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NEPAL

FY 2011–2015 Multi-Year Strategy

U.S. Government Document

The Feed the Future (FTF) Multi-Year Strategies outline the five-year strategic planning for the U.S. Government's global hunger and food security initiative. These documents represent coordinated, whole-of-government approaches to address food security that align in support of partner country priorities. The strategies reflect analysis and strategic choices made at the time of writing and while interagency teams have formally approved these documents, they may be modified as appropriate.

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TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS 4

1. INTRODUCTION 6

2. DEVELOPMENT CHALLENGES AND OPPORTUNITIES 7

2.1 Development Challenges 7
2.2 Variations across Nepal 8
2.3 Opportunities 9
2.4 Nepal Political Situation and Development Progress 9
2.5 Nepal Government Agricultural and Nutrition Strategy and Progress 10
2.6 Feed the Future Strategy 12
2.6 Cross Cutting Issues 16
2.7 Donor Coordination 17
2.8 Sustainability 17

3. FEED THE FUTURE OBJECTIVES, PROGRAM STRUCTURE AND IMPLEMENTATION 18

3.1 Feed the Future Objective Statement 18
3.2 Program Focus Areas 18
3.3 Linkages with Other U.S. Government Programs 18
3.4 Intermediate Results 19
3.5 Policy Reform Priority Areas 22
3.6 Role of Whole of Government in the Program 23
3.7 Results and Impact of the U.S. Government Feed the Future Strategy 24

4. CORE INVESTMENT AREAS 25

4.1 Overview 25
4.2 Improved Agriculture Productivity 25
4.3 Nutrition and Hygiene Interventions 31
4.4 Interventions to Integrate Vulnerable Groups 33
4.5 Collaborative Research Support Program (CRSP) 34
4.6 Cereals System Initiative for South Asia (CSISA) 34
4.7 Institutional Capacity Building 35
4.8 Policy Work 35
4.9 Role of Whole of Government 35
4.10 Collaboration with Other Donors 38
4.11 Engagement with Government of Nepal (GON) 38
4.12 Approach for Expansion with Additional Funding 39
4.13 Impact on Targeted Beneficiaries and Change Agents 39
4.14 Gender and Social Inclusion 40

5 MONITORING AND EVALUATION 40

5.1 Overview 40
5.2 Performance Monitoring 41
5.3 Impact Evaluation 42
5.4 Mechanisms for Monitoring and Evaluation 43

5.5 FEED THE FUTURE GOALS, OBJECTIVES, INTERMEDIATE RESULTS, AND INDICATORS....44
6 ANNEXES....46
6.1 ANNEX A. DONOR AND MULTILATERAL FINANCING FOR FOOD SECURITY AND NUTRITION PROGRAMS IN NEPAL....46
6.2 ANNEX B. FEED THE FUTURE PROGRAM DISTRICTS....54
6.3 ANNEX C. PREVALENCE OF POVERTY....55
6.4 ANNEX D. PREVALENCE OF STUNTING....56
REFERENCES....57

ABBREVIATIONS AND ACRONYMS

AAMA	Action Against Malnutrition through Agriculture
ADB	Asian Development Bank
APP	Agriculture Perspective Plan
CA	Conservation Agriculture
CC	Collection Center
CFUG	Community Forest User Group
CIP	Country Investment Plan
CRSP	Collaborative Research Support Program
CSISA	Cereals System Initiative for South Asia
DADO	District Agriculture Development Office
DFID	Department for International Development (UK)
DOA	Department of Agriculture
DDC	District Development Committee
DHO	District Health Office
DOD	Department of Defense
EIG	Education for Income Generation
FCHV	Female Community Health Volunteer
FTF	Feed the Future
FNCCI	Federation of Nepalese Chambers of Commerce and Industry
FSIP	Food Security Interim Plan
GAFSP	Global Agriculture and Food Security Program
GCC	Global Climate Change
GHI	Global Health Initiative
GON	Government of Nepal
HDI	Human Development Index
HKI	Helen Keller International
HMRP	Hill Maize Research Program
IFAD	International Fund for Agriculture Development
IFPRI	International Food Policy Research Institute
INP	Integrated Nutrition Program
IPM	Integrated Pest Management
IRRI	International Rice Research Institute
MCC	Millennium Challenge Corporation
MDG	Millennium Development Goal
MOAC	Ministry of Agriculture and Cooperatives
MOHP	Ministry of Health and Population
MPC	Marketing and Planning Committee
MSU	Michigan State University
MUS	Multiple Use Water System
NAGA	Nepal Nutrition and Gap Analysis
NARC	Nepal Agriculture Research Council
NDHS	Nepal Demographic Health Survey
NEAT	Nepal Economic, Agriculture, and Trade
NeKSAP	Nepal Food Security Monitoring System
NFC	Nepal Food Corporation
NFRP	Nepal Flood Recovery Program
NHSP	National Health Sector Plan
NPC	National Planning Commission

NTFP	Non-Timber Forest Product
PACOM	Pacific Command
SIMI	Smallholder Irrigation Market Initiative
USDA	U.S. Department of Agriculture
USG	U.S. Government
VDC	Village Development Committee

1. INTRODUCTION

Feed the Future's (FTF) overall objective is to sustainably reduce global poverty and hunger. FTF Nepal aims to increase inclusive growth in the agricultural sector and improve nutritional status, especially of women and children. These first level objectives are the foundation of FTF Nepal, which is designed to maximize the number of Nepalis lifted out of poverty and the number of children and women with improved nutritional status. A key underpinning to the FTF Nepal strategy is the recognition that Nepal is undergoing changes in precipitation event patterns, temperature regimes, and hydrology (due to glacier melt) linked to climate change. FTF activities will be part of a larger U.S. Government (USG) commitment to build the resilience of vulnerable populations to the changing climate in Nepal. To this end, through Feed the Future Nepal, over the next five years:

- An estimated 165,000 vulnerable Nepali women, children, and family members—mostly smallholder farmers—will receive targeted assistance to escape hunger and poverty. The interventions will take on a private sector lens and will focus on establishing profitable businesses able to provide inputs, extension services, and market linkages to target farmers on a sustainable basis. The interventions will increase production (availability) of vegetables while also enhancing incomes (access).

- In conjunction with the Global Health Initiative, more than 393,000 children will be reached with services to improve their nutrition and prevent stunting and child mortality. Agricultural interventions will increase production (availability) of vegetables while also enhancing incomes (access). Nutrition and hygiene interventions will promote behavior change regarding diet composition, feeding practices and spending patterns (utilization). Targeted programs will also increase resiliency (stability) in vulnerable communities and groups.

- Significant numbers of additional rural populations will achieve improved income and nutritional status from strategic policy and institutional reforms. [1]

Through an integrated whole-of-government approach, FTF Nepal will concentrate on agriculture and nutrition investments in a geographically-defined target area and will make supporting contributions in cross-cutting areas. In the targeted geographic focus area, FTF Nepal will invest in three main components:

1. **Component A** - Commercially-driven agricultural transformation, driven by change agents with the goal of increasing incomes of smallholder farmer households through sustainable intensification of high value vegetables along with cereals and pulses under a farming systems approach, aggregation and marketing, and targeted productive infrastructure.
2. **Component B** - Capacity building program to deliver nutrition and hygiene education to targeted households.

[1] Disclaimer: These preliminary targets were estimated based on analysis at the time of strategy development using estimated budget levels and ex-ante cost-beneficiary ratios from previous agriculture and nutrition investments. Therefore, targets are subject to significant change based on availability of funds and the scope of specific activities designed. More precise targets will be developed through project design for specific Feed the Future activities.

3. **Component C** - Literacy and entrepreneurship training led by local leaders and targeting the most vulnerable individuals in the community (e.g., youth, women, lower caste and ethnic minority groups).

Components A and B will be strongly connected throughout the program. There will be one implementing partner for both components and the same households will be targeted in the agriculture and nutrition interventions. In addition, the same group of beneficiaries will be included in the literacy program in Component C. Background information, intermediate results, and descriptions of the interventions are explained on the following pages.

2. DEVELOPMENT CHALLENGES AND OPPORTUNITIES

2.1 DEVELOPMENT CHALLENGES

With a population of 28 million, Nepal is a severely food deficit country recovering from a 10-year civil war. With a GDP per capita of $470 (estimated FY09), Nepal remains the poorest country in South Asia and the 13th poorest country in the world. About 55 percent of Nepalese live below the international poverty line of $1.25/day. [2] More than 80 percent of the population works in the agriculture sector, accounting for 38 percent of the GDP. Recent declining agricultural production has depressed rural economies and increased widespread hunger and urban migration in Nepal. This situation is compounded by a population growth rate of over 2 percent per year and one of the highest ratios of population to arable land in the world. [3] In 2009, 43 of 75 districts were reported to be food deficient, with 23 districts in Nepal chronically food insecure. Two of three Nepalese suffer food insecurity at some point during the year. [4]

The main underlying causes of hunger, poverty, and undernutrition in Nepal include low agricultural productivity, limited livelihood opportunities, weak market linkages, and inadequate production and consumption of nutritious locally available foods. Other major issues are below:

- Production resources, especially land and biodiversity, have decreased.
- Climate change risks (e.g., increased drought and flood, new and more frequent pest and disease outbreaks, temperature rise, shifting rain patterns, changes in glacier water storage) have increased the vulnerability of the poor to natural disasters.
- Low and declining investment in agricultural research and extension, poor access to quality inputs and services and limited basic infrastructure have inhibited productivity and led to significant post-harvest losses.
- Food prices continue to rise. The current year-on-year food price inflation rate is up to 15-18 percent, whereas recent agricultural GDP growth rate is only 2.5 to 3.5 percent.
- Lack of livelihood opportunities and market volatilities increase vulnerability of the poor, resulting in youth outmigration, declining labor availability and more fallow land.

According to the Nepal Demographic Health Survey (NDHS 2006), the rate of stunting among under-five children is 49 percent (surpassing Sudan), wasting is 13 percent and underweight is 39 percent

[2] World Bank, World Development Indicators Database, Oct. 2009 (Atlas Methodology)
[3] World Bank; www.worldbank.org.np
[4] WFP Nepal Food Security Atlas, July 2010

(exceeding Ethiopia), [5] reflecting widespread chronic malnutrition. Nearly half of children six months to five years of age are anemic. In areas where production is sufficient, food behaviors and practices remain the major barriers; in other more food insecure communities, the sheer absence of diverse foods poses a threat to the nutritional status of women and children. Although the problem of undernutrition is pervasive across Nepal, national aggregates mask wide disparities across socioeconomic groups and ecological regions. In households in the poorest quintile, 54 percent of children below five years were found to be underweight. [6]

Due to extremely low levels of income and agricultural production, the poorest households must allocate almost three quarters of their income to food. The most vulnerable were highly affected by the decade-long conflict and increasingly common drought and other natural disasters exacerbated by climate change, leaving them with few coping mechanisms to deal with rising food prices. [7] Additionally, a growing youth bulge (41 percent under 15 years of age, with 13 percent under age five),[8] will add even more pressure on Nepal's resources in the next decade. It also presents an opportunity for future growth and innovation in the agriculture sector.

In Nepal's traditionally patriarchal social hierarchy system, gender and caste relationships are shaped by broad inter-related parameters based on community norms and social hierarchy, demographic factors, institutional and legal structures, economic conditions, and political developments. Women, Dalits [9], and other low caste and disadvantaged groups typically have less access to education, medical facilities, and other social services and little access to property ownership or cash. For example, only 14 percent of working women are paid fully in cash, while 41 percent are paid in food or other materials. [10] Dalits in the Terai [11] have among the highest poverty rates in Nepal (49.2 percent vs. 42.6 percent national average). [12]

The majority of Nepali women are engaged in agriculture. Since the current fertility rate is 3.1 nationally, but much higher in some areas (particularly in the Mid-Western and Far-Western Regions), most women have the multi-faceted role of caring for fields and livestock, taking care of children and doing domestic chores. Furthermore, political uncertainty and declining employment opportunities have resulted in a significant number of male laborers migrating for work abroad. [13] This has added even more responsibilities for these women. In addition to higher levels of poverty, women and children typically suffer greater hunger levels. Often, female headed households use harsher mechanisms (e.g., skipping meals or selling assets) than male headed households to cope with hunger and food shortages.

2.2 VARIATIONS ACROSS NEPAL

Nepal is a landlocked country divided into three primary ecological zones mainly running east-west: (i) the Terai, (ii) the Hill area in the middle, and (iii) the Mountain area in the north. There are five administrative development regions: Eastern, Central, Western, Mid-Western, and Far-Western. The country is further divided into a total of 75 districts.

[5] UNICEF State of the World's Children: http://www.unicef.org/statistics
[6] Nepal Demographic Health Survey, 2006
[7] WFP Food Security Atlas. http://www.foodsecurityatlas.org/npl/country/
[8] Nepal Demographic Health Survey, 2006
[9] Dalits are a low caste group formerly called "untouchables".
[10] Nepal Demographic and Health Survey, 2006
[11] The Terai is the plains area of Nepal bordering India.
[12] UNDP, "The Dalits of Nepal and the New Constitution," September 2008
[13] Adhikari, Ramesh, and Podhisita, Chai, "Household Headship and Early Child Death in Nepal", June 2010

In Nepal, crop production and poverty rates vary significantly by region and district due to the country's cultural and environmental diversity. The hills and mountains in the Mid-Western and Far-Western Regions typically have the highest rates of food insecurity and hunger, since crop production is often poor and transportation and other infrastructure is lacking. However, even though the Terai is the granary, there are eight Terai districts which faced food deficits in 2010. Furthermore, despite its greater production rate, some Terai districts have high rates of anemia and malnutrition, primarily due to behavioral and cultural practices.

2.3 OPPORTUNITIES

Despite the difficulties faced by Nepal, there are many opportunities to substantially improve food security. Ecologically, Nepal has the potential to be a food surplus country. The flat plains of the Terai region hold the greatest potential for small-scale commercial agriculture, especially increased agricultural production of rice and pulses, which are an essential part of the Nepali diet. Although cereal staple crops dominate agricultural production, the yields of major cereal crops and pulses in Nepal have stagnated at low productivity. Opportunities exist to close the yield gap by incorporating best practices that sustainably intensify cereal systems through conservation agriculture, crop rotation, and other resource conserving technologies.

By taking a systems-level approach to improve productivity in staple crops, labor and resources will be conserved. This will better position farmers to invest in higher-return, high value vegetables because of increased resilience, productivity and stability in staple crop production. There are opportunities in the Hills for high value horticultural crops, which could increase incomes and improve nutrition among rural, food insecure populations. In particular, vegetable production is growing at a rate of 7 percent per year and is in high domestic and regional demand.

Improved irrigation, including small water storage, micro/drip irrigation, and energy efficient pumping technologies, will improve climate change resiliency and address vulnerability of smallholders to frequent fuel shortages. Understanding the implications on youth and the elderly, men and women, and marginalized ethnic groups will be critical to harnessing productivity gains (particularly for the most vulnerable), given changes in the labor force.

FTF Nepal will apply lessons learned from previous USAID programs that integrate agriculture and nutrition activities in order to move the poor out of poverty. For example, the current Action Against Malnutrition through Agriculture (AAMA) promotes home gardening, small livestock production, and nutrition education packages. This has resulted in increased household production, availability, and consumption of micronutrient-rich foods and improved health and nutritional status of women and children. The ongoing Nepal Flood Recovery Program (NFRP) and previous Smallholder Irrigation Market Initiative (SIMI) include components on small-scale irrigation, high value crop production and marketing, and key productive infrastructure, as well as sanitation, hygiene and nutrition training. This approach helps to increase production and household incomes. In the Education for Income Generation (EIG) program, entrepreneurial-based literacy and life skills education integrate vulnerable populations through enhanced empowerment, establishment of savings groups, and creation of market-based jobs.

2.4 NEPAL POLITICAL SITUATION AND DEVELOPMENT PROGRESS

The Government of Nepal (GON) has experienced many recent changes, but is largely on the right track in its democratic transition. The 10-year conflict ended in 2006 and the Comprehensive Peace Agreement has remained in place since then. National elections were held in April 2008. The 240 year monarchy was dissolved and a republic was formed in May 2008. A Constitution is currently being drafted by a Constituent Assembly, which has more than 30 percent female membership (by far the

highest in South Asia). The new Prime Minister took office in February 2011 and a new government has been formed.

