (MDD-W)

F.3 Strategic Alignment

Nepal's Agricultural Development Strategy (ADS)

Nepal's Multi-Sector Nutrition Plan II (MSNP II)

Nepal's National Adaptation Plan (NAP)

U.S. Government Global Water Strategy 2022-2027

USAID Climate Strategy 2022-2030

USAID/Nepal Country Development Cooperation Strategy 2020-2025

G. Notes and References

G.1 Notes

Please insert any notes (including footnotes from the document) here under the "Notes" heading. Include the superscript number within the text where you are referring to, and add the corresponding superscript numbers [1] here with the note in ascending order.

G.2 References

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