



# 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

### Components<sup>1</sup>

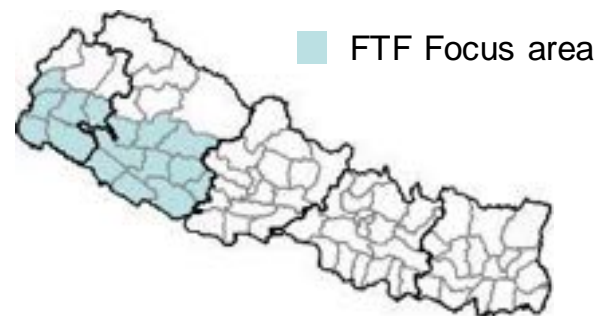
- High value agriculture (75%)
- Nutrition & hygiene (15%)
- Integration of vulnerable groups (5%)

### Highlights

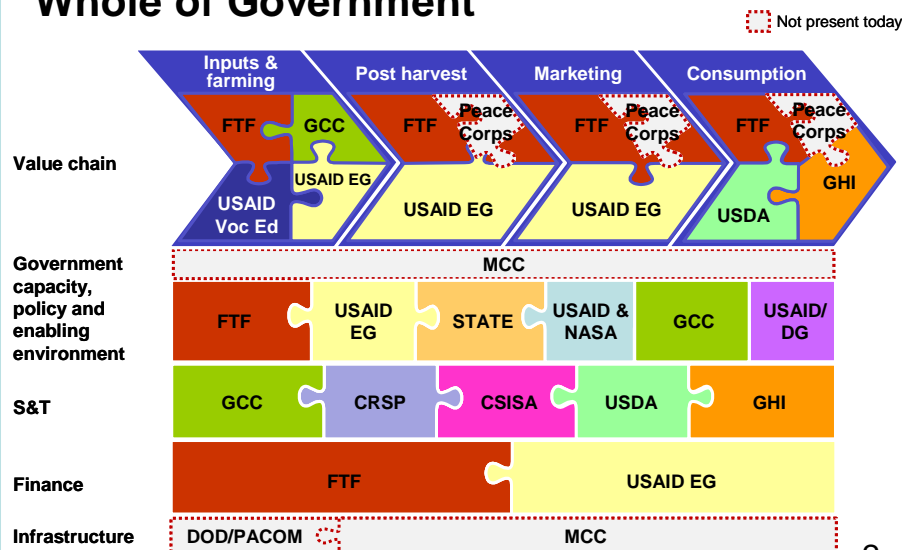
- 100% inclusive leadership, WOG approach
- Cost/person out of poverty \$160 over 5 years
- Scale & sustainability through change agents
- Based on USAID proven interventions

### Geographic Focus

16 districts in FW & MW Terai & lower Hills



### Whole of Government





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



## Country Context

**Nepal is the 13<sup>th</sup> 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

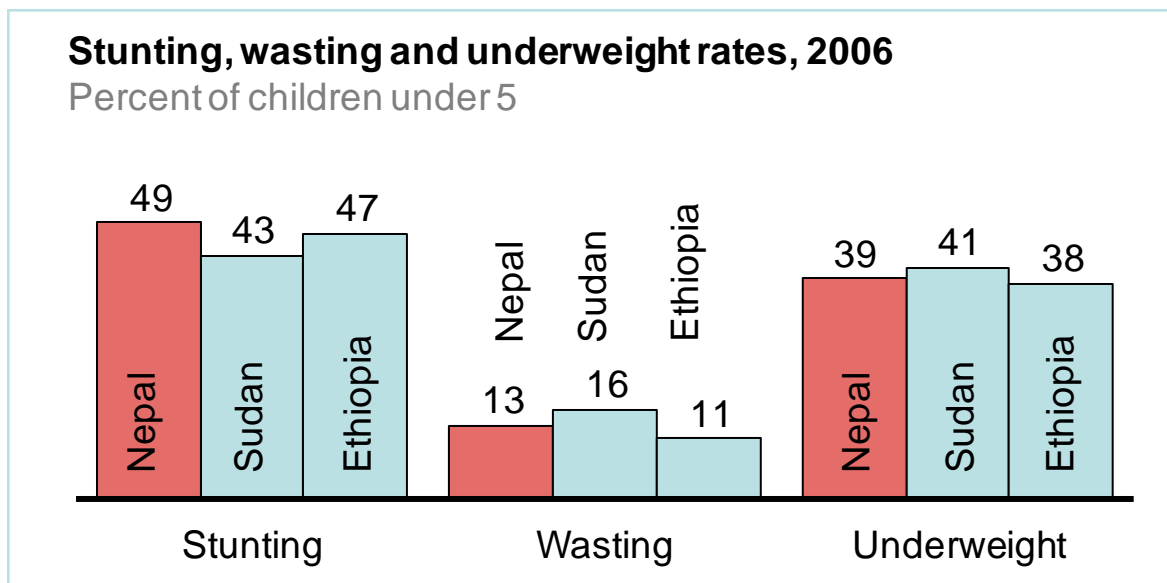
### Ethnic, linguistic and religious groups



- 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**  
**requirement<sup>1</sup>**

<sup>1</sup> 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

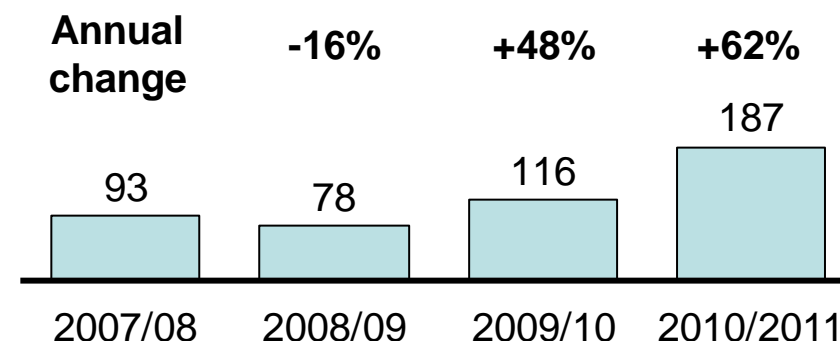
### Development progress...

- 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
  - 13<sup>th</sup> poorest country in the world
  - Extreme food insecurity
- Interventions with Highest Potential
- Proposed USG Engagement
- Impact

## Feed the Future focus on 16 districts of Western Terai and Hills

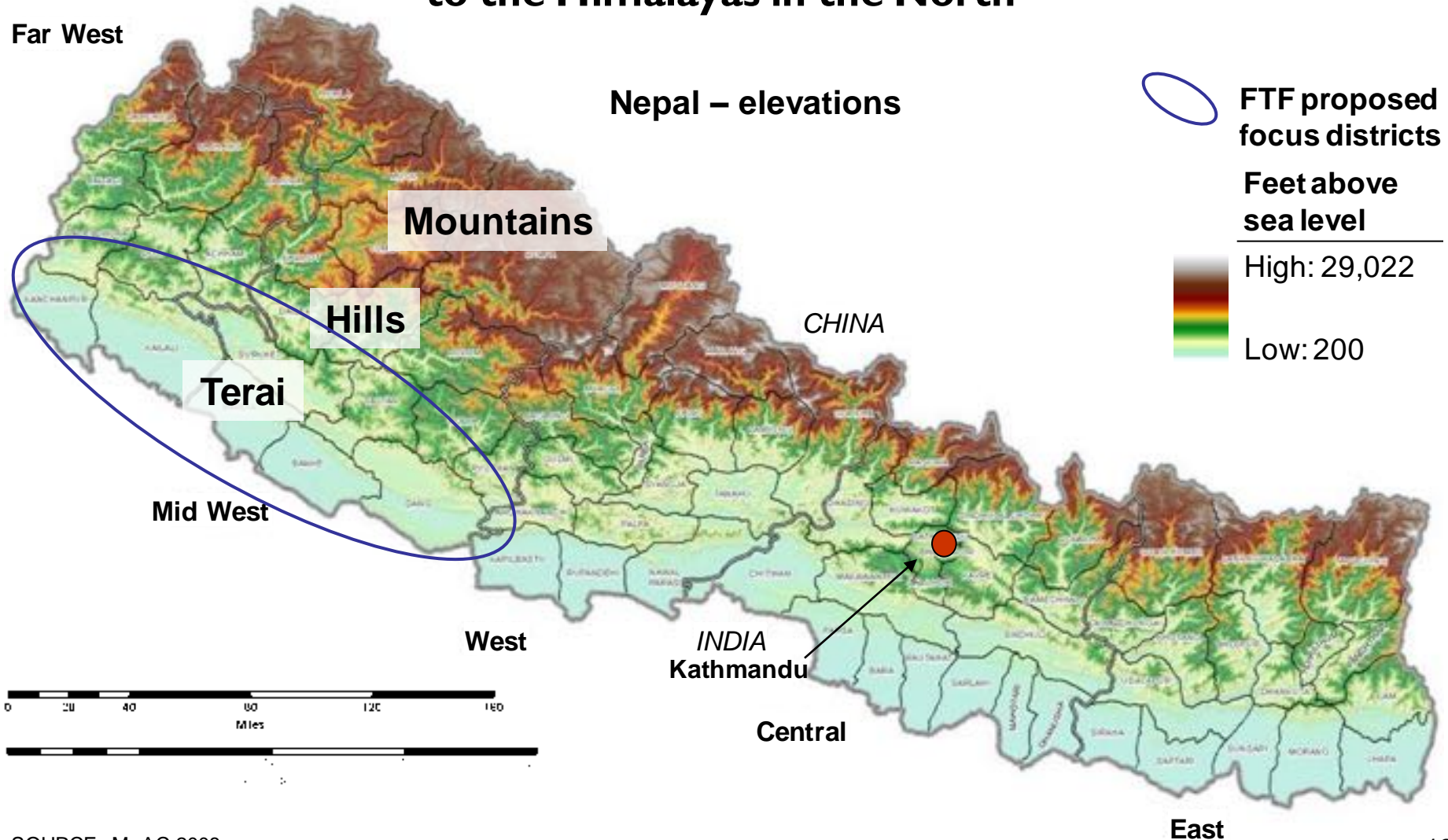
■ Feed the Future proposed focus districts