Despite changes in national leadership, the GON ministries have continued to function. There is a steady cadre of civil servants who have enacted and implemented technical policies. The Prime Minister has prioritized food security as an urgent national issue. Representatives from key government agencies are actively working with multilateral and donor agencies (including USAID) to address Nepal's agriculture and nutrition needs.

In spite of the challenges detailed in the earlier section, Nepal has experienced steady development progress and FTF is in position to have a major impact. Key achievements are listed below:

- Nepal currently is on track to meet three Millennium Development Goals (MDGs) by 2015. These include MDG-2 (achieve universal primary education), MDG-4 (reduce child mortality), and MDG-5 (improve maternal health).

- Nepal has the greatest increase in Human Development Index (HDI) of any country since 1980.

- In fall 2010, Nepal received a special award honoring its health achievements from the UN General Assembly.

- The GON has shown increased support to developing agriculture, as demonstrated by this sector receiving the highest percent increase in national budgets over the past two years: 48 percent ($78 million to $116 million) in 2009/2010 and 62 percent ($116 million to $187 million) in 2010/2011.

- Nepal has a vibrant civil society with numerous community groups, including mothers' clubs, youth groups, and community-based organizations. Examples of successful community-led initiatives include over 45,000 female community health volunteers (FCHVs) and 50,000 community forest user groups (CFUG) members nationally.

2.5 NEPAL GOVERNMENT AGRICULTURAL AND NUTRITION STRATEGY AND PROGRESS

In an effort to ensure country-led implementation of FTF Nepal, the USG held numerous consultations with key GON Ministries and Commissions. Through these consultations and a joint USAID-Food and Agricultural Organization (FAO) mission in April 2010, the GON communicated its priorities and concerns regarding food security.

The strategic framework for agriculture and food security is provided by the longer-term Agriculture Perspective Plan (APP, 1995-2015). The objectives of the agriculture sector are addressed by the National Agriculture Policy (NAP, 2004), National Agriculture Sector Development Priority Framework (NASDP, 2010), and the associated Country Investment Plan (CIP). The overall goal of the CIP is to reduce poverty and household food insecurity on a sustainable basis and to strengthen the national economy.

In addition to these plans, there is a food security component in the Interim Plan of Nepal 2007-2010. The Food Security Objectives, Policies, Programs and Monitoring Mechanisms in the Food Security Interim Plan (FSIP) were prepared with technical assistance from FAO and are being renewed for 2011-2014. The principal objective of the FSIP is to make the lives of the targeted people healthy and

productive by improving national food sovereignty and the food and nutrition situation. The basic FSIP objectives are as follows:

1. Increased national self-reliance in basic food products (increased food production, transportation, cold storage, irrigation)
2. Improved nutrition situation (reduced undernutrition)
3. Enhanced quality, standard and hygiene of available food products
4. Enhanced capacities to manage food insecurity during crisis situations like famines, droughts, floods, landslides, fires, etc.
5. Improved access to food for people/groups most at risk of food insecurity (rural infrastructure, employment and income generation opportunities).

In September 2010, the GON submitted its application to the World Bank's Global Agriculture and Food Security Program (GAFSP). This application was approved for funding in June 2011. The proposal seeks to implement core elements of the Country Investment Plan with respect to enhancing food availability. The overall goal is to enhance food security (availability, access, and utilization) in the poorest, most food-insecure regions through increased agricultural productivity, household incomes, and awareness of health and nutrition. The CIP and GAFSP application are primarily focused on the Far-Western and Mid-Western development regions.

The proposal was prepared with intensive participation and consultations with all stakeholders and was endorsed by the Donor Technical Working Group on Food Security (chaired by the USAID Mission Director). A series of regional workshops (supported by FAO) were held in several regions of Nepal in order to obtain feedback from regional and local GON agencies. A final draft was validated in the course of a two-day national workshop in September 2010, involving 112 participants from several GON ministries, civil society, national and international NGOs, academic institutions, the private sector, and bilateral and multilateral partners. The overall workshop objective was to incorporate feedback into the final proposal.

In addition, the Ministry of Health and Population (MOHP) developed the five-year National Health Sector Plan, Phase II (NHSP II) for 2010-2015. The NHSP II contains specific components on addressing food security and an explicit section on nutrition. MOHP is also revising its "National Nutrition Policy and Strategy, 2004" on the basis of the 2009 Nepal Nutrition and Gap Analysis (NAGA). The GON's nutrition priority areas outlined in this plan are:

1. Wider coverage of micronutrient initiatives (Vitamin A and zinc supplementation, iron fortification and salt iodization)
2. Increased dissemination on breastfeeding and complementary feeding practices
3. Improved focus on maternal and infant nutrition
4. Hygiene and sanitation, food safety and preparation
5. Strengthened nutrition education in training curriculums for health care workers
6. Education on nutrition, dietary diversification and locally available nutritious foods.

2.6 FEED THE FUTURE STRATEGY

Geographic Focus

USG will focus FTF investments on 16-20 districts in the Terai and lower Hills and will reach people in the Far-Western, Mid-Western, and Western Regions. The Terai is Nepal's granary and together with the Hills contains the most arable land and fertile soils. Irrigation potential is greater and transportation networks are present in the Terai and lower Hills. Forty-seven percent of the total population lives in the Terai and 45 percent are located in the Hills. As detailed in the map in Annex B, FTF Nepal is expected to concentrate on the following geographic areas:

- 6 districts in the Far-Western Region: Achham, Baitadi, Dadeldhura, Doti, Kailali, and Kanchanpur
- 10 districts in the Mid-Western Region: Banke, Bardia, Dailekh, Dang, Jajarkot, Pyuthan, Rolpa, Rukum, Salyan, and Surkhet
- 4 districts in the Western Region: Arghakhachi, Gulmi, Kapilvastu, and Palpa

FTF's focus on the Far-Western, Mid-Western, and Western Regions versus the Eastern Region of Nepal is driven by higher sub-regional hunger indexes, incidences of asset sale as coping strategy, levels of outmigration, and numbers of female-headed households. Though these areas have high poverty rates, there is a substantial population and good potential investment returns. In addition, the Far-Western and Mid-Western Regions were prioritized by the GON in its CIP. The USG will be able to build on USAID/Nepal's experience in Economic Growth programs in these regions, such as EIG and NFRP.

Originally, the USG planned to cover only the Terai and lower Hill districts in the Mid-Western and Far-Western Regions. However, it was decided to work in the Western Region as well, in order to build on the current transportation networks and markets and to link FTF activities with the focus value chains in the Nepal Economic, Agriculture, and Trade (NEAT) program. In addition, existing roads and transportation networks from some Mid-Western hill districts (e.g. Rolpa and Pyuthan) are more directly connected to markets and transportation networks in the neighboring Western Region. This will enable FTF Nepal to further strengthen these already formed markets.

Conversely, the higher Hills and Mountains have less access to markets and limited road connectivity and infrastructure and are more suited to low volume high value crops (e.g. medicinal herbs). Though poverty and undernutrition rates are highest in the higher Hills and Mountains (especially the remote Karnali region),[14] the population density is much lower (only about 8 percent of the country's total population).[15] Therefore, the total number of poor and malnourished people is lower in absolute terms when compared to the more densely populated lower Hills and Terai regions.

Although FTF will not focus on high mountain areas such as the Karnali, USAID/Nepal has other projects such as EIG which are currently present in this region. The AAMA project implemented by Helen Keller International (HKI) was recently expanded to Bajura, which is one of the most food insecure districts in Nepal. The new USAID/Nepal Integrated Nutrition Program (INP) will cover some

[14] Located in the remote high mountains in the Mid-Western Region, the Karnali is the poorest, least populated area of Nepal. The five Karnali districts are Dolpa, Humla, Jumla, Kalikot, and Mugu. There is little road access, low food production, and limited income opportunities, which contribute to high poverty and malnutrition rates.
[15] "Ensuring Food and Nutrition Security in Nepal: A Stocktaking Exercise," September 2010.

mountain districts and the Hill Maize Research Program (HMRP) implemented by CIMMYT includes some higher hill areas (e.g. Kalikot district in the Karnali).

Other donors have prioritized the mountain areas and are carrying out activities primarily on improved economic access and infrastructure. The World Bank is supporting road building to connect the mountain districts to the lower hills and Terai. Asian Development Bank (ADB) initiated an income generation program in the high mountains. International Fund for Agriculture Development (IFAD) also has a new project focusing on high-value agriculture products, value chain development, and income opportunities. The World Food Program (WFP) is continuing its Food for Work programs in the Karnali and data collection and analysis through the Nepal Food Security Monitoring System (NeKSAP). In addition, Food for Peace is further funding WFP's protracted emergency food relief efforts in the Karnali.

Value Chain Selection

Nepal's major agricultural value chains were evaluated based on the following criteria:

1. High unmet demand (production growth rate, exports and imports as production percent)
2. High potential to increase production (value of production, volume of production, yield gap compared to China and India and scale potential)
3. Prioritization in the Country Investment Plan
4. Significant role in nutritional content and share of diet
5. Produced by a large number of smallholders (number of smallholders reached, impact on smallholder incomes)
6. High potential and applicability in focus districts.

The subsector selection process consisted of three parts: 1) market and data analysis, 2) value chain constraint analysis and 3) key informant interviews. An important part of analysis included focusing on value chains where FTF could make a substantive impact during the project implementation period and where other donors are not engaged. The final step was a ranking exercise taking all issues into account. A key part of the analysis was GIS mapping of arable land, crop production rates, population density, poverty prevalence (see Annex C), transportation networks, and other factors. Evaluations of current and previous USAID/Nepal projects also were considered in the value chain selection process. In addition, the USG used assessments from the McKinsey team and value chain analyses for the new NEAT project.

Based on those analyses and from previous programs, the USG decided that it can best support the GON in addressing Nepal's most pressing food security, poverty, and nutrition challenges through balanced interventions in high value vegetable value chains and complementary support to rice, maize and pulses under an integrated farming systems approach. These include promotion of intercropping or relay cropping during the current fallow season, crop rotation to improve nutrient retention, locally-adapted improved varieties (i.e., high yielding, early harvest, and flood tolerant varieties), and minimal tillage systems with residue management, timely provision of quality inputs, water management, and adapted mechanization at farm scale.

The focus subsectors of high value vegetables, lentils, and cereals present many opportunities to integrate women and youth in employment generating activities. Where applicable, livestock (e.g.

poultry and goats) may also be included as part of the farming system, in order to reach the landless and most marginalized. Enhanced cereal productivity and marketing systems alongside high value vegetable and/or livestock investments would increase the likelihood of success by ensuring sufficient local-level food production and adding resilience to the system in a way that promotes risk-taking on agricultural investments.

Conservation agriculture (CA) approaches (e.g. zero tillage) for staple crops can save labor when machinery is included, while also conserving water and fuel for pumping and improving soil quality. The labor benefit is of particular value in Nepal, where increasing labor shortages are affecting farm households, particularly female-headed households. When coupled with small irrigation and water storage systems, the CA approaches are important for climate change adaptation. Improved management practices and new seed varieties can also help farmers adapt to a changing climate and thereby further enhance and stabilize system productivity.

FTF Nepal assessed gender as a cross cutting issue along with youth and disadvantaged groups. This relates mainly to gender issues on the production and post-harvest side of the different sub sectors. With the high rate of male outmigration to foreign work destinations or urban centers within Nepal, women now head the majority of rural households. By focusing on agricultural value chains, FTF Nepal can have major impact on women and children.

Previous experience has demonstrated that interventions on high value vegetables can have significant impact at the smallholder level (e.g. 100-300 percent increase in household income and up to 685 percent increase in sales per hectare). Improved livelihoods enable households to indirectly benefit through various ways, such as increased food quantity, quality and variety, purchase of livestock and other productive assets, lower seasonal migration, increased savings and loan repayments, and improved school enrollment. There is also potential impact on the national economy including foreign exchange savings from reduced imports, greater value of agriculture GDP growth, higher labor productivity, and improved food trade balance.

Linking Agriculture to Household Nutrition

FTF Nepal will enhance the ability of agriculture to leverage nutrition by adopting a value chain approach to nutrition. On the supply side, nutrition will be improved in three ways: 1) Production of nutritious foods for the household; 2) Sale of agricultural products which generate income for the purchase of nutritious foods; and 3) Purchase and distribution of these same farmer-produced nutritious foods through nutrition programs that target smallholders as beneficiaries. The demand side will address critical access and utilization functions that contribute to improving the nutritional status of smallholder farming families, including intra-household resource allocation and food preparation.

Component A will support agricultural interventions that increase the number of crop cycles per year for target smallholders while also increasing productivity in high value vegetables and relevant cropping systems (i.e., rice, maize and pulses). This is expected to increase household incomes significantly. In addition, FTF will build the capacities of local and national government stakeholders to plan and implement food security programs. Specific activities under Component A are described in more detail in Section 4.

Because cultural and behavioral issues are key issues of low nutrition indicators, Component B will drive change in household hygiene and nutrition behavior by delivering nutrition and hygiene education and promoting availability and consumption of locally available nutritious foods. Activities under Component

B are described in Section 4. Components A and B are complementary and will be carried out through the same funding mechanism, for men and women in the same target households.

Integration of vulnerable groups will include empowering literacy, life skills, and entrepreneurial training that will enable women, youth, and ethnic minorities to take full advantage of the agricultural and nutrition interventions. USG will build the capacity of community leaders to deliver basic literacy and entrepreneurship education to disadvantaged youth, women and lower castes, with the target population being fully integrated into market-led initiatives. USAID/Nepal's previous experience has shown that literacy, numeracy, and life skills training have transformational impact, especially for poor rural women. They become not only inspired, but are empowered to make informed decisions about family finances, and nutrition. Additional details on Component C are in Section 4.4.

Additional funds will be used for supporting central initiatives, which are described in Sections 4.5 to 4.8 below. Five percent of FTF Nepal funds will be used for Monitoring and Evaluation.

Impact of Indian Market on High Value Vegetables

Little reliable information is available on imports and exports of vegetables between Nepal and India. In 2009/10, Ministry of Agriculture and Cooperatives (MOAC) data states there was a total official export of 2,577 MT of vegetables from Nepal to India. However, since total production for vegetables in Nepal was estimated at 3 million tons for the same period, official exports were only a small fraction of total production. Official imports of vegetables from India jumped from 685 million NPR in 2001/02 to 1,457 million NPR in 2007/08.

Price fluctuations in the Indian market impact the production and export of vegetables from Nepal to India. However, the domestic demand from the Nepalese market is growing. Most of the increased vegetable production is sold in the urban wholesale markets of Nepal for domestic consumption. This has resulted in import substitution related to many vegetables.

Exports to India take place "unofficially" because of quarantine issues on the Indian side of the border. For some vegetables, most of the volume in wholesale markets comes from India. For example, according to estimates from the Butwal wholesale market, 80 percent of onion, 80 percent of green chili, 25 percent of cauliflower, and 10 percent of tomatoes sold are imported from India. While Nepal currently cannot send truckloads of vegetables across the border, there is ample opportunity for import substitution for many vegetables. The production area dedicated to vegetables continues to grow, though the market absorbs all that is produced.

Large vegetable producers and traders in the hills state that significant amounts of produce go to major national markets and markets in India during the off-season. With the price fluctuations due to seasonality, the hill regions of Nepal can make significant profit. For example, during the rainy off season (July-August), tomato and cabbage can sell for two to three times the price as during the dry low season (April-May).

Table 1. Vegetable Production in Nepal (MOAC data)

Year	Area Production (ha)	Metric Tons (MT)
1989-1990	140,500	967,000
1999-2000	149,000	1,490,000
2009-2010	235,000	3,004,000

2.6 CROSS CUTTING ISSUES

To incorporate cross-cutting issues, FTF Nepal will replicate approaches that have demonstrated successful impact in the past. To address conflict-affected youth, disadvantaged women, and ethnic, linguistic and religious groups, FTF Nepal will:

1. Include literacy, life-skills, nutrition, health, family planning, and entrepreneurial skills training. These have proven to empower vulnerable individuals to take on new productive activities, facilitate mindset change towards "fee for service" in agriculture, create savings groups, deliver jobs in agricultural businesses, and help prevent HIV/AIDS infection.

