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

G-CAN: Gender-responsive and Climate-resilient Agriculture for Nutrition – Insights from Cambodia

USAID: Mark Visocky, Jeannie Harvey, Meredith Soule
IFPRI: Claudia Ringler, Tim Thomas, Jowel Choufani, Sophie Theis, Elizabeth Bryan

USAID FROM THE AMERICAN PEOPLE

CGIAR RESEARCH PROGRAM ON Climate Change, Agriculture and Food Security CCAFS

IFPRI INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

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

G-CAN ACTIVITIES

1. Process/template for FTF focus countries to help understand climate science and implications for CSA programing that integrates nutrition and gender
2. An innovative new framework for integrating gender and nutrition into CSA decision-making
3. Enhanced effectiveness and sustainability of investments in focus countries, based on country/mission tailored analysis and assessment of the potential for agricultural technologies

USAID
FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

G-CAN ACTIVITIES

4. Enhanced use of FTF open data to improve our understanding of ZOI for better program planning
5. Advisory services to allow end-users quick access to summaries of existing and new research with programmatic implications in the areas of CSA, gender and nutrition

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

Climate change vulnerability and adaptation policy in Cambodia

USAID
FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

HIGH VULNERABILITY TO CLIMATE CHANGE

- Cambodia is considered very vulnerable to climate change and one of the most vulnerable in SE Asia (Yusuf and Francisco 2009)
- High dependence on natural resources vulnerable to climate impacts – 70% of population relies on agriculture, fisheries, and forestry; 80% of population is rural
- Frequent and increasingly intense floods, droughts, salinization, changing temperature and rainfall patterns, increased incidence of pests and disease (Cambodia HDR 2011)
- Drinking water sources likely to be affected (tubewells, dug wells, rainwater, and surface water for rural households)

LARGE SET OF CLIMATE CHANGE POLICIES FOR RURAL RESILIENCE

- Climate Change Strategic Plan 2013-2023
- National Strategic Development Plan-NSDP (2014-2018)
- Climate Change and Gender Strategy and Action Plan
- Community Based Disaster Risk Management Plan (CBDRM)
- Plan of Action for Disaster Risk Reduction in Agriculture 2014-2018 aims to integrate DRR, climate change adaptation, and sustainable land management into all activities within General Directorate of Agriculture
- National Social Protection Strategy for the Poor and Vulnerable (2011-2015)
- Gender and Climate Change Strategic Plan-GCCSP (2014-2023), Gender and Climate Change Action Plan-GCCAP (2014-2018)
- Local governance institutions to address climate:
  - Commune Committees on Disaster Management (CCDM)
  - Commune Committees for Women and Children (CCWC)

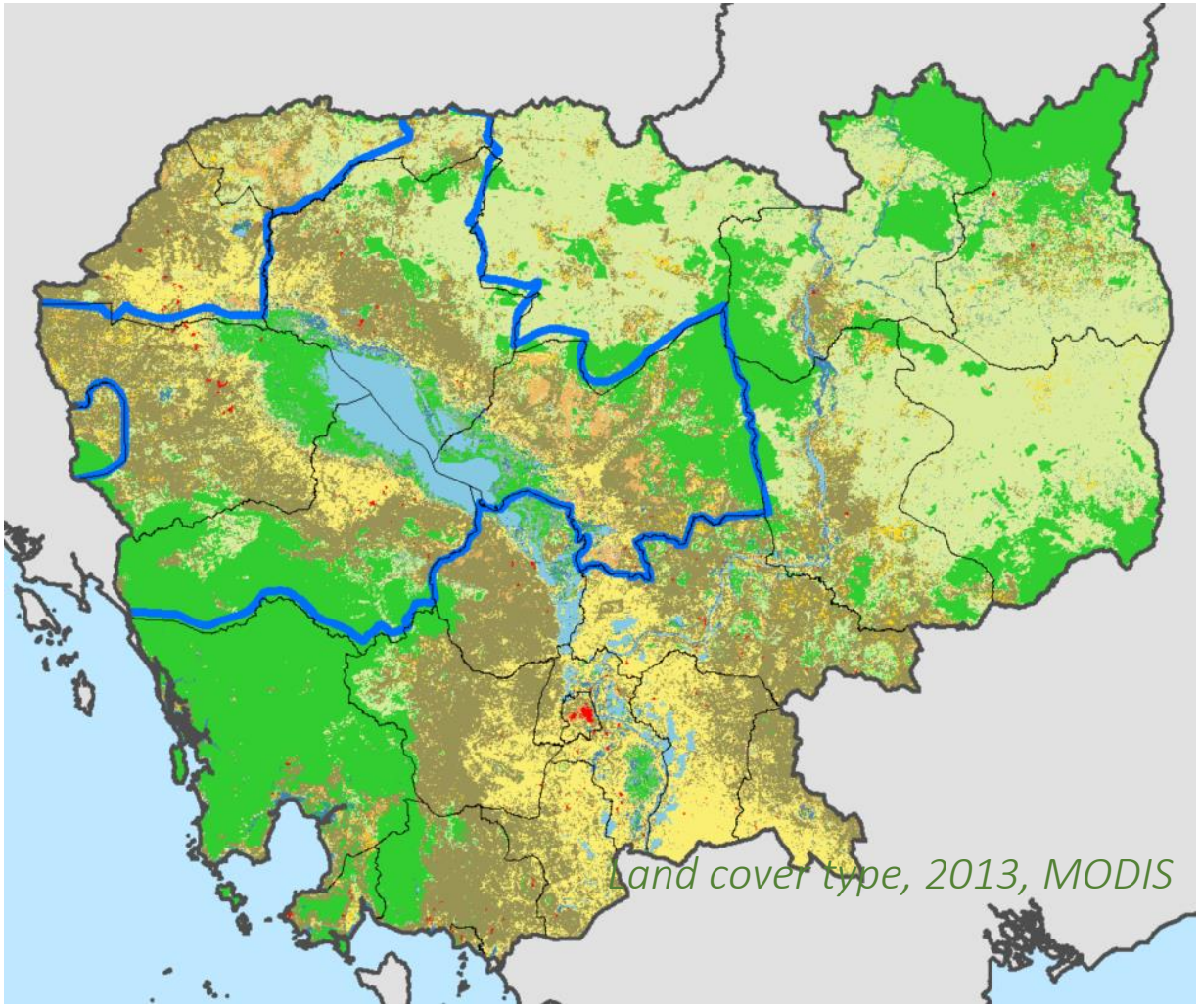
FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