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

Far West



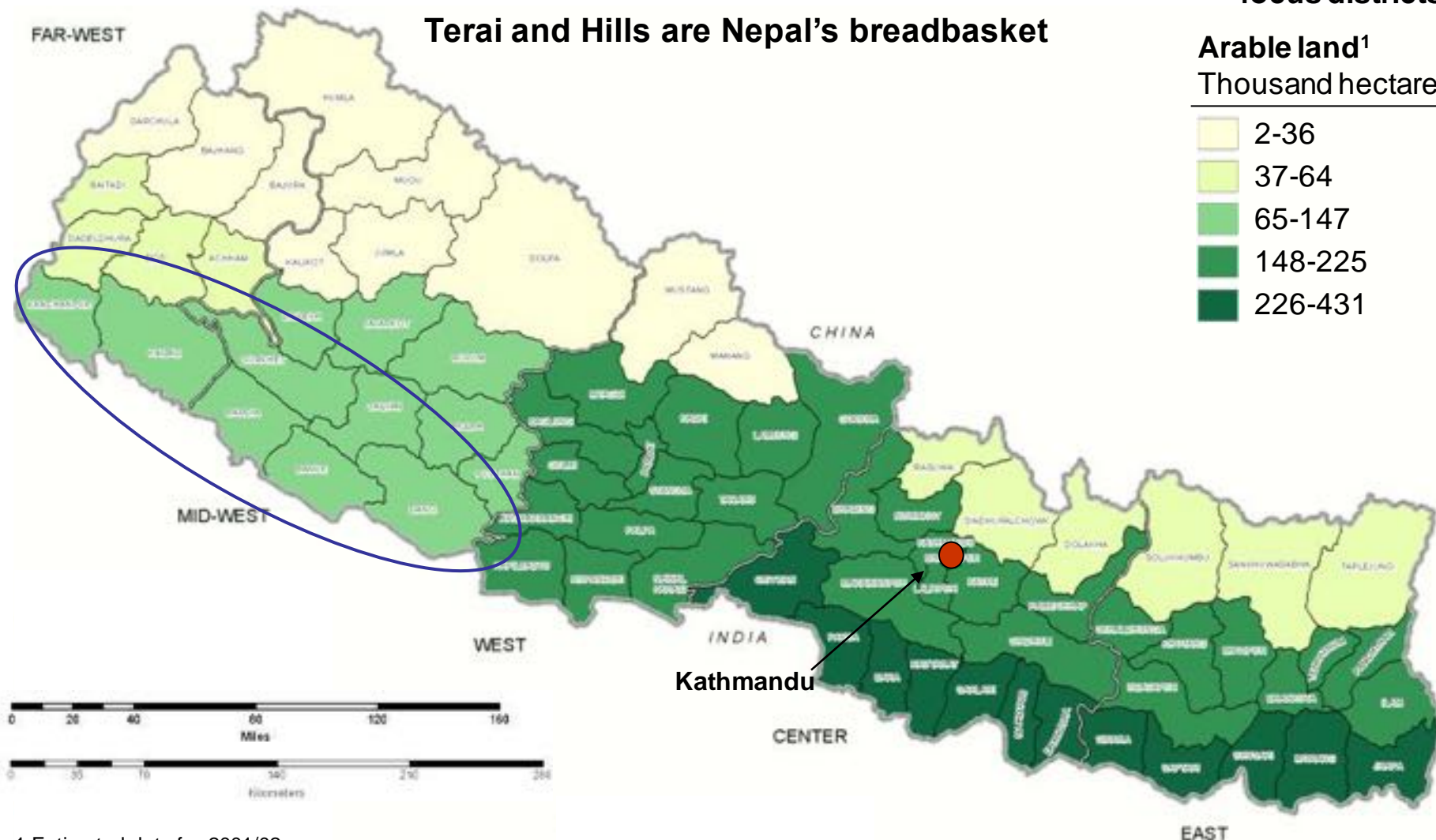
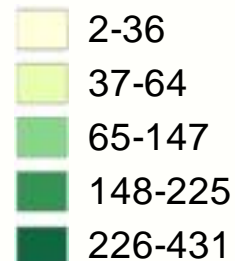