2. Prioritize vulnerable individuals in selection of farmer beneficiaries and change agents. For example, at least 30 percent of beneficiaries will be from female-headed households. Youth farmers will also be targeted.

3. Promote female-friendly farming practices and technologies

4. Target all family members with behavior change education, not just farmers

5. Ensure program trainers and community leaders that become trainers represent multiple castes.

Given that USAID/Nepal has achieved significant multiplier effects in the past through integrated development programs (e.g. EIG and NFRP), the USG will also apply this cohesive approach to FTF. In addition, other USG actors (e.g. Department of Defense) are currently considering contributions, such as building market collection centers that can also be used as shelters or emergency control centers during flooding or other disasters.

Sanitation, hygiene and nutrition education combined with kitchen gardens and improved stoves has also led to behavior change in hygiene and nutrition reducing diseases and malnutrition levels. Based on previous successes, these elements will be incorporated into the FTF program. As part of its activities under the Global Health Initiative (GHI), USAID/Nepal is in the process of awarding a five year Integrated Nutrition Program (INP). INP is a community-based program that focuses on improving nutrition, maternal, newborn, and child health, family planning, water, sanitation and hygiene, home-based gardening and behavior change communication. GHI funding will be used for nutrition interventions under FTF and will be targeted to the same beneficiary households and communities as the agriculture and literacy interventions.

FTF will conduct an assessment of the impact of the selected value chains on natural resource management (NRM) and engage with technical advisors in Washington to ensure that these considerations are incorporated during program implementation. To address environmental and climate change resiliency, the USG will include analysis of impacts on ecosystems and climate change from FTF investments and activities when appropriate. This will help to internalize environmental sustainability as part of long-term food security and contribute to building climate change resilience of vulnerable populations.

As part of the Global Climate Change (GCC) initiative, USAID/Nepal is launching a program that aims to reduce threats to biodiversity and climate change vulnerabilities. GCC will focus on interventions in priority landscapes and enabling the national policy environment. One of GCC's priority areas is the Terai Arc Landscape, which partially overlaps with FTF's geographic focus. Convergence of geographic areas will allow the USG to integrate programs (e.g., conservation agriculture, use of weather data, and climate change models) for decision making on crop and variety selection, land use planning, and

improved understanding of irrigation and water management. FTF activity implementation will be coordinated with the GCC program.

2.7 DONOR COORDINATION

Since September 2009, the USG has undertaken consultations with various donors and development agencies to inform planning, including:

- Donors from G8 nations and regional bodies (DFID, GIZ, JICA, EU, CIDA, SAARC)
- International banks/multilateral agencies (FAO, WFP, ADB, WB, UNDP, IFC, WTO)

Notably, the USG initiated the development of a donor food security working group that is meeting monthly and includes all major donors operating in the sector in Nepal. USAID/Nepal participates in other food security working groups, including the national nutrition group which is comprised of bilateral and multilateral agencies and implementing organizations. In addition, the UN food security cluster is conducting disaster risk reduction (e.g., earthquakes, drought, and flooding) and contingency planning. USG will continue to coordinate with external development partners through these working groups to ensure there is synergy of programming and to avoid duplication of efforts.

Through consultations with relevant donors, the USG has identified other programs that can affect FTF interventions either at the district level (i.e. same focus districts with complementary interventions) or at the national level (i.e., policy, infrastructure, finance sector, trade). FTF Nepal will ensure that beneficiaries are aware of and can tap into relevant resources (e.g. World Bank's Poverty Alleviation Fund to support community infrastructure or IFC's small-medium enterprise venture risk capital to finance entrepreneurs) and will collaborate with donors to ensure programs are truly complementary and not overlapping.

2.8 SUSTAINABILITY

The programmatic sustainability and scalability of the USG strategy depends on the ability to target and develop a network of change agents that will continue interventions. USAID/Nepal will provide capability building and supplier network connections to local service providers, entrepreneurs, and the GON to establish and scale up commercially-driven models that deliver extension services, inputs, scale-appropriate mechanization, and output systems to target farmers. A business development fund will support technical assistance and investment, with the aim of supporting change agent expansion.

Farmer producer groups and other marketing groups will also receive training to improve production and marketing. Targeting young farmers will ensure sustainability of new technologies and improved productivity over time. Other value chain actors that provide essential products and services to farmers will be supported on a smaller scale where relevant and necessary (e.g. irrigation equipment providers).

To ensure sustainability of FTF nutrition and hygiene interventions, USAID/Nepal will train and empower facilitators and volunteers to become "change agents" able to deliver nutrition and hygiene education to their communities. This will be based on the FCHV model, which has been quite successful in delivering essential health services such as Vitamin A supplementation at the community level in Nepal.

In order to enhance local capacities and further build long-term sustainability, Component C will be implemented directly by Nepali organizations. There are numerous NGOs with experience in conducting literacy training for USAID/Nepal and other donors. Furthermore, USAID/Nepal is already

funding a livestock and seed production project through MOAC and will continue direct support to relevant GON agencies when appropriate. These approaches are consistent with the objectives of USAID Forward procurement reform.

To ensure environmental sustainability, careful attention will be made to avoid unintended negative impacts of FTF programming on ecosystems, upon which Nepal's population relies both in the short- and long-term. To the extent possible, consideration of ecosystem and climate changes (e.g., dams, changing weather and temperature regimes, hydrology, and land use) will be built into FTF programming.

3. FEED THE FUTURE OBJECTIVES, PROGRAM STRUCTURE AND IMPLEMENTATION

3.1 FEED THE FUTURE OBJECTIVE STATEMENT

Feed the Future's overall objective is to sustainably reduce global poverty and hunger. FTF Nepal aims to improve inclusive growth in the agricultural sector and improve nutritional status, especially of women and children. These first level objectives are the foundation of FTF Nepal, which is designed to maximize the number of Nepalis lifted out of poverty and the number of children and women with improved nutritional status. A key underpinning to the FTF Nepal strategy is the recognition that Nepal is undergoing changes in precipitation event patterns, temperature regimes, and hydrology (due to glacier melt) linked to climate change. FTF activities will be part of a larger USG commitment to build the resilience of vulnerable populations to the changing climate in Nepal.

3.2 PROGRAM FOCUS AREAS

Through an integrated whole-of-government approach, FTF Nepal will concentrate on agriculture and nutrition investments in the geographic target area (defined in Section 2.6) and will support cross-cutting areas. Additional details on specific programs are included in Section 4 (Core Investment Areas).

3.3 LINKAGES WITH OTHER U.S. GOVERNMENT PROGRAMS

USG will apply an integrated development approach by leveraging relevant USAID programs (e.g. GCC and GHI) and other USG actors (e.g. Department of State) in the following areas:

- *Capacity Building*: Improve the general skills, decision-making capabilities, and planning abilities of private sector change agents and local and national government stakeholders in agriculture and nutrition (e.g. INP)

- *Policy and Enabling Environment:* Assist the GON in formulating and implementing agriculture policy reforms and foster a conducive business environment for private sector-led growth (e.g. NEAT, State)

- *Government Capacity:* Improve GON capacity to plan and implement food security interventions (e.g. inter-ministerial coordination by National Planning Commission)

- *Finance*: Address issues in microfinance policy and strengthen microfinance institutions to increase access of women, poor and disadvantaged to financial services (e.g. NEAT)

- *Agricultural Research and Science and Technology*: Disseminate proven high technologies (e.g. integrated pest management (IPM) and horticulture practices through Collaborative Research

Support Program (CRSP); improved technologies, cropping systems, and commercialization through Cereals System Initiative for South Asia (CSISA); nutrient-enhanced varieties through CIMMYT and International Rice Research Institute (IRRI)

- *Infrastructure*: Contribute small scale productive infrastructure at the community level while coordinating with donor and GON investments in larger scale roads and irrigation (e.g. NFRP)

- *Resilience to Climate Change*: Improve biodiversity conservation and adaptation to climate change through forest and water resource management, NFTP production and processing, social marketing, dissemination of adapted crop varieties, and improved policy (e.g. GCC).

3.4 INTERMEDIATE RESULTS

There will be four intermediate results (IRs) from this strategy. This section describes illustrative activities under each IR, with additional detail on the activities of Components A, B, and C included in Section 4 below.

IR 1: Improved Agricultural Productivity

The development hypothesis is that agricultural productivity will be increased through investments in key areas. By building the capabilities of change agents to train farmers in high value agriculture along with best practices for rice, maize, and pulses, these farmers will increase yields of staples while moving towards production of higher value crops. This will lead to higher land productivity and incomes. Activities may include the following:

1. Improve seed varieties of vegetables, pulses, and cereals that boost yields, are nutrient fortified, and are disease and climate change resistant (i.e., Vitamin A fortified maize, high iron rice, drought and flood tolerant rice).

2. Supply quality inputs, appropriate machinery and equipment, output systems, efficient marketing systems, and best management practices (e.g., seeds, fertilizer, and organic IPM treatments) through extension agents, service providers, and other private sector change agents.

3. Train farmers on improved production techniques using extension and mass media.

4. Assist the GON on agriculture policies, including micro-credit issues.

5. Improve farming practices and techniques, including intercropping (e.g. lentils and rice), crop rotation, conservation agriculture approaches, intensified cropping systems, integrated weed, pest, disease, and nutrient management.

6. Develop and disseminate appropriate technologies for female farmers (e.g. corn huskers and smaller tractors).

7. Improve small-scale water storage and irrigation systems (e.g. micro-irrigation drip systems).

8. Strengthen market linkages and/or introduce aggregators (e.g. producer associations and committees).

9. Build grading and storage facilities, collection centers, and trader warehouses.

Through support for increased food production, irrigation, community infrastructure, improved inputs, and updated farming practices and technologies, IR 1 supports two of the five objectives in the GON's FSIP:

- Objective 1: Increased national self-reliance in basic food products
- Objective 4: Enhanced capacities to manage food insecurity during crisis situations.

IR 2: Increased Agriculture Value Chain Productivity Leading to Greater on and off Farm Jobs

The development hypothesis is that after receiving USG training and targeted capital assistance, commercially-driven local change agents will provide sustainable, high quality agriculture inputs and government extension services to smallholders. Combined with strengthening market systems, this will lead to higher production and greater incomes, thereby improving food access and reducing poverty. Private sector investment is expected to increase after the economic profitability of this model is demonstrated.

Key intervention areas may include the following:

1. Increase value added processing at the producer level.
2. Improve post-harvest handling, including analysis of nutrient quality.
3. Build storage facilities (including cold storage) and new, improved storage systems for enhanced retention of nutrients.
4. Reduce and/or eliminate anti-nutrients such as aflatoxins occurring in peanuts and rice.
5. Test, adapt and distribute bio-fortified grain seeds (e.g. high zinc and iron in rice).
6. Enable technology transfer and facility setup financing for post-harvest food fortification such as micronutrient additives to flour.
7. Establish collection and analysis centers and train processors to increase availability, safety, and quality.
8. Build domestic, regional, and international private sector alliances.
9. Strengthen local procurement centers, associations, and other aggregators.
10. Facilitate market information and access for smallholders and wholesalers.
11. Assure local procurement of processed nutritious foods for food assistance programs.
12. Establish food safety standards, improved packaging, and SPS certification.

By supporting private-sector led agricultural services, market linkages, and input supply, IR 2 supports two of the five objectives in the GON's FSIP:

- Objective 1: Increased national self-reliance in basic food products
- Objective 4: Enhanced capacities to manage food insecurity during crisis situations.

IR 3: Improved Access to Diverse and Quality Foods and Improved Nutritional Behaviors

The development hypothesis is that expanded production of vegetables, lentils, and livestock will increase the availability and affordability of nutritious food. The focus on nutrition and hygiene education will ensure the food will be accessed and consumed adequately by all household members.

Examples of activities to increase consumer demand of nutritious foods include the following:

1. Surveys to understand preferences and demand, awareness of nutritional and health benefits.
2. Mass media and promotional events to raise awareness of nutritional benefits of vegetables and lentils and to promote appropriate consumption.
3. Community and household messaging about nutritional needs of mothers and infants.
4. Food preparation training to increase utilization of nutritious products.
5. Innovative marketing and branding to enhance demand of processed nutritious foods.
6. Engaging schools, hospitals, hotels, and food service markets.

Through its emphasis on household and community level nutrition, hygiene behavior change, and knowledge of nutrition of locally available foods, IR 3 immediately supports three of the six objectives in the GON's "National Nutrition Policy and Strategy, 2004":

- Objective 2: Increased dissemination on breastfeeding and complementary feeding practices
- Objective 4: Hygiene and sanitation, food safety, and preparation
- Objective 6: Education on nutrition, dietary diversification, and locally available nutritious foods.

IR 4: Increased Resilience of Vulnerable Communities and Households

The development hypothesis is that through specific trainings in literacy and entrepreneurship, the most vulnerable individuals and groups (e.g., disadvantaged youth, women, and ethnic groups) will be integrated into the program, thereby reducing poverty rates and improving food security. By providing income generating activities to vulnerable groups and improving access to savings groups, incomes will be higher and more consistent throughout the whole year. This will reduce male migration and use of coping strategies, thereby diminishing the negative impact of lean seasons and food price fluctuations, especially among female-headed households. Through investments in small scale community infrastructure, capacity building of producer groups, and addressing issues affecting entire farming systems (including livestock), vulnerable communities will be better equipped to cope with emergency situations such as droughts or floods. Through considering impacts on ecosystems, changing land use and hydrology, and climate change, investments and activities will internalize environmental sustainability as part of long-term food security and build climate change resilience of vulnerable populations.

By improving vulnerable individuals' livelihood opportunities and investing in community capability and infrastructure, IR 4 immediately supports two of the five objectives in the Government of Nepal's FSIP:

- Objective 4: Enhanced capabilities to manage food insecurity during crisis situations.
- Objective 5: Improved access to food for people/groups most at risk of food insecurity.

3.5 POLICY REFORM PRIORITY AREAS

As part of FTF and NEAT, assessments were conducted and stakeholders were consulted to determine short, medium, and long-term policy priority areas. In selecting the areas for agricultural policy reform, the USG used a diagnostic approach, where key constraints to agricultural growth were identified. A subset of constraints and possible solutions were found after a concerted literature review, meetings with private sector and public sector constituents, and discussions with other donor agencies.

The following factors were considered in selecting the FTF Nepal policy agenda:

1. Able to achieve impact within the project implementation period
2. Focus on areas/issues of interest to farmers, private sector, and stakeholders
3. Areas where there is government support
4. Policy issues that impact agriculture productivity and food security
5. Avoid overlap with other donors.

After careful analysis of priorities, timeframe, feasibility, and budgets, the USG decided to focus on the following short- and medium-term policy areas under FTF.

Short-Term Policy Issues:

- *Seed Regulation:* Currently, the GON has limited ability and a long process to approve new seed varieties. Farmers cited seed regulations as their top concern, as they are unable to find sufficient quantities of quality seeds. USG plans to work with the government to increase technical capacity, decrease regulatory bottlenecks, and ensure quality control, driving toward increased local seed development and multiplication. HMRP is already working on improving the efficiency of seed licensing and distribution.

- *Competition Policy Law:* The Competition Promotion and Market Protection Act of 2007 is in place. However, this law needs to be implemented in practice to deal with disputes in transport syndicates.

Medium-Term Policy Issues:

- *Contract Enforcement:* For the longer term, improving contract enforcement is one of the areas that would have greatest impact on business enabling environment in Nepal. Diplomatic efforts will work towards this end, particularly as USG leverage increases over time as the new Nepali government normalizes functions and programs like MCC and Peace Corps are able to initiate operations. USG will explore possibilities to establish a "SEZ" contract system within targeted geographies. In the meantime, USG will ensure that the contracts between parties involved in USG efforts are enforced.

