



Strategic Review

FEED THE FUTURE

January 21, 2011

This presentation represents the preliminary strategic direction of a multi-year, whole-of-government, U.S. strategy to address food security in a Feed the Future country or region. It describes partner country progress and outlines how U.S. investments will align in support of partner country priorities. This document has not yet been approved or funded but will form the basis of a multi-year strategy in development.

Lift 1 million individuals out of poverty

Value chains

- Focus: high value vegetables
- Cropping systems: rice, maize, pulses

Components¹

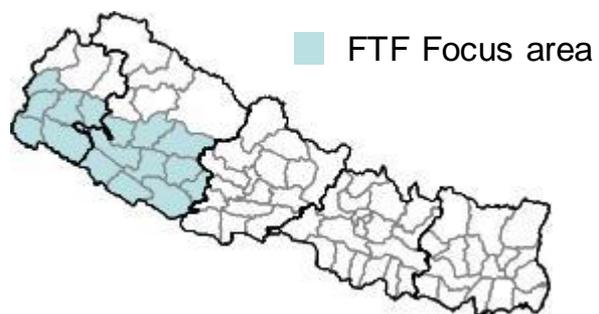
- High value agriculture (75%)
- Nutrition & hygiene (15%)
- Integration of vulnerable groups (5%)

Highlights

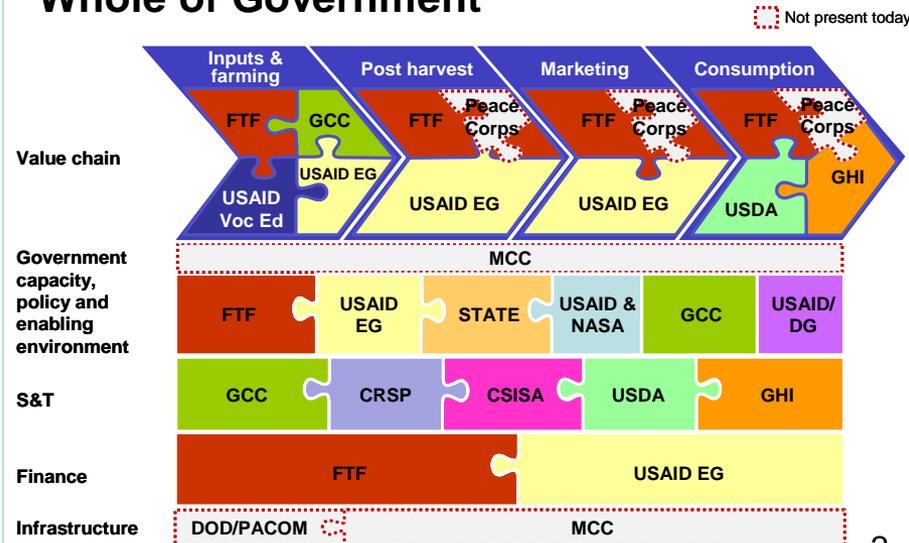
- 100% inclusive leadership, WOG approach
- Cost/person out of poverty \$160 over 5 years
- Scale & sustainability through change agents
- Based on USAID proven interventions

Geographic Focus

16 districts in FW & MW Terai & lower Hills



Whole of Government



¹ 5% for M&E



- Development Challenge
- Interventions with Highest Potential
- Proposed USG Engagement
- Impact

Country Context

Nepal is the 13th poorest country in the world ...

- **Poorest** country in South Asia; 142/177 HDI
- **55% population** <\$1.25/day
- **GDP/capita \$470**
- **Population** expected to **double** between 2000-2040
- **70%** of population depend on **agriculture** for their livelihood (34% of GDP)
- **50% population** is under 18 years
- **>100 ethnic groups; 92 languages**
- Caste and gender **discrimination**
- **Rising out of conflict**



Vulnerable Groups

Women



- Last to eat and first to give up food
- Absorb greater workload as men migrate in lean season
- Literacy rate of only 42% (vs. 69% male)

Disadvantaged and conflict-affected youth



- 50% of population is under 18
- Significant number of former combatants from conflict era

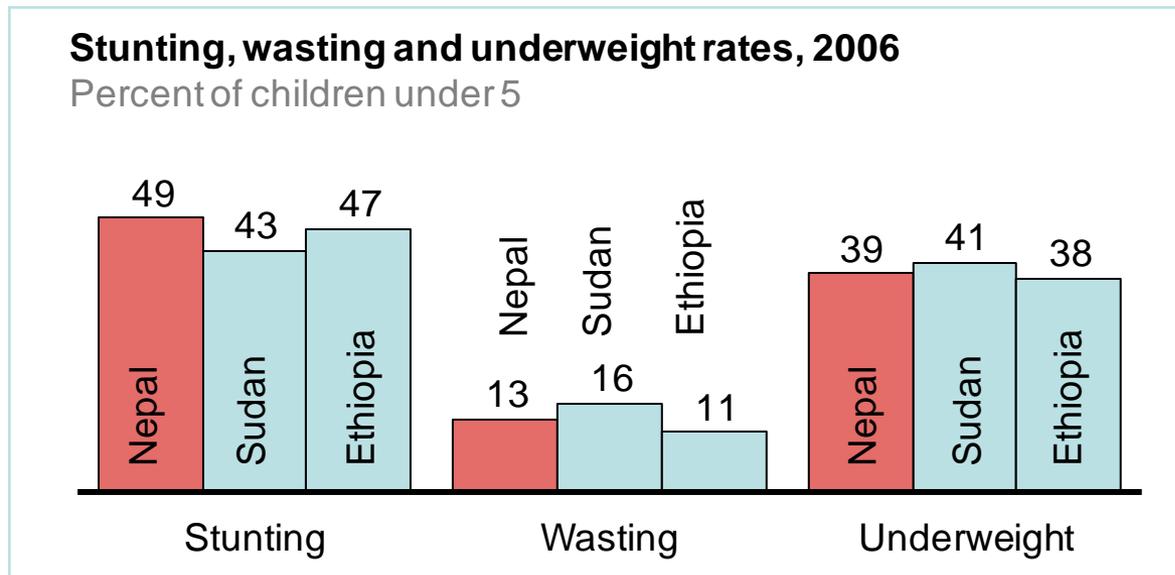
Ethnic, linguistic and religious groups



- Dalits, Madhesis, Janajatis face >200 forms of discrimination
- Half income compared to other castes



Nutritional status in Nepal is similar to Sudan and Ethiopia



2/3 of all Nepalese suffer from food insecurity during year

41% of people consume less than the minimum calorie requirement¹

¹ Minimum calorie requirement of 2144 kcal/person/day

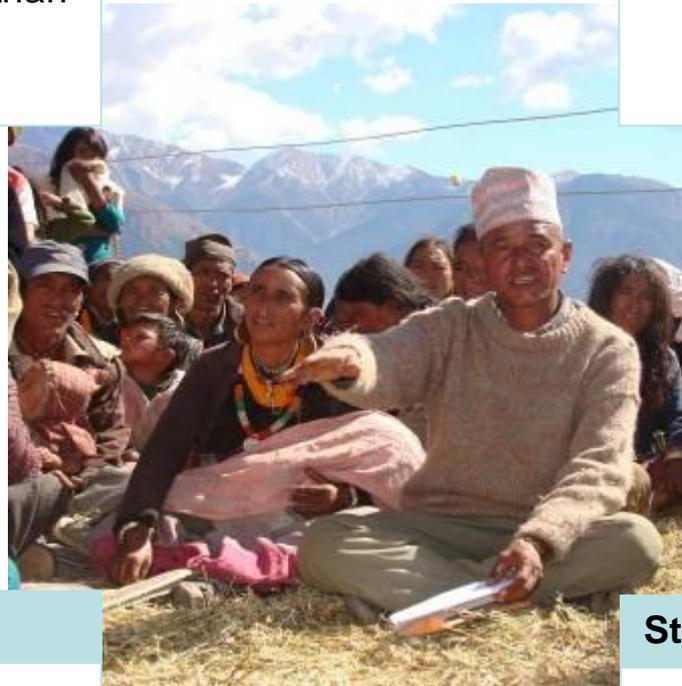
Food Insecurity

Availability

- **National food deficit** since 1980s
- Average landholding size less than **0.5 hectare**
- Several **days walk to market**

Access

- **75% of income spent on food**
- **15% food inflation rate** (Ag. GDP growth rate only 2.5-3.5%)



Utilization

- **Limited dietary diversity**
- **Discriminatory feeding practices** affecting women and lower **castes**

Stability

- **Agricultural lean seasons** lead to male outmigration
- Recurrent **natural disasters** increase vulnerability of poor

Steady development progress despite challenges in governance

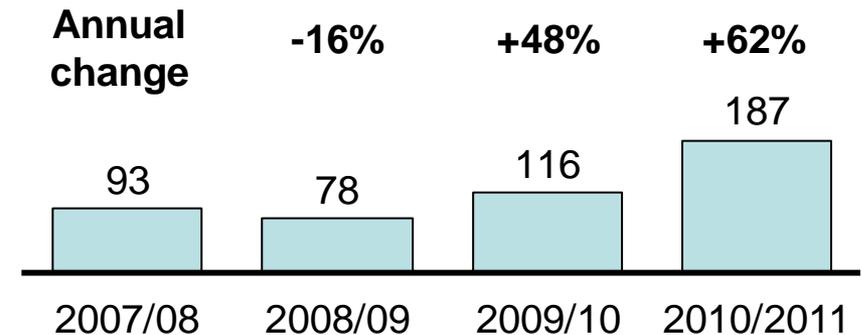
Development progress...

- **Greatest global increase in HDI since 1980**
- **Macroeconomic environment**
- **GON budget increases** (Ag., roads, education, health)
- **Vibrant civil society**
- **On track to meet 3 MDGs**

Growing GON commitment to agriculture

GON agriculture budget

\$ million



...despite challenges in governance

- **10 year conflict ended in 2006; Constitution in progress**
- **Technical-level policy-making**
- **Constraints on business enabling environment**



Government readiness

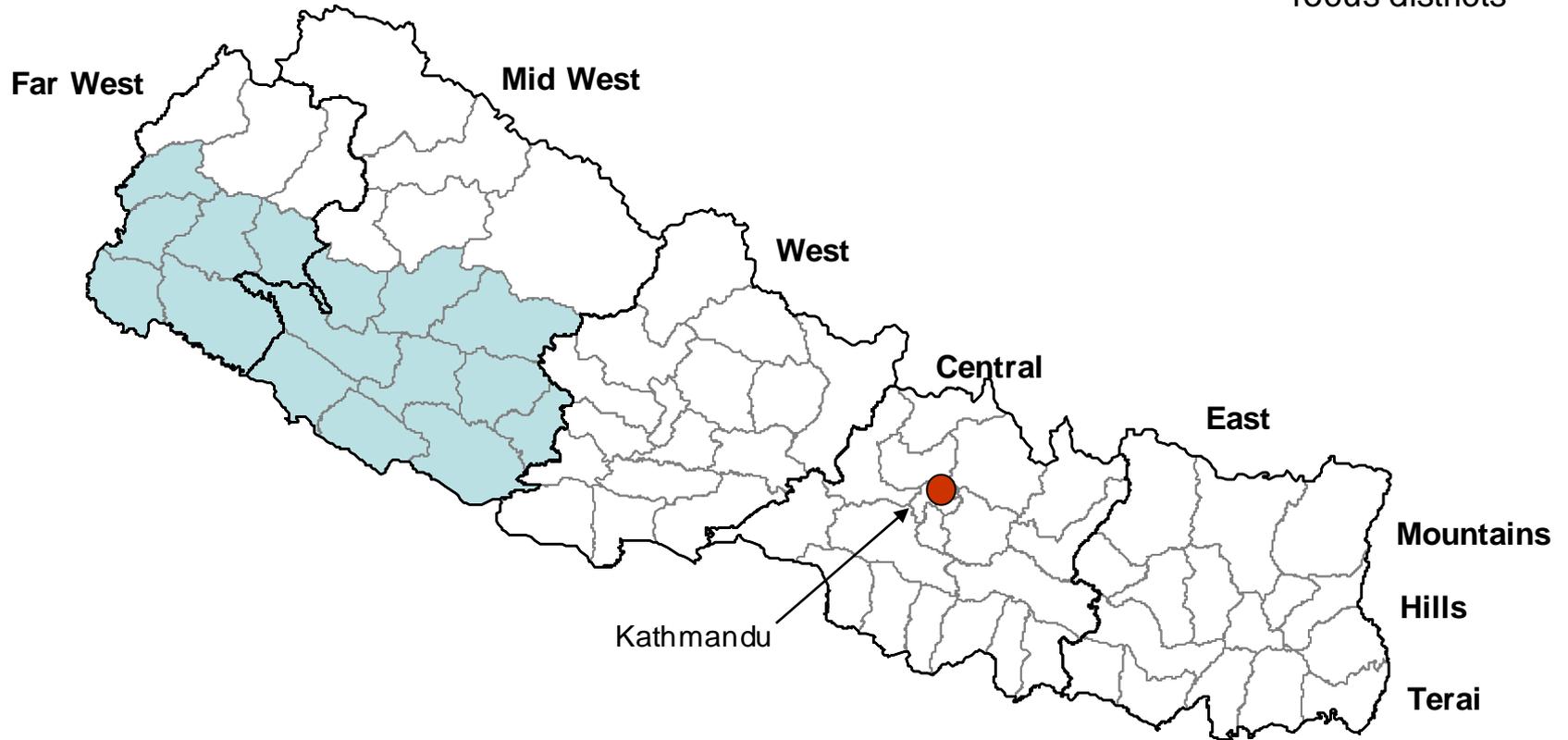
- **Strong donor coordination**
 - Agency heads & technical level groups
- **Country Investment Plan process**
 - Stakeholder workshops: GON, civil society, NGOs, private sector, bilateral/multilateral partners, academia
 - IFPRI stocktaking exercise
 - Priority investment areas clearly articulated, quantified and roles assigned
- **GAFSP application Oct. 2010**
 - Partial overlap with FTF focus districts
 - Broad stakeholder consultation, endorsed by donor group
- **Nutrition Assessment and Gap Analysis (NAGA) 2009**
- **National Health Sector Plan 2010-2015**
 - Food security and nutrition section