Overview of Land Use and Agriculture

USAID
FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

CLIMATE AND AGRICULTURE IN CAMBODIA



- Water
- Evergreen Needleleaf Forest
- Evergreen Broadleaf Forest
- Deciduous Needleleaf Forest
- Deciduous Broadleaf Forest
- Mixed Forests
- Closed Shrublands
- Open Shrublands
- Woody Savannas
- Savannas
- Grasslands
- Permanent Wetlands
- Croplands
- Urban and Built-Up
- Cropland/Natural Vegetation Mosaic
- Snow and Ice
- Barren or Sparsely Vegetated

TEN LEADING CROPS OF CAMBODIA, BY HARVESTED AREA, 2010-2012

Item	Rank by area harvested	Hectares harvested, average, 2010-2012	Tons produced, average, 2010-2012	Yield, average, 2010-2012
Rice, paddy	1	2,917,527	8,771,753	3.01
Cassava	2	302,962	6,631,653	21.89
Maize	3	240,007	813,726	3.39
Vegetables, other	4	94,598	592,425	6.26
Soybeans	5	81,585	130,452	1.60
Beans, dry	6	64,086	74,031	1.16
Sesame seed	7	42,540	30,053	0.71
Rubber, natural	8	35,670	42,051	1.18
Bananas	9	32,748	155,609	4.75
Sugar cane	10	22,333	469,355	21.02

Source: FAOSTAT (FAO 2014).

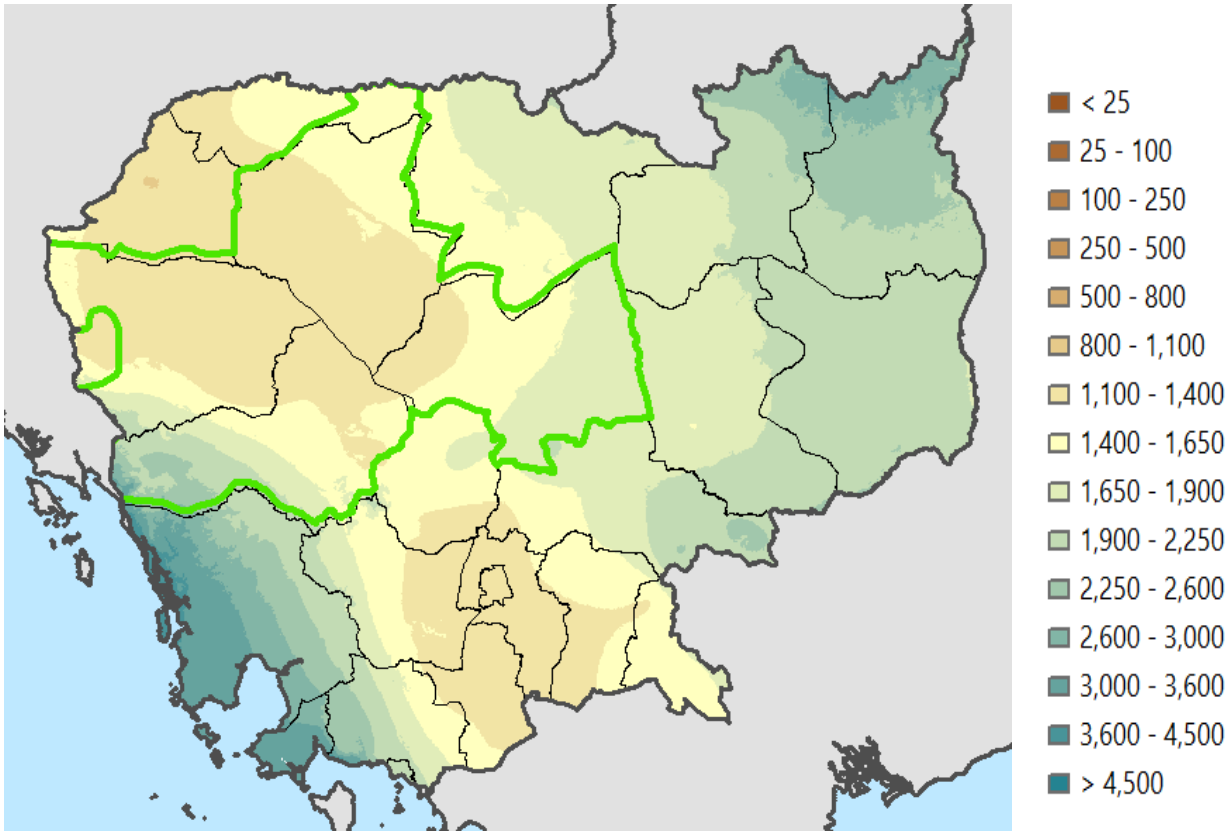
FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

Climate in Cambodia

USAID
FROM THE AMERICAN PEOPLE

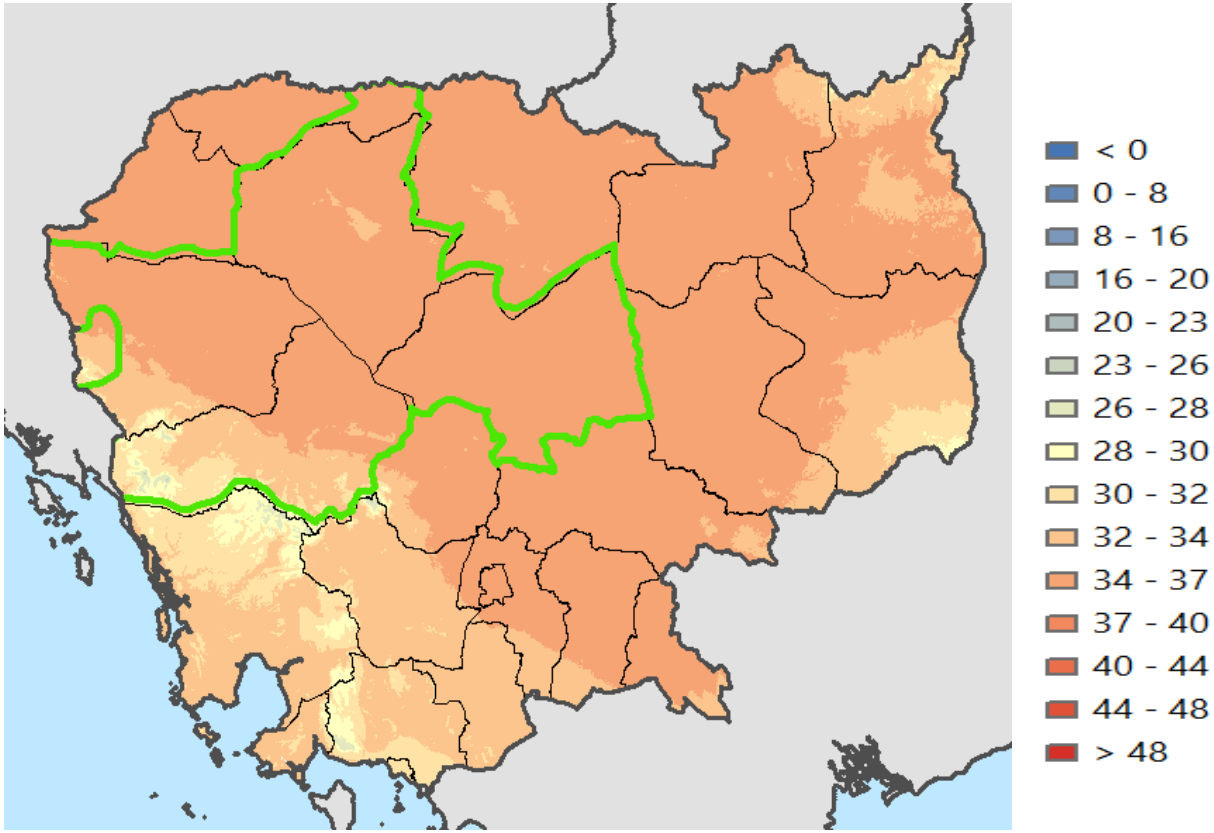
INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