- *Contract Farming Act:* Private investment in processing linked directly to smallholder suppliers is currently inhibited by the lack of a regulating framework that ties all parties to the contract even during high price fluctuations. The current Contract Act of 1999 should be amended to include contract farming. Specifically, breach of contract issues need to be addressed and a provision for out of court mediation and arbitration should be included. Once a legal framework for contract

farming is created, it will be easier to attract more agribusiness investors. Representatives of the Federation of Nepalese Chambers of Commerce and Industry (FNCCI) have underscored the impact such a policy would have in further corporate investment.

- *Agricultural Cooperatives Law:* Cooperatives have largely developed financing operations, but not actual production activities. The law should be reformed to foster the development of production cooperatives and to achieve the economies of scale.

- *Agricultural Product Markets-Legal Management Authority:* Nepal's major food markets are an essential part of the agribusiness value chain, yet the ownership and management are organized using ad-hoc rules and regulations. The previous draft act should be re-written in order to enable creation of additional markets.

Long-Term Policy Issues:

The USG considered various long-term policy options, including fertilizer and land tenure. Based on the analysis, it was determined that focused, significant impact could not be achieved in these issues during the FTF timeframe.

3.6 ROLE OF WHOLE OF GOVERNMENT IN THE PROGRAM

An FTF program is envisioned that includes clear roles for current USG agencies present at Post, but also creates the opportunity for other agencies to launch activities in Nepal. Building a comprehensive FTF package that leverages USG funding and capabilities across agencies is a major priority, since it will significantly increase leverage towards the GON and multiply potential impact on target communities. An illustrative diagram of USG agencies that can contribute to FTF Nepal is below.

Key USG agencies that are already active in Nepal include:

1. USAID/Nepal: Health and Family Planning (particularly INP), Democracy and Governance, Economic Growth programs (NEAT, EIG, GCC, NFRP)

2. USAID/Washington: CRSP research and CSISA adaptation and dissemination of improved agriculture technologies and management approaches

3. USAID/NASA SERVIR program: Glacier melting, early warning system, and response

4. Department of State: Political and policy reform on trade and agriculture issues

5. Food for Peace: Support to WFP for emergency programs in remote mountain areas

6. U.S. Department of Agriculture (USDA): McGovern-Dole International Food for Education and Child Nutrition school feeding program (planned).

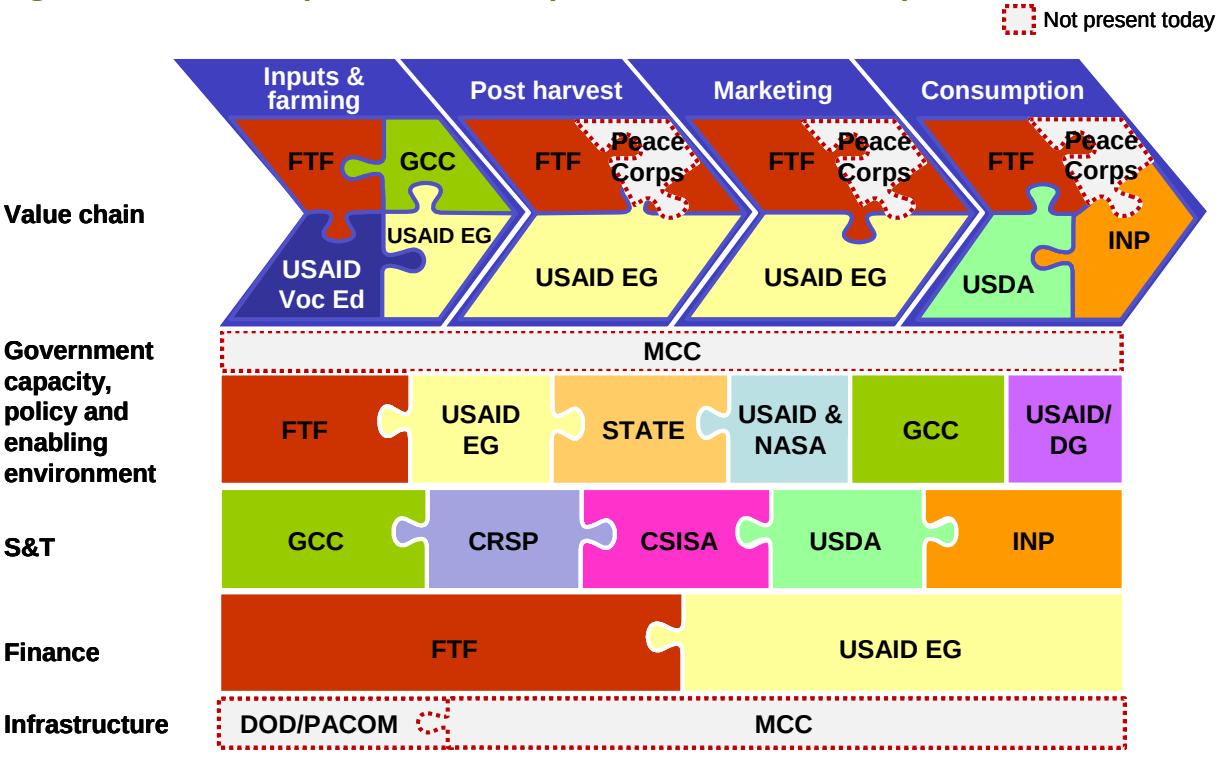
In addition, Department of Defense's (DOD) Pacific Command (PACOM) is currently evaluating opportunities for investment in Nepal and assessing options for targeting the same focus areas as FTF. This includes investing in market collection centers in FTF target communities. These structures would serve as collection centers during regular times and converted into shelters or emergency control centers during flooding, earthquakes, or other natural disasters.

Nepal is eligible for Millennium Challenge Corporation (MCC) threshold funding and it is therefore a USG priority to help support GON achieve it. An MCC threshold program would drive improvements

in policy and business enabling environment that would benefit FTF value chain interventions. A Compact could also provide much-needed larger scale infrastructure investments in the future. More importantly, the potential for a Compact with significant funds will provide incentives for GON to work with the USG on creating a more conducive policy and business enabling environment.

Finally, the USG is strongly advocating for Peace Corps to re-launch operations in Nepal. Agriculture and nutrition volunteers could be specifically targeted towards FTF geographies. This would have a multiplier effect of FTF interventions and would expand reach to households that are not priority FTF beneficiaries. Examples of current and potential participating USG agencies are illustrated in the diagram below.

Figure 1. Potential Impact of Peace Corps on Feed the Future Nepal Activities



Source: FTF Nepal strategic review presentation, January 2011

3.7 RESULTS AND IMPACT OF THE U.S. GOVERNMENT FEED THE FUTURE STRATEGY

Through Feed the Future Nepal, over the next five years:

- An estimated 165,000 vulnerable Nepali women, children, and family members—mostly smallholder farmers—will receive targeted assistance to escape hunger and poverty. The interventions will take on a private sector lens and will focus on establishing profitable businesses able to provide inputs, extension services, and market linkages to target farmers on a sustainable basis. The interventions will increase production (availability) of vegetables while also enhancing incomes (access).

- In conjunction with the Global Health Initiative, more than 393,000 children will be reached with services to improve their nutrition and prevent stunting and child mortality. Agricultural interventions will increase production (availability) of vegetables while also enhancing incomes (access). Nutrition and hygiene interventions will promote behavior change regarding diet composition, feeding practices and spending patterns (utilization). Targeted programs will also increase resiliency (stability) in vulnerable communities and groups.

- Significant numbers of additional rural populations will achieve improved

4. CORE INVESTMENT AREAS

4.1 OVERVIEW

As described in Section 3, FTF Nepal has core investments in one geographically-based focus area with change agent-led interventions in agriculture, nutrition and hygiene, and literacy and entrepreneurship for vulnerable groups. The IRs for FTF Nepal are as follows:

1. Improved agricultural productivity
2. Increased agriculture value chain productivity leading to greater on- and –off farm jobs
3. Improved access to diverse and quality foods and improved nutritional behaviors
4. Increased resilience of vulnerable communities and households.

All planned FTF Nepal programs are described below. Components A and B are explained separately, but will include the same target populations. The integrated agriculture and nutrition interventions under Components A and B comprise of the majority of the total program.

4.2 IMPROVED AGRICULTURE PRODUCTIVITY

FTF Nepal takes a farming systems approach, through balanced interventions in high value vegetables and sustainable intensification of staple crops and livestock when appropriate. Intensifying rice and maize production would release more land for cultivation of high value vegetables. Most Nepali farmers will not shift all their land to non-cereal crops, but would split land holdings between staples and other higher-value crops. In addition, applying resource conserving technologies to cereal production leads to more efficient use of inputs, such as water, fertilizer, and labor, which can then be invested in higher-value production activities. By using CA practices, turnaround times in cropping systems are decreased, making it more feasible to insert a high value vegetable crop rotation in the system (e.g. adding a ginger rotation into a maize-based cropping system). Systems that incorporate these factors generate additional income while maintaining the staple base.

FTF Nepal is not proposing to replace cereals with vegetables, but is promoting crop diversification and intercropping. Previous projects have shown that households growing vegetables for sale in markets consume 20 percent of produce grown, thereby contributing to improved nutrition. Increased income has proven to contribute to increased food security as cultivation of vegetables using improved production techniques results in a significantly higher gross-margin than cereals. Under NFRP, when farmers switched from cereals to producing vegetables, their incomes increased by 200 percent. High value vegetable production can have an especially large impact on incomes and food security for producers in marginal areas and/or with small landholdings. Input and labor costs are higher for vegetables, but this is more than made up for by increased income per unit of land.

The decision to invest in high value vegetables and cereals such as rice, maize and pulses (lentils) in FTF areas is based on seasonality linked with agro-ecological features (i.e., Terai, inner Terai, and hills). In some Village Development Committees (VDCs), there will be more production of cereals than vegetables during particular seasons. In other VDCs, there will be more focus on vegetable production. This will depend on local factors such as water availability (micro-irrigation), market access, and labor availability. According to MOAC data, net profit of vegetables is on average at least five times higher than cereals in the hills and Terai.

Previous USAID/Nepal programs have delivered successful high value agriculture intervention models that FTF will leverage and improve upon. Examples of these models are:

Micro-irrigation Technologies*:* The USAID/Nepal SIMI (2002-2009), EIG (2008-2013), and NFRP (2009-2012) projects have shown the effectiveness of developing local manufacturing and dealer networks for micro irrigation technologies including drip irrigation systems, treadle pump, micro sprinklers, and water storage technologies. SIMI facilitated over 70,000 households to adopt micro irrigation and increase annual income by $200. NFRP facilitated over 4,000 households to adopt shallow tube wells that can irrigate up to 4-5 hectares each (20 households), thereby tripling annual income.

Multiple Use Water Systems (MUS*):* In the hills, the SIMI and EIG projects promote multiple use water systems (MUS). MUS are community systems with a single source pipe and dual storage and distribution systems for domestic use and irrigation utilizing drip and micro sprinklers for 15-50 households. MUS cost less than $100 per household and result in average income increases of $200 per year. MUS also decrease the time required by women for water collection and improve drinking water quality. USAID/Nepal programs have developed over 100 MUS. The MUS approach has been recognized and replicated by the GON as well as multilateral agencies such as the World Bank, which incorporated USAID/Nepal's MUS approach into its recent irrigation projects.

Collection Centers (CC*):* The SIMI, EIG, and NFRP projects are establishing collection centers located in production pocket areas. The approach involves organizing smallholders into 20 to 40 producer groups of 20 households and delivering production and marketing training to those groups. Those groups select a marketing and planning committee (MPC) which also includes local traders. The project builds the MPC's capacity to establish and manage a shipping point CC within walking distance of producers. Farmers sell their produce at a fair price to the CC, where a wholesale trader arranges for transportation and sale at markets that are farther away. USAID/Nepal projects have established over 150 collection centers serving over 100,000 households (benefiting over 500,000 people).

Demonstration Farms*:* NFRP and other projects are implementing an approach to develop model farmers through an 18 month farm demonstration program that includes 6 field trainings (e.g. crop selection and nursery management, production management, IPM, pre-harvest and post-harvest management, and marketing). Farmers are asked to contribute 0.2-0.4 hectares to high value vegetable production, and share 25 percent of irrigation set costs and increasing share of inputs each cycle (15-25-100 percent). Irrigation clusters become a focal point for program intervention and training (1 shallow tube well per 5-9 farmers on 1–1.5 Ha). Irrigation Clusters are further organized into Producer Groups (1 per VDC worksite, including 30-45 farmers), which become the focal point for marketing assistance.

IPM Packages*:* The IPM-CRSP has developed production packages integrating micro irrigation and best practices for production of vegetable crops, coffee, and tea. These technologies include grafting high yielding varieties of tomato and eggplant to resistant root stocks, use of pheromones for monitoring and mass trapping, use of sweet gourd in mass trapping, application of bio-pesticides and fertilizers, use of

soap water in pheromone traps, practices to control stem borer in coffee, and a package for organic tea production. These technologies have been recognized by DOA/GON as part of the technology development process.

Implementation of these programs has delivered quantifiable impacts, as summarized below:

- Significant increases in total income of participating households (200-300 percent) as well as of those not directly participating, but within a 30-minute walk from a participating household. Further, increased household production of vegetables and incomes has led to better food quantity, quality and variety, higher spending on non-food items (e.g. schooling), productive asset acquisitions (e.g. livestock), lower seasonal migration, savings and loan repayments, and home improvements.

- Diffusion or copycat effect: Once one household is encouraged to grow vegetables for cash income, there are additional households who often join after observing the success of their neighbors. In addition, plastic-sheeted hothouses for vegetable production and irrigation technologies such as shallow tube wells have shown an additional 40 percent neighbor adoption in projects such as NFRP and EIG.

- Employment created for participating households, neighboring households, and in both direct and indirect value chain enterprises.

4.2.1 Identification of Challenges to Address

The first step in designing the program was to identify the most binding constraints in each value chain. These challenges are listed below:

<u>High value vegetables</u>

- Lack of irrigation technology

- Limited access to quality inputs, particularly seeds

- Limited technical knowledge (including pest management and appropriate timing and sequencing of crops)

- Inadequate knowledge of pricing and access to markets

- Fragmentation of production supply

<u>Rice, maize, and pulses</u>

- Poor water management

- Limited dissemination of improved seeds and other inputs

- Poor knowledge of techniques to increase crop cycles and adapt cropping systems to maximize productivity

- Inadequate flood and drought preparedness, especially with changing hydrology and rainfall patterns due to climate change effects

4.2.2 Identification of Primary Change Agents

FTF Nepal considered a variety of potential change agents with the purpose of investing in individuals or organizations that will deliver long term sustainable change in the selected value chains. The highest potential change agents identified were service providers, agriculture extension agents, and lead farmers.

1. **Service Providers:** These are private sector entities that provide input and agriculture services. Since they are usually present at district headquarters and market centers, FTF Nepal will improve linkages between service providers and farmers. FTF Nepal will recruit new service providers and train them to further support farmers. The service providers will ensure the supply of quality seed, disseminate information on cultivation practices to farmer groups and cooperatives, and provide farmers with tools and information on how to use new equipment (e.g. micro irrigation). Examples of service providers in Nepal include the following:

    - Companies: Local companies import and sell new equipment to farmers according to local demand, such as tractors, tillers, and seed processing and packaging machinery. Some have specialized, female friendly equipment such as smaller tractors and treadle pumps.

    - Agrovets: Agrovets are private sector entities present in district capitals with established networks of sales representatives across small towns and rural areas. They are the primary source for farmers to access agricultural inputs (e.g. seeds and fertilizers) and services (e.g. water). In some cases, Agrovets agents will buy back and trade produce with wholesalers or processors. They extend credit to farmers and are paid in cash or produce after harvest. Some entities have started counseling services to farmers and are building the cost into input prices of inputs. Most Agrovets are affiliated with the Seed Entrepreneur Association in Nepal (SEAN) and are involved in trading seeds (mainly vegetable and some cereal crops), pesticides, and agriculture tools and equipment.