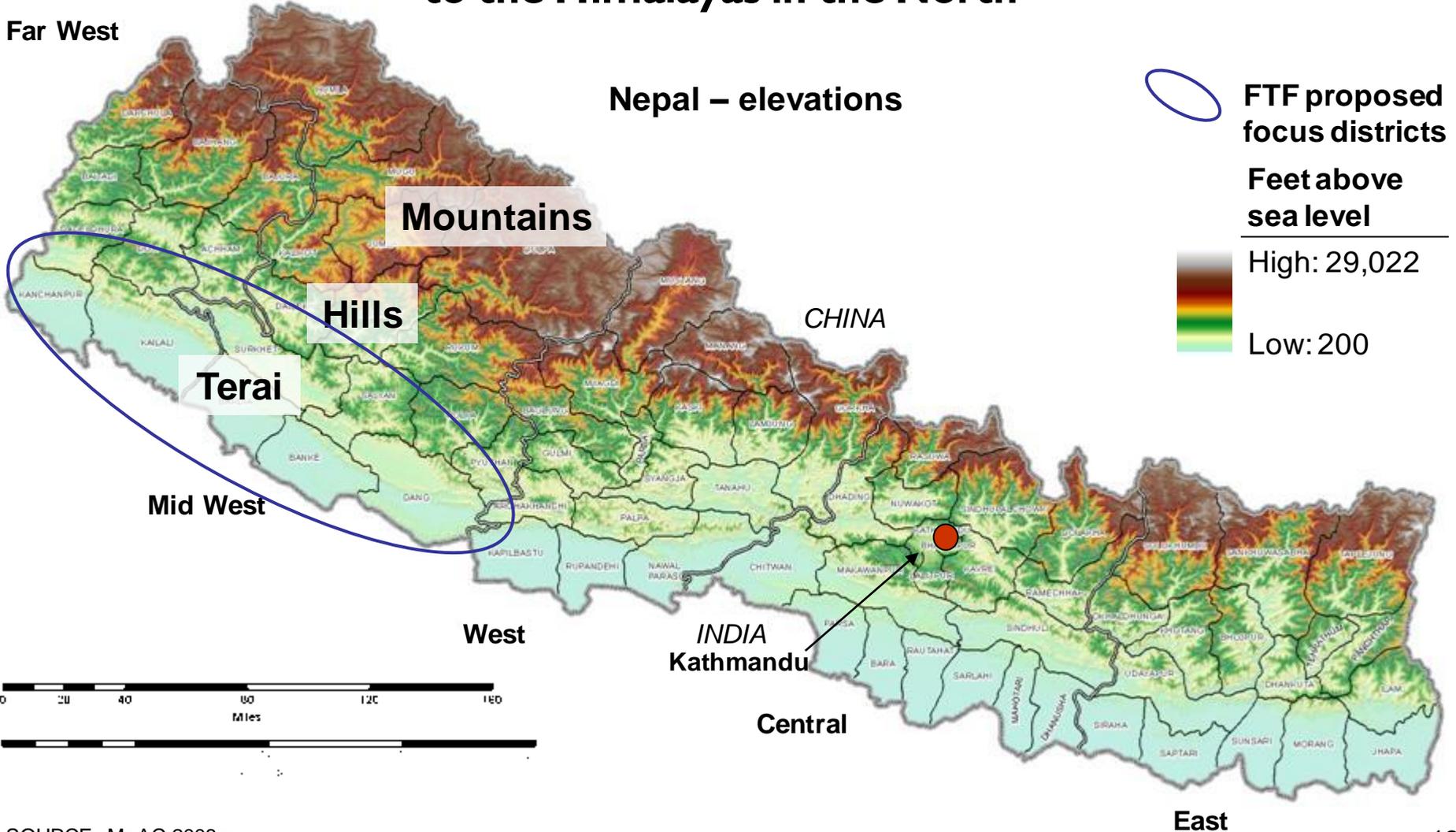
- Development Challenge
 - 13th poorest country in the world
 - Extreme food insecurity
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Feed the Future focus on 16 districts of Western Terai and Hills

■ Feed the Future proposed focus districts



Nepal has 3 major regions, running from the Terai plains in the South to the Himalayas in the North

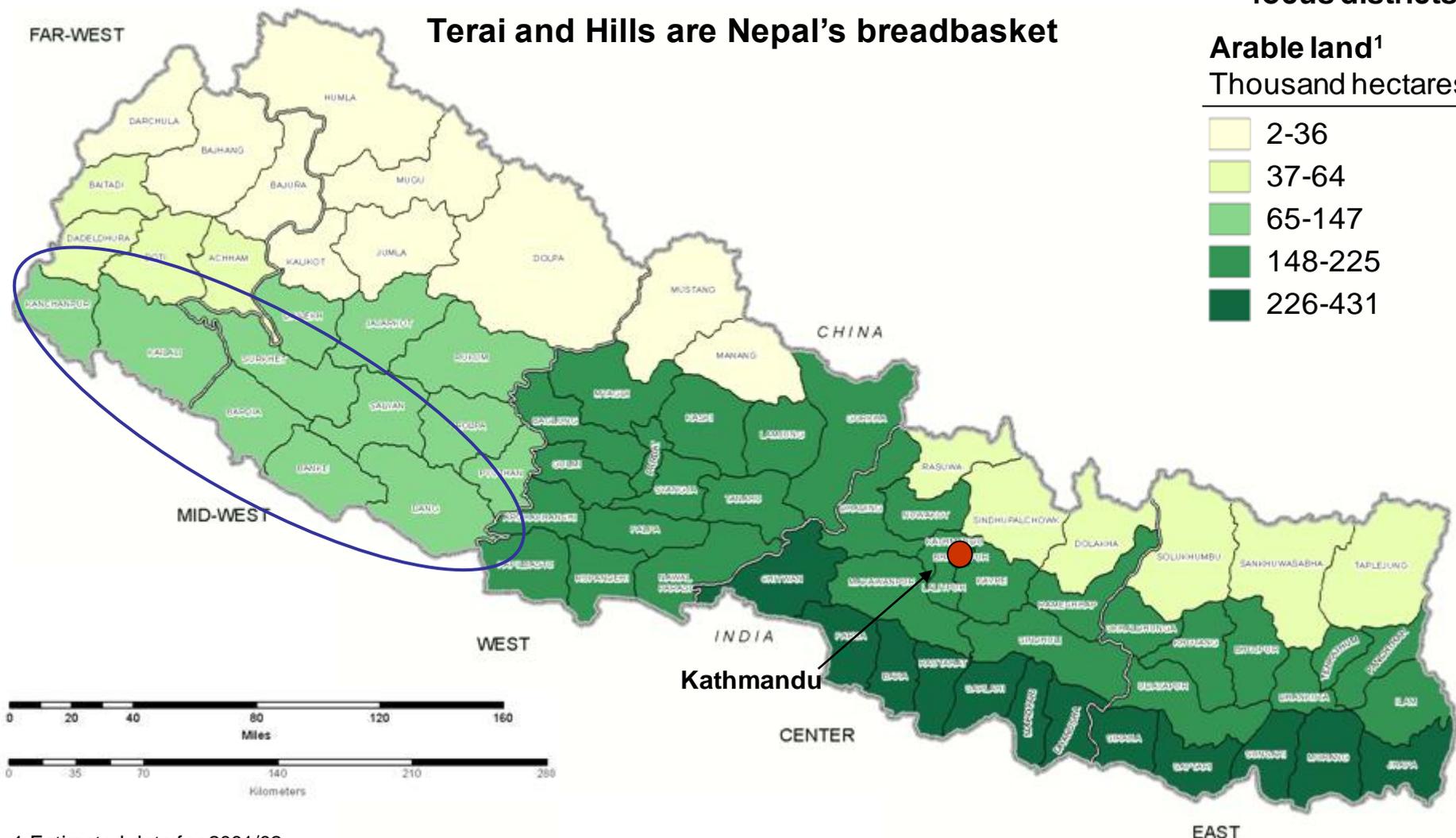


Greatest agricultural potential in the Terai and hills

 FTF proposed focus districts

Terai and Hills are Nepal's breadbasket

Arable land¹
Thousand hectares



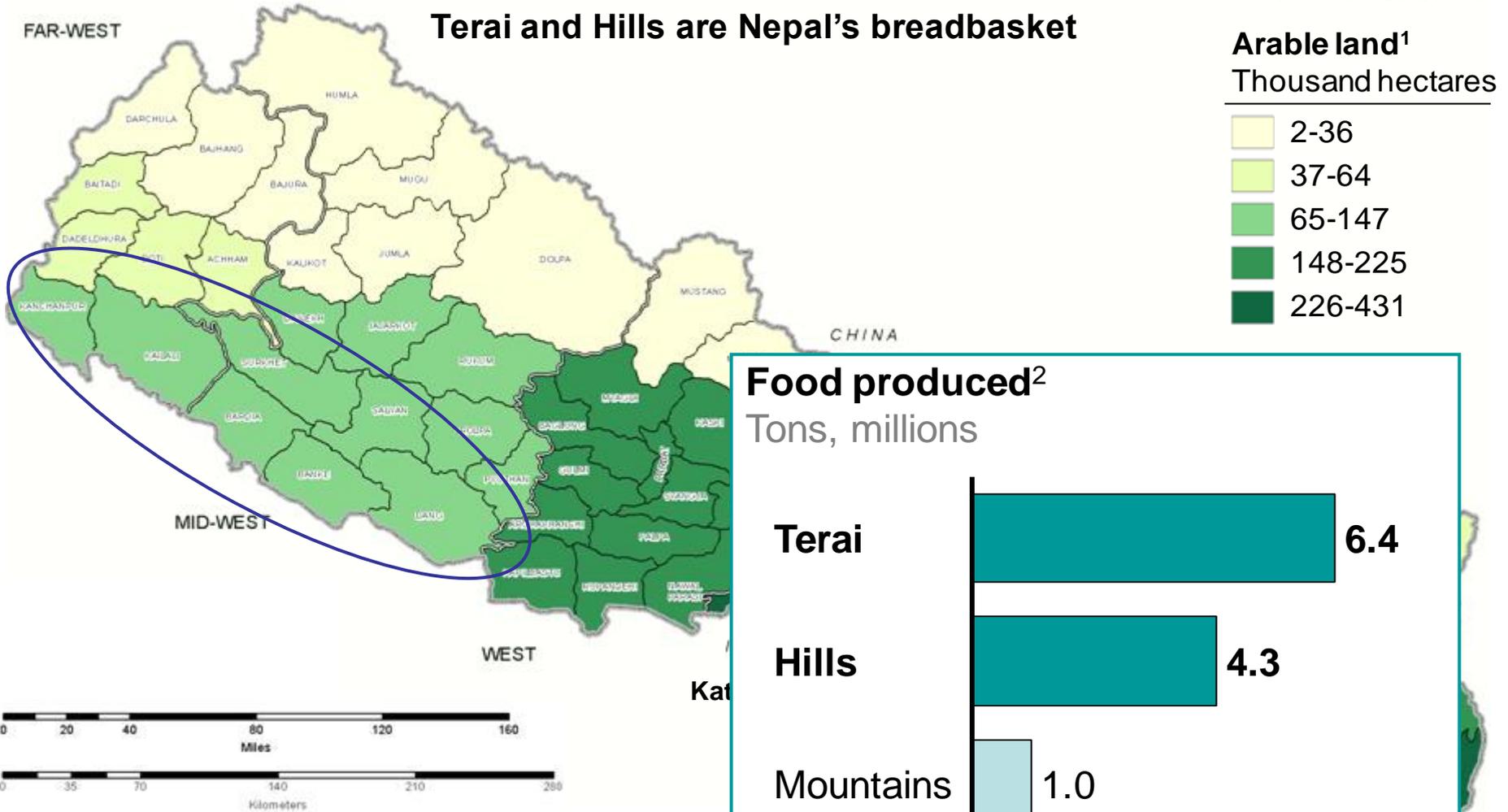
1 Estimated data for 2001/02

2 MoAC data for 2008/09, includes rice, maize, wheat, millet, oilseed, potato, spices, pulses, vegetables, tropical fruits