## Greatest agricultural potential in the Terai and hills

**Terai and Hills are Nepal's breadbasket**

 FTF proposed focus districts

**Arable land<sup>1</sup>**  
Thousand hectares



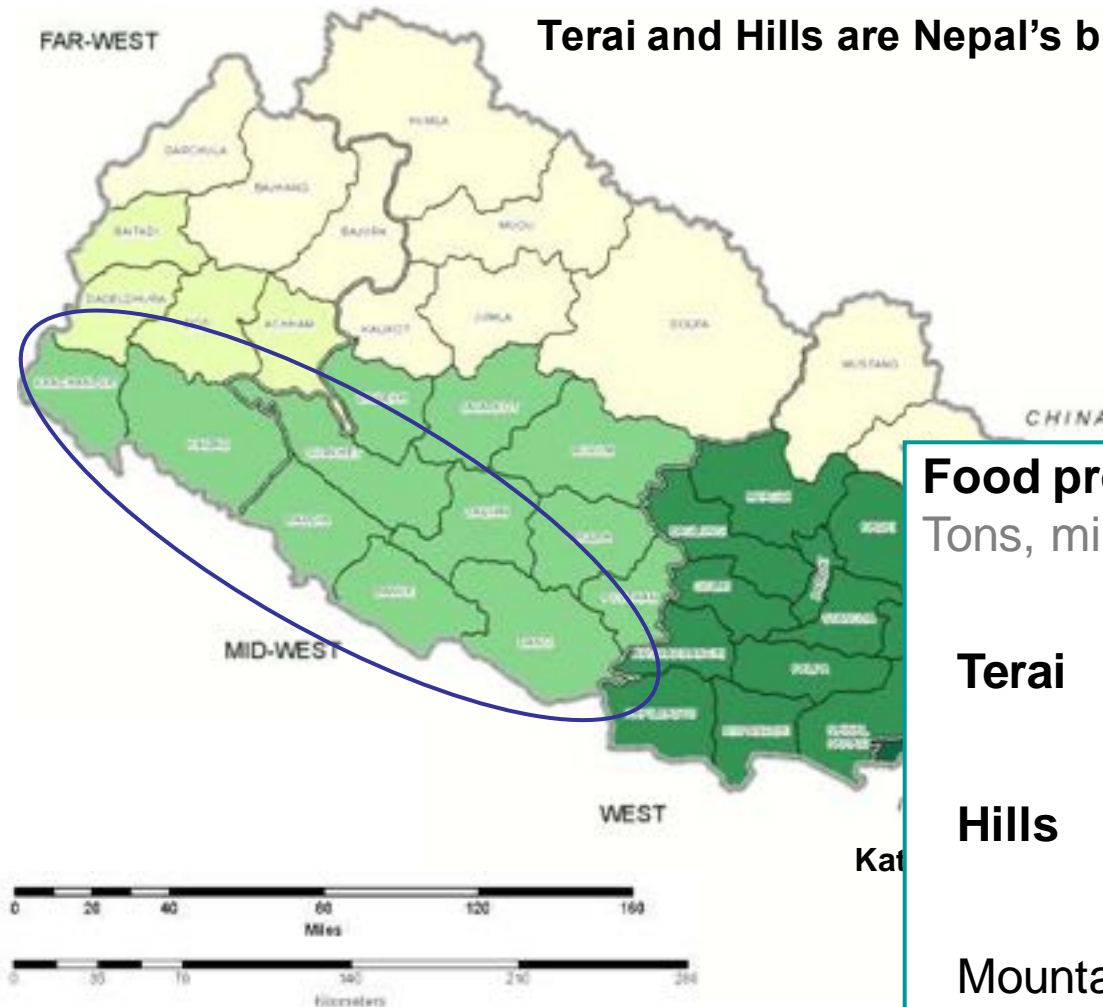
<sup>1</sup> Estimated data for 2001/02

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

## Greatest agricultural potential in the Terai and hills

**Terai and Hills are Nepal's breadbasket**

 **FTF proposed focus districts**



### Food produced<sup>2</sup>

Tons, millions

**Terai**

**6.4**

**Hills**

**4.3**

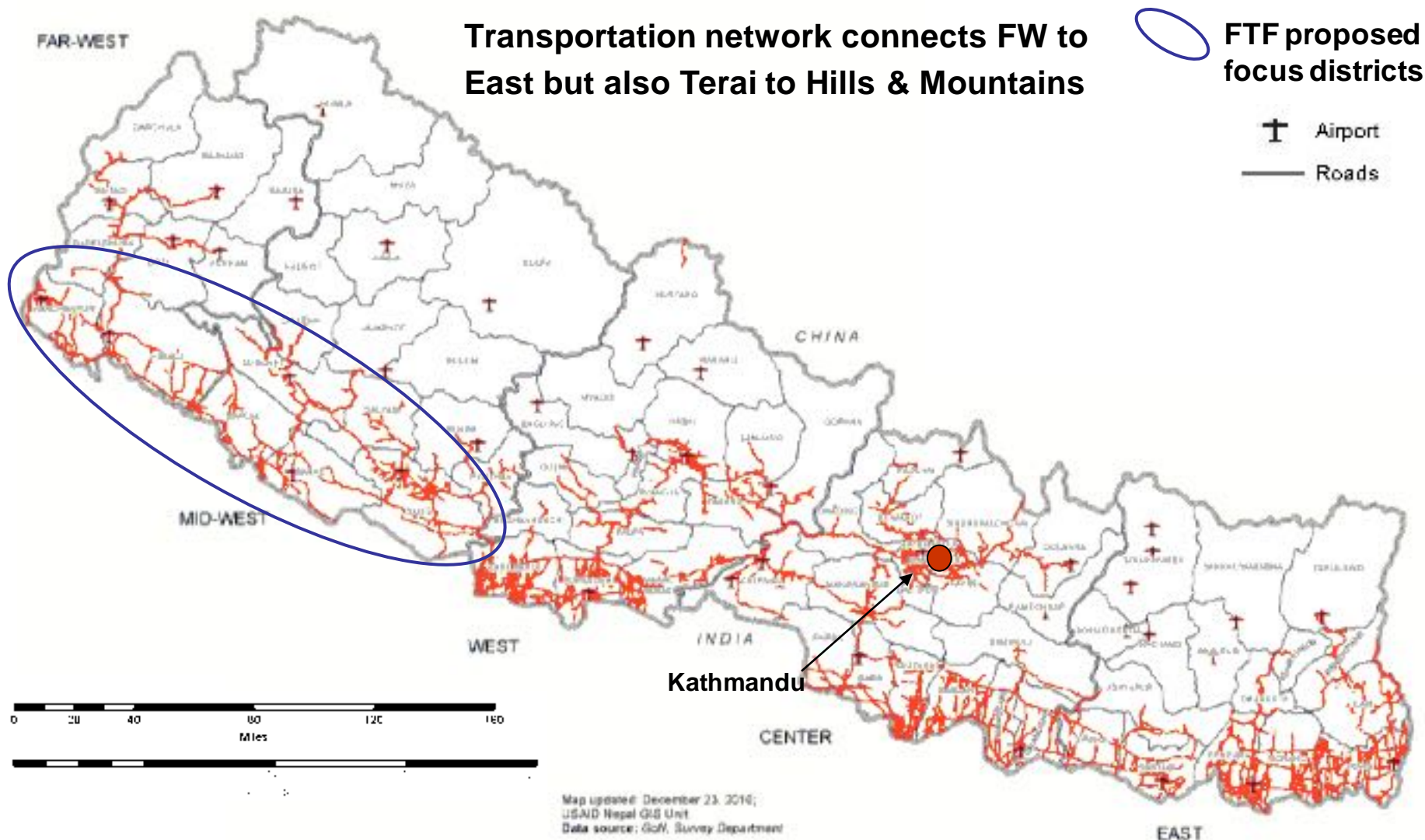
**Mountains**

**1.0**

<sup>1</sup> Estimated data for 2001/02

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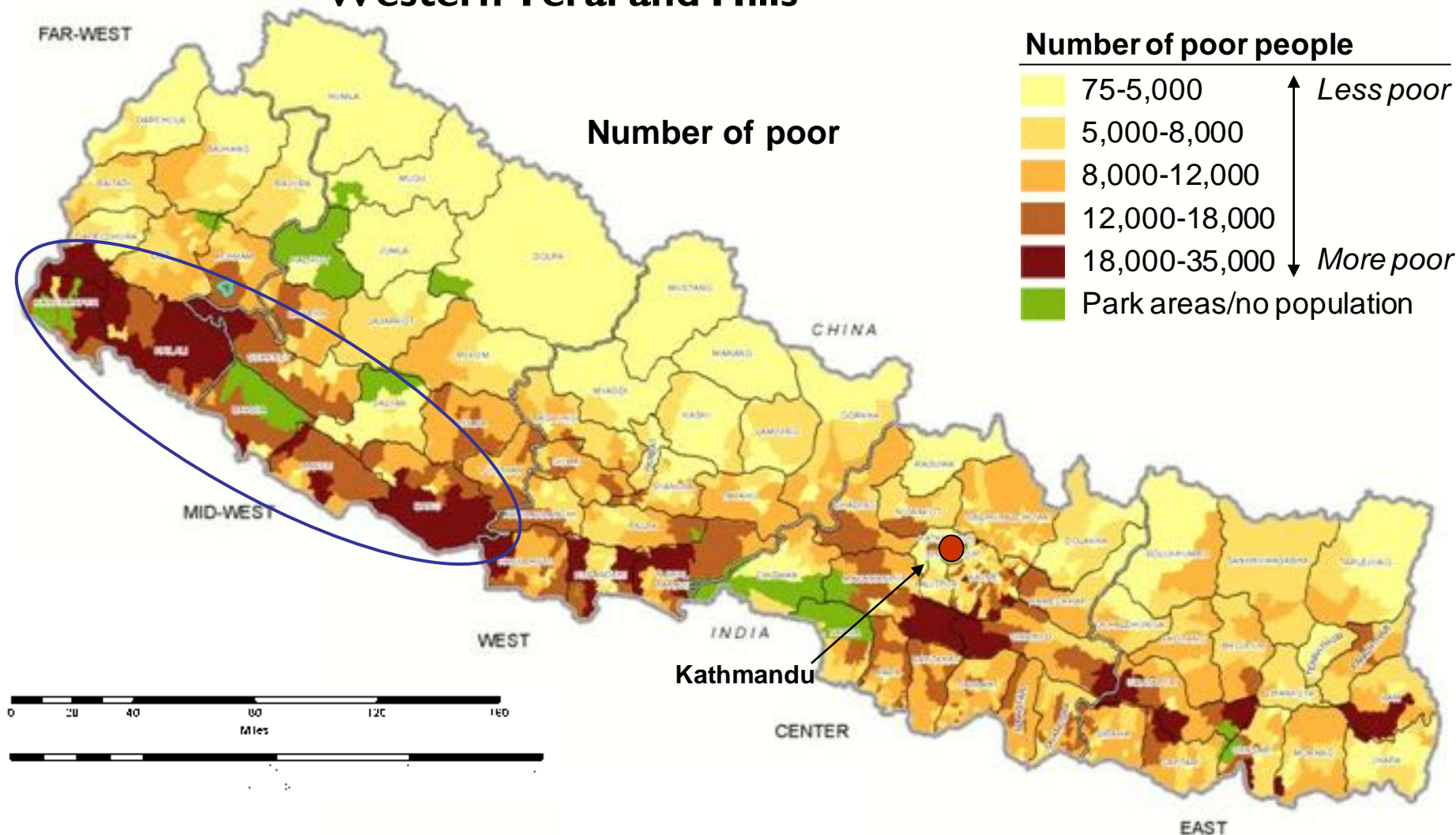
## Existing transportation network