MEAN ANNUAL PRECIPITATION, MM, 1950-2000



Source: WorldClim 1.4 (Hijmans et al.).

MEAN DAILY MAXIMUM TEMPERATURE FOR THE WARMEST MONTH, ^{0}C, 1950-2000



Source: WorldClim 1.4 (Hijmans et al.).

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

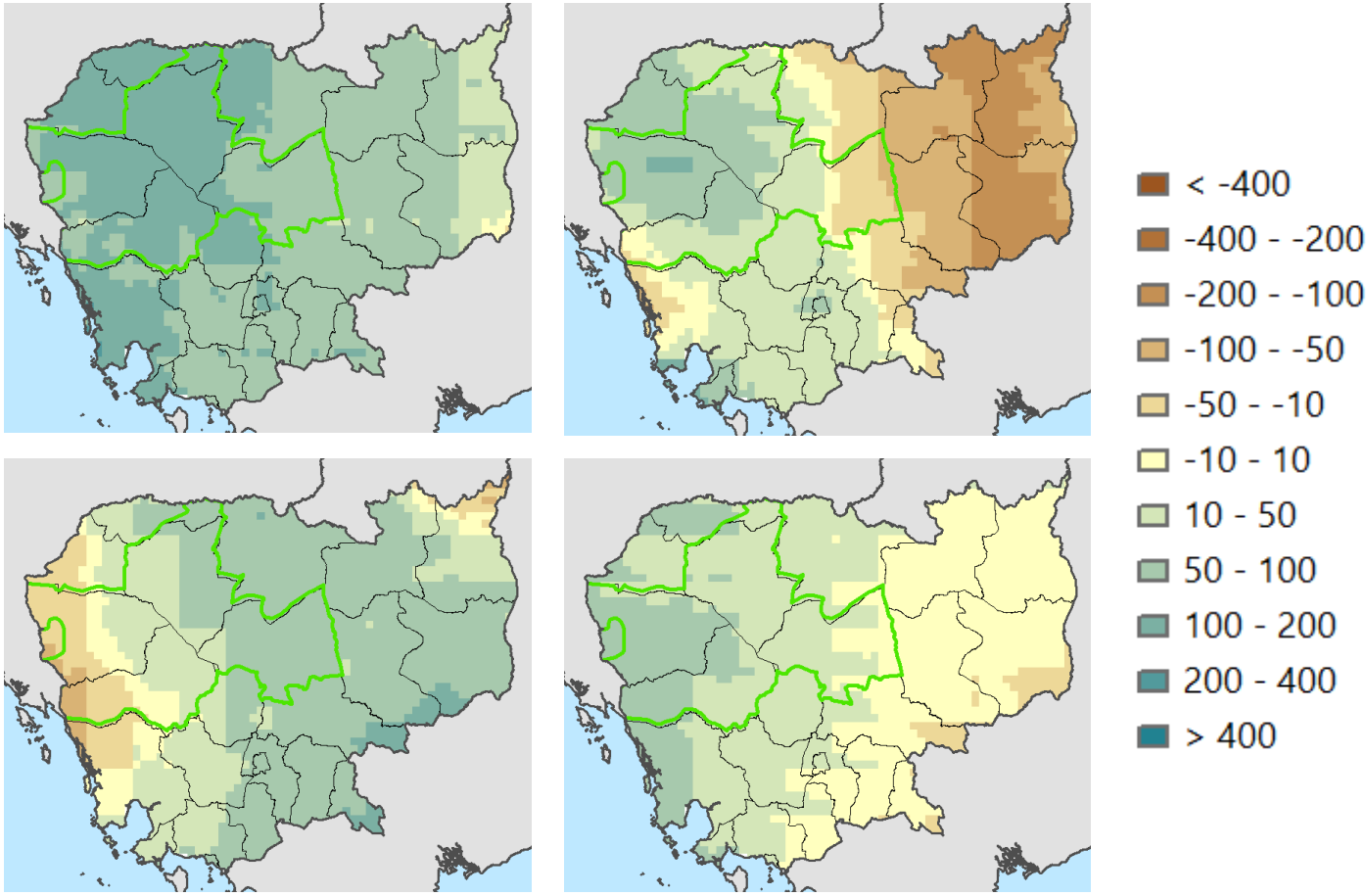
Climate Change Projections for Cambodia

USAID
FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

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

CHANGE IN MEAN ANNUAL PRECIPITATION, MM, 2000-2050

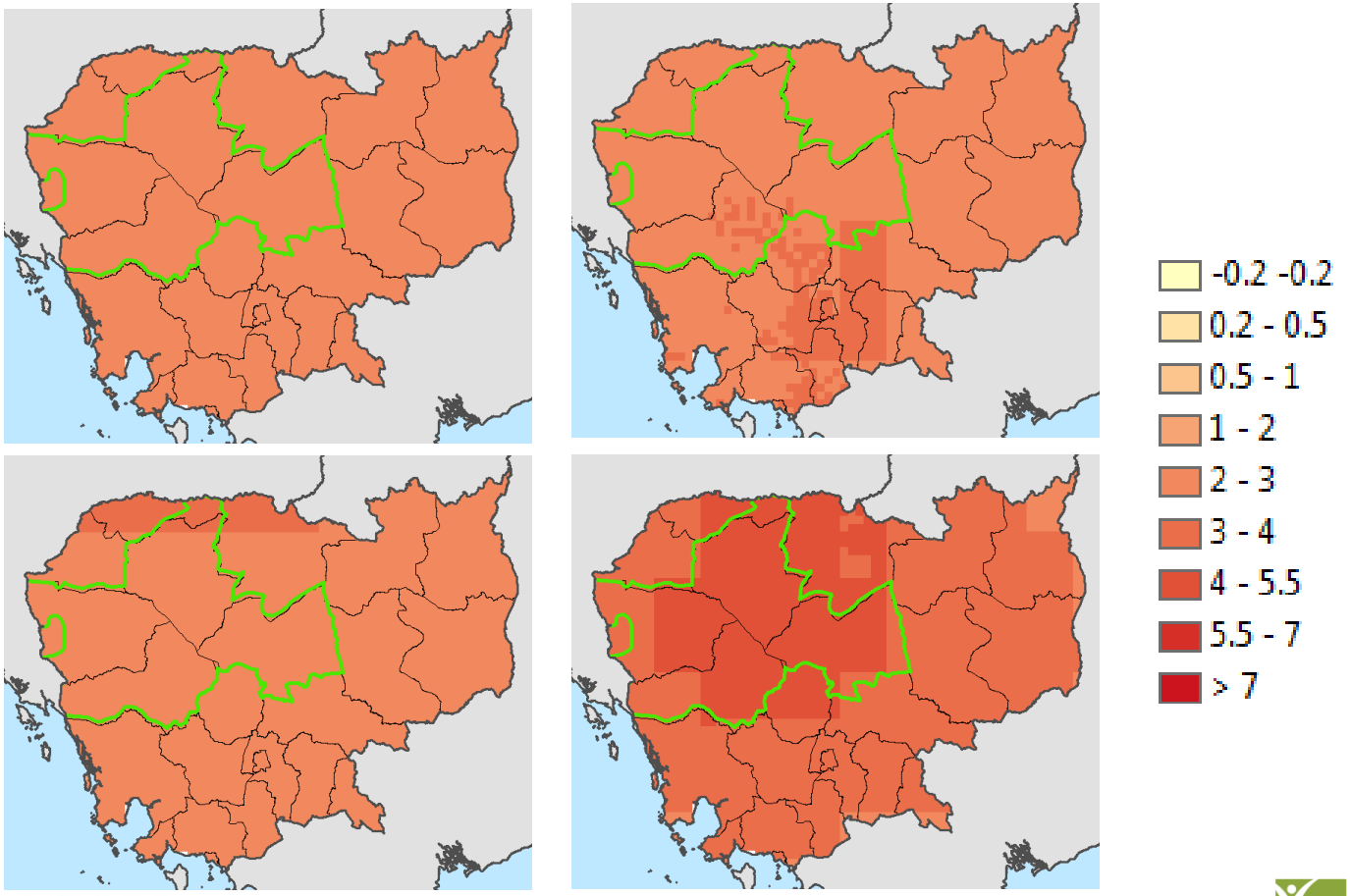


Note: RCP 8.5. Climate models clockwise from top left: GFDL, HadGEM, MIROC, and IPSL. Feed the Future zone is outlined in green.

USAID FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

FIGURE 5. CHANGE IN MEAN DAILY MAXIMUM TEMPERATURE FOR THE WARMEST MONTH, 0C, 2000-2050



Note: RCP 8.5. Climate models clockwise from top left: GFDL, HadGEM, MIROC, and IPSL. Feed the Future zone is outlined in green.