2. **Government Extension Agents:** MOAC's Department of Agriculture (DOA) has a good agriculture extension network throughout the country. However, the current extension system is not effective in delivering services to farmers due to lack of resources and is not oriented toward the varied topography and terrain in Nepal. Since one field technician (Junior Technician/Junior Technical Assistant) generally covers farmers in 2-4 VDCs, it is difficult to provide technical services to all farmers. FTF Nepal will work with extension agents to ensure that farmer groups and cooperatives have increased access to agriculture services, technical inputs, and cultivation practices. Government extension officers in agriculture service centers and sub-centers in the VDCs will also be involved at the farmer-household level. The extension agents will provide farmers with services and disseminate usage information in three main areas: reliable seed supply, farm equipment and tools, and technical inputs for agriculture technologies.

3. **Lead Farmers:** The District Agriculture Development Offices (DADO) already has programs in place to work through lead farmers. These are successful farmers who are recruited to conduct field-to-field visits to neighboring farmer groups and cooperatives. The lead farmers will provide technical advice and demonstrate new cultivation practices (e.g. transplanting seeds and grafting technologies) to beneficiary households.

A mapping study will be carried out to identify service providers, extension agents, and lead farmers in each geographic target area. This study will assess their current capacities, services, needs, and locations, as well as their potential impact (e.g. number of potential households to be reached per change agent). Priority will be given to entities or individuals that represent vulnerable groups such as women. Profile of change agents will vary by target area, given different levels of agricultural development and different types of farmer needs. However, the type of investments that the program will deliver (described below) will be similar across different types of change agents.

Payments to change agents who provide services to farmers are often an issue. In many cases, farmer groups receiving technical services and inputs may not be in a position to pay service providers up front. This is especially true for programs focusing on disadvantaged and poor beneficiaries. To address this issue, FTF Nepal will collaborate with VDCs in the 20 working districts in order to access additional funds for agriculture activities. Under the decentralization process, the GON has allocated block grants for development activities. VDC officials can use these funds to address local needs in agriculture, health, education, and other relevant areas.

4.2.3 Investments

The greatest emphasis of FTF investments will be on developing commercially-driven agriculture change agents to ensure sustainability and scale up of interventions. This will be supported by targeted investments in developing producer groups and strengthening markets.

Figure 2. Feed the Future Agriculture Change Agents

Source: FTF Nepal strategic review presentation, January 2011

As part of its investments in agriculture change agents, FTF Nepal will work with private sector service providers to:

1. Provide a "train the trainer" module in which the contractor and future change agents go out to the field to train the farmers in best practices and agricultural services. In years 2 and 3, the contractor role will diminish as the change agents take ownership of the farmer training. The economics of training the farmers plus selling the inputs should be sustainable on a long term basis without USG intervention.

2. Provide general capacity building and training around business and financial management so that the service providers are better equipped to manage their business and experiment with new models. This includes support for business plan development.

3. Establish a business development fund for service providers to access to loans for:

- Working capital requirements (e.g., expand their inventories of seeds, fertilizers, tools, and other related inputs)
- Contracting of services (e.g. marketing materials)
- Capital investments (e.g. transportation, agricultural machinery)

4. Leverage existing microfinance programs to facilitate access to credit for input dealers to support expansion into under-served areas.
5. Connect input suppliers with local buyers so that production is tailored to buyers' preferences and so they will sell inputs, extension, and other services to farmers.
6. Aggregate farmers into producer groups organized around collection centers and build the capacity of MPCs to coordinate production and marketing services demand.
7. Build the capacity of MPCs to work with VDCs to identify and prioritize investments for the community and effectively manage the CCs.
8. Invest in simple infrastructure (e.g. sheds) to formalize the centers and attract more economic activity.
9. Leverage other financing mechanisms (e.g. World Bank Poverty Alleviation Fund) and VDC block grants available for small scale infrastructure support.
10. Consider investments in improving information systems such as forecasting (e.g. linking SERVIR and meteorological services) and crop insurance, in order to improve risk management given changing monsoon variability and precipitation events.

To invest in government extension agents and lead farmers, FTF Nepal will promote lead farmer training to create visible examples of functioning farms, as well as potential impact on incomes and production. In the process, this will foster mindset change amongst farmers towards fee for services, thereby creating demand for service providers. Specific targeted production best practices and agricultural services include:

1. Disseminating proven small-scale irrigation technology (e.g., shallow tube wells, multiple use water systems, drip kits, small water storage, rainwater harvesting) and appropriate machinery and equipment (e.g., seed drills for low tillage systems, small tractors, adapted land leveling equipment, and harvesting machinery).
2. Introducing and increasing access to well-adapted seed varieties, such as flood resistant and early harvest rice seeds, including the acceleration of regional commercialization of high-quality seed production and distribution.
3. Promoting the adoption of proven farming "packages" adapted to specific ecological zones, including CA approaches targeting system intensification and diversification, integrated strategies for managing weeds, pests, and disease (including post-harvest), and site-specific efficient nutrient management.
4. Aggregating farmers into marketing groups to create critical mass and facilitating marketing linkages with local buyers and input suppliers.

5. Contributing targeted investments in community productive infrastructure (e.g. market collection centers).

6. Supporting private sector providers and government extension agents to act as major change agents in disseminating inputs, scale-appropriate mechanization and irrigation systems, best management practices, and technologies.

4.3 NUTRITION AND HYGIENE INTERVENTIONS

The same beneficiaries from Component A will also receive nutrition and hygiene education under Component B. Component B will encourage consumption of locally available, nutritious foods. In previous projects such as AAMA, this was essential in ensuring that household members consume nutritious vegetables and animal source foods from their home gardening and livestock activities and make appropriate decisions on nutrition and feeding practices.

Existing sources have shown that increased food production will have limited impact without strong nutrition education and behavior change communication activities. For this reason, additional GHI funding has been dedicated for nutrition and hygiene interventions in FTF target districts. These activities will replicate the INP, which will cover other districts of Nepal for five years. FTF will leverage technical resources generated in the national program to deliver the same interventions in focus districts.

The primary purpose of the INP is to improve the nutritional status of women and children under-two years of age. Interventions will include maternal and child health, family planning, nutrition, behavior change communication, and hygiene and sanitation. Its main program focus will be at the community level, although INP will also cover district level capacity development and national inter-ministerial coordination.

In addition to INP, USAID/Nepal recently began two new projects to improve water, sanitation, and hygiene access for more than 65,000 people in the Mid-Western and Far-Western Regions. These projects will be directly implemented by local Nepali organizations in two FTF priority districts (Achham and Surkhet). This is consistent with the procurement reforms proposed under USAID Forward.

4.3.1 Identification of Challenges to Address

The main nutrition and hygiene challenges to address are listed below:

- Harmful feeding practices and behaviors (i.e., males eat first, low weight gain during pregnancy, traditional practices toward pregnant and menstruating women)

- Inadequate understanding of nutrition, particularly for pregnant women and young children (e.g. breastfeeding, complementary feeding, infant and young child feeding)

- Lack of awareness on sanitation and hygiene (e.g. food safety and preparation, hand washing, and clean drinking water)

- Inadequate access and/or utilization of health services

- Food scarcity and lack of variety in some regions.

Given the rich diversity of culture, geography, ethnicity and beliefs in Nepal, programs that attempt to change nutrition related practices must begin by understanding both the negative and positive behaviors in a particular location as well as the community level barriers to improved nutrition-related behaviors. Programs will target male and female household members.

4.3.2 Identification of Primary Change Agents

Nutrition and hygiene volunteers will act as the key change agents for FTF Nepal. These volunteers will be mobilized through existing community entities such as FCHVs, mothers' groups, etc. A mapping study will be carried out to identify volunteers and facilitators in each geographic target area, and to assess current capacities, needs, and locations. This component will follow the existing FCHV model, which has worked very effectively in Nepal. Since the FCHVs are already involved in numerous health activities, a separate group of nutrition and hygiene volunteers will be recruited and trained for FTF Nepal. FCHVs receive travel stipends and incentives, but not a regular salary, and are well-respected in the community. The role of these change agents is described and illustrated in the diagram below:

- **Volunteers:** The volunteers will work with community facilitators to deliver household level training packages to men and women that address nutrition and hygiene issues.

- **Community Facilitators:** The community facilitators will recruit and train new volunteers, while coordinating and providing refresher training to existing volunteers.

Over 45,000 FCHVs across Nepal serve as frontline local health resource persons who provide community-based health education and services in rural areas, with a special focus on maternal and child health and family planning. FCHVs play a significant role in the biannual distribution of vitamin A capsules, National Immunization Days, distribution of family planning commodities, and oral rehydration salts. They also provide treatment of acute respiratory infections and referral to local health facilities. FCHVs are the foundation of Nepal's primary health care system and the key referral link between health services and community members. The GON and donors (including USAID) have worked extensively through this network to expand and improve health care in Nepal.

Figure 3. Feed the Future and Female Community Health Volunteers (FCHVs)

Source: FTF Nepal strategic review presentation, January 2011

4.3.3 Investments

Investments directed towards improving household health and nutrition behaviors will be a key part of FTF interventions. Volunteers will work with community facilitators to deliver a holistic package of education and services to men and women at the household level such as:

- Promote evidence-based, age-appropriate feeding practices such as maternal nutrition, exclusive breastfeeding, complementary feeding, and water, sanitation, and hygiene.

- Promote household production of nutritious foods, complementing the agriculture activities under Component A.

- Educate women on proper nutrition and food utilization, coupled with the literacy, life skills, and entrepreneurship training of Component C.

- Extend coverage of micronutrient supplementation activities, such as iron folic acid for pregnant women and vitamin A for children.

Investments directed towards increasing consumption of diverse and nutritious foods will also be incorporated under Component B. These include:

1. Work closely with the Nutrition CRSP for evaluation research, improving national and local nutrition capacities, and strengthening policies and programs that integrate agriculture, health, and nutrition in Nepal.

2. Strengthen interpersonal communication and counseling skills on nutrition and hygiene.

3. Develop behavior change communication and mass media campaigns on nutrition and hygiene to be disseminated via radio.

4. Work with community groups to identify areas for water improvement systems and collaborate with partner organizations and the private sector to identify local solutions to improve sanitation and water purification methods.

5. Develop community based gardening approaches and train members on household and community based food production techniques.

6. Provide information on available foods and improved food preparation techniques as well as feeding practices (e.g., food calendars, recipe booklets).

4.4 INTERVENTIONS TO INTEGRATE VULNERABLE GROUPS

Component C focuses on empowering vulnerable groups. In order to ensure that women, ethnic minorities, lower castes, and youth benefit from components A and B, FTF Nepal will provide additional support to all beneficiaries through literacy training. In particular, women benefit from agricultural programs when they have completed literacy and numeracy programs combined with entrepreneurial and business skills and life skills. These literacy groups often continue working together through cooperatives and savings and credit groups even after they have completed the training modules.

These trainings include basic reading, writing, and math skills, as well as entrepreneurial and business skills (marketing, budgeting, and accounting) and life skills (e.g. HIV/AIDS awareness, human trafficking, and nutrition). The training is conducted by a local resource person over a 9 to 10 month period. Modules will be based on already existing materials that were developed for EIG and other similar programs.

4.4.1 Identification of Challenges to Address

The following are the major challenges identified for Component C:

Gender

- Existence of cultural, economic, technical and other factors that impose barriers to participation of women in the workforce
- High rates of male outmigration that leave women as head of households with greater workload and limited cash availability

Marginalized groups

- Exclusion of low caste and ethnic groups such as Dalits and Janajatis from social and economic activities following cultural norms
- Integrating internally displaced persons and victims of conflict into social and economic fabric

Youth (aged 16 to 30 years)

- Lack of employment opportunities
- Lack of adequate education during conflict

4.4.2 Identification of Primary Change Agents

In order to further improve local capacities and advance the objectives of USAID Forward, Component C will be implemented directly by local Nepali organizations. There are numerous local NGOs with experience in developing training modules in Nepali and other local languages and carrying out similar trainings supported by USAID/Nepal and other donors.

FTF Nepal's priority is to integrate vulnerable groups using an approach that remains sustainable after the program is over. Local capacities will be built to continue the intervention through a"Train the trainer" model. The program will identify individuals at the community level that are interested in becoming community facilitators, have the leadership skills to bring others into the training, and have demonstrated commitment to social inclusion in the community. In the selection of these future community facilitators, priority will be given to representatives of the vulnerable groups that are being targeted. A training of trainers program will be instituted to ensure a long-term presence and to transfer skills and technologies to local communities.

4.5 COLLABORATIVE RESEARCH SUPPORT PROGRAM (CRSP)

FTF Nepal may invest additional funds into the CRSPs that are disseminating technologies to farmers. This includes the IPM CRSP, which is working with high-value vegetables, one of the FTF focus value chains. The IPM CRSP is distributing technology packages to farmers for grafting tomatoes and eggplant, micro-irrigation, and pest control through pheromones and other non-pesticides.

4.6 CEREALS SYSTEM INITIATIVE FOR SOUTH ASIA (CSISA)

FTF Nepal may contribute funds to support expansion of the CSISA project to the geographic focus areas. Activities will emphasize adapting and disseminating best practices to farmers, extension workers, and service providers. Areas may include improved seeds, crop rotation, intercropping vegetables and pulses with cereal crops, improved crop calendars, crop selection, small mechanization, high quality inputs, and post-harvest storage.

4.7 INSTITUTIONAL CAPACITY BUILDING

Improved institutional capacity building at the national and local levels will be a key element throughout FTF Nepal. Possible areas of focus may include improved GON food security analysis and strategic planning, hybrid and seed production facilities, and more involvement of private agro-enterprises and NGOs.

4.8 POLICY WORK

Through assisting the GON to better develop and understand the impact of agricultural policies, more effective and appropriate mechanisms can be introduced that sustainably increase agricultural production and improve nutritional outcomes in Nepal. The specific policies that FTF Nepal plans to address are described in more detail in Section B.5.

4.9 ROLE OF WHOLE OF GOVERNMENT

As mentioned in Section 3.6, building a comprehensive FTF package that leverages USG funding and capabilities across agencies is a major priority. The proposed FTF program includes clear integrated roles for both USG agencies present at Post today and other agencies that could potentially start programs in the near future given the right environment.

The USG is working to emphasize integration of programs with the FTF focus areas. Decisions are currently in progress to adjust other programs to better fit with FTF priorities. For example, the USAID/Nepal team is working closely to ensure that the NEAT program targets similar geographic areas and policy reform priorities as FTF agricultural interventions. The USG has set aside funding to help support Peace Corps operations, and FTF Nepal is in talks with PACOM to identify investment opportunities that fit both sets of priorities.

Integration of USG programs that are already active in Nepal include:

- Global Health Initiative (GHI) will work in maternal and child health, HIV/AIDS, reproductive health, family planning, nutrition, hygiene, and other crucial health areas. Nepal is one of eight GHI focus countries worldwide.

- Integrated Nutrition Program (INP) is an essential part of GHI. INP will enhance the nutritional status of FTF target communities by improving household health and nutrition behaviors and increasing consumption of diverse, nutritious foods.

- Global Climate Change Program ("Hariyo Ban") will complement FTF by improving resilience in FTF focus areas of the Terai.

Relevant activities include:

- Foster biodiversity conservation through management planning/zoning practices within community forests; sustainable, certified NTFP production and value-added processing; and policy advocacy.

- Improve adaptation to climate change through GON support for climate change adaptation policies; education and awareness on climate change adaptation; watersheds, river basins, and lake management; support to disseminate crop varieties better adapted to warmer

temperatures and variable rainfall; and enhance systems for vulnerability mapping, monitoring, and reporting.

USAID Nepal Economic, Agriculture and Trade Program (NEAT) will complement FTF by strengthening value chains, increasing cereal production, policy reform, business environment, and microfinance. There will some overlap of geographic and value chains between NEAT and FTF. NEAT's activities will primarily concentrate on the Terai and hill areas in the Mid-Western Region with some work in the neighboring Western Region and Eastern Region. Primary value chains under NEAT include high-value vegetables, lentils, orthodox tea, and ginger. Relevant NEAT activities include:

1. Foster a conducive business environment for private sector led growth; improve trade and fiscal policies and practices that facilitate trade and increase revenues without distorting the economy.

2. Strengthen microfinance policy and institutions to increase the access of women, poor and disadvantaged to financial services.