## Greatest number of poor and malnourished in Western Terai and Hills

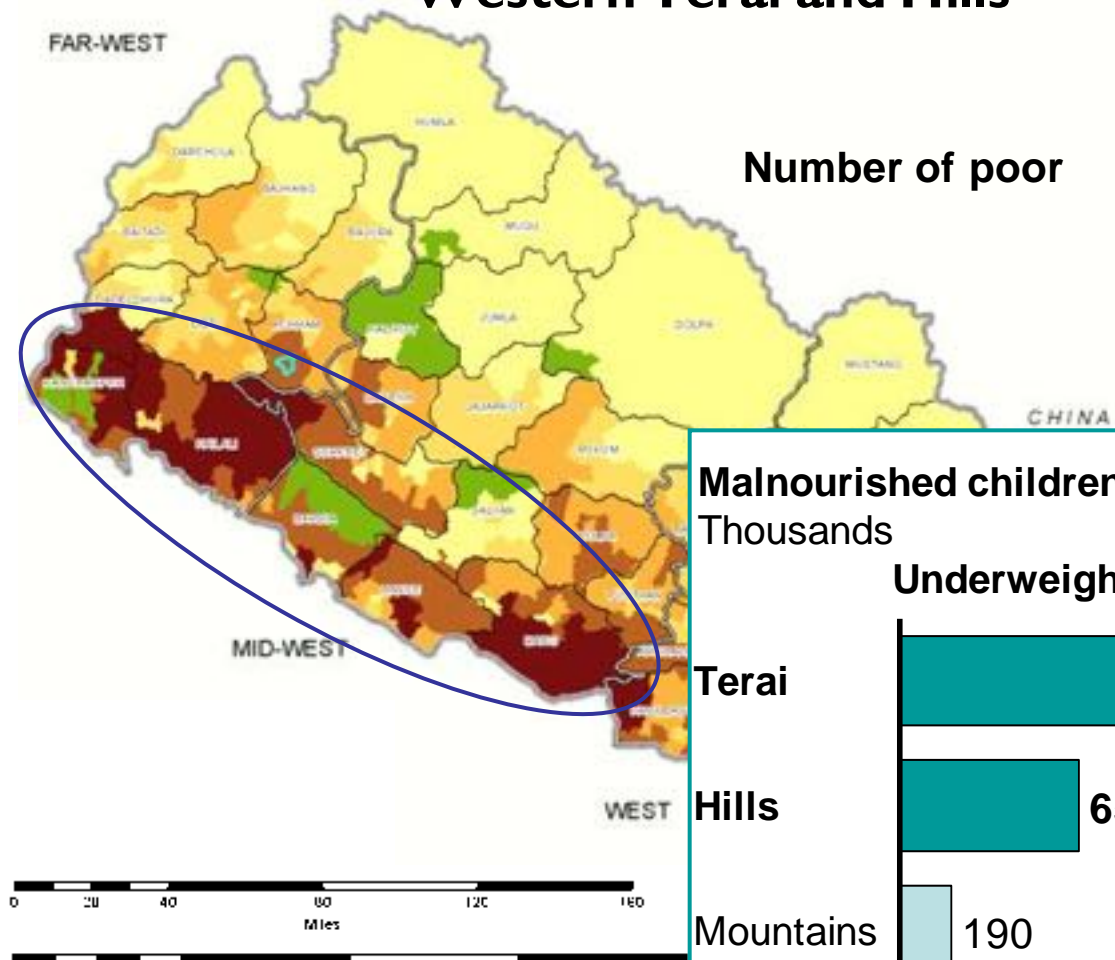
 FTF proposed focus districts



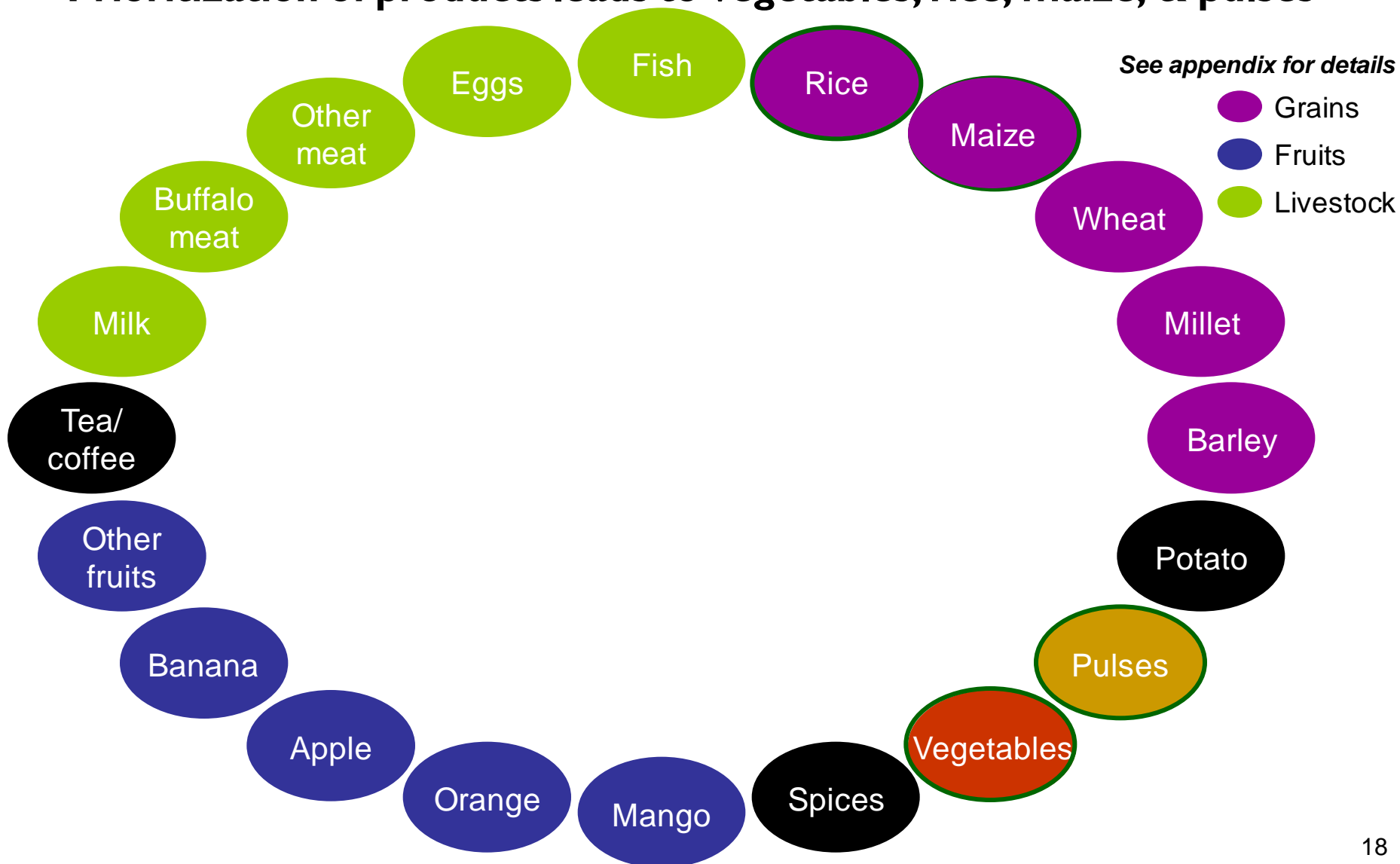


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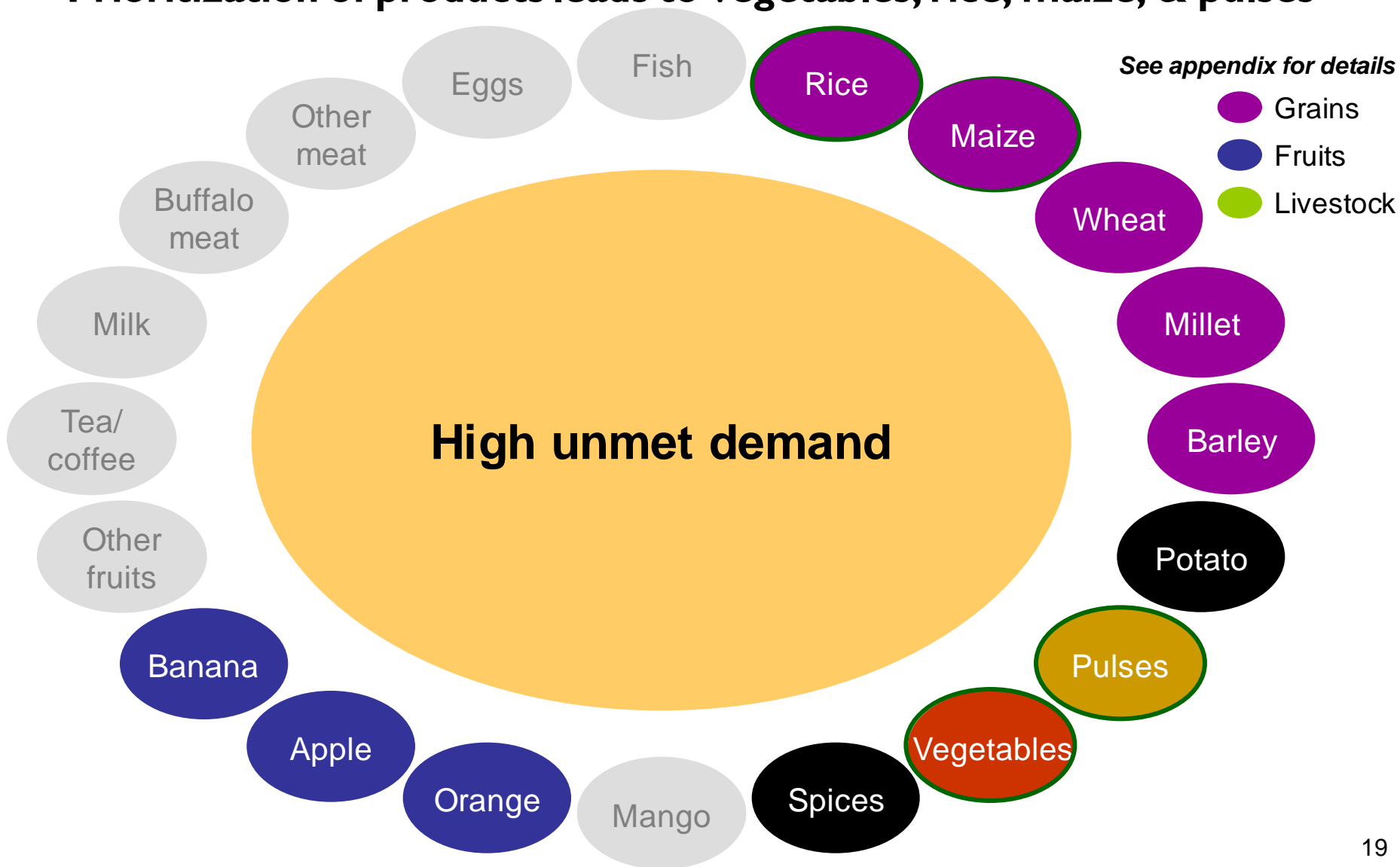
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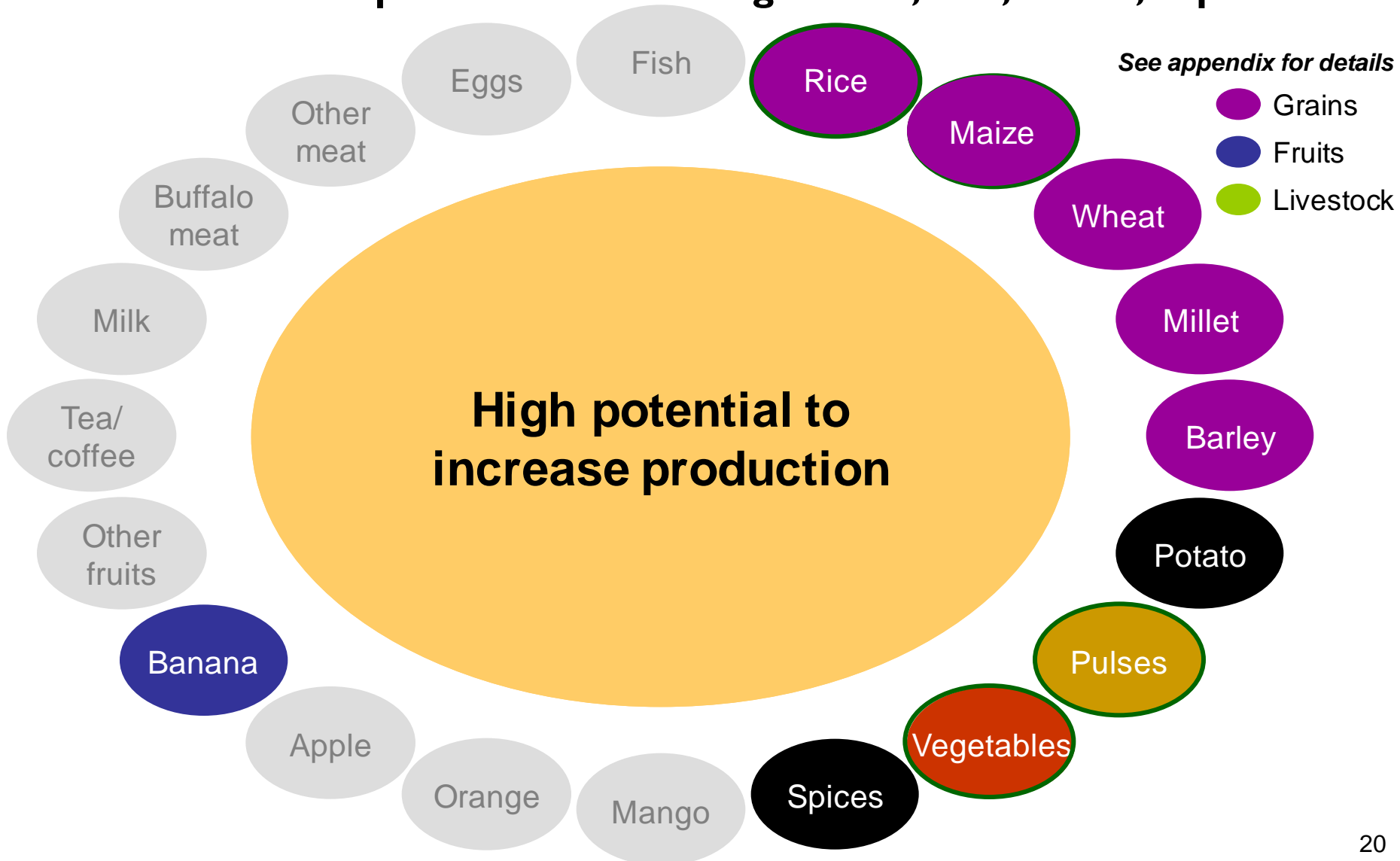
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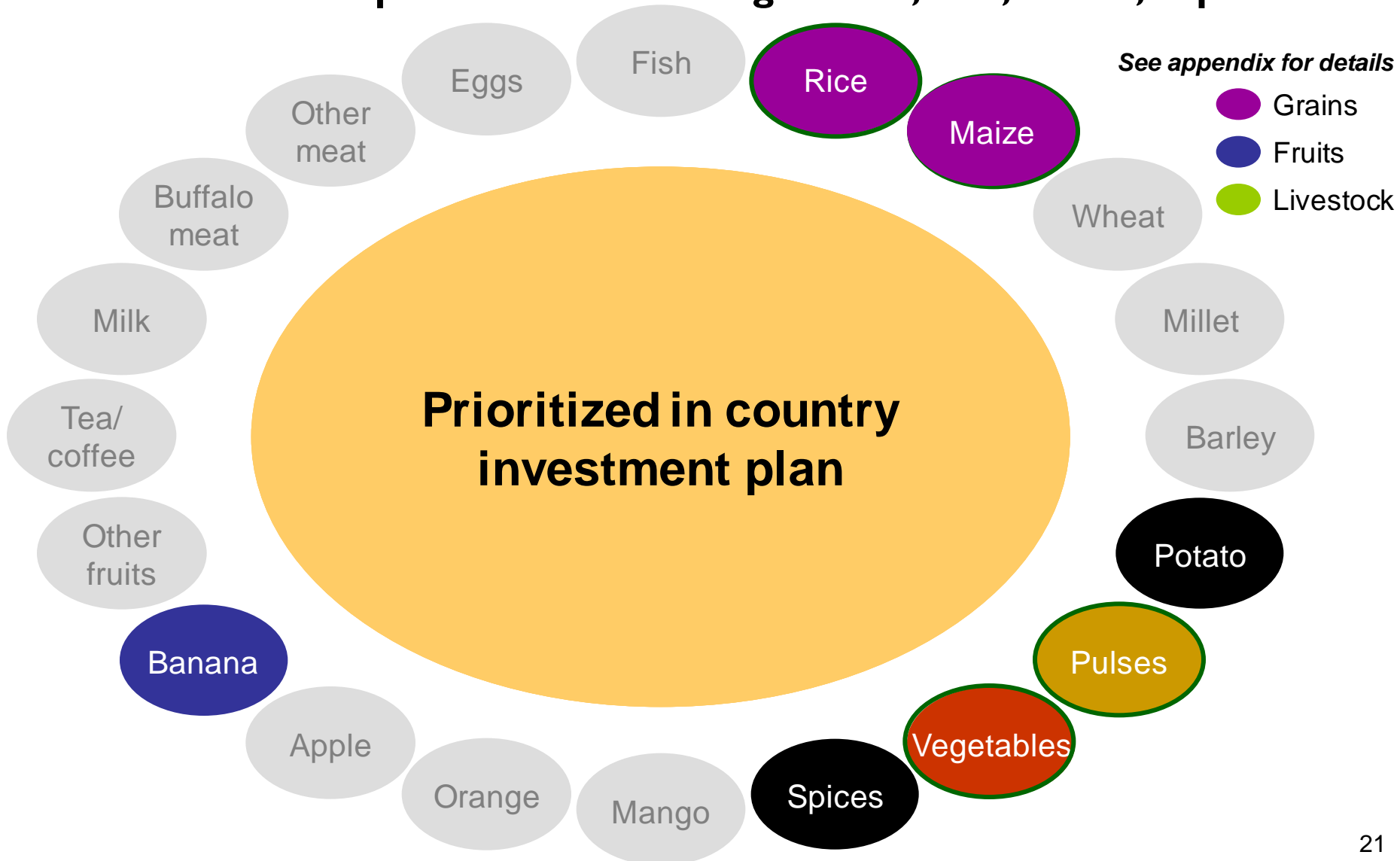