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

Projected Impact of Climate Change on Agriculture

USAID
FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

IMPACT OF CLIMATE CHANGE ON CROP YIELDS, 2000-2050, PERCENT

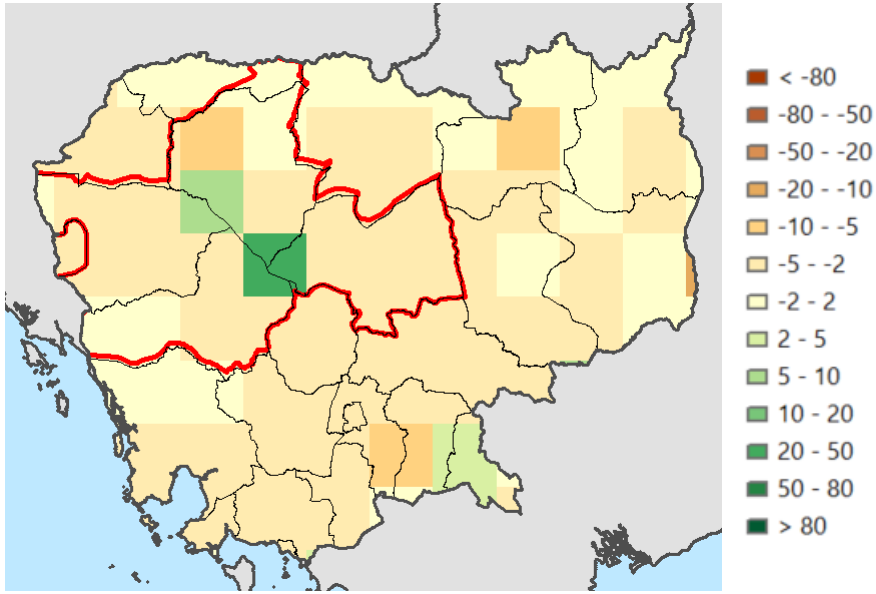
			Percent yield change due to climate change, 2000-2050				
Crop	Water	Hectares harvested, 2005	GFDL	Had-GEM	IPSL	MIROC	Median of 4
Rice	Rainfed	2,020,239	-2.5	2.3	-1.7	-5.5	-2.1
Rice	Irrigated	331,456	-3.1	4.0	-2.9	-5.7	-3.0
Maize	Rainfed	89,073	-11.3	-6.7	-7.8	-11.0	-9.4
Soybeans	Rainfed	79,898	0.0	2.3	-4.7	-12.0	-2.3
Cassava	Rainfed	64,131	-5.9	-20.8	-6.8	-7.8	-7.3
Groundnuts	Rainfed	17,762	-22.2	-23.9	-22.6	-21.2	-22.4
Sugarcane	Irrigated	8,588	-29.2	-50.5	-40.7	-47.8	-44.2
Sugarcane	Rainfed	7,318	-28.7	-51.6	-41.0	-45.2	-43.1

Source: AgMIP GGCMI; SPAM 2005.