3. Encourage competitiveness of agribusiness for export market using a value chain approach and creating private-public partnerships (horticulture will likely be a focus sector once launched).

4. Disseminate proven high yield varieties and technologies; increase capacity of private firms to multiply seeds, sell inputs/services; increase capacity of processors to source from smallholders; and drive use of ICT to disseminate market information.

USAID/Nepal Hill Maize Research Program (HMRP) is already being implemented by CIMMYT in 20 hill districts across Nepal with co-funding from the Swiss Agency for Development and Cooperation (SDC). The program aims to improve food security and incomes among 35,000 households, introduce new maize varieties and technologies, enhance production and marketing, and improve distribution of new seed varieties.

USAID Nepal Flood Recovery Program (NFRP) has been extended to 2012 and will cover three FTF districts in the Far-Western Region: Dadeldhura, Kailali, and Kanchanpur. NFRP will continue working on productive infrastructure, high-value agriculture, and marketing interventions in Terai communities affected by flooding. USAID/Nepal direct funding to the GON has already been initiated. A program to improve seed quality and livestock breeding is underway through MOAC. USAID/Nepal water, sanitation, and hygiene projects will improve access to safe drinking water, sanitation facilitates, hygiene, and irrigation to more than 65,000 rural people in two FTF districts in the Mid-Western and Far-Western Regions. These two projects will be directly implemented by Nepali NGOs.

USAID Collaborative Research Support Programs (CRSP) currently working in Nepal provides targeted support in IPM, horticulture, natural resource management, aqua fish and nutrition. IPM CRSP is working on bagging, pheromones and soil amendments; tomato grafting, micro-irrigation and reducing use of pesticides. Other activities include the following:

- Horticulture CRSP is developing technology for postharvest drying and storage of seeds and germplasm development.

- Sustainable agriculture and natural resource management CRSP is working on conservation agricultural production.

- Livestock climate change CRSP is researching vulnerability, adaptive capacity, and income of livestock producers in regions most affected by climate change.

- Aqua fish CRSP is working on species combinations in polyculture.

- Nutrition CRSP is studying the impact and outcomes of integrated agricultural and nutrition interventions.

The State Department will advocate for policy reforms that will improve the enabling environment for FTF interventions as well as provide support for professional exchange programs that will enhance local technical capacity. Relevant activities include:

- Engage Government of Nepal on agricultural priorities such as seed regulation, contract farming act, agriculture credit services, and contract enforcement.

- Support International Visitors Leadership Program, Fulbright scholarships, and Humphrey fellowship programs.

- Sponsor speakers to deliver presentations on food security and agriculture-related topics.

- USAID/NASA SERVIR program will provide satellite data for famine early warning notification and improves response to droughts, flooding, and other natural disasters.

USG agencies that are not currently active in Nepal but are encouraged to join include:

U.S. Department of Agriculture (USDA): May support a school feeding program that will contribute to nutritional status of FTF target children. Depending on funding levels, USDA may be able to use existing tools via trade and scientific exchange programs to provide sanitary and phytosanitary (SPS) training and fellowships for Nepali researchers.

Department of Defense's Pacific Command (PACOM): There is a clear role for PACOM to add value to FTF by supporting targeted infrastructure investments that can have a multiplier effect on FTF focus areas. Examples of potential areas for investment include community productive infrastructure (e.g. bridges, feeder roads) and clean water supply (linked to FTF irrigation systems). Specifically, PACOM is looking to build multi-use shelters for disasters, also used as collection centers in normal times.

Millennium Challenge Corporation (MCC): In the medium term, MCC threshold program could provide technical assistance to write new legislation and support technical training to build government capacity in required areas, with the view of achieving a Compact in the following years. A Compact program would be designed by the GON, while the USG advocates for large scale infrastructure to improve access to communities in the same Economic Corridors where FTF is focusing, thereby facilitating the trading of food and other commodities between the Terai, Hills and remote Mountain districts. MCC funds could also serve as incentive for the GON to create a more conducive business and policy environment.

Peace Corps: The USG is advocating for Peace Corps volunteers to return to Nepal. Peace Corps agriculture and nutrition volunteers could significantly enhance FTF impact. Community activities for volunteers include:

- Deliver agriculture training to non-target families, particularly those with very small plots (e.g. kitchen gardening)

- Develop agriculture and nutrition community volunteers, supporting FTF work establishing local change agents
- Promote community-based production and storage (e.g. community gardens)
- Strengthen nutrition and hygiene education.

4.10 COLLABORATION WITH OTHER DONORS

As described in Section 1.8, the USG has undertaken consultations since September 2009 with various donors and development agencies to inform FTF planning, including:

- Donors from G8 nations and regional bodies (DFID, GIZ, JICA, EU, CIDA, SAARC)
- International banks/multilateral agencies (FAO, WFP, ADB, WB, UNDP, IFC, WTO)

The USG initiated a donor food security working group that meets monthly and includes all major donors operating in the sector in Nepal. USAID/Nepal participates in other food security working groups, including the national nutrition group and the UN food security cluster responsible for disaster risk reduction and contingency planning. USG will continue to coordinate with external development partners to ensure there is synergy of programming and avoid duplication of efforts.

In addition to the aforementioned working groups, USAID/Nepal is collaborating with donors in other ways, including field visits and sharing resources. For example, in November 2010, the USAID/Nepal Mission Director and other staff went on a joint field visit with WFP to Humla and Surkhet districts. USAID/Nepal is also leveraging funds with SDC for the HMRP currently being implemented by CIMMYT.

The USG has identified donor programs that can have complementary effects on FTF interventions and will collaborate actively with implementers to ensure FTF beneficiaries are aware of and can tap those resources where relevant (e.g. request funding from World Bank's Poverty Alleviation Fund to support community infrastructure, apply for IFC's SME venture risk capital to finance entrepreneurs). Please see Annex A for a list of relevant programs that other donors and multilateral agencies are carrying out in Nepal.

4.11 ENGAGEMENT WITH GOVERNMENT OF NEPAL (GON)

The USG acknowledges that the political situation in Nepal requires FTF to have a flexible approach for engaging with the GON. However, it is expected that civil servant staff will remain consistent as the new government is formed. Major agriculture policy issues (e.g. Agricultural Cooperatives Law and Contract Farming Act) will be addressed through the NEAT program and through capacity building of the GON. FTF Nepal will work to improve MOAC's overall agricultural planning and implementation capacities. USG investments in CSISA and CRSP will enhance technology development and dissemination in vegetables, lentils, rice, and maize. USAID/Nepal will also continue working with MOHP on the NHSP-II and other GON health plans that specifically address nutrition.

FTF will work with the National Planning Commission (NPC) to improve capacity to carry out food security inter-ministerial coordination. FTF Nepal will encourage MOAC to incorporate nutrition mindset in operations. In addition, FTF Nepal will invite new USG actors such as MCC to improve government technical capacities, policy, and infrastructure. The USG will work with regional directorates and district offices to support local implementation of food security programs. Government

extension agents will be a key part of Component A and will receive agriculture and nutrition trainings to promote knowledge transfer and multiplication effect.

Where appropriate, and where sufficient financial controls exist, USAID/Nepal may directly fund the GON through Implementation Letters (ILs) under the bilateral Assistance Agreement. USAID/Nepal has already initiated direct funding to MOAC for a program to improve seed quality and livestock breeding. This support will reinforce the GON's priorities and advance host country systems, as specified in the Paris Declaration on Aid Effectiveness.

At the local level, a key part of FTF Nepal is training and capacity building for government extension workers, private sector service providers, and nutrition and hygiene volunteers who will act as change agents under Components A and B. FTF Nepal will work with local government agencies as appropriate, including the District Agriculture Development Office (DADO), District Development Committee (DDC), and District Health Office (DHO).

There is approximately one GON extension worker per 7,000+ households. Due to limited resources, technical capacities, and transportation access, extension services have minimally impacted the agricultural sector. Agrovets and input supply dealers fill that void to a large extent. Given the financial and capacity issues facing extension services, FTF will work to strengthen government extension worker capacities along with expanding and enhancing service provider services in the target districts. This will be done by training extension workers on updated technologies and training methods and then supporting them to help train FTF beneficiaries.

Where possible, FTF Nepal will leverage funds for agriculture and nutrition activities from VDC block grants. These funds from the central government can be used by the VDCs for small-scale development according to local priorities. This funding is frequently underutilized and can bolster agriculture, health, forestry, and education programs. For example, in the SIMI and EIG projects, local VDCs have contributed matching funds for construction of irrigation canals, multi-use water systems, market collection centers, and toilets.

FTF Nepal will explore possible linkages with democracy and governance activities, particularly USAID/Nepal's new Sajhedari program. Sajhedari will enable communities to better access financial resources and more efficiently implement local development activities. Although Sajhedari's target districts are in the Eastern Region (Dhankuta, Morang, Panchthar, Saptari, Sunsari, and Udayapur) and FTF is focused on the Far-Western, Mid-Western, and Western Regions, best practices on local governance from Sajhedari and other similar programs will be used when appropriate.

4.12 APPROACH FOR EXPANSION WITH ADDITIONAL FUNDING

If the FTF Nepal budget were double from what was originally planned, the USG would be able to reach significantly more people under the same implementation model and support agribusiness for export markets.

4.13 IMPACT ON TARGETED BENEFICIARIES AND CHANGE AGENTS

As a result of the investment in these programs, FTF Nepal will have the following impact on the country, as described in Section 3.7. Specific indicators under each IR are in Section 5.5. These targets are approximate and are based on analysis of previous and current agriculture and income generation activities, along with estimates of population growth.

4.14 GENDER AND SOCIAL INCLUSION

As noted in Section 2.1, women, Dalits, and other low caste or disadvantaged groups often have high poverty rates and less access to education, job opportunities, and medical and social services. These groups were highly affected by the 10-year conflict, which originated in the FTF Nepal target regions. Due to lack of employment opportunities, a significant number of male laborers have migrated to the cities or abroad for work. The conflict and high male out-migration have contributed to the feminization of agriculture and added more responsibilities for women in Nepal.[16] For these reasons, FTF Nepal will target conflict-affected regions with high rates of male outmigration and large numbers of female-headed households. In addition to prioritizing women, Dalits, and other disadvantaged groups, at least 30 percent of beneficiaries will be from female-headed households.

In addition to the component specifically targeting the integration of vulnerable individuals, gender and social inclusion dimensions will be considered in all interventions and phases of the program cycle. During implementation, participation of women and disadvantaged groups will be prioritized at all decision making levels (e.g. adequate representation of disadvantaged groups within trainers and inclusion in cooperatives). Priority will be given to farming techniques and marketing approaches that are more female-friendly and contribute to their empowerment. The selection of high value crops and horticulture was partially due to the income and nutrition benefits on women and other vulnerable groups. Specific efforts will also be incorporated to measure the program's impact on women and social inclusion through databases with gender and caste disaggregated data relating to these areas.

In developing the FTF strategy, the USG incorporated elements from USAID/Nepal's gender analysis from 2007 and considered other relevant documents, including the 2010 stocktaking exercise conducted by IFPRI. Several other organizations have completed analyses on gender and social inclusion in Nepal, particularly the feminization of agriculture. The USG referred to these recent gender studies by other agencies, including ADB, FAO, and WOCAN. The assessments are included in the references in Section 6.

Within the work with the GON on improving agricultural policies and practices, efforts will be made to identify policies and practices where improvements will particularly benefit women and disadvantaged groups. Attention will be given to identifying changes in laws, regulations or procedures that will have particularly positive impacts on the economically beneficial participation of these targeted beneficiaries.

The program will work with both men and women in the household with the understanding that improving food security and nutrition will require changing the current use of valuable household resources such as time, labor, water, food, and cash. Experience has shown that decisions to change the roles and behavior of men and women in households are most successful when both men and women understand the reasons for changes, agree on any necessary changes, and decide together how to adopt new practices.

5. MONITORING AND EVALUATION

5.1 OVERVIEW

Using guidance from the January 2011 USAID Evaluation Policy, USG will employ monitoring and evaluation (M&E) plans to gather evidence of how FTF Nepal programs are sustainably reducing poverty and hunger. USAID/Nepal's FTF and Program Office staff will be responsible for supervising M&E activities with input from USAID/Washington.

[16] ADB, "Overview of Gender Equality and Social Inclusion in Nepal," December 2010

For Performance Monitoring, FTF Nepal will collect data for indicators to track results and outcomes and determine if specific programmatic objectives are on target. Data collected through monitoring will be used for reports to stakeholders. Program activities will be monitored through periodic field visits and quarterly performance reports submitted by implementing partners. Implementers will be required to prepare a detailed Performance Management Plan (PMP) that demonstrates how the targeted outcomes will be achieved through specific activities.

For Impact Evaluation, FTF Nepal will review program results to assess development hypotheses and examine how and to what extent program activities are contributing to the overall goal of reduced poverty and hunger. FTF Nepal will ensure that quality information is collected and local capacities are strengthened as part of the overall M&E process. Impact evaluation will enable FTF Nepal to learn from implementation experience, improve future program design, implementation, and scale, and make informed decisions about existing and future food security and nutrition-related resources.

5.2 PERFORMANCE MONITORING

Overview

FTF Nepal will hire a third-party local organization for monitoring and evaluating the indicators (see section 5.5 below). This contract was awarded after a full and open competition for eligible organizations in Nepal. The contractor will be responsible for a baseline survey, ongoing data analysis, and midterm and final evaluations. There are numerous organizations with M&E experience for USAID/Nepal and other donors, and additional capacity building support will be provided as needed. This will further improve local capacities and is consistent with the objectives of USAID Forward.

Methods

The implementers will compile data and specify the collection methods on project and program-level output and outcome indicators. Data collection and quality will be verified by the M&E contractor, who will assess how the results are meeting the goal and impact indicators that are part of the overall FTF goal and key objectives. Data will be disaggregated by sex in all cases and by ethnic or caste group when appropriate. Examples of data collection methods that may be used are household and individual surveys, focus group discussions, and probability sampling in various geographic areas.

Baselines

Baseline data will be collected by a local firm hired for M&E throughout the life of FTF Nepal programs. The latest in-country data will be available with the Nepal National Census and NDHS, which are currently underway and will be completed in 2011. Additional baseline data is available from other sources, such as the NDHS 2006, NAGA 2009, MOHP management information systems (MIS) database, MOAC crop production reports, and the NeKSAP food security monitoring system. A local organization will also be hired through a purchase order to inventory service providers who will be used as change agents for Component A. This study will be conducted within the next two to three months and will measure the current capacities, services, locations, and potential needs of the service providers.

Links to Host Country Monitoring

FTF Nepal will coordinate data collection and analysis directly with the GON, particularly MOAC and MOHP. Host country information will be used to track the goal and objective indicators, as well as indicators for IR 3. Project data will be used for measuring the indicators under IRs 1, 2, and 4. The

major goal and impact results will be linked to the GON's national MDG targets for 2015 and will be consistent with targets stated in the NHSP-II, CIP, and other national plans.

FTF Nepal will coordinate data collection and analysis with other development partners working in similar geographic areas, especially the World Bank, ADB, EU, and WFP. USG programs will help the GON strengthen its overall planning, analytical, and policy-making capacities. In addition, EU is supporting MOAC's institutionalization of the NeKSAP monitoring system established by WFP. This will further complement efforts to improve monitoring and data analysis capacities at the national level.

5.3 IMPACT EVALUATION

Overview

The M&E contractor will verify data and results attributable to FTF Nepal interventions. In addition, the Nutrition CRSP will analyze and compare results from FTF Nepal's integrated agriculture and nutrition interventions with USAID/Nepal economic growth programs that focus on income generation and do not have targeted nutrition activities (e.g. NEAT and EIG). For example, households and individuals (men/women) within households can be interviewed to determine if higher incomes contribute to increased consumption of vegetables and other nutritious foods. This will enable the USG to document if increased incomes and reduced poverty lead to improved nutrition outcomes.

Indicators that will be measured are listed in Section 5.5 below. The following development hypotheses will be assessed through an impact evaluation:

IR 1: Improved agricultural productivity

The development hypothesis is that agricultural productivity will be increased through investments in key areas. By building the capabilities of change agents to train farmers in high value agriculture along with best practices for rice, maize, and pulses, these farmers will increase yields of staples while moving towards production of higher value crops. This will lead to higher land productivity (up to 685 percent increase in sales per hectare) and incomes (up to 200-300 percent increase in household income).