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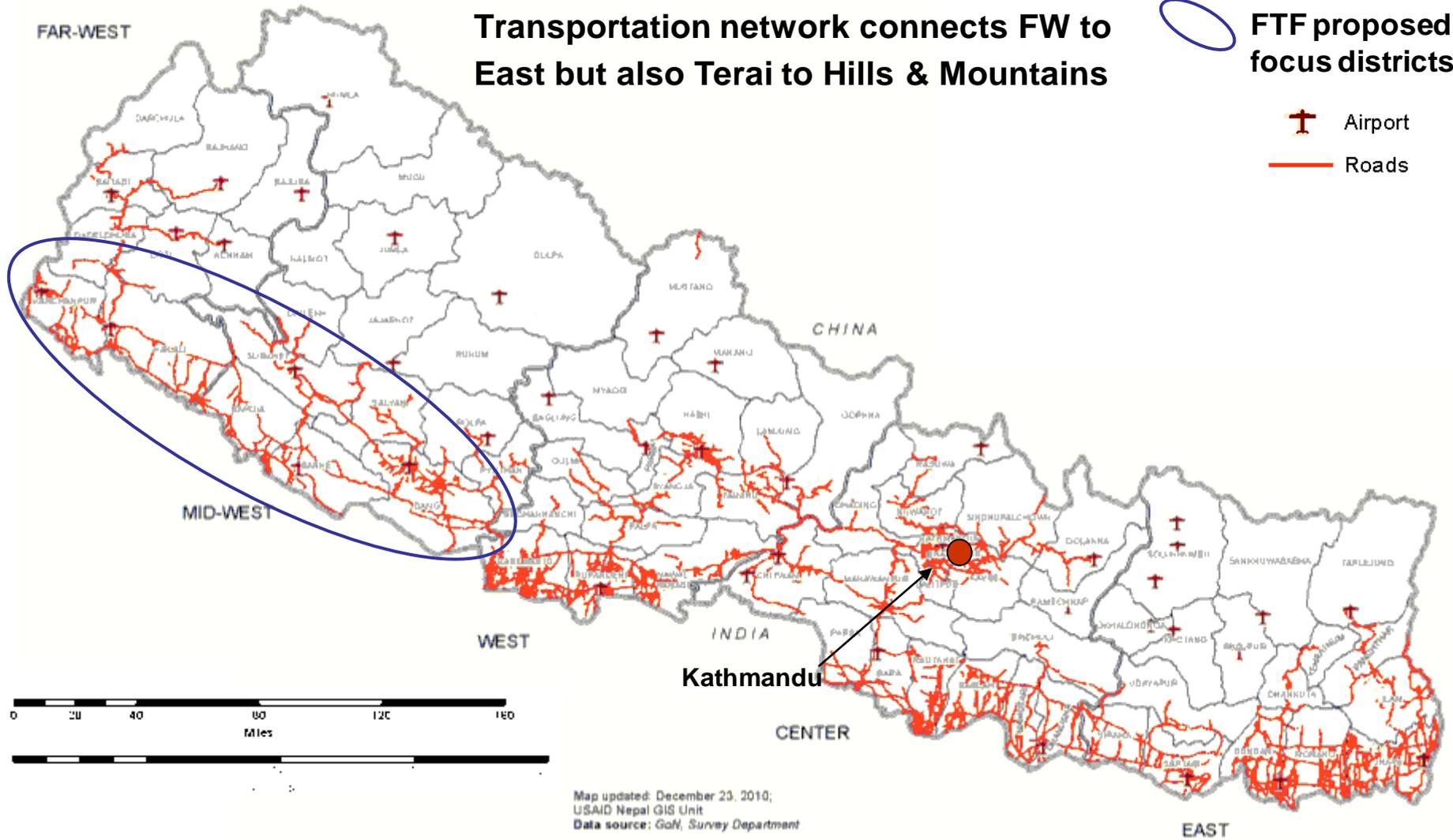
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Existing transportation network

Transportation network connects FW to East but also Terai to Hills & Mountains

 FTF proposed focus districts

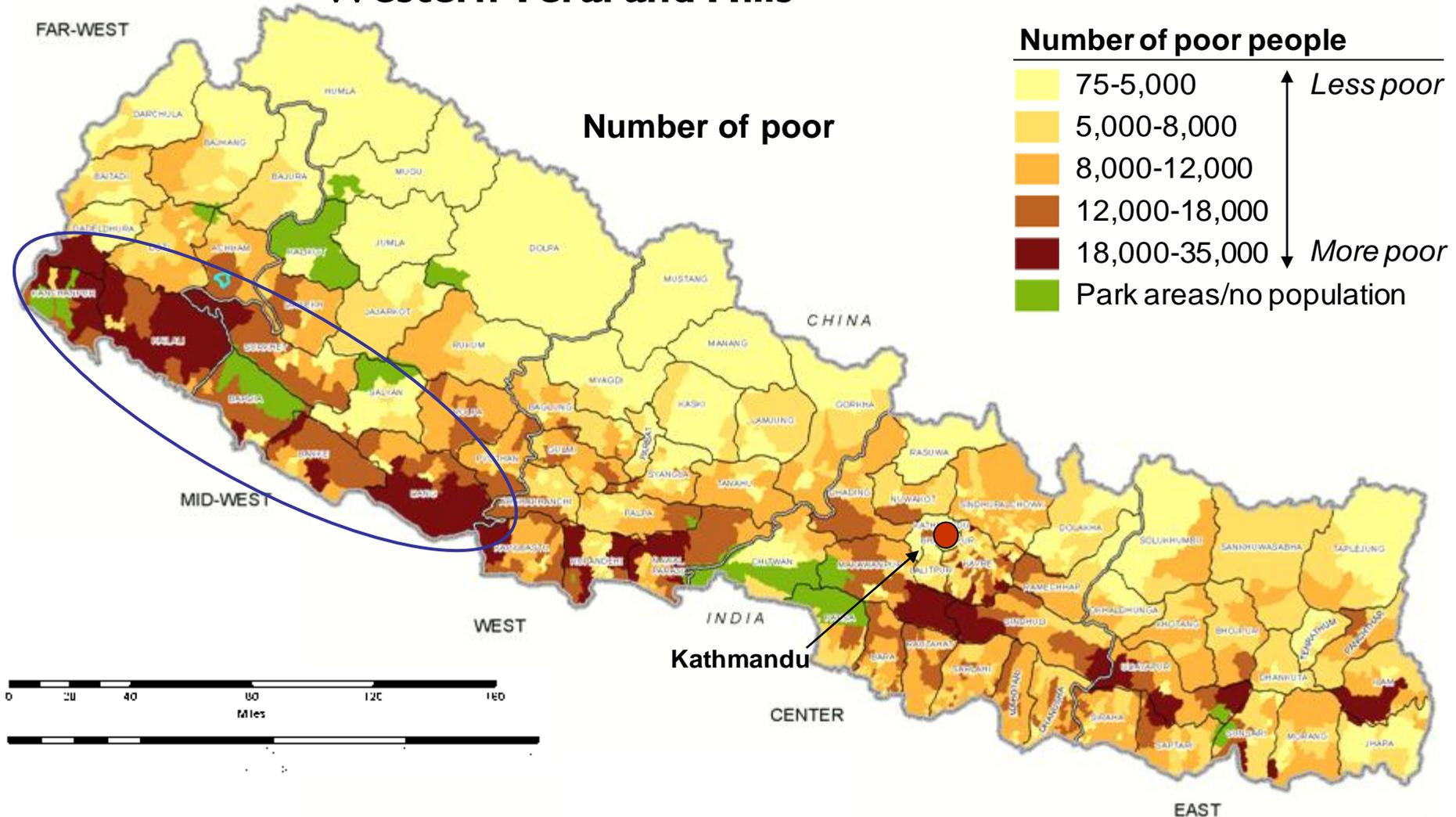
 Airport
 Roads



Map updated: December 23, 2010;
USAID Nepal GIS Unit
Data source: GoN, Survey Department

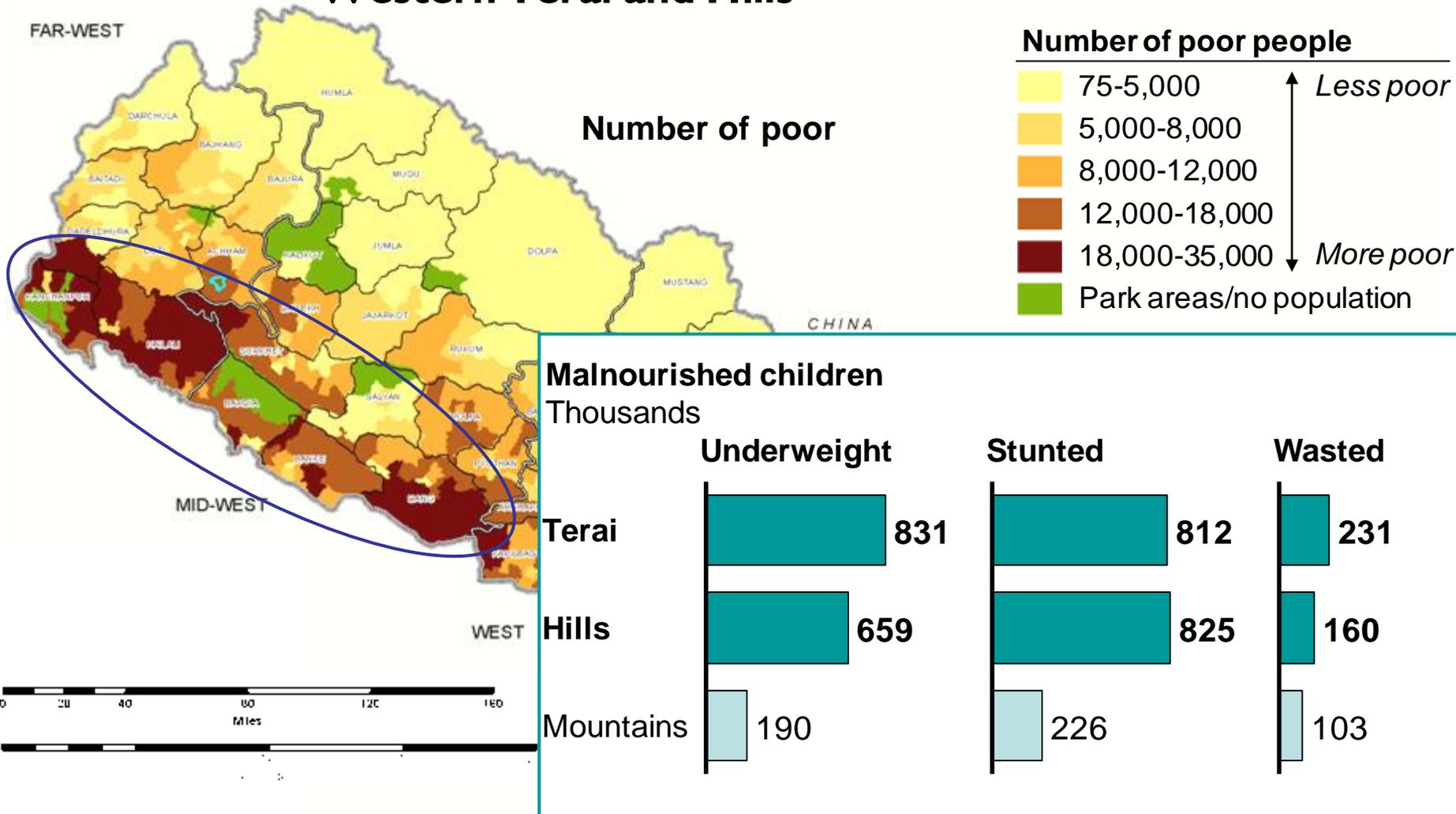
Greatest number of poor and malnourished in Western Terai and Hills