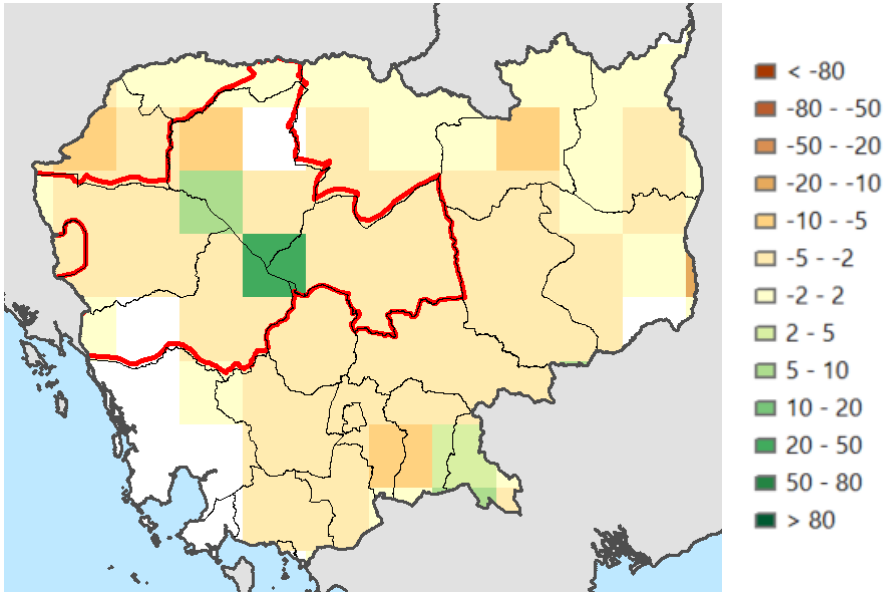
FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

CHANGE IN YIELD DUE TO CLIMATE CHANGE, VARIOUS CROPS, 2000-2050, MEDIAN OF 4 GCMS AND 3 CROP MODELS, PERCENT

Rainfed Rice



Irrigated Rice



Source: AgMIP GGCMI; SPAM 2005.

Note: Median derived from using four General Circulation Models and up to four crop models (three for rice; four for both maize and soybeans; one for cassava). Evaluated with CO2 fertilization.

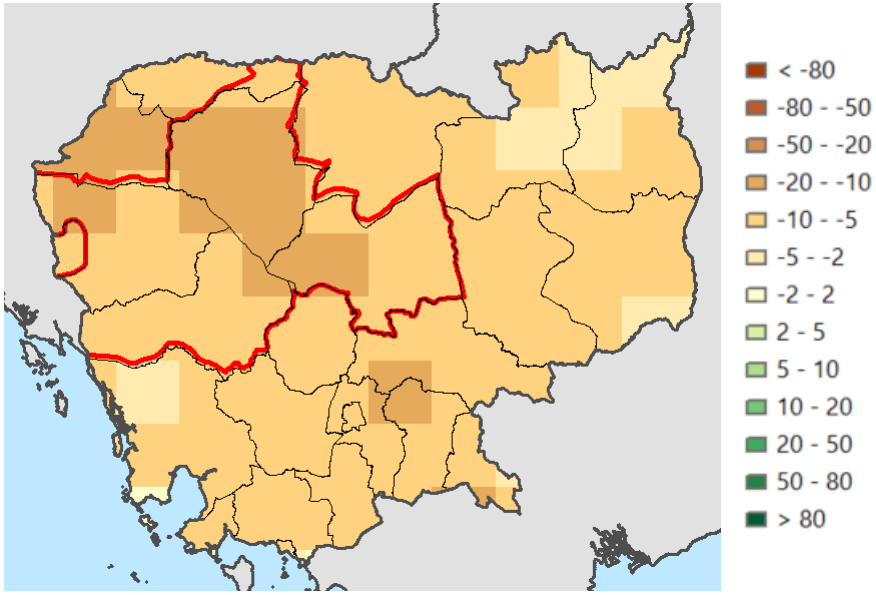
USAID FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE IFPRI

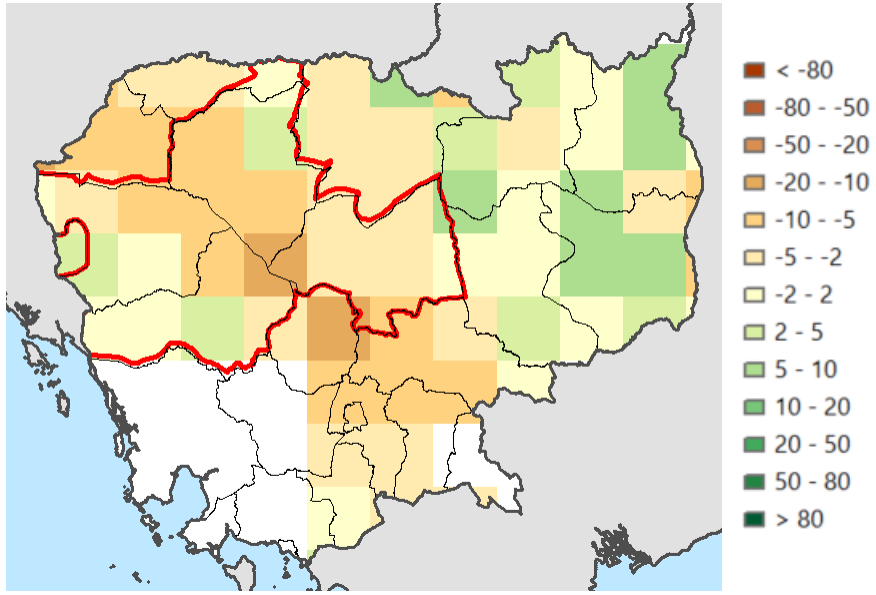
FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

CHANGE IN YIELD DUE TO CLIMATE CHANGE, VARIOUS CROPS, 2000-2050, MEDIAN OF 4 GCMS AND 3 CROP MODELS, PERCENT

Rainfed Wheat



Rainfed Soybeans



Source: AgMIP GGCMI; SPAM 2005.