IR 2: Increased agriculture value chain productivity leading to greater on and off farm jobs

The development hypothesis is that after receiving USG training and targeted capital assistance, commercially-driven local change agents will provide sustainable, high quality agriculture inputs and government extension services to smallholders. Combined with strengthening market systems, this will lead to higher production and greater incomes, thereby improving food access and reducing poverty.

IR 3: Improved access to diverse and quality foods and improved nutritional behaviors

The development hypothesis is that expanded production of vegetables, lentils, and livestock will increase the availability and affordability of nutritious food. The focus on nutrition and hygiene education will ensure the food will be accessed and consumed adequately by all household members.

IR 4: Increased resilience of vulnerable communities and households

The development hypothesis is that through specific trainings in literacy and entrepreneurship, the most vulnerable individuals and groups will be integrated into the program, thereby reducing poverty rates and improving food security. By providing income generating activities to vulnerable groups and improving access to savings groups, incomes will be higher and more consistent throughout the year.

This will reduce male migration and use of coping strategies, thereby diminishing the negative impact of lean seasons and food price fluctuations, especially among female-headed households. By considering impacts on ecosystems, changing land use and hydrology, and climate change, investments will internalize environmental sustainability as part of long-term food security and build climate change resilience of vulnerable populations.

Methods

The M&E contractor will measure changes in outcomes that are attributable to the FTF intervention. This contractor will collect impact evaluation data and specify collection methods. Data quality and reliability will be one of the criteria for selecting the M&E contractor. The indicators, intermediate results, and data will be disaggregated by sex in all cases and by ethnic or caste group when appropriate. As needed, data on individuals targeted by IR 1 and IR 2 will be disaggregated by age. Data will be collected on the same questions and using similar methods as the initial baseline survey (e.g. household and individual surveys, focus group discussions, and probability sampling).

Baseline

Baseline data will be taken from various sources, such as the NDHS 2011, Nepal National Census 2011, NAGA 2009, MOAC production reports, MOHP MIS database, and the NeKSAP food security monitoring system.

Links to Host Country Monitoring

As mentioned in Section 5.2 above, FTF Nepal will coordinate data collection and analysis directly with the GON and other development partners. GON information will be used to track the goal and objective indicators and determine FTF Nepal's long-term impacts. The major goal and impact results will be linked to the national MDG targets and will be consistent with various national plans. USG and other donors will support the GON in strengthening its planning, analytical, and policy-making capacities.

5.4 MECHANISMS FOR MONITORING AND EVALUATION

In addition to the new M&E contract, FTF Nepal will use existing M&E food security mechanisms. These include the following:

- Nutrition CRSP will measure nutritional outcomes of FTF beneficiaries from integrated agriculture and nutrition interventions. These will be compared with a control group from other economic growth programs that do not include nutrition components.

- NeKSAP monitoring system was established by WFP and is being institutionalized within MOAC. NeKSAP is an active countrywide monitoring system with local and household data. National and district food security bulletins, market watch reports, crop situation forecasts, and other related studies are regularly issued online in English and Nepali.

- MOAC crop production reports provide important national, regional, and district information (e.g. harvest yields, land usage, labor, and agricultural imports and exports).

- MOHP MIS database includes population data and other demographic information related primarily to health and nutrition.

5.5 FEED THE FUTURE GOALS, OBJECTIVES, INTERMEDIATE RESULTS, AND INDICATORS

Goal: Reduce Hunger and Poverty and Improve Nutrition in Nepal

- Prevalence of Poverty: Percent of people living on less than $1.25/day
- Prevalence of underweight children under 5

Key Objective 1: Improved Equitable Growth in the Agriculture Sector

- Percent growth in agricultural GDP
- Expenditures of rural households (proxy for income)
- Gender perceptions index

Key Objective 2: Improved Nutritional Status

- Prevalence of stunted children under 5
- Prevalence of wasted children under 5
- Prevalence of underweight women

IR1: Improved agricultural productivity

- Gross margin per unit of land or animal of selected product
- Number of individuals who have received USG supported short-term agricultural sector productivity or food security training
- Number of additional hectares under improved technologies or management practices as a result of USG assistance
- Number of farmers and others who have applied new technologies or management practices as a result of USG assistance
- Number of producers organizations, water users associations, trade and business associations, and community-based organizations (CBOs) receiving USG assistance
- Number of private enterprises, producers organizations, water users associations, trade and business associations and community-based organizations (CBOs) who have applied new technologies or management practices as a result of USG assistance
- Value of incremental sales (collected at farm-level) attributed to FTF implementation
- Number of policies/regulations/administrative procedures: analyzed; presented for legislation/decree; drafted and presented for public/stakeholder consultation; or passed

- Number of rural households benefiting directly from USG interventions
- Number of hectares under improved NRM as a result of USG assistance

IR2: Increased agriculture value chain productivity leading to greater on-and -off farm jobs

- Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation
- Number of jobs attributed to FTF implementation

IR3: Improved access to diverse and quality foods and improved nutritional behaviors

- Prevalence of stunted children under 5
- Prevalence of wasted children under 5
- Prevalence of underweight women
- Percent of children 6-23 months that received a Minimum Acceptable Diet
- Prevalence of exclusive breast feeding of children under six months
- Prevalence of maternal anemia

IR4: Increased resilience of vulnerable communities and households

- Change in average score on Household Hunger index
- Number of vulnerable households benefiting directly from USG assistance
- Number of people with increased adaptive capacity to cope with impacts of climate variability and change as a result of USG assistance

6. ANNEXES

ANNEX A. DONOR AND MULTILATERAL FINANCING FOR FOOD SECURITY AND NUTRITION PROGRAMS IN NEPAL

World Bank:

Relevant Projects for FTF	Objective/Activity	Budget (US$)	Period	Partners	Geographic Areas	FTF overlap districts
Project for Agriculture Commercialization and Trade (PACT)	Improve competitiveness of smallholder farmers and agribusiness sector. Help farmer groups and cooperatives engage in profitable market-oriented production. Strengthen industry-wide partnerships along the value chain	$20 million	2009-2015		25 districts: Bara, Chitwan, Sarlahi, Dhanusha, Kavre, Parsa, Rautahat, Mahottari, Dhading, Kathmandu, Lalitpur, Rupandehi, Syangja, Nawalparasi, Palpa, Kaski, Tanahu, Kapilvastu, Lamjung, Dang, Banke, Bardia, Surkhet, Kailali, Kanchanpur	2 FTF districts and 1 NEAT district in Far-West: Kailali and Kanchanpur 4 FTF and 4 NEAT districts in Mid-West: Banke, Bardia, Dang, Surkhet 2 FTF districts and 3 NEAT districts in West: Kapilvastu, Palpa, Rupandehi
Nepal Social Safety Nets Project	Improve agricultural production and nutritional impact, primarily through food and cash for public works programs as the means for increasing agriculture production in food insecure areas.	$48 million	2010-ongoing		28 districts: Achham, Bajhang, Baitadi, Bajura, Banke, Dadeldhura, Dailekh, Darchula, Dolpa, Doti, Humla, Jajarkot, Jumla, Kailali, Kalikot, Khotang, Makwanpur, Mugu, Pyuthan, Ramechhap, Rolpa, Rukum, Salyan, Sankhuwasabha, Saptari, Sindhuli, Sunsari, Udayapur	5 districts in Far-Western Region: Achham, Baitadi, Dadeldhura, Doti, Kailali, 7 districts in Mid-Western Region: Banke, Dailekh, Jajarkot, Pyuthan, Rolpa, Rukum, Salyan

Poverty Alleviation Fund II	Improve living conditions, livelihoods, and empowerment among the rural poor, with particular attention to groups that have traditionally been excluded by reasons of gender, ethnicity, caste and location. Improve food security in response to drought and price fluctuations.	$75 million	2011-2015		40 districts: Bara, Bardia, Dhading, Dhanusha, Khotang, Panchthar, Salyan, Okhaldhunga, Parsa, Saptari, Solukhumbu, Sindhupalchowk, Achham, Taplejung, Terhathum, Udayapur, Baitadi, Bajhang, Bajura, Dadeldhura, Dailekh, Dolpa, Doti, Humla, Jajarkot, Jumla, Kalikot, Mugu, Mahottari, Rasuwa, Rautahat, Rolpa, Rukum, Sindhuli, Darchula, Pyuthan, Siraha, Kapilvastu, Ramechhap, Sarlahi	4 districts in Far-Western Region: Achham, Baitadi, Dadeldhura, Doti 7 districts in Mid-Western Region: Bardia, Dailekh, Jajarkot, Pyuthan, Rolpa, Rukum, Salyan 1 district in Western Region: Kapilvastu
Enhanced Vocational Education and Training (EVENT)	Improve access to Technical Education and Vocational Training (TEVT) programs for disadvantaged youth	$50 million	2011-2015		15 districts: TBD	TBD

Asian Development Bank (ADB):

Relevant Projects for FTF	Objective/Activity	Budget (US$)	Period	Partners	Geographic Areas	FTF overlap districts
Commercial Agriculture Development Project	Improve efficiency of marketing and processing High Value Crops (HVCs) such as fruits, spices, tea, vegetables. Increase rural incomes and employment.	$24 million	2007-2013		11 hill and Terai districts of Eastern Region	None
Community Managed Irrigation Support Program	Improve irrigation systems, extensive services, credit access, and agriculture production.	$20 million	2007-2013	Ministry of Irrigation	21 districts: Central and Eastern Regions	None
Community Irrigation Program	Improve irrigation systems, extensive services, and agriculture production.	$26 million	2011-2017	Ministry of Irrigation	12 districts: Bajhang, Dang, Doti, Jumla, Kailali Kanchanpur, Kapilvastu, Mugu, Rukum, Rolpa, Pyuthan, Salyan	3 FTF and 1 NEAT district in Far-West: Doti, Kailali, Kanchanpur 5 districts in Mid-West: 1 district in West: Kapilvastu,
Support for Targeted and Sustainable Development Programs for Highly Marginalized Groups	Reduce poverty and empower disadvantaged groups. Develop new livelihood opportunities and improve income in poorest and most disadvantaged communities.	$2.7 million	2011-2015	Ministry of Local Development	4 districts: Gulmi, Mahottari, Nawalparasi, Surkhet (to be confirmed)	1 district in Mid-Western Region: Surkhet 1 district in Western Region: Gulmi
Raising Income for Small and Medium Farmers (RISMF) Project	Build high value agriculture value chains and increase incomes of small and medium farmers	$33.5 million	2011-2017	SNV and MOAC	10 districts in Mid-Western and Far-Western Regions	Likely overlap with FTF Terai and hill districts
Preparation of the National Agriculture Development Strategy (ADS)	Assessment and drafting of an updated ADS	$2 million	2011-ongoing		National	FTF and NEAT policy agenda
High Mountain Agribusiness and Livelihood Program (HIMALI)	Improve incomes and sustainable livelihood options in high mountain areas. Increase volume and value of high value agricultural products.	$20 million	2011-2017		10 high mountain districts: Jumla, Humla, Mugu, Dolpa; Mustang, Manang; Rasuwa, Dolakha; Solukhumbu, Sankhuwasabha	None

Other Donors and Multilateral Agencies:

Relevant Projects for FTF	Objective/Activity	Budget (US$)	Period	Partners	Geographic Areas	FTF overlap districts
WFP:						
Food for Asset/ Cash for Asset	Small-scale infrastructure: feeder roads, irrigation, market center, water harvesting, farmer field schools	$35 million annually	Annual program		21 districts	4 Far-Western districts 5 Mid-Western districts
Mother and Child Health Care/ School Feeding Program	Support for outreach clinics for pregnant and nursing mothers for prenatal checkup				11 districts	4 Far-Western districts 4 Mid-Western districts
NeKSAP (EU funded)	Food security monitoring and vulnerability assessment			MOAC, FAO	72 districts except 3 in Kathmandu valley	All FTF and NEAT districts
UNICEF:						
National Health Sector Support, scale-up of evidence-based nutrition interventions	Micronutrient supplementation, IYCF, CMAM, nutrition, sanitation and hygiene, MCH	$4 million annually	Annual	MOHP	National	3 districts in Mid-West: Banke (MNH), Bardia, Dang (CMAM) 1 district in Far-West: Achham (CMAM)
FAO:						
EU Food Facility Program	Training in food safety and agriculture trade, agriculture production in food insecure areas	$12.4 million	2009-2011	WFP		
Integrated Pest Management (funded by NORAD)	IPM and improved farming practices	$3.4 million	2009-2013	MOAC	15 districts	2 FTF and 1 NEAT districts in Far-West: Kailali, Kanchanpur
Technical Assistance for Leasehold Forest and Livestock Program		$3.5 million	2009-2013	Department of Forestry		

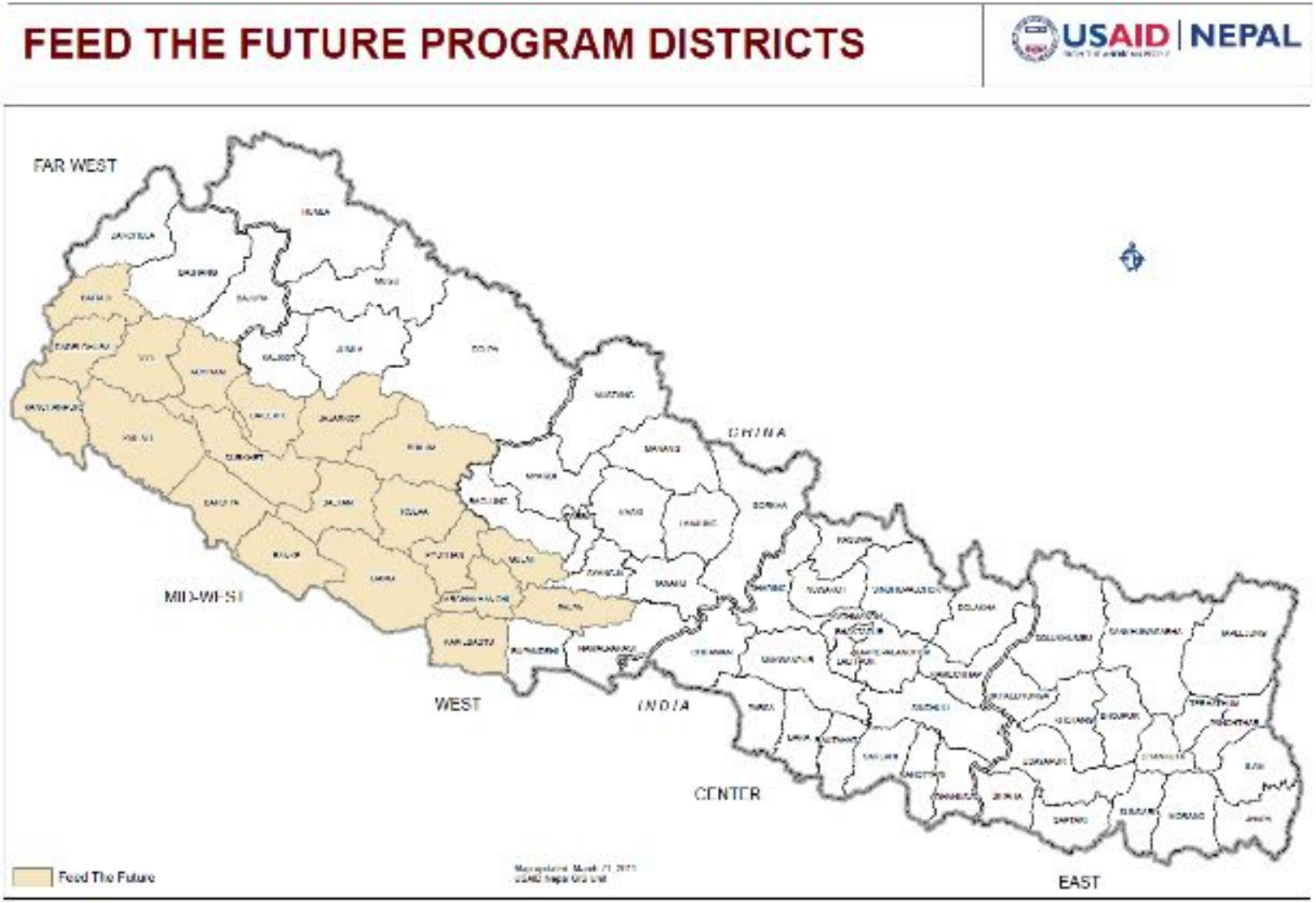
IFAD:						
High Value Agriculture Project	Develop commercial links with traders and sustainably raise incomes. Training and support in production and post-harvest techniques. Access to technical services, finances, farm supplies and market information.	$19 million	2010-2017	SNV, MOAC	10 districts: Achham, Dailekh, Dolpa, Humla, Jajarkot, Jumla, Kalikot, Mugu, Salyan, Surkhet	4 districts in Mid-Western Region: Dailekh, Jajarkot, Salyan, Surkhet 1 district in Far-Western Region: Achham
Leasehold Forestry and Livestock Program	Reduce poverty by allocating leasehold forestry plots to poor families to enable them to increase incomes from forest products, tree crop production, and livestock.	$12.8 million	2005-2013	Ministry of Forestry	22 districts: Achham, Baitadi, Bhojpur, Chitwan, Dadeldhura, Dhading, Dolakha, Doti, Gorkha, Kavre, Khotang, Lamjung, Makwanpur, Pyuthan, Okhaldhunga, Salyan, Panchthar, Ramechhap, Sindhuli, Sindhupalchowk, Tanahu, Terhathum.	2 districts in Mid-Western Region: Pyuthan, Salyan 4 districts in Far-Western Region: Achham, Baitadi, Dadeldhura, Doti
Western Uplands Poverty Alleviation Project	Promote livelihood options (livestock, forestry and crops) in food insecure areas. Improve service and resource access. Empower women and marginalized people.	$32.6 million	2003-2014	Ministry of Local Development	11 districts: Bajhang, Bajura, Dailekh, Dolpa, Humla, Jajarkot, Kalikot, Jumla, Mugu, Rolpa, Rukum	4 districts in Mid-Western Region: Dailekh, Jajarkot, Rolpa, Rukum
Poverty Alleviation Fund (co-funding with WB)		$4 million		Ministry of Local Development		
EU:						
Maternal and Child Nutrition Security Project	Regional project supporting improved nutrition	$4.5 million	2011-2014	UNICEF	TBD	TBD
Institutionalization of NeKSAP through WFP	Food security monitoring system	$4 million	Ongoing	NPC and MOAC	72 districts except 3 in Kathmandu valley	All FTF and NEAT districts
DFID:						
Market Access for Smallholder Farmers	Improved income access for dairy farmers	$3.3 million	2010-2012	IDE, Practical Action, NARC, DADOs	4 districts: Chitwan, Dhading, Gorkha, Tanahu	None