 FTF proposed focus districts

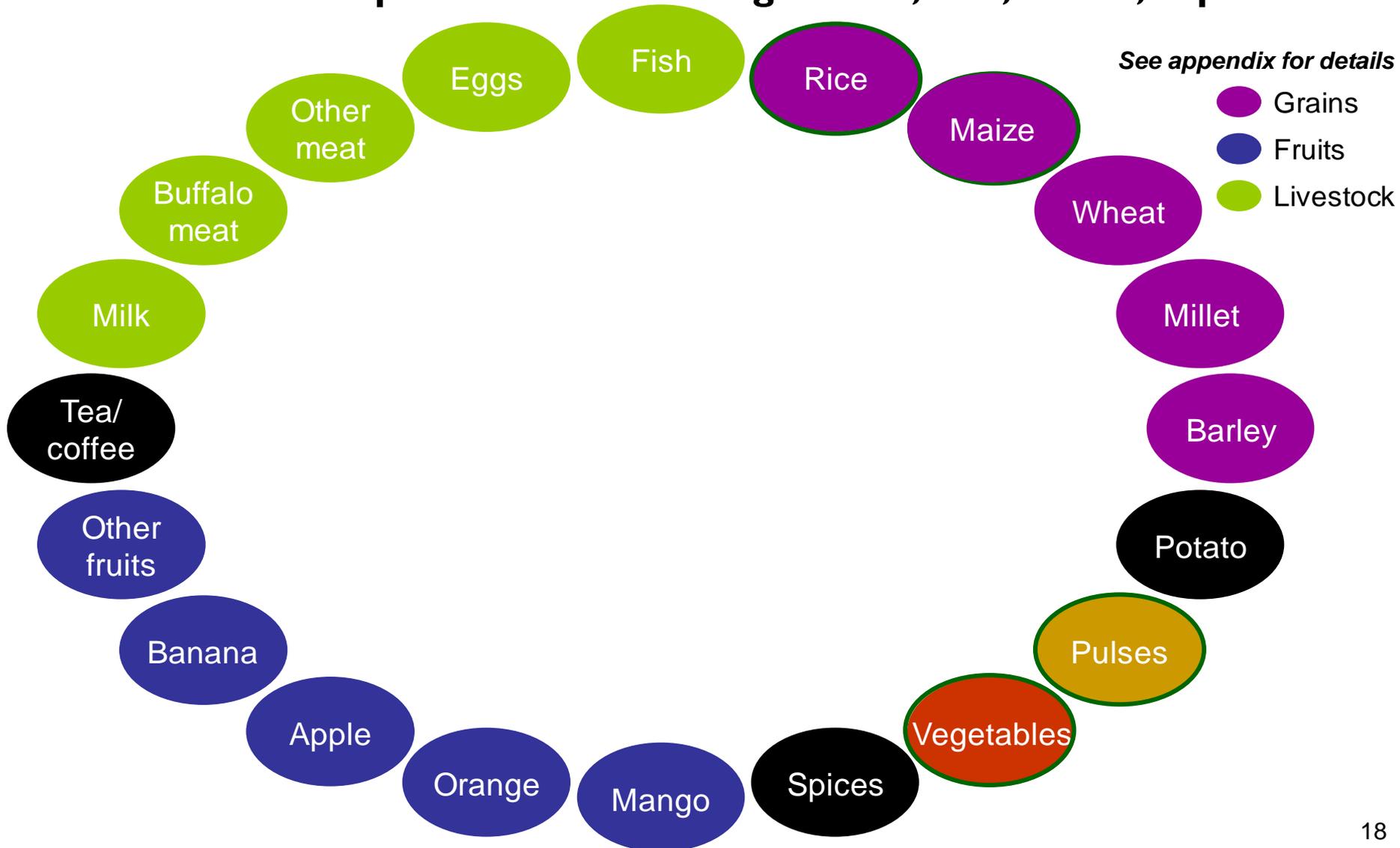


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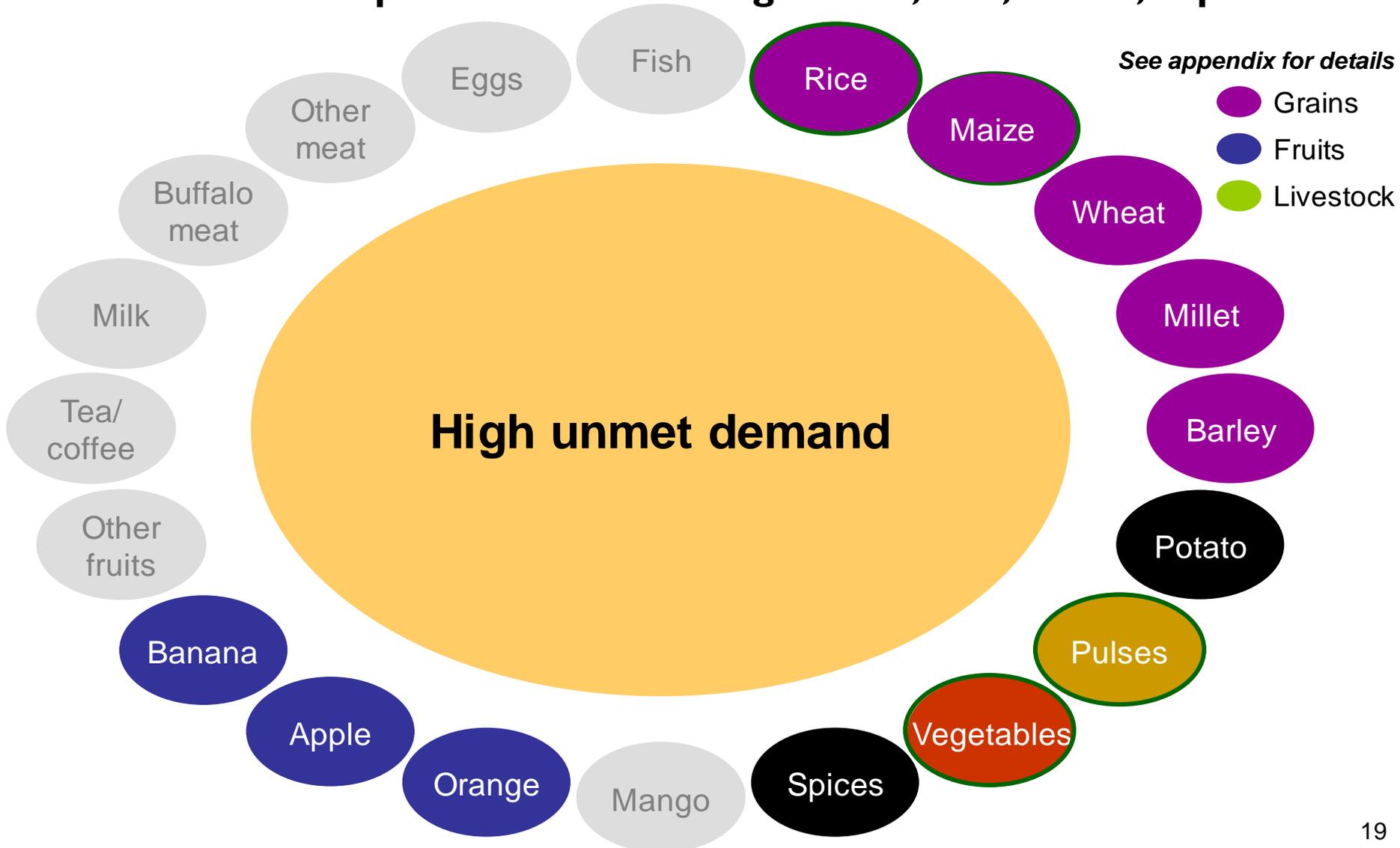
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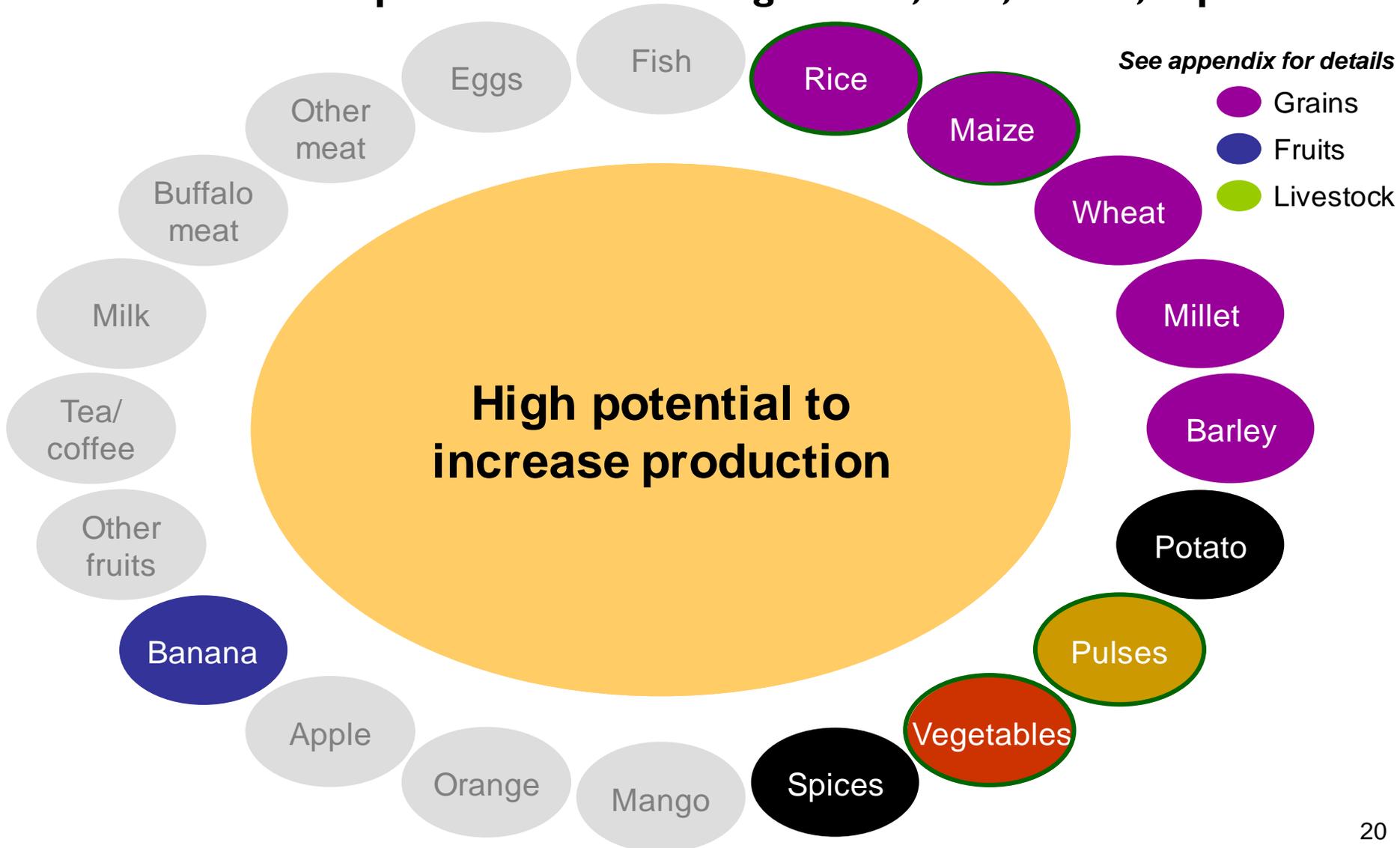
Prioritization of products leads to vegetables, rice, maize, & pulses