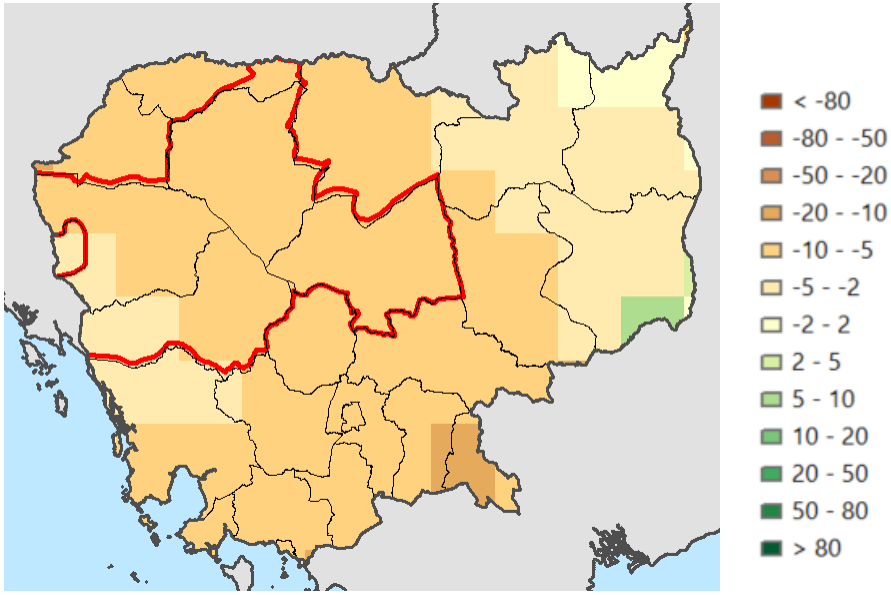
Note: Median erived from using four General Circulation Models and up to four crop models (three for rice; four for both maize and soybeans; one for cassava). Evaluated with CO2 fertilization.

USAID FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

CHANGE IN YIELD DUE TO CLIMATE CHANGE, VARIOUS CROPS, 2000-2050, MEDIAN OF 4 GCMS AND 1 CROP MODEL, PERCENT

Rainfed Cassava



Source: AgMIP GGCMI; SPAM 2005.

Note: Median derived from using four General Circulation Models and up to four crop models (three for rice; four for both maize and soybeans; one for cassava). Evaluated with CO2 fertilization.

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

Climate-Smart Agriculture (CSA) in Cambodia

USAID
FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

PRIORITY ACTIONS RELATED TO CSA IN THE INDC

- Build sea dykes in coastal areas
- Expand irrigation and improve efficiency
- Develop crop varieties suited to new climate
- Expand aquaculture

PROMISING CSA ACTIVITIES

- System of Rice Intensification (SRI): Currently more than 200,000 households (CEDAC)
- Aquaculture
- Climate-Smart Villages (CCAFS)
- Improved Irrigation (SNV)
- Pest-Smart (CABI)
- Seed development for new climates

ADDITIONAL CSA ACTIVITIES TO CONSIDER

- Improved livestock feed
- Improved fertilizer use in places where SRI not adopted

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

Climate and nutrition: Considerations for nutrition-sensitive approaches

USAID
FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

NUTRITION PROFILE

- Global Hunger Index 2016= Score 21.7 (Serious) (decline by -4.9 since 2008)
- Stunting in children under 5 years: 32.4% (WHO cutoff ≥20%). Rank: 95/132. Large disparities between lowest and highest wealth quintiles and at the sub-national region
- Anemia in women of reproductive age: 43.8% (WHO cutoff ≥20%) Rank: 124/185

- **Micronutrient deficiencies** (varies with urban/rural, wealth quintile)
  - Children (6-59 mo): Anemia (HB<11g/dL): 56%
  - Women: Anemia– pregnant women: 53%; Anemia– non-pregnant women: 44%

Global Nutrition Report 2016; CDHS 2014; Wieringa et al

CAMBODIA NSFSN (2014-2018)

- Objective 1: Increased Food Availability and Food Access
  - More productive and diversified agriculture and livestock production
  - Sustainable forestry and fisheries
  - Non-agricultural employment and income opportunities during agriculture lean season
  - Infrastructure (roads, markets)
- Objective 2: Improving Use and Utilization of Food
  - Improved WASH practices, decreased parasitic infections
- Objective 3: Increasing Stability of Food Supply
  - Natural disasters (floods and droughts), socio-economic shocks (food price increases)

NSFSN 2014-108, brief

NUTRITION IMPLICATIONS OF THE CAMBODIA CLIMATE CHANGE STRATEGIC PLAN (2013-2023)

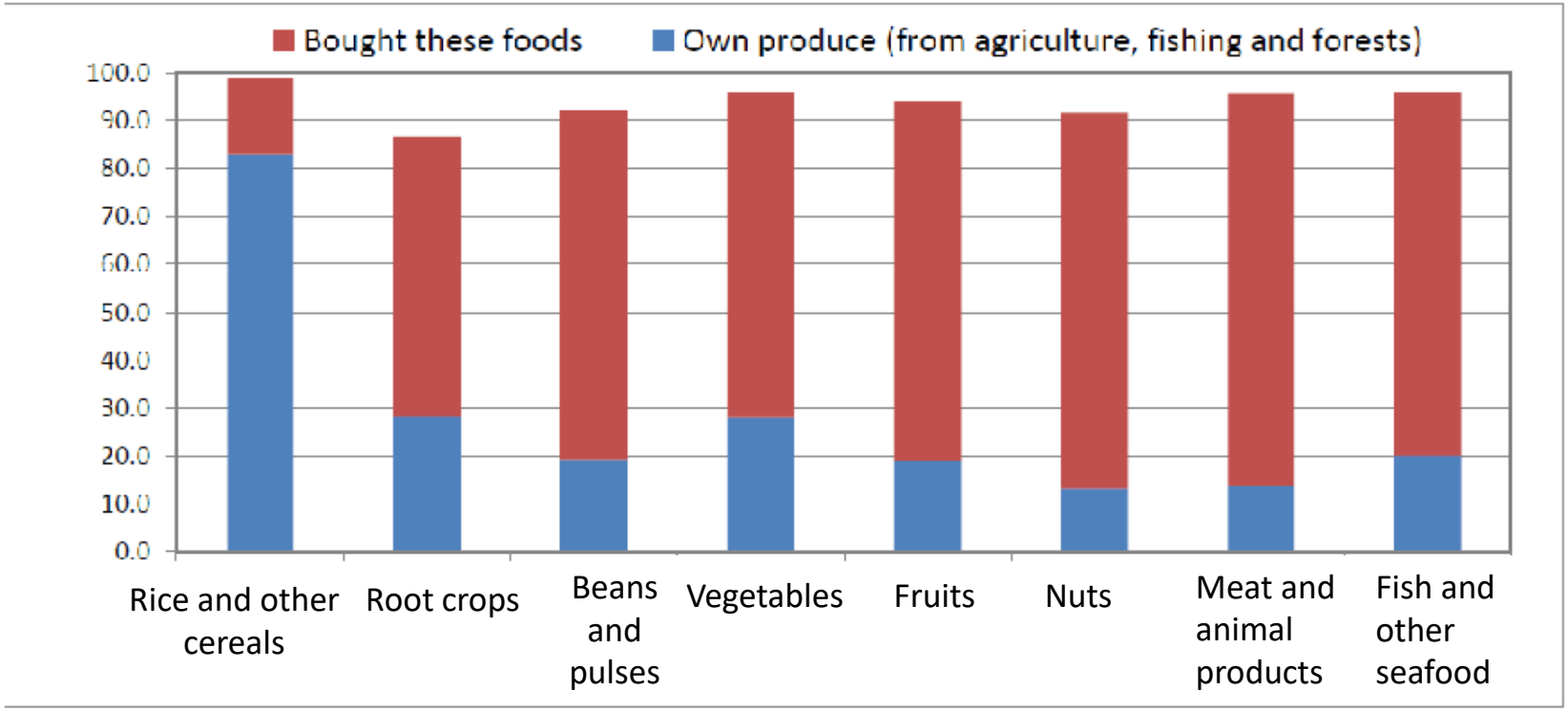
- Agricultural diversification (e.g. crops, livestock, etc.)
- Increase in productivity (e.g. crops, fisheries, livestock, forestry, etc.)
- Opportunity for new crop varieties
- Build and rehabilitate climate-resilient rural road infrastructures and connect production areas to the market