Rural Access Program 2 (RAP)	Improve connectivity of rural hill communities, economic and job opportunities, access to market and social services.	$28 million	2008-2012	Helvetas, Department of Roads	7 districts: Achham, Bhojpur, Dailekh, Doti, Khotang, Terhathum, Sankhuwasabha	2 districts in Far-West: Achham, Doti 1 district in Mid-West: Dailekh
Nepal Market Development Program	Increased financing for agribusiness	$22.7 million	2011-2016	Ministry of Industry	TBD	TBD
SNV:						
	Value chain development in orthodox tea, ginger, vegetables, cardamom, and NTFPs, income generation, WASH			MOAC		
SDC:						
Sustainable Soil Management Program (SSMP): Phase 4	Scaling up proven SSM technologies and decentralizing Farmer to Farmer approach	$8.25 million	2011-2014	MOAC, DOA, and NGOs	7 districts: Khotang, Okhaldhunga, Ramechhap, Kalikot, Jajarkot, Dailekh, Achham	1 district in Far-West: Achham 2 districts in Mid-West: Dailekh, Jajarkot
Vegetable Seed Project: Phase 3	Improved vegetable seed production, market linkages and quality assurance	$2.75 million	2011-2014	CEAPRED, MOAC, DOA, NARC and NGOs	7 districts: Khotang, Okhaldhunga, Ramechhap, Kalikot, Jajarkot, Dailekh, Achham	1 district in Far-West: Achham 2 districts in Mid-West: Dailekh, Jajarkot
Hill Maize Research Program (HMRP): Phase 4 (co-funded with USAID)	Improved maize seed quality, seed licensing, and marketing of new varieties	$3.65 million	2010-2014	CIMMYT, NARC, DOA, private seed entrepreneurs	20 districts: Achham, Baglung, Baitadi, Bajhang, Dadeldhura, Dailekh, Dhading, Dolakha, Doti, Gulmi, Jajarkot, Kalikot, Kavre, Khotang, Okhaldhunga, Palpa, Ramechhap, Sindhupalchowk, Surkhet, Syangja	4 districts in Far-West: Achham, Baitadi, Dadeldhura, Doti 3 districts in Mid-West: Dailekh, Jajarkot, Surkhet 2 districts in West: Gulmi, Palpa
Home Garden Project: Phase 3	Home gardening and livelihood activities for disadvantaged groups	$1.15 million	2009-2013	DADOs, farmer groups, CBOs, VDCs	15 districts: Gulmi, Ilam, Jhapa, Khotang Rupandehi, Bardia, Kailali, Kanchanpur, Dolakha, Kavre, Baitadi, Okhaldhunga, Sindhupalchowk, Dadeldhura, Surkhet	4 districts in Far-West: Baitadi, Dadeldhura, Kailali, Kanchanpur 2 districts in Mid-West: Bardia, Surkhet 1 district in West: Gulmi

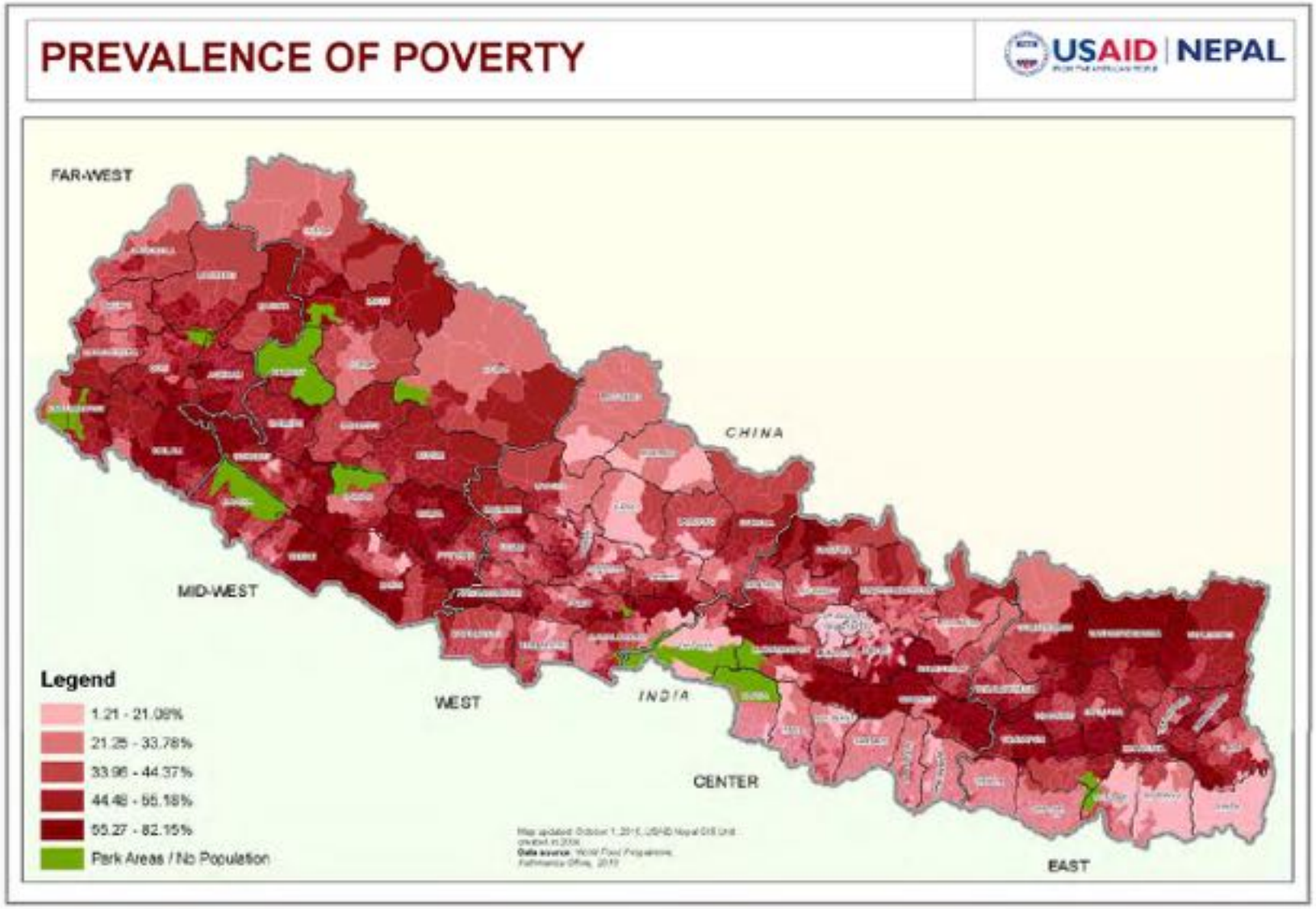
GIZ:						
Inclusive Development of Economy Program (INCLUDE)	Promote entrepreneurship and access to finance through support of the Youth and Small Enterprise Self-Employment Fund (YSESEF) Program		2008-2011		14 districts: Bara, Chitwan, Dang, Ilam, Dhanusa, Jhapa, Kailali, Kapilvastu, Makwanpur, Palpa, Mahottari, Pyuthan, Rupandehi, Surkhet	1 district in Far-West: Kailali 3 districts in Mid-West: Dang, Pyuthan, Surkhet 1 FTF and 2 NEAT districts in West: Kapilvastu, Palpa, Rupandehi
JICA:						
School Health and Nutrition Project (pilot)	Improve health and nutrition status of school-aged children and ensure that national school health and nutrition strategy are institutionalized by MOHP and Ministry of Education		2008-2012		1 district in Central: Sindhupalchowk 1 district in West: Syangja	None
Government of Japan:						
Food aid	Procurement of rice and shipping services, delivery by NFC	$12.5 million	2011-ongoing	NFC	Distribution areas determined by NFC	Expected overlap with hill districts in Mid- and Far-Western Regions
Government of Finland:						
Rural Village Water Resources Management Project, Phase II (RVWRMP II)	Livelihood training, income generation, hygiene, sanitation, irrigation	$23 million	2010-2015		10 districts: Achham, Baitadi, Bajhang, Bajura, Dadeldhura, Darchula, Doti, Kailali, Dailekh, Humla	1 district in Mid-West: Dailekh 5 districts in Far-West: Achham, Baitadi, Dadeldhura, Doti, Kailali
Rural Water Supply and Sanitation Project in Western Nepal (RWSSP-WN)	Rural water supply, sanitation and hygiene sector support	$21 million	2008-2102		9 districts: Baglung, Kapilvastu, Myagdi, Parbat, Nawalparasi, Pyuthan, Rupandehi, Syangja, Tanahun	1 district in Mid-West: Pyuthan
CIDA:						
Sahakarya - Building Self-Reliant Communities	Improve market-oriented production and cooperative capacities	$900,000	2010-2012	CECI	5 districts: Jumla, Dadeldhura, Baitadi, Surkhet, Dailekh	2 districts in Mid-West: Dailekh, Surkhet 2 districts in Far-West: Baitadi, Dadeldhura

Agricultural Micro-Enterprise Development	Agriculture-based micro-enterprise development for poor, socially excluded groups. Business management and marketing training. Improve policies for agro-based micro-enterprise development.	$1.2 million	2011-2012	UNDP	18 districts: TBD	TBD
AUSAID:						
	Support for National Health Sector Plan, child health and nutrition, Vitamin A distribution, water and sanitation.			UNICEF, MOHP		

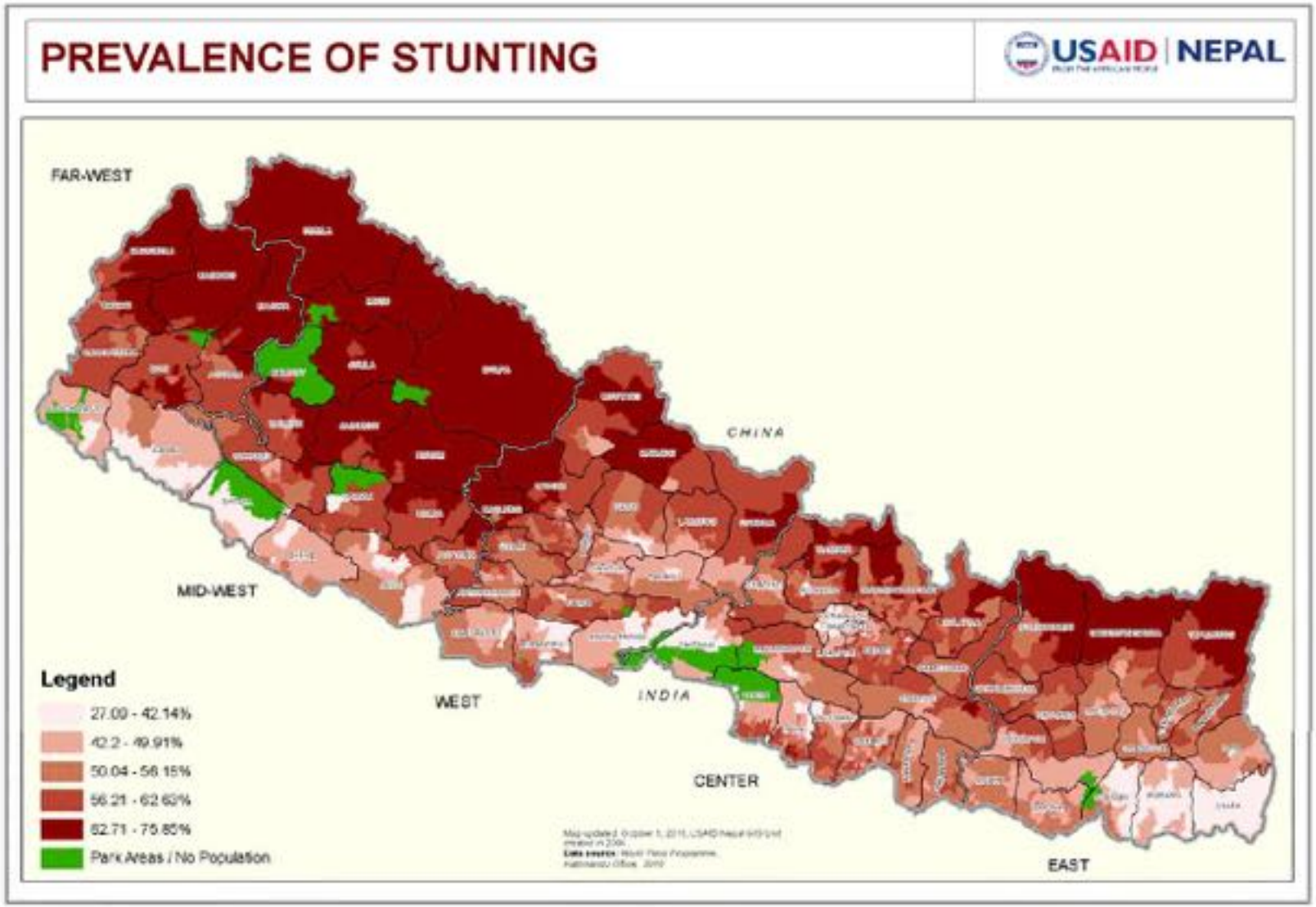
ANNEX B. FEED THE FUTURE PROGRAM DISTRICTS



ANNEX C. PREVALENCE OF POVERTY



ANNEX D. PREVALENCE OF STUNTING



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