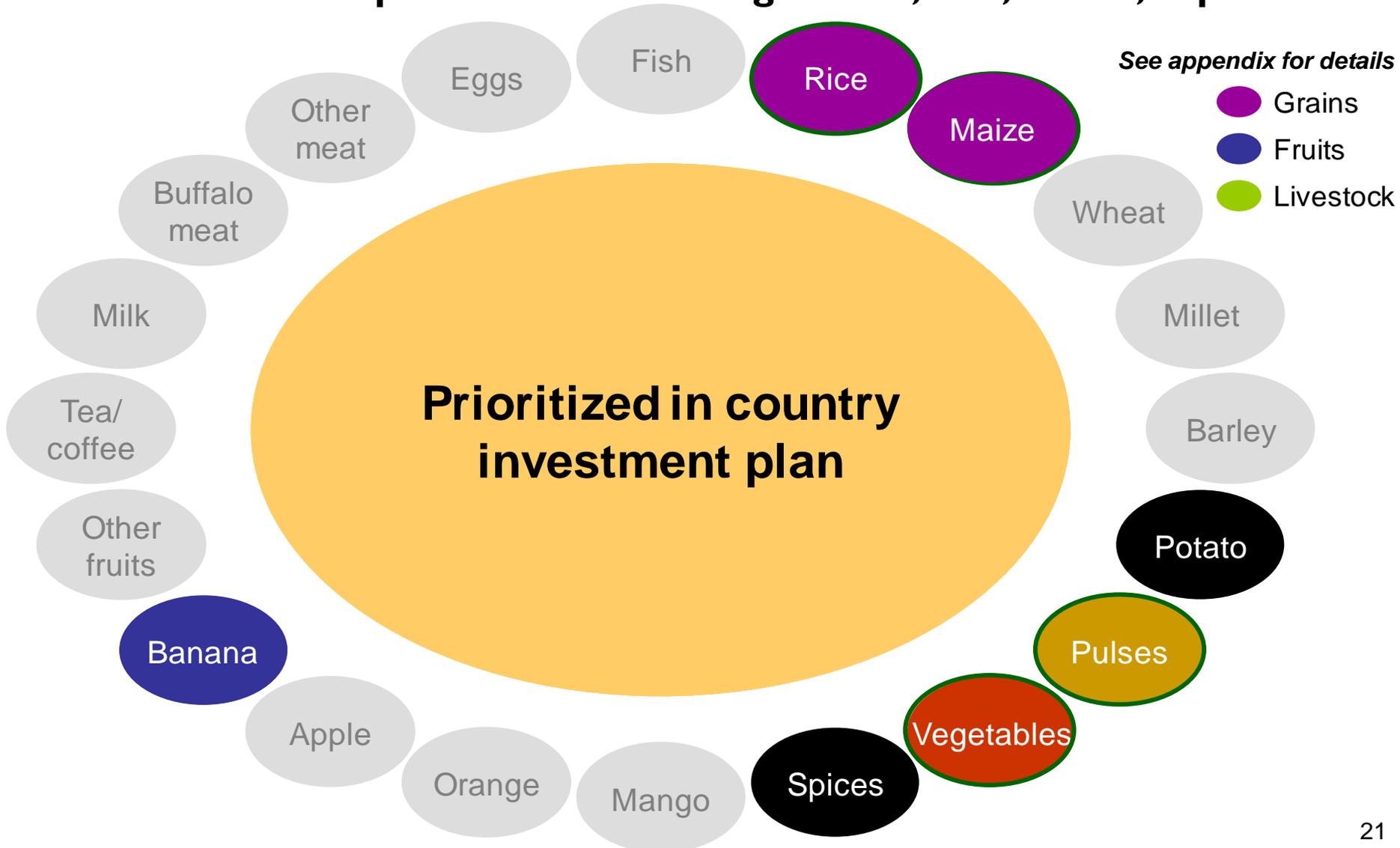
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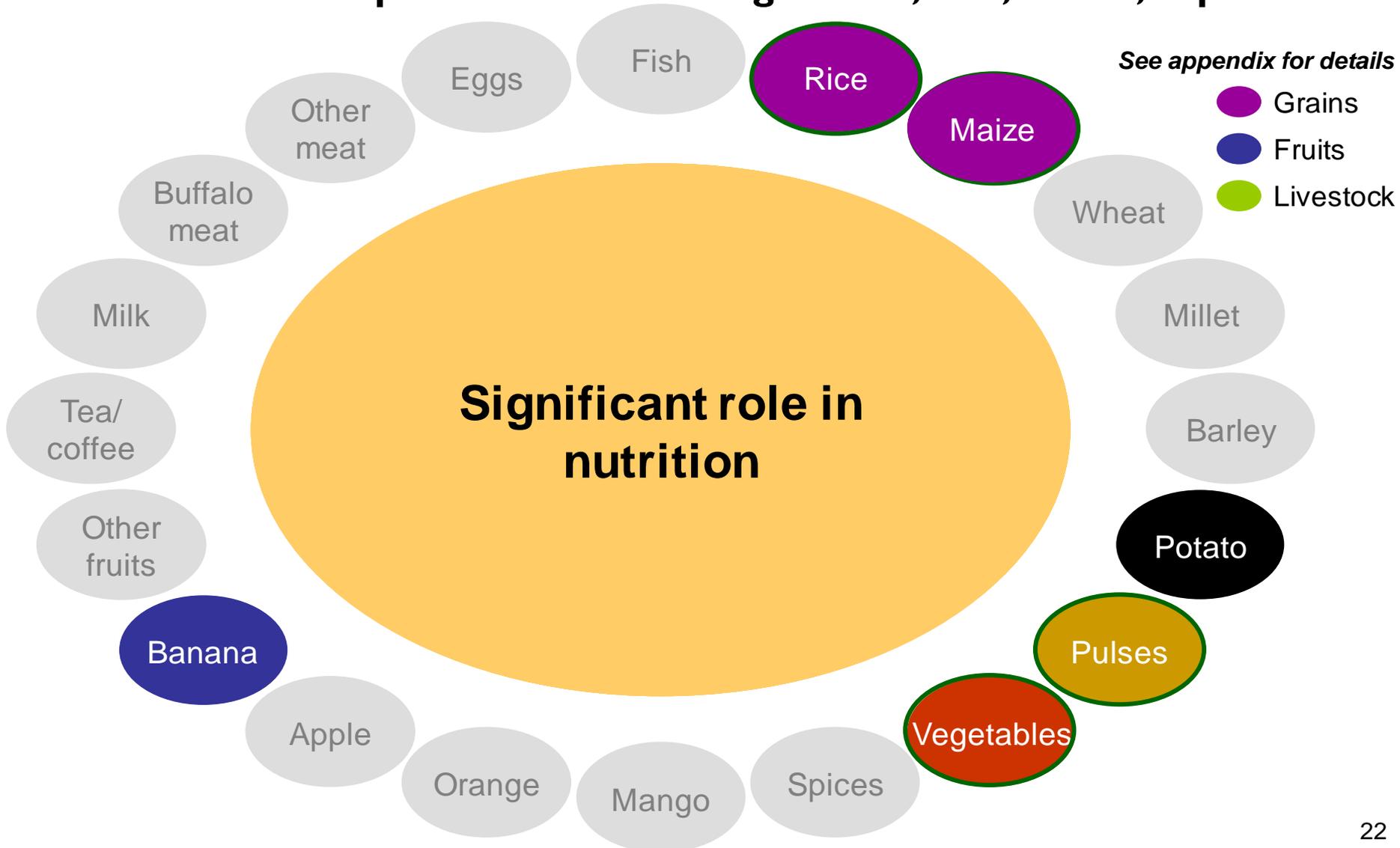
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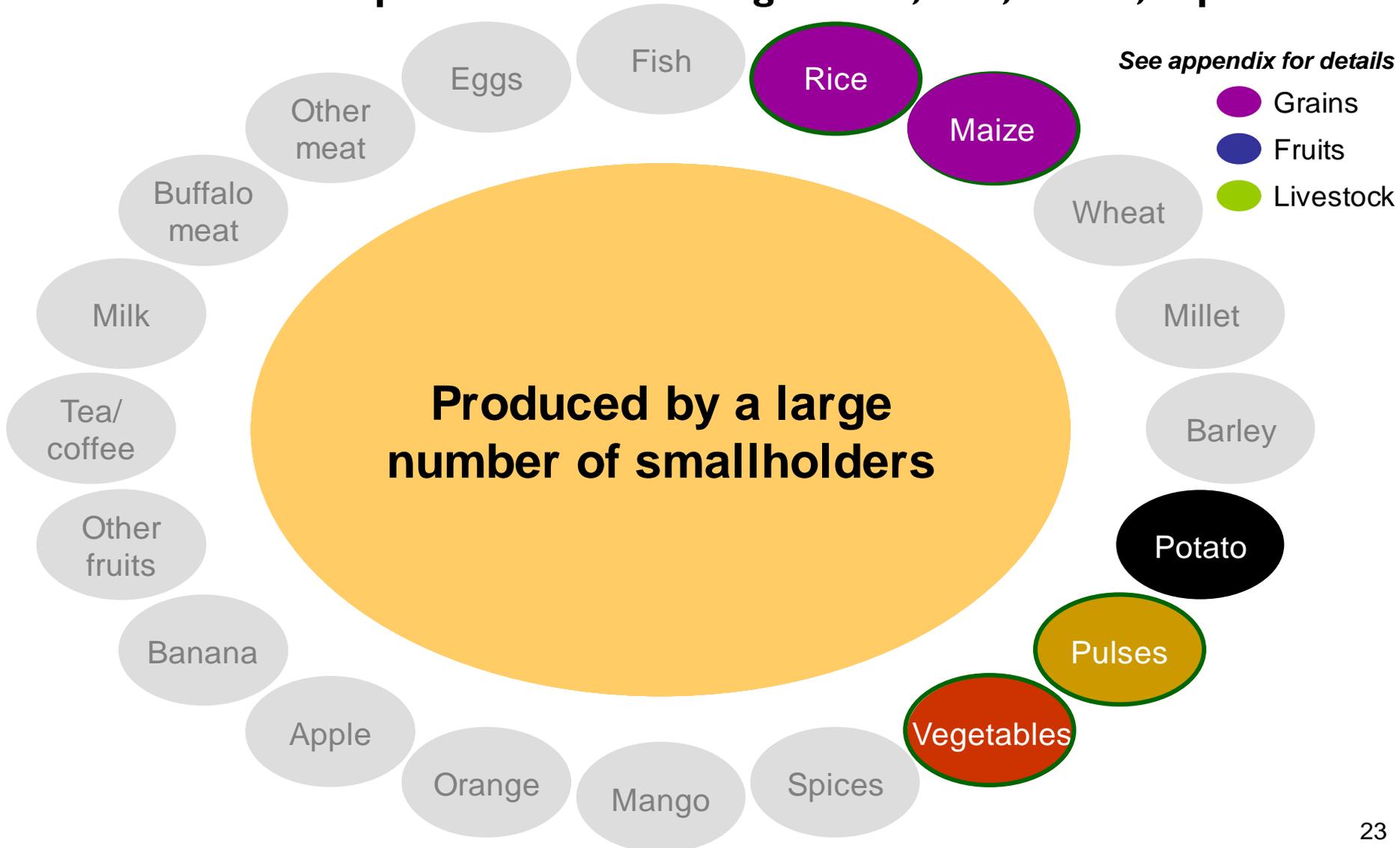
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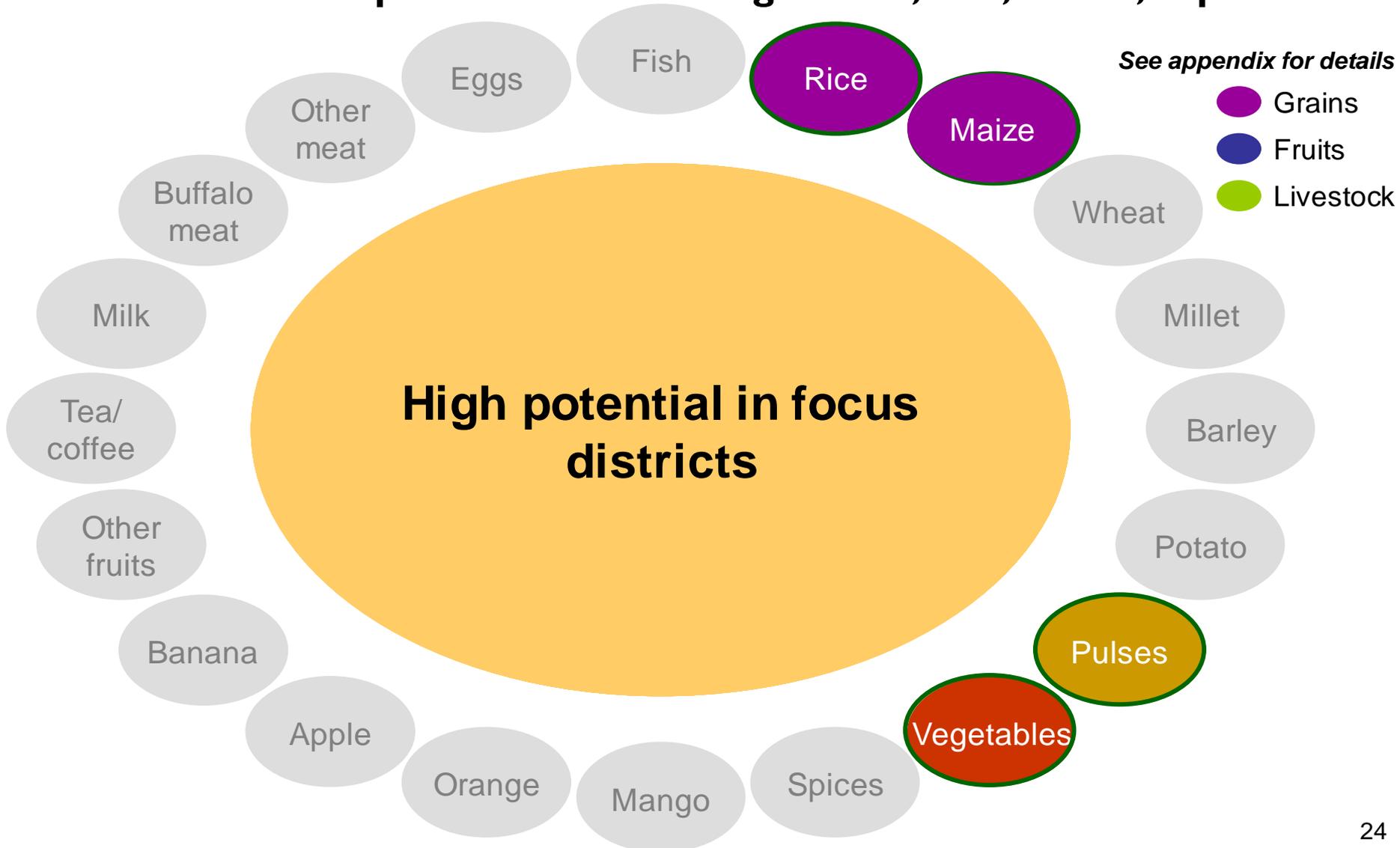
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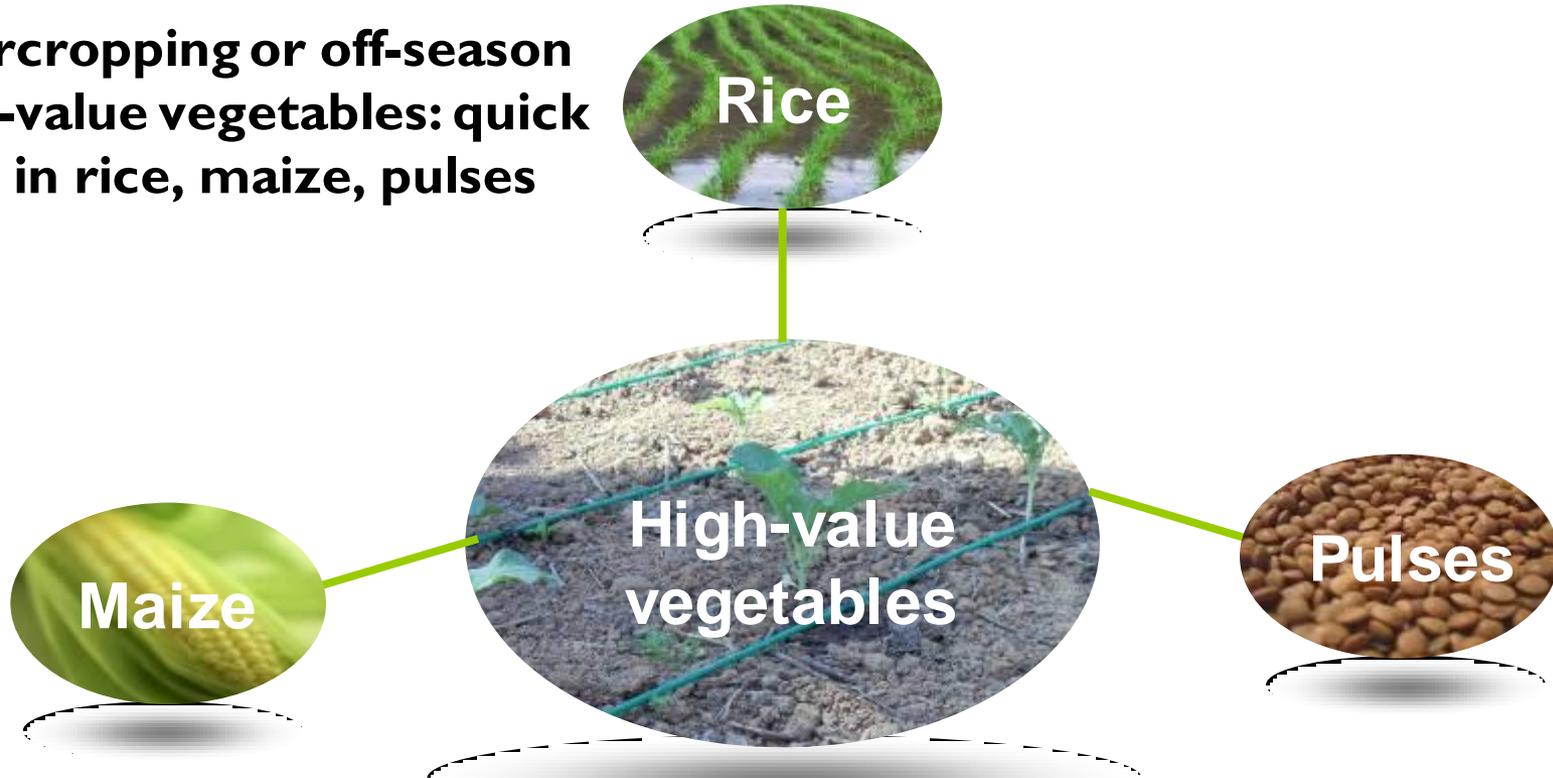
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Prioritization of products leads to vegetables, rice, maize, & pulses