No specific details on diversification or new crop varieties
→ What are the nutrition implications?

Climate Change Strategic Plan 2013-2023

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

SOURCE OF FOODS CONSUMED



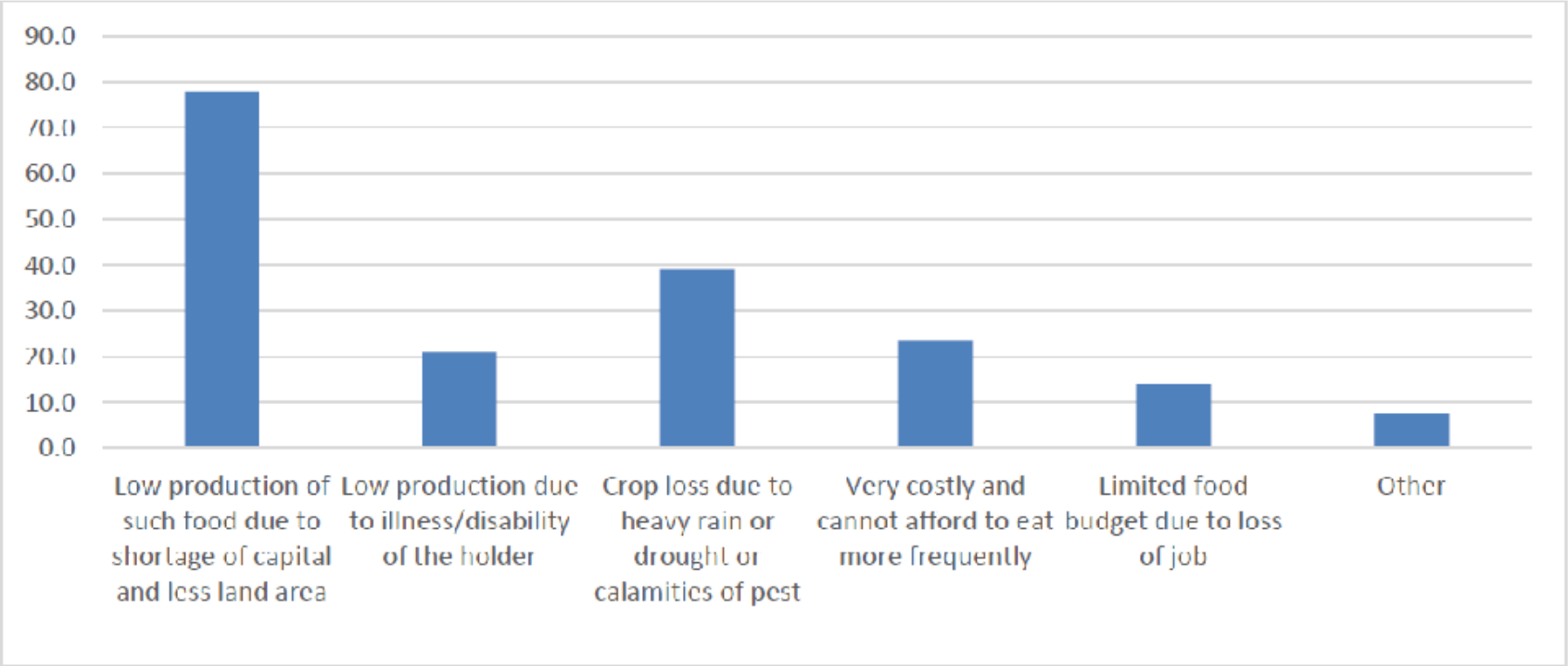
Percentage of households reporting consumption of basic food types in the past seven days by source of food.

USAID FROM THE AMERICAN PEOPLE

Census of Agriculture 2013

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

VARIOUS CAUSES OF FOOD SHORTAGE



Percentage of households reporting various causes of food shortage.

Census of Agriculture 2013

ENTRY POINTS FOR NUTRITION IN CSA

- Stunting was negatively associated with dietary diversity, and in particular, consumption of animal source food was a protective factor against stunting and underweight
  - Fish is primary source of protein. Chicken and pork other sources
  - Low consumption of pulses
- **Diversification:**
  - 30% of Cambodian children (6-23 months) met the minimum standard with respect to three IYCF feeding practices (food diversity, feeding frequency, and consumption of breast milk or other types of milk or milk products)
  - Only 48% percent of children received foods from the minimum number of food groups for their age.
  - Urban children were more likely to be fed according to all of the IYCF practices than rural children (49 percent versus 28 percent).
  - Large regional differences in feeding practices.

[1]Darapheak et al; CDHS 2014

NUTRITION-WATER-CLIMATE LINKAGES

- Growing understanding of relationship between WASH and nutrition
  - Diarrhea
  - Environmental Enteropathy
  - Sanitation facilities
- Significant change in open defecation between 2005 – 2010 able to explain much of the increase in mean child height in that period
- Floods:
  - Destroy crops
  - Destroy infrastructure
  - Increase in food prices
  - Cause fecal contamination of water sources
  - Increased risk of water-born diseases, infection

Janmohamed et al ; Kov et al; Cambodia National Report for Rio+20

IMPORTANCE OF MATERNAL EDUCATION AND INCOME

Maternal secondary education:

- Higher proportion (39%) of children fed in accordance with IYCF criteria, 49% in highest wealth quintile
- Children less likely to be anemic than other children.
- Lower rates of stunting (22.2% vs 45.8%) and underweight (25.1% vs43.5%) compared to mothers with no education
- Men more likely than women to have secondary education or higher (52 percent versus 40 percent).