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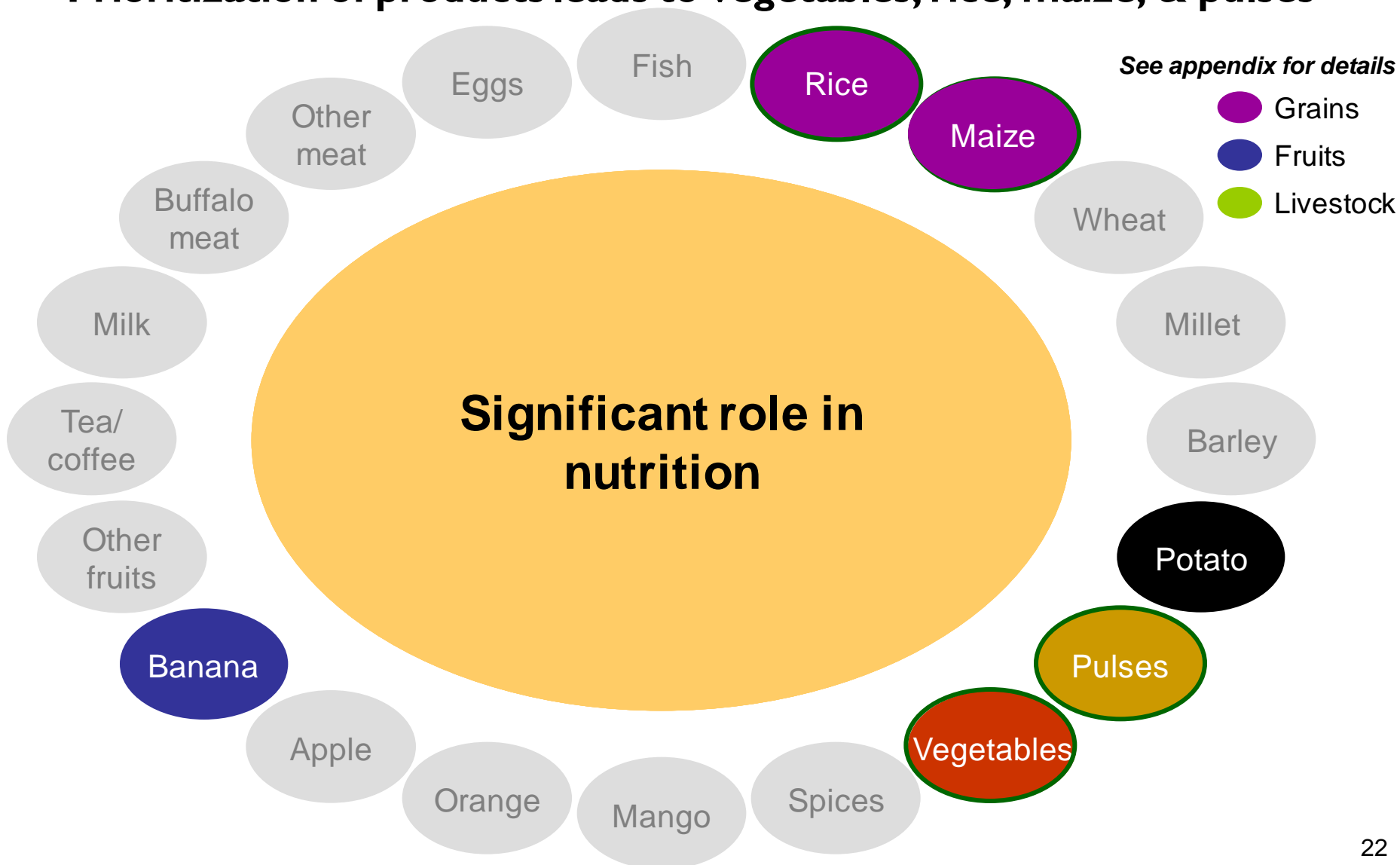