Intercropping or off-season high-value vegetables: quick wins in rice, maize, pulses



Vegetables

- **High impact potential** for income & nutrition
- By 2015, **domestic demand** will be **1.4 times** current **production**¹
- Competitive **supply** potential²
- Focus on **farming systems** and driving supply **expansion**

Staple systems

- **High impact potential:** Rice and Maize are #1 and #2 most produced staples
- **Pulses** are key source of **protein**
- **Quick wins with existing technologies:** early harvest rice, protein-rich maize seed dissemination, intercropping with vegetables

¹ Based on 2005-2010 local consumption growth rate

² Based on USAID project experience showing competitiveness for local market

USAID proven impact of irrigation and vegetable interventions

Proven with over 100,000 farmers over past 10 years, including in Feed the Future target region



Proven *direct* impact

- **200-300% increase in household income** (from \$350 up to \$1200)
 - **685% average increase in sales per hectare**
 - **7x higher labor productivity**
- ... over 2-3 crop cycles

Proven *indirect* impact

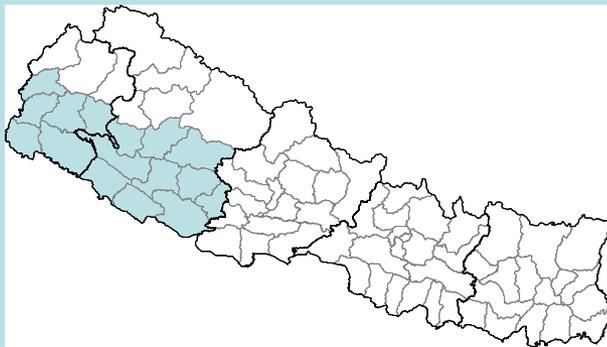
- **30-40% diffusion effect**
- Increased **food quantity, quality** and diet **diversification**
- Purchase of **productive assets** (e.g. livestock)
- Improved loan **repayments, savings, school enrollment, homes**; lower **migration**



- Development Challenge
 - *13th poorest country in the world*
 - *Extreme food insecurity*
- Interventions with Highest Potential
 - *High value vegetables with rice, maize, pulses*
 - *Proven interventions ready to scale*
- Proposed USG Engagement
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Feed the Future will scale up and enhance USAID proven implementation models targeting 160K farmer households (1m people) ¹

FTF focus areas



Feed the Future major components

A

- Increase number of crop cycles per year
- Increase productivity of high value vegetables with complementary impact on rice, maize and pulses

B

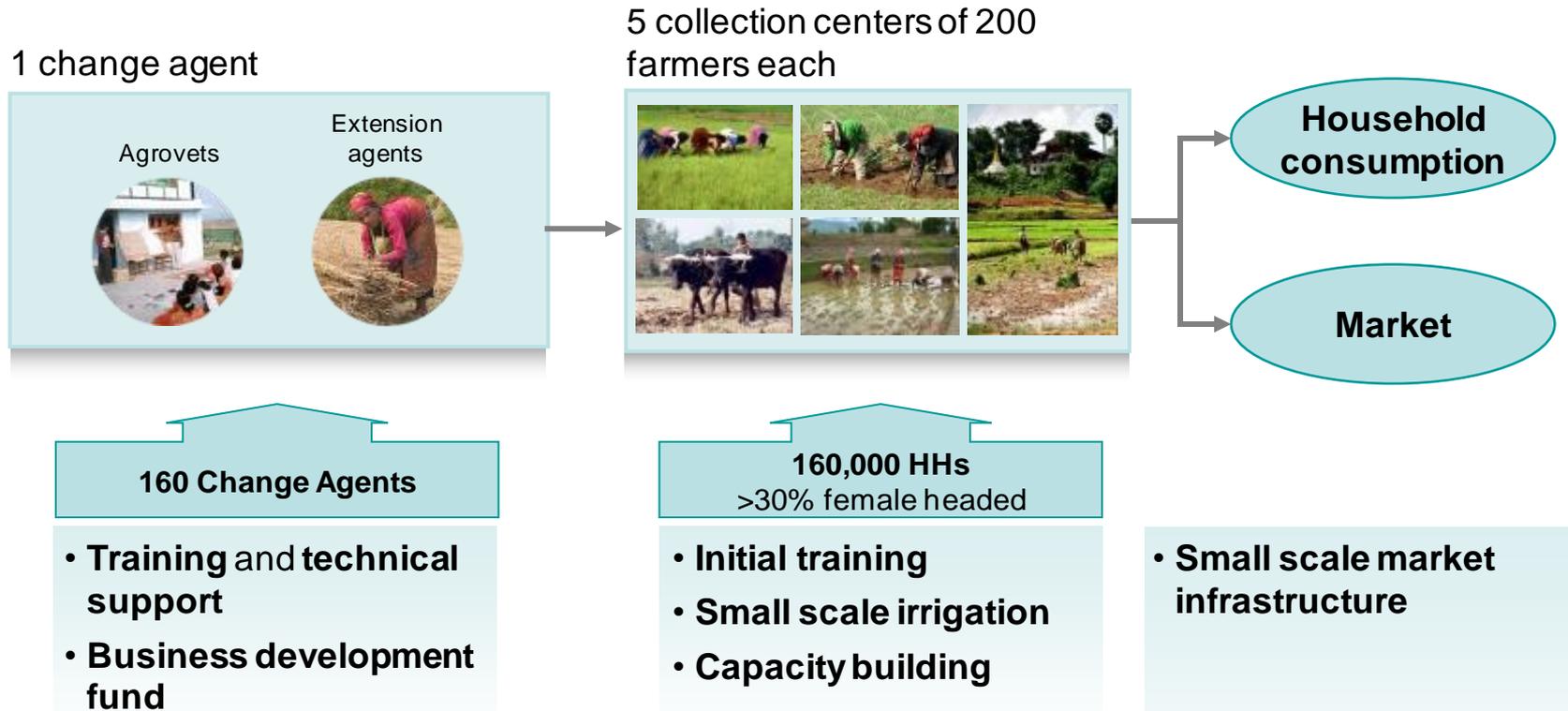
- Change behaviors
- Improve diets
- Deliver services for nutrition and hygiene