What roles do women take in agriculture, and how does this affect schooling, care practices, control over income, and ultimately nutrition?

[1]Darapheak et al; CDHS 2014

NO ONE SIZE FITS ALL

- Key drivers of change differ between severely & moderately stunted children and between rural & urban areas → Different interventions needed
- **Rural**: maternal best practices and parental characteristics (parental education levels) are key for child nutrition status, wealth less important (for severely stunted).
- **Urban**: maternal best practices and parental characteristics are important, but household wealth more important (severely stunted).
- **Moderately stunted:** improvement in health infrastructure–principally improved sanitation and drinking water–important

Zanello et al

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

Gender and climate resilience

USAID
FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

GENDER AND CLIMATE IN GOVT PLANNING

- **National Strategic Development Plan-NSDP** (2014-2018)
- **Cambodia Climate Change Strategic Plan** with 'Strategic Objective 2: Reduce sectoral, regional, gender vulnerability and health risks to climate change impacts'.
- Neary Rattanak IV ("women are precious gems"), strategic plan of MoWA

- Gender and Climate Change Strategic Plan-GCCSP (2014-2023)
- Gender and Climate Change Action Plan-GCCAP (2014-2018) to translate GCCSP into action

PRIORITY GENDER & CC ACTIONS (GENDER AND CC ACTION PLAN 2014-2018)

Strategy 1: Strengthening institutional capacity and cross-sectoral coordination with a focus on women's role in climate change adaptation and mitigation

1. Gender and climate change capacity strengthening at all levels
2. Gender integration in NSDP and sector plans
3. Increase women's participation in decision making at all levels

Strategy 2: Improving capacity, knowledge, and awareness on women's role in climate change adaptation and mitigation

4. Vulnerability assessments and gender indicators in national M&E climate change framework
5. Disaggregated info on role of men and women in coping with impacts of climate change

Strategy 3: Promote climate change adaptation and mitigation measures for disadvantaged women and other groups

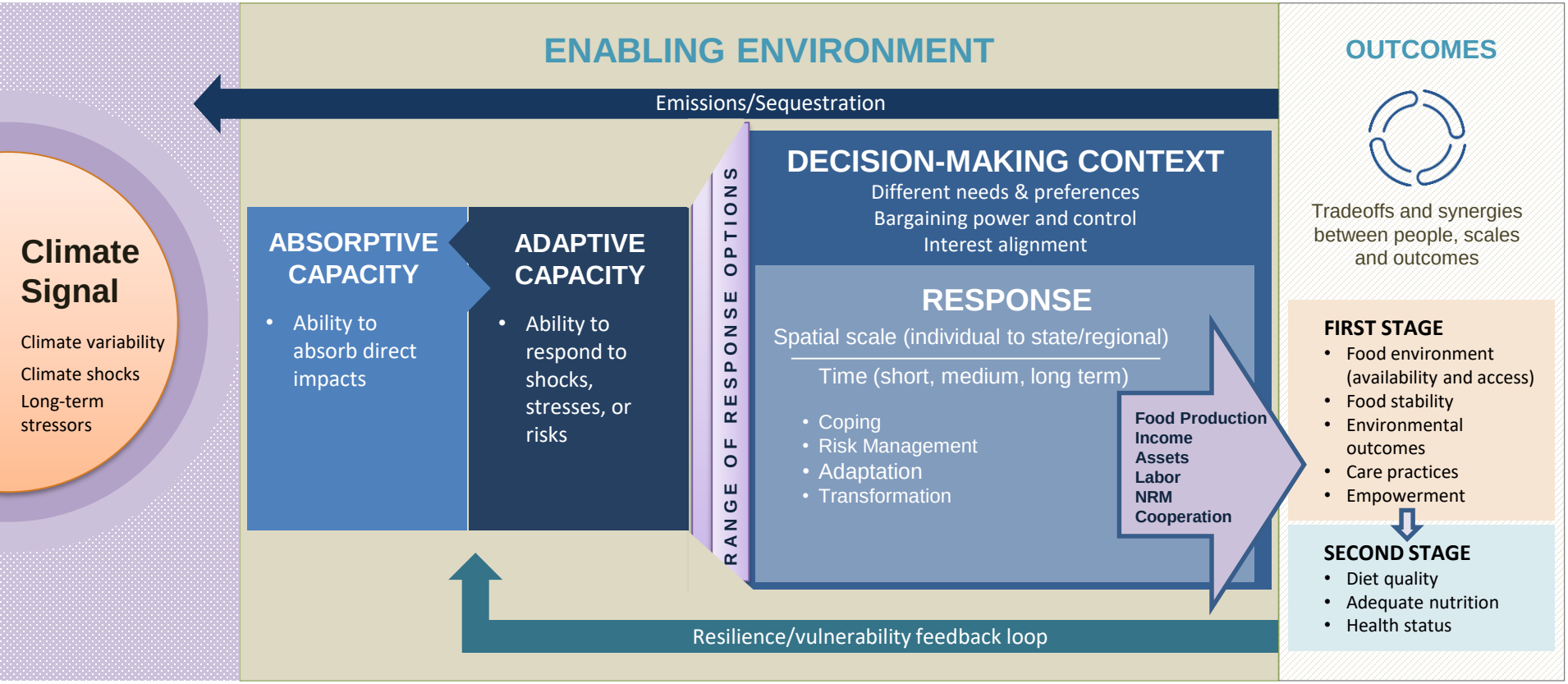
6. Gender-responsive climate change adaptation and mitigation projects

FURTHER DETAIL ON ACTIONS AS ELABORATED IN THE PLAN: WHERE WE COULD WORK TOGETHER TO CONTRIBUTE

- [Strategy 1] **Research on women and climate change-related decision making**
- [Strategy 2] **Develop questionnaires and guidelines for vulnerability assessment**, disaggregated data system to collect and analyze climate change impacts on women and men, **gender indicators** in national M&E framework on climate change
- [Strategy 3] **Review of best practices** of gender-responsive climate change interventions in Cambodia and elsewhere (e.g. entry points for increasing men's and women's participation, identifying and addressing gendered needs and preferences); **evaluate pilot projects** and share lessons learned

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

Framework for Climate, Gender, and Nutrition



USAID FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

- **Understanding and addressing these gender differences** (within households & between female/male-headed households) **can help to:**
  - Ensure social inclusion
  - Mitigate potential harm to the most vulnerable