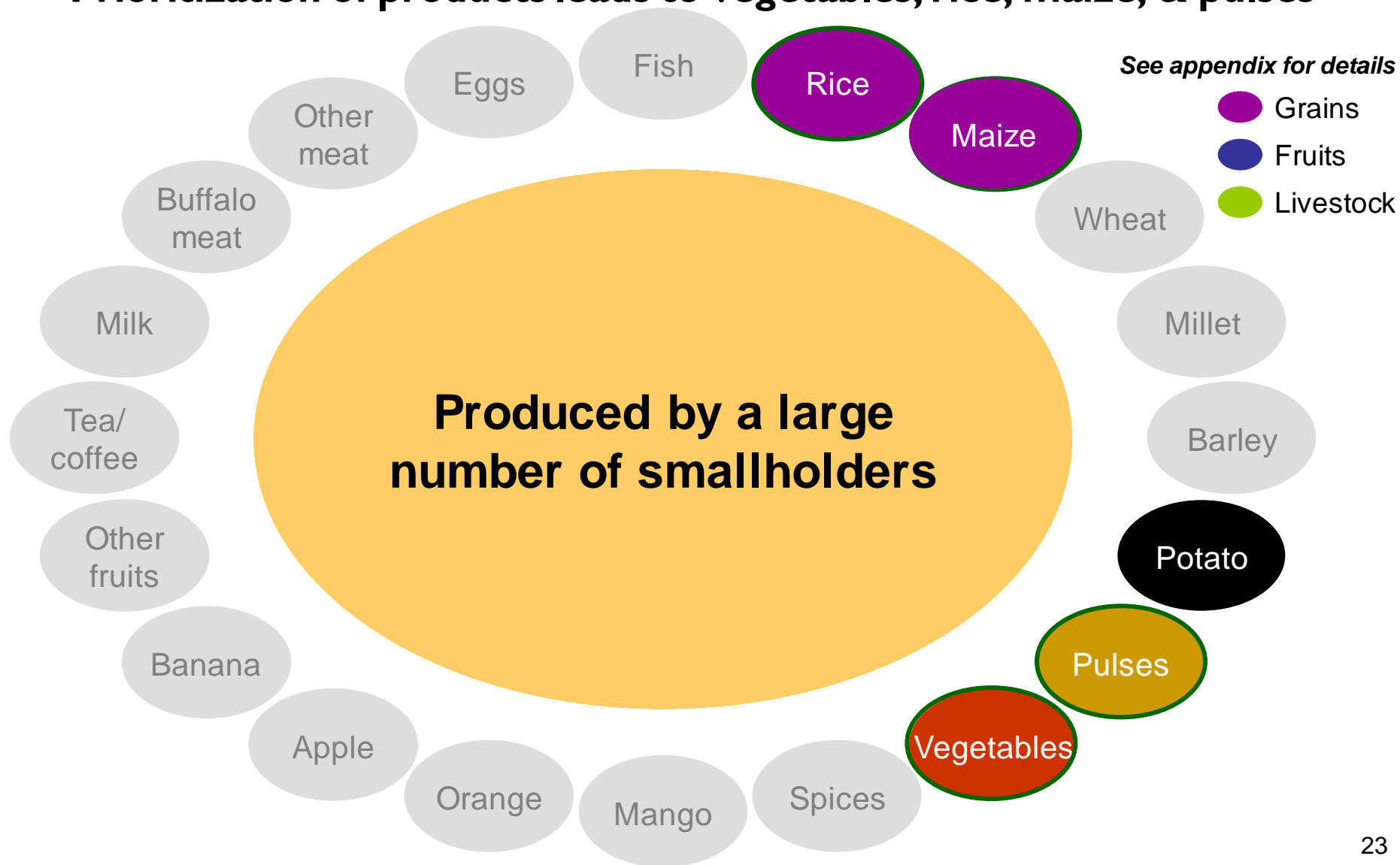
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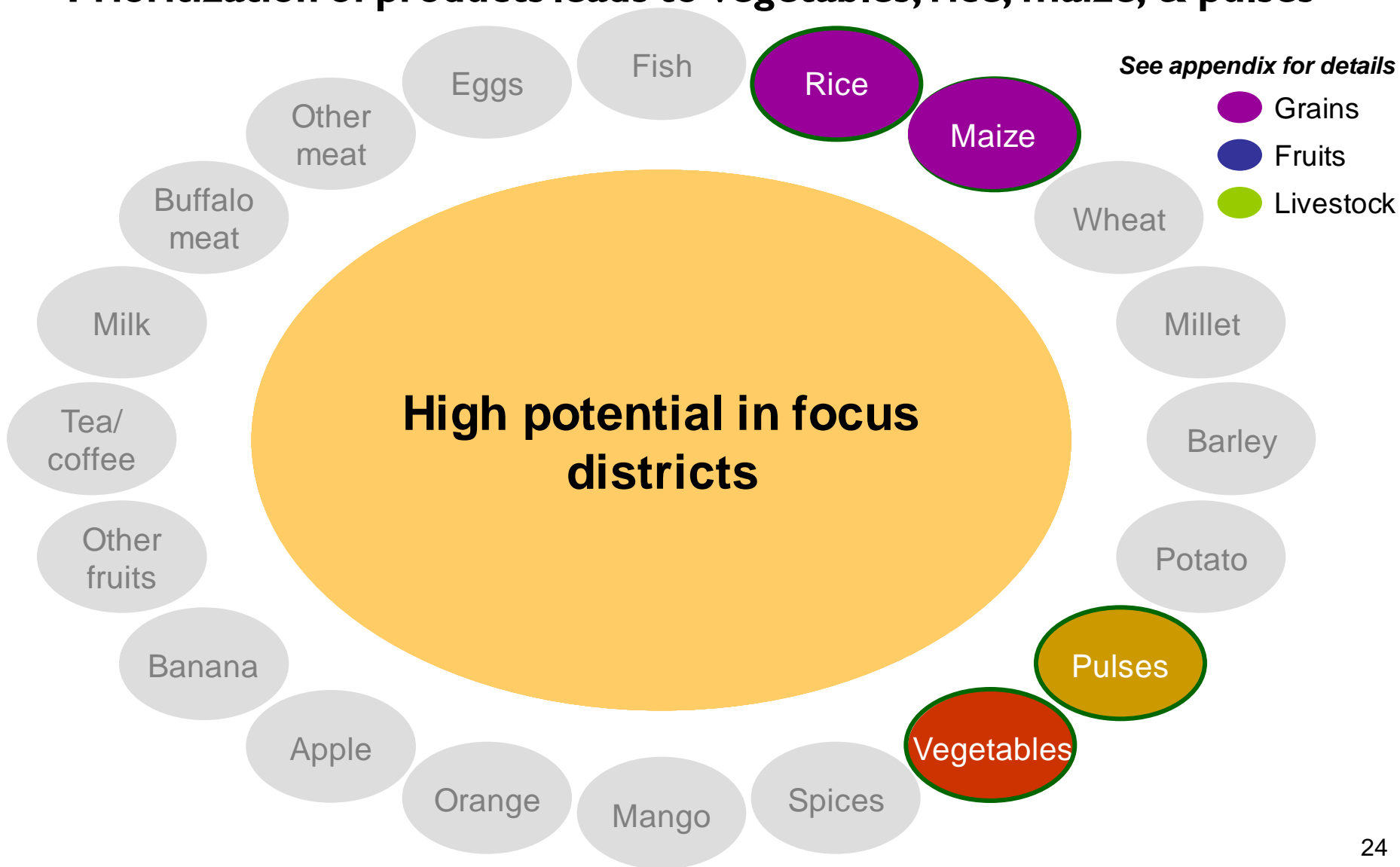
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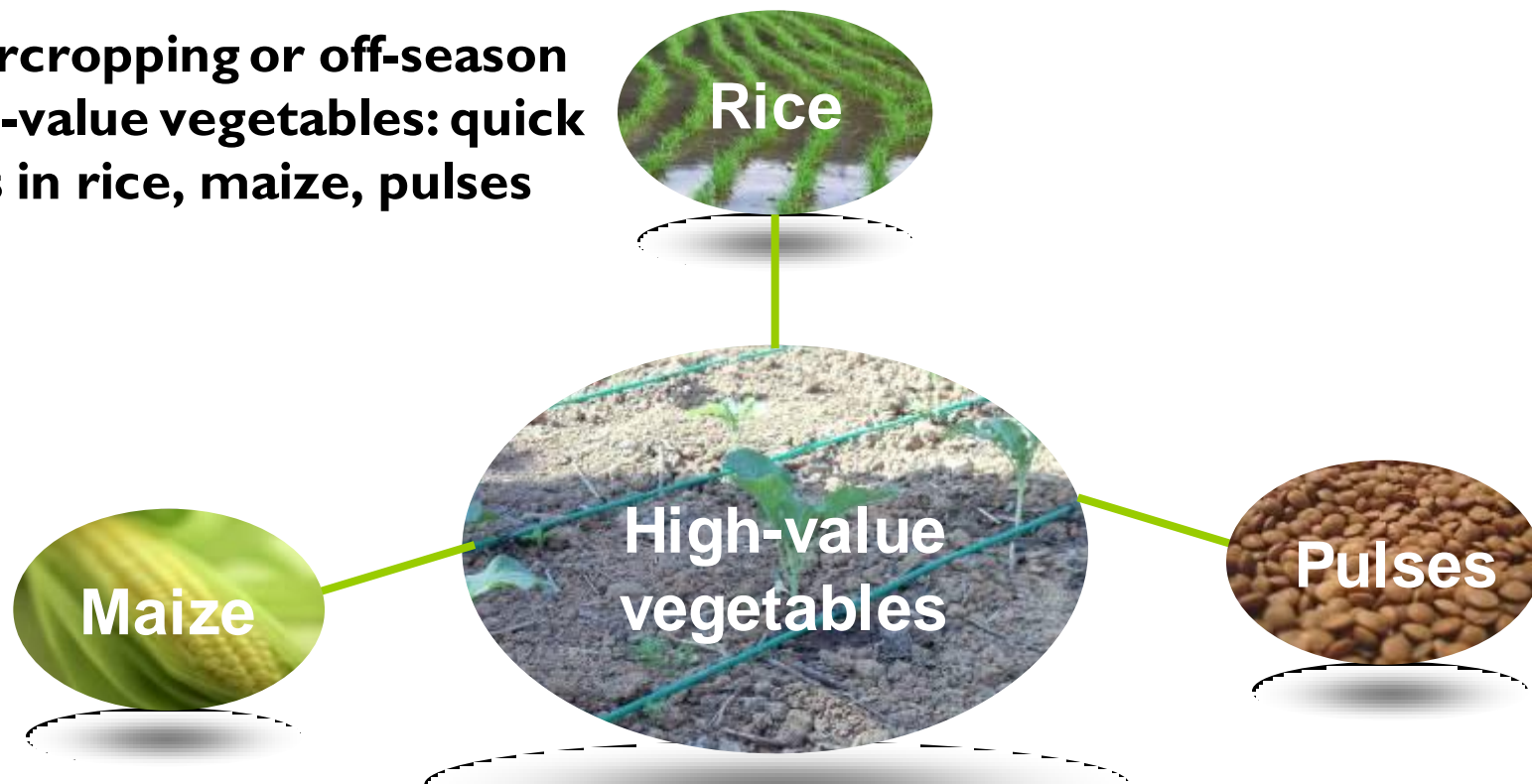


### Prioritization of products leads to vegetables, rice, maize, & pulses





**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**<sup>1</sup>
- Competitive **supply** potential<sup>2</sup>
- 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

<sup>1</sup> Based on 2005-2010 local consumption growth rate

<sup>2</sup> 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**

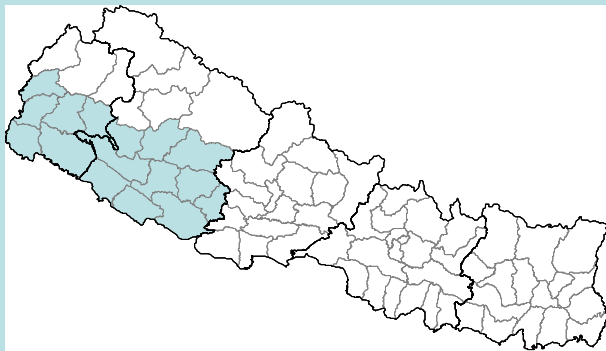


- Development Challenge
  - *13<sup>th</sup> poorest country in the world*
  - *Extreme food insecurity*
- Interventions with Highest Potential
  - *High value vegetables with rice, maize, pulses*
  - *Proven interventions ready to scale*
- Proposed USG Engagement
- Impact

### **Feed the Future will scale up and enhance USAID proven implementation models targeting 160K farmer households (1m people)<sup>1</sup>**

#### **Feed the Future major components**

#### **FTF focus areas**

**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**

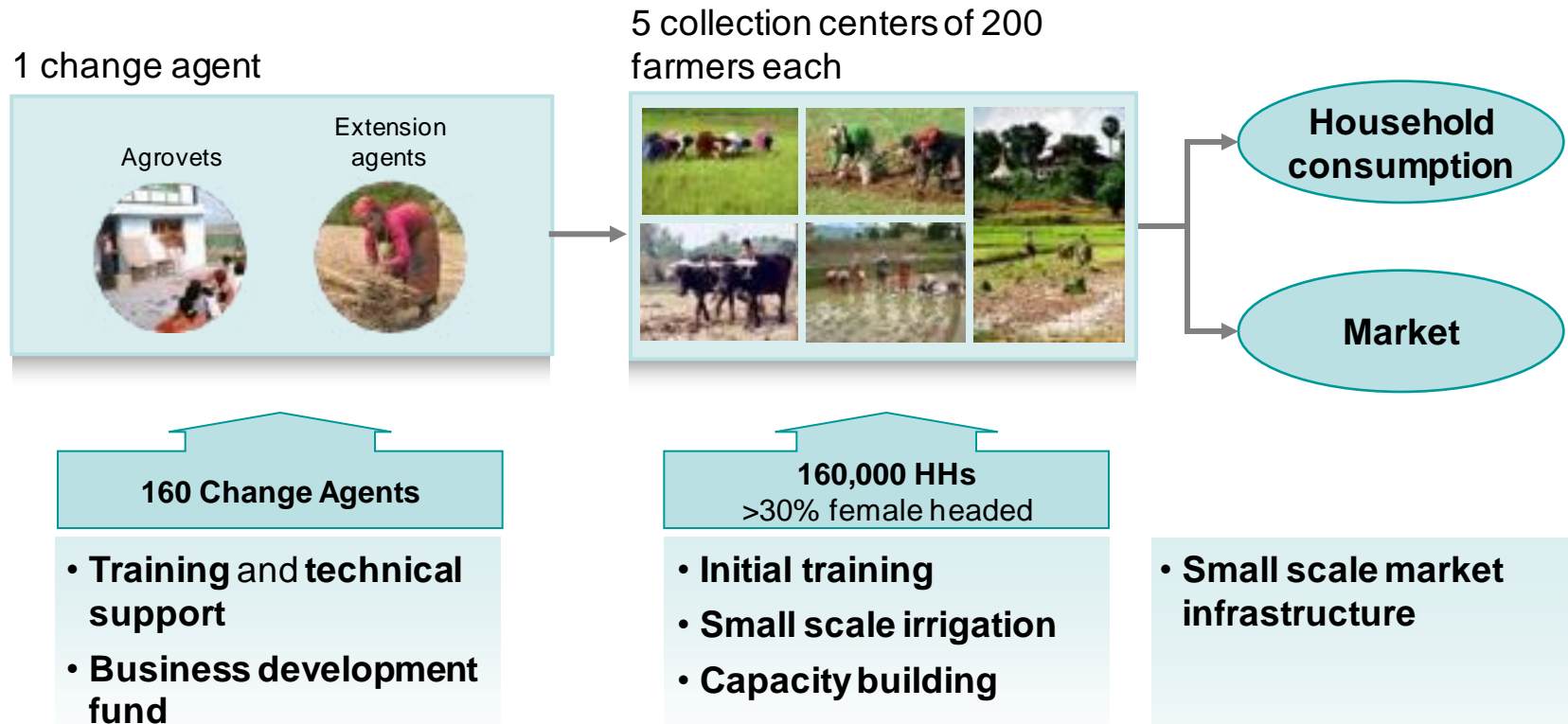
**Integrate vulnerable groups so they benefit from ag. and nutrition interventions (A & B) at full potential**