C

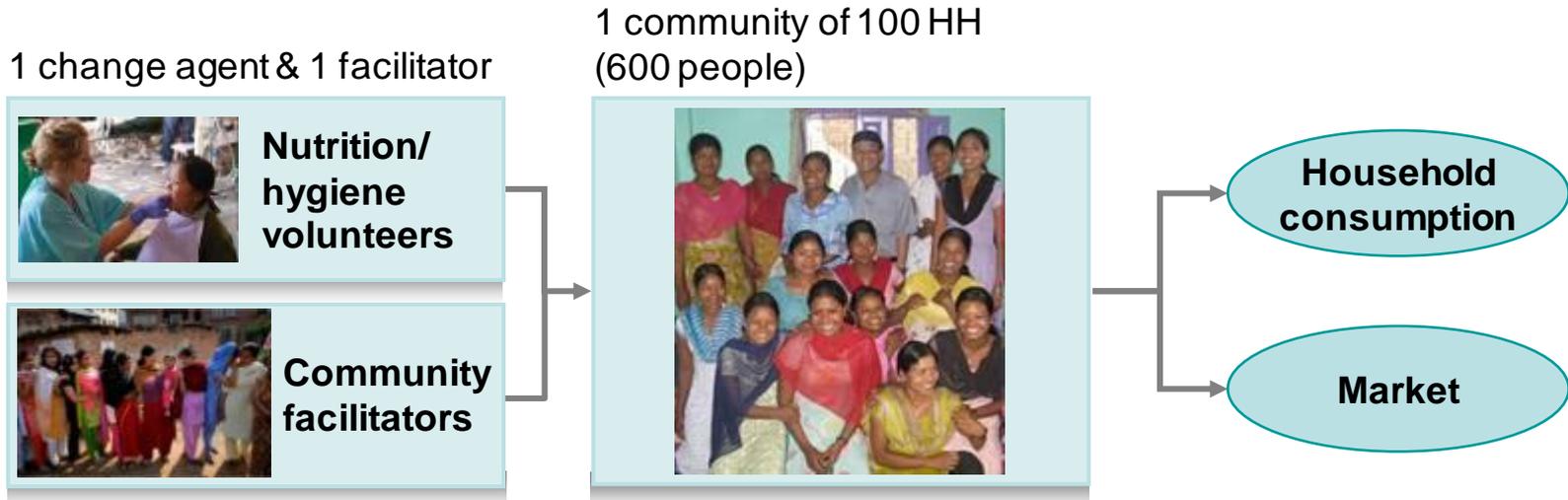
Integrate vulnerable groups so they benefit from ag. and nutrition interventions (A & B) at full potential

Monitoring & Evaluation

Component A: Develop commercially-driven agriculture change agents



Component B: Nutrition/hygiene education and service delivery



2,000 volunteers & 2,000 facilitators

1,700 communities; 1m people

FTF will deliver:

- **Nutrition & hygiene training** of volunteers
- **Training of trainers (TOT)** to supervise existing volunteers and train new recruits

- **Support of volunteers** to educate HH and deliver services

- **HH-based education**
 - Feeding and hygiene practices
 - HH food production and preparation
- **Service delivery**
 - Micronutrient supplement
 - Acute malnutrition

Component C: Empowering vulnerable groups

Components A & B



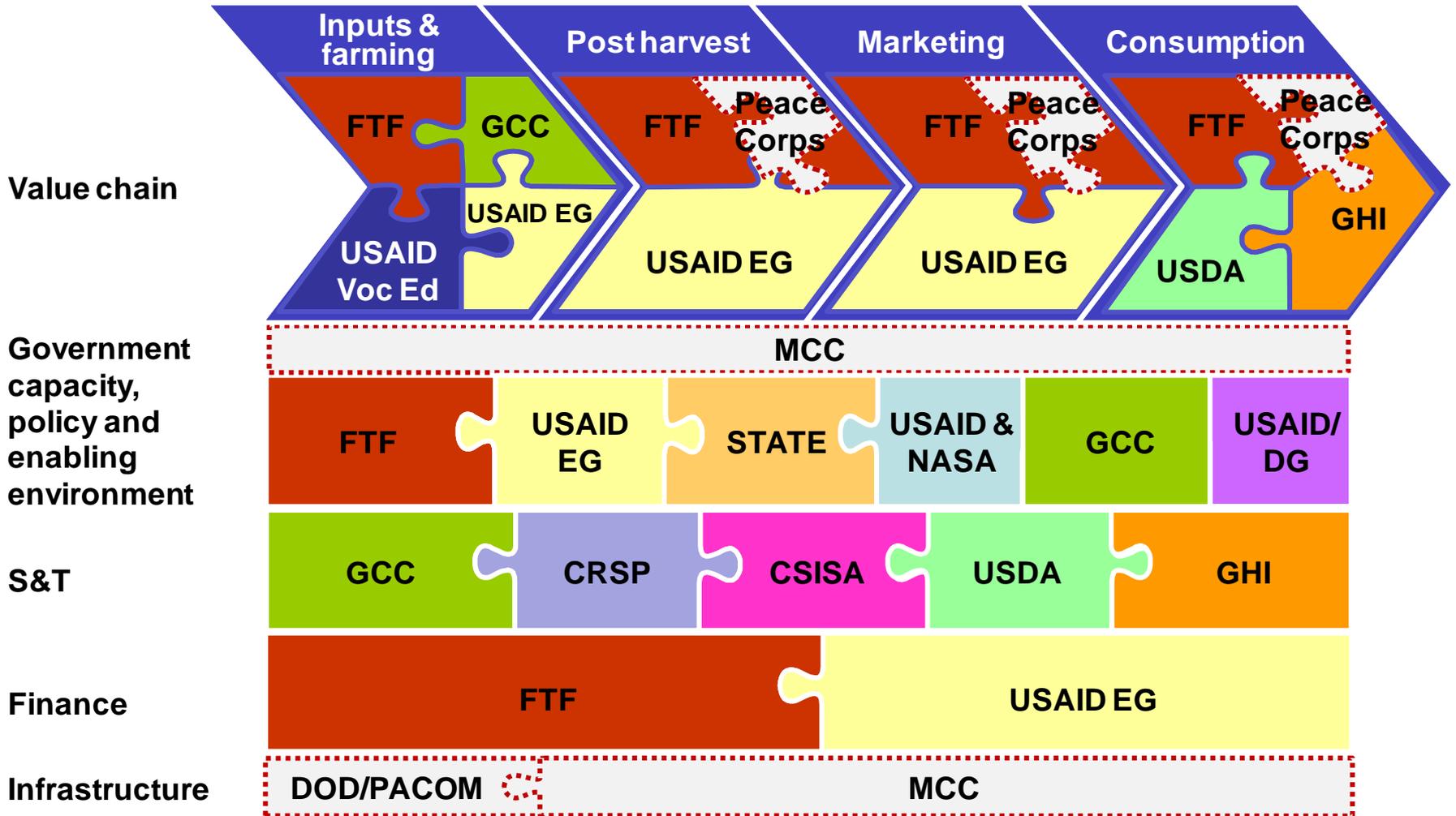
Component C

- **Literacy, nutrition & entrepreneurial skills training**
- Promote **female-friendly farming** practices (e.g. multi-use water systems)
- Target **male and female family members** with **behavior change education** (e.g. hygiene, feeding practices)
- Ensure **trainers** represent **multiple ethnic and caste groups**



Whole of Government

 Not present today



All USG assets combined for FTF interventions

STATE

USAID &
NASA

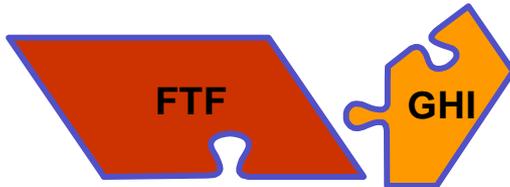
CRSP

USDA

CSISA

- Engage GON on **Agricultural priorities**
 - Seed regulation
 - Contract Farming Act
 - Ag. Credit services
- **Int'l Visitors Leadership Program**
- **Sponsorship** of key speakers
- **Fulbright and Humphrey** programs
- **SERVIR** satellite tracks glacial melting, surface water for irrigation, and improves response to droughts, flooding, etc.
- **Integrated pest management:** tomato grafting, micro-irrigation and pesticides
- **Horticulture:** technology for postharvest drying, seed storage
- **SANREM:** conservation agricultural production
- **Nutrition:** impact of agricultural interventions on nutrition outcomes
- **School feeding program**
- **Cereals R&D**

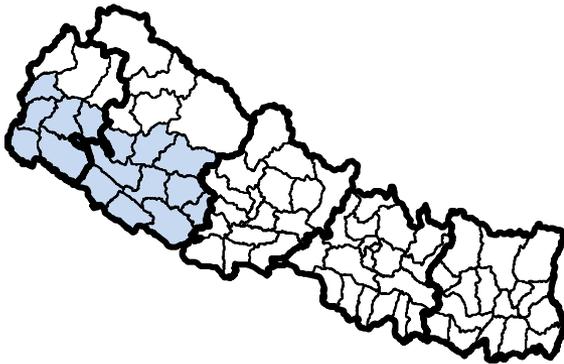




FTF & GHI complement each other

Proposed focus districts for FTF

■ FTF Focus area



Integrated Nutrition Program: 2-pronged approach

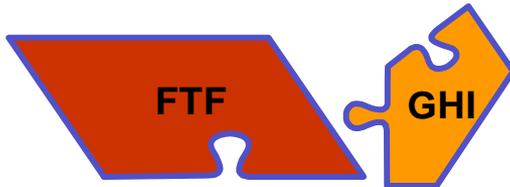
- \$2m per year set aside from GHI for nutrition interventions in FTF target districts
- \$46m for broader national nutrition program (INP)

Interventions: Coordination & harmonization

- Comprehensive nutrition/hygiene interventions
- FTF will leverage technical resources from Integrated Nutrition Program (INP)

Impact: Opportunities for learning

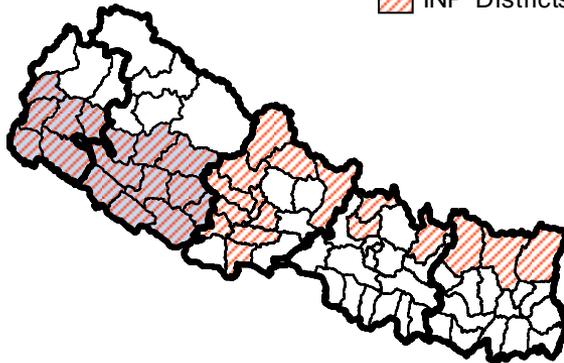
- Leverage Nutrition CRSP to set up FTF and INP impact evaluation research



Feed the Future & Global Health Initiative complement each other

Proposed focus districts for the FTF and GHI Integrated Nutrition Program (INP)