**Monitoring & Evaluation**

<sup>1</sup> Average of 6 people per household

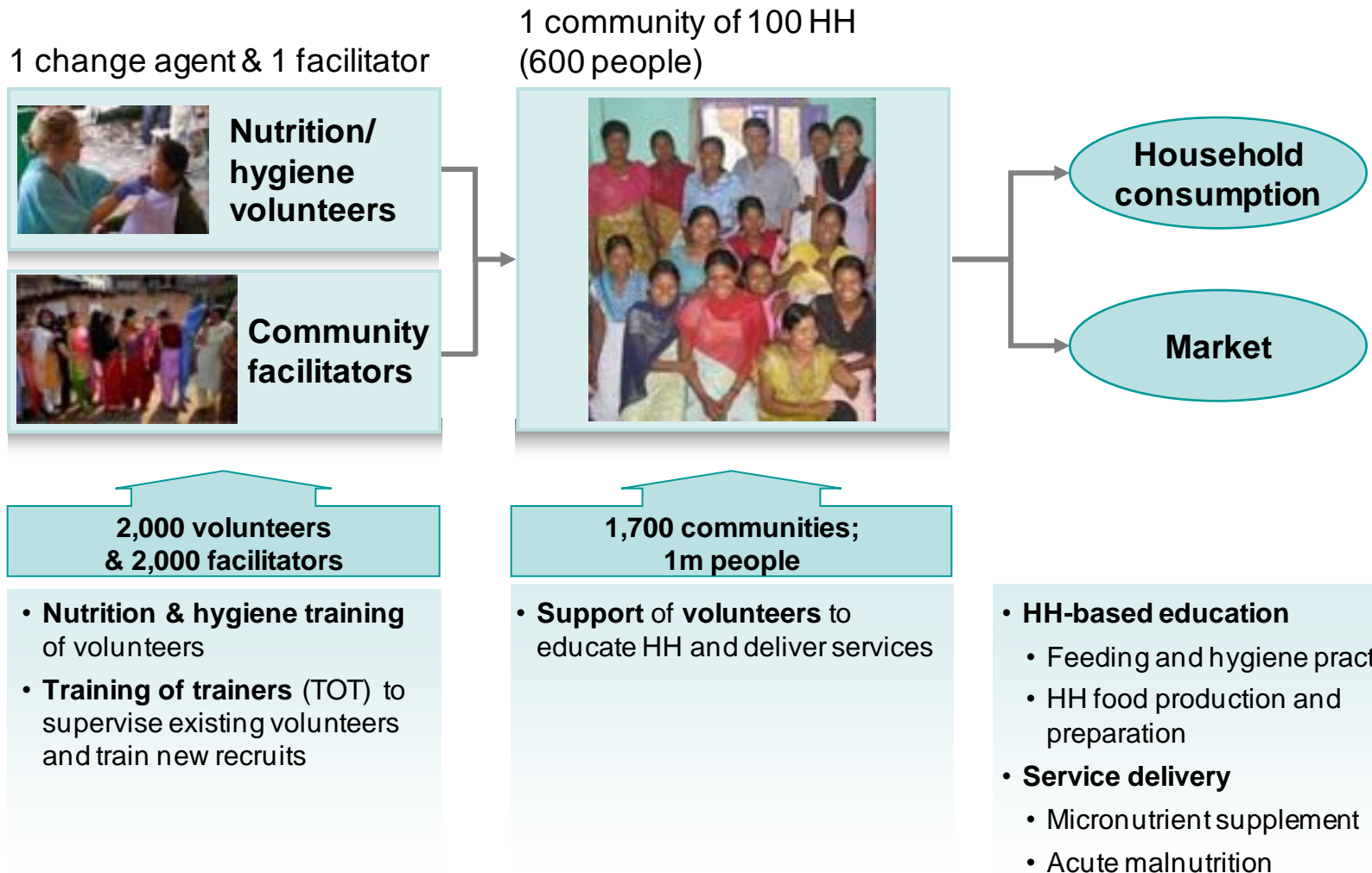


## Component A: Develop commercially-driven agriculture change agents





## Component B: Nutrition/hygiene education and service delivery



## Component C: Empowering vulnerable groups

### *Components A & B*



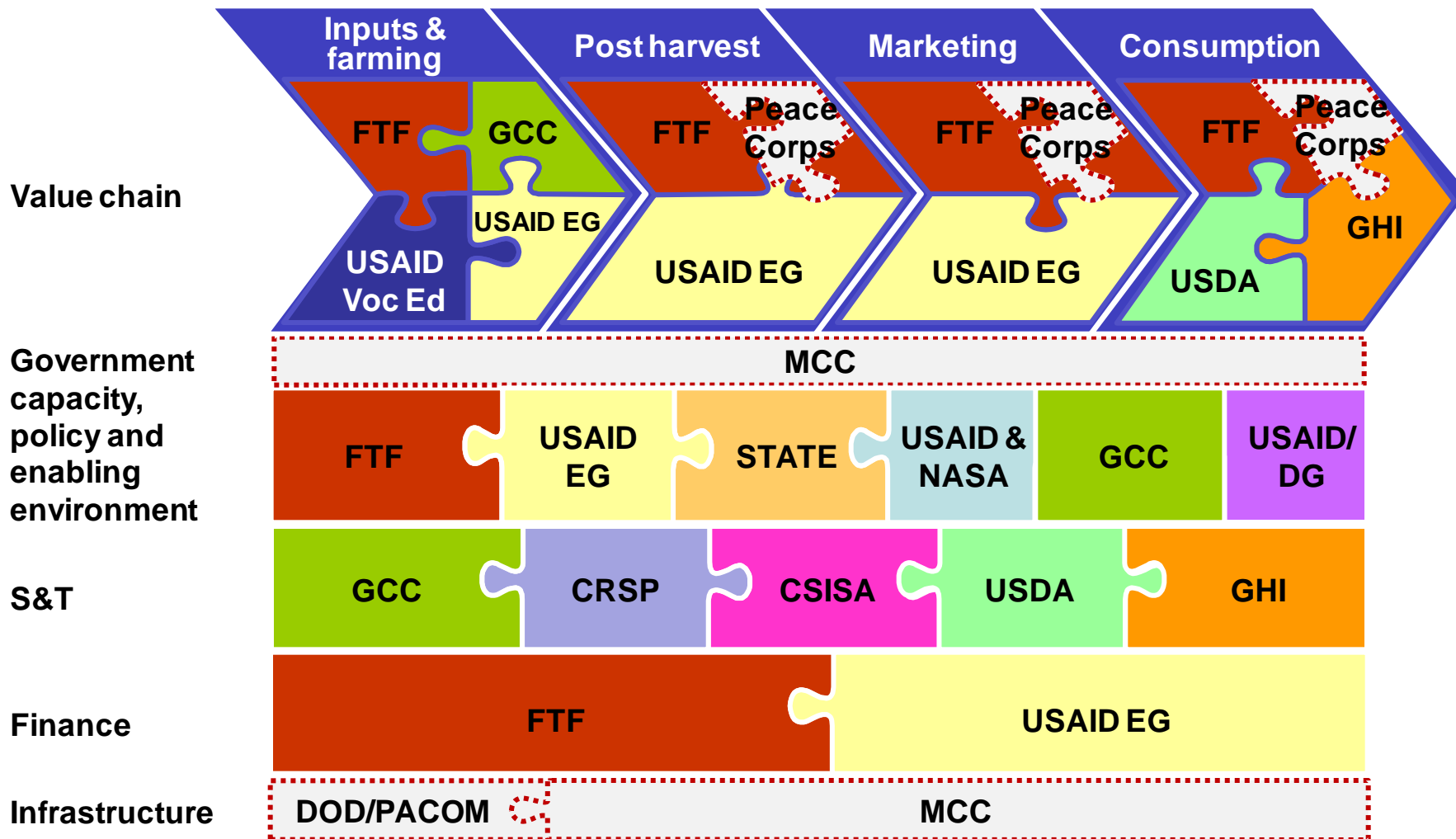
### Component C

- **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

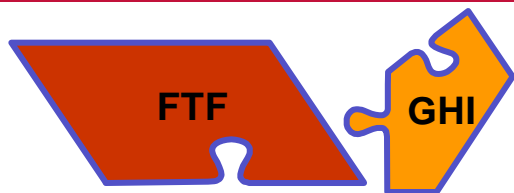


CSISA

- 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**



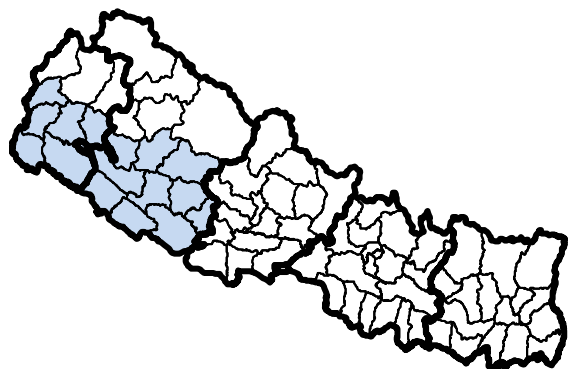




## FTF & GHI complement each other

### Proposed focus districts for FTF

■ FTF Focus area



### Integrated Nutrition Program: 2-pronged approach

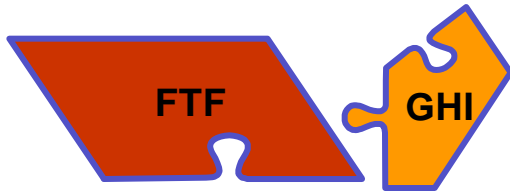
- \$2m per year set aside from GHI for nutrition interventions in FTF target districts
- \$46m for broader national nutrition program (INP)