-  FTF Districts
-  INP Districts



Integrated Nutrition Program: 2-pronged approach

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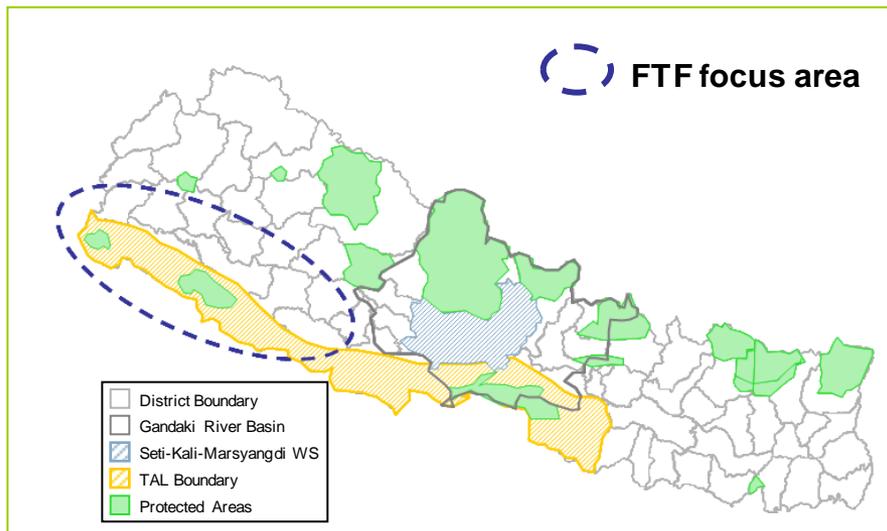
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Climate change initiative will improve resilience in Feed the Future focus areas

Global Climate Change focus areas



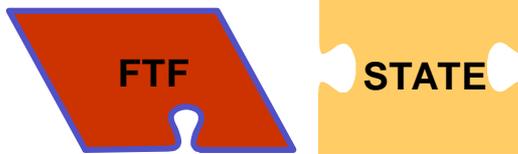
Global Climate Change illustrative activities

Biodiversity Conservation (\$7.5m/5 years)

- Empowering communities to manage and benefit economically from forest resources
- NTFP¹ production, value added processing
- Address threats to local ecosystems on which food security depends

Adaptation to climate change (\$12m/5 years)

- CC adaptation policies
- Education/awareness
- Water resources management
- Adapted crop varieties
- Vulnerability mapping, monitoring, and reporting



Feed the Future uses effective ways of engaging **GON** at each level of government

FTF engagement with GON

**National
Planning
Commission**

- Improve capacity for **inter-ministerial coordination**

Ministry

- **US-GON engagement to drive policy priorities** (Contract Farming Act, seed regulation, Ag. credit services)
- Drive **MoAC** to incorporate **nutrition mindset** in operations
- **Small funding to MoAC to test** capacity to deliver

**Regional
Directorates**

- Prepare for future decentralization
- Involve MoAC **extension agents** as additional change agents

District Offices

Collaborate with and complement other donor programs

Ongoing & upcoming donor programs...

...complement and multiply FTF impact



- Agriculture commercialization and trade
- Roads, irrigation & water management
- Poverty alleviation fund
- Direct financial and technical assistance to MoHP

- **Financing** for private sector agents across agricultural value chains including horticulture
- Productive **infrastructure** in FTF areas
- **Scale-up** of evidence-based **nutrition interventions**



- High mountain agribusiness & livelihoods
- Raising incomes of small and medium farmers
- Crop diversification and commercialization
- Commercial agriculture development program

- Improves **purchasing power of Mountain populations** to access food from Hills/Terai
- Investments in **post harvest handling, value addition & marketing** in Western Terai/Hills
- Similar interventions to FTF but in the **East**



- Improving business forum
- Small enterprise dev. fund, SME venture risk capital
- Microfinance sector development
- Direct Investment in value chains (seeds)

- Improves **policy** and **regulatory environment**
- Increases **credit** available to finance activities/assets relevant to agriculture
- Contributes to increased **productivity**



- Pro-poor value chain

- Increased reach to poor and vulnerable (10 West & Mid-West districts)



- Challenge fund for agribusiness
- Direct financial and technical assistance to MoHP

- Increased **financing** available for agribusiness
- **Scale-up** of evidence-based **nutrition interventions**



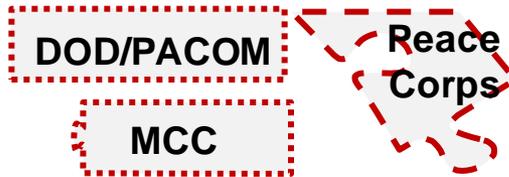
- Food security monitoring system (NekSAP)
- MCH, school feeding, Food/Cash for Work

- Market Watch provides early warning information and serves as data collection support for impact evaluation



- Food facility for most vulnerable areas
- Training in food safety and Ag. trade

- **Emergency relief** in extreme hunger areas
- Increased **capacity for export market**

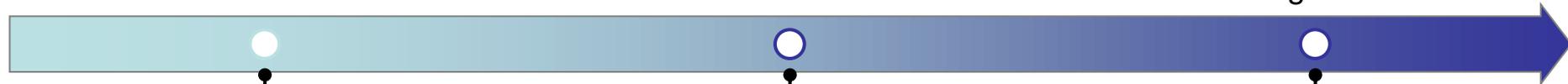


Presence of additional USG agencies could multiply effect

Short term

Medium term

Longer term



DoD/PACOM

Targeted investment in productive infrastructure

- **PACOM:** Multi-use shelters for disasters, also used as collection centers in normal times



MCC threshold

Policy and government capacity to achieve Compact

- **MCC Threshold:** technical assistance to write new legislation; build government technical capacity in required areas



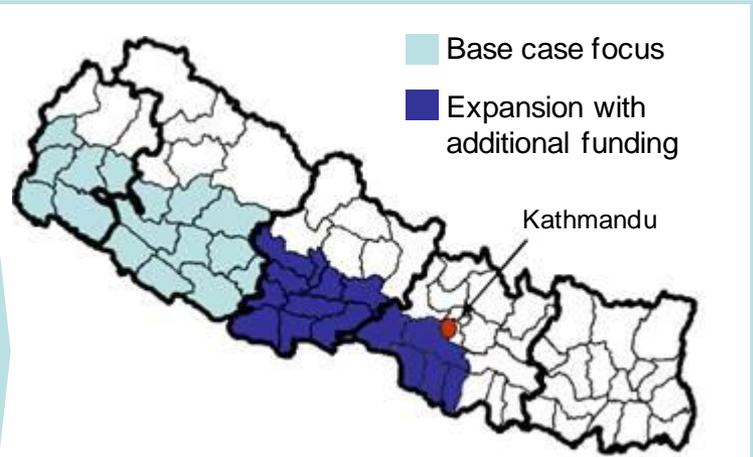
Peace Corps

Community training and development

- **Peace Corps:** Ag. training to non-target HH; community-based production & storage; nutrition and hygiene education

Potential for Increased Impact with Additional Funds

Expansion of program to another 15 districts at lower cost per farmer



- Additional **160K farmer households**
- **Cost per farmer HH** down through cost leverage
- Support **agribusiness** for **export market**

POTENTIAL FOR IMPACT

- Additional **160K farmer households (1m people)**
- Expanded market potential (e.g. **SPS standards**)

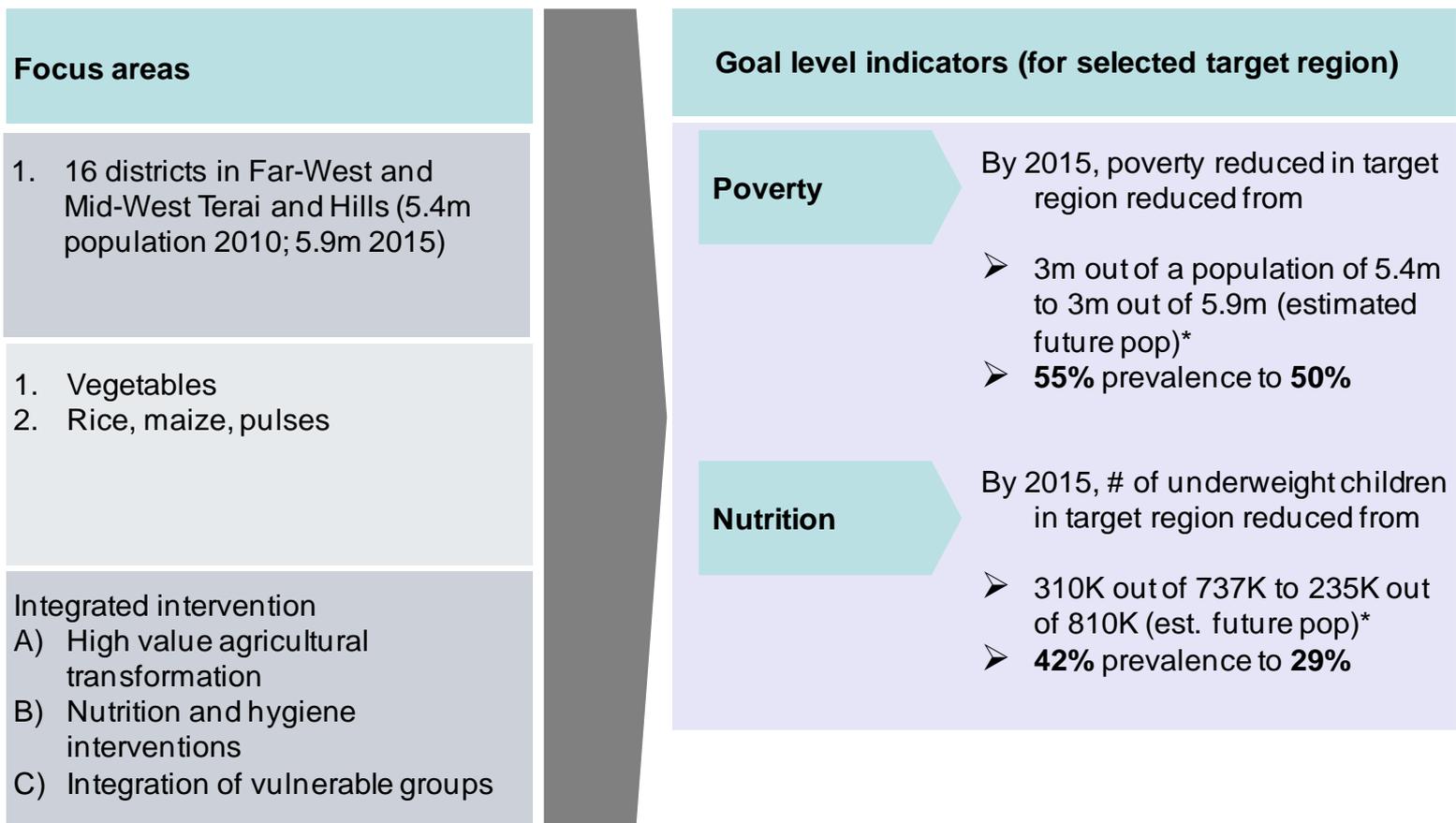




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- Interventions with Highest Potential
 - *High value vegetables with rice, maize, pulses*
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- Proposed USG Engagement
 - *Focus on districts to reach most number of hungry, poor*
 - *All USG agencies brought to bear*
 - *Coordinated with GON and other donors*
- Impact

Preliminary Dashboard

Cost per person out of poverty: \$160 over 5 years



Sources: UN Population Division, Ministry of Health and Population MIS database, UNICEF, World Bank
*Includes population growth assumptions from UN Population Division

Impact Indicators

Overall FTF goals (Forecast includes anticipated impact of other donors & GON)	Baseline	2015
• Prevalence of poverty (under \$1.25/day)	• 55% ¹ (2004)	• 30% ³
• Prevalence of underweight children under 5	• 39% ² (2006)	• 29% ³
National level (Forecast includes anticipated impact of other donors & GON)	Baseline	2015
• Expenditures of rural households (by proxy)	• TBD	• TBD
• Prevalence of wasted children under 5	• 13% ² (2006)	• 5% ³
• Prevalence of stunted children under 5	• 49% ² (2006)	• 28% ³
Project level (Indicators listed only for interventions relevant to Nepal mission)	Baseline	2015
• Improved ag productivity		
– Gross margin per ha of target crops	• \$200	• \$2,000
• Improved access to markets		
– Value of incremental sales (collected at firm level) attributed to FTF implementation	• N/A	• \$160m
• Increased agricultural sector jobs		
– Number of jobs attributable to FTF implementation (firm level survey)	• N/A	• 160 change agents and \$4.6m in labor
• Improved access to diverse & quality foods		
– Proportion of population below minimum level of dietary energy consumption	• 40% ⁴ (2005)	• 25%
• Improved nutrition related behaviors		
– Prevalence of exclusive breastfeeding of children under 6 months	• 30.6% ² (2006)	• 60% ⁵

NOTE: To be disaggregated by sex, ethnicity and caste as appropriate