### Interventions: Coordination & harmonization

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

### Impact: Opportunities for learning

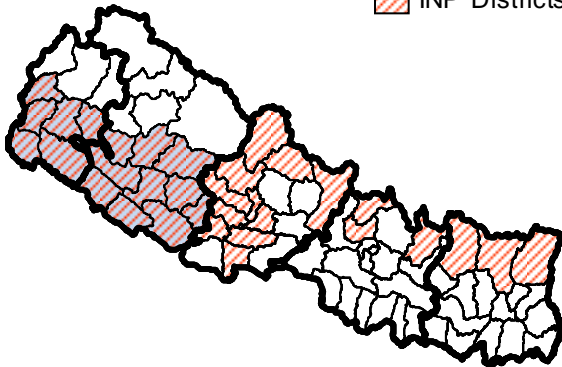
- Leverage Nutrition CRSP to set up FTF and INP impact evaluation research



## 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

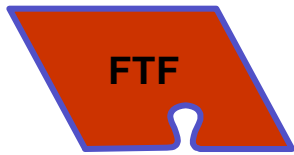
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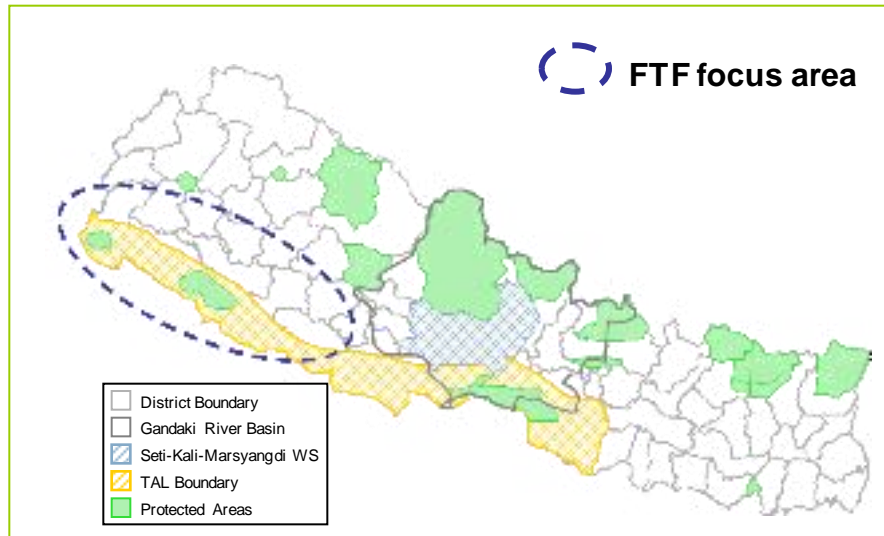
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## Climate change initiative will improve resilience in Feed the Future focus areas

### Global Climate Change focus areas



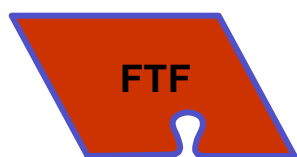
### Global Climate Change illustrative activities

#### Biodiversity Conservation (\$7.5m/5 years)

- Empowering communities to manage and benefit economically from forest resources
- NTFP<sup>1</sup> 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**



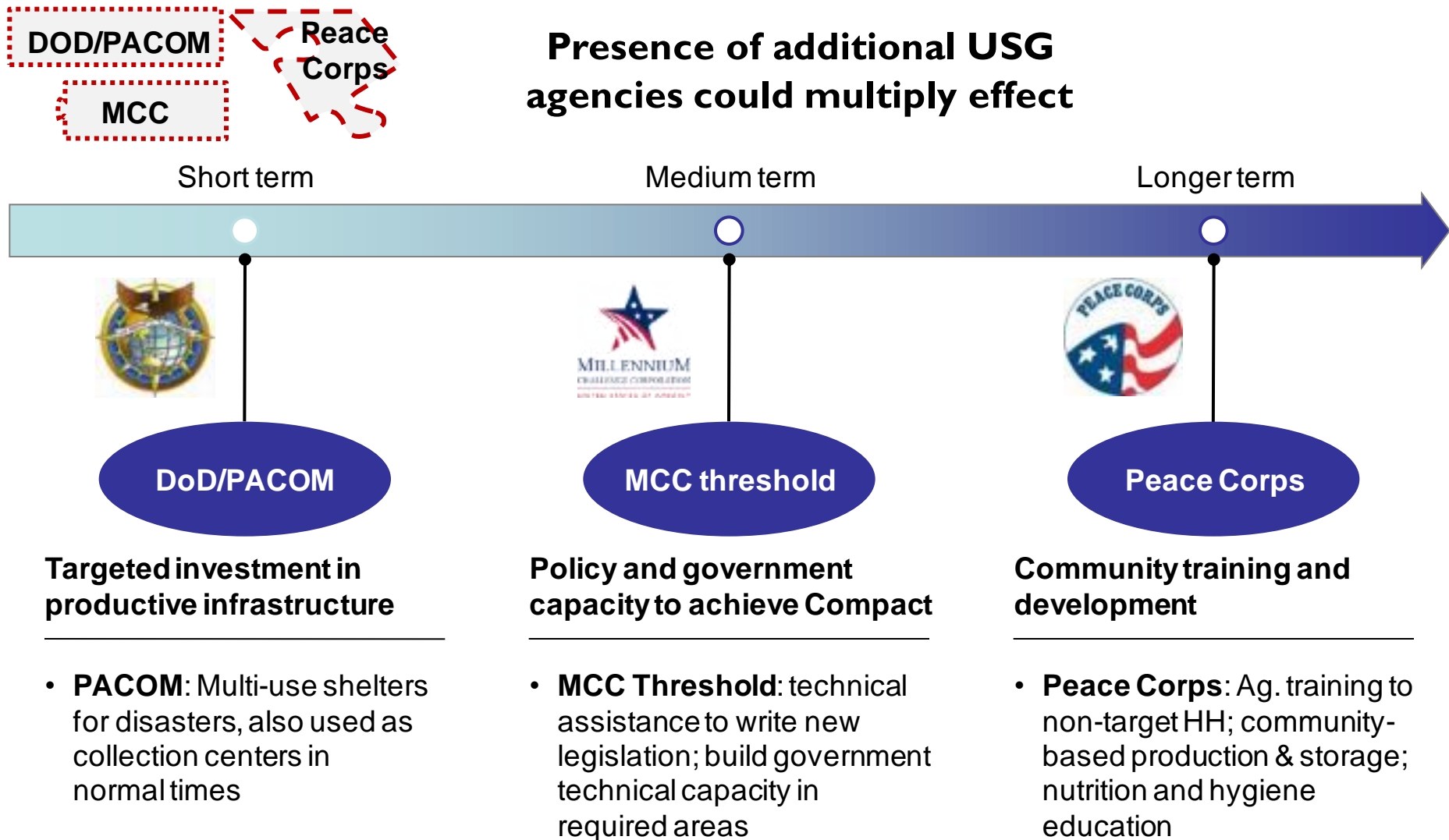
- Food security monitoring system (NekSAP)
- MCH, school feeding, Food/Cash for Work

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



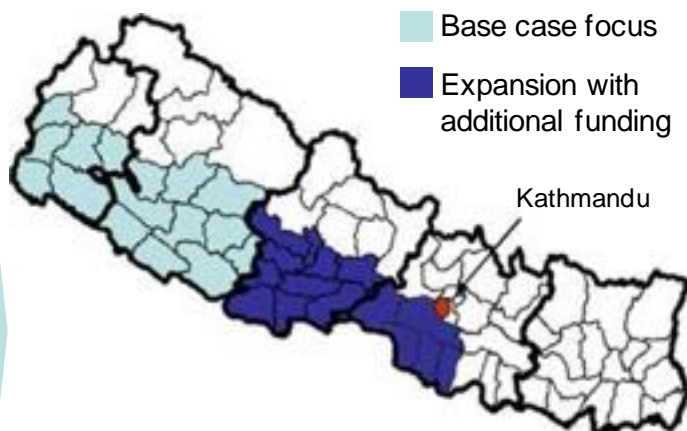
- Food facility for most vulnerable areas
- Training in food safety and Ag. trade

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



## 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)





- Development Challenge
  - 13<sup>th</sup> 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
  - 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**

	Focus areas	Goal level indicators (for selected target region)
<b>Geography</b>	1. 16 districts in Far-West and Mid-West Terai and Hills (5.4m population 2010; 5.9m 2015)	<b>Poverty</b> <p>By 2015, poverty reduced in target region reduced from</p> <ul style="list-style-type: none"> <li>➤ 3m out of a population of 5.4m to 3m out of 5.9m (estimated future pop)*</li> <li>➤ <b>55% prevalence to 50%</b></li> </ul>
<b>Value chains</b>	1. Vegetables 2. Rice, maize, pulses	
<b>Interventions</b>	Integrated intervention A) High value agricultural transformation B) Nutrition and hygiene interventions C) Integration of vulnerable groups	<b>Nutrition</b> <p>By 2015, # of underweight children in target region reduced from</p> <ul style="list-style-type: none"> <li>➤ 310K out of 737K to 235K out of 810K (est. future pop)*</li> <li>➤ <b>42% prevalence to 29%</b></li> </ul>

## Impact Indicators

<b>Overall FTF goals</b> (Forecast includes anticipated impact of other donors & GON)	<b>Baseline</b>	<b>2015</b>
• Prevalence of poverty (under \$1.25/day)	• 55% <sup>1</sup> (2004)	• 30% <sup>3</sup>
• Prevalence of underweight children under 5	• 39% <sup>2</sup> (2006)	• 29% <sup>3</sup>
<b>National level</b> (Forecast includes anticipated impact of other donors & GON)	<b>Baseline</b>	<b>2015</b>
• Expenditures of rural households (by proxy)	• TBD	• TBD
• Prevalence of wasted children under 5	• 13% <sup>2</sup> (2006)	• 5% <sup>3</sup>
• Prevalence of stunted children under 5	• 49% <sup>2</sup> (2006)	• 28% <sup>3</sup>
<b>Project level</b> (Indicators listed only for interventions relevant to Nepal mission)	<b>Baseline</b>	<b>2015</b>
• 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% <sup>4</sup> (2005)	• 25%
• Improved nutrition related behaviors		
– Prevalence of exclusive breastfeeding of children under 6 months	• 30.6% <sup>2</sup> (2006)	• 60% <sup>5</sup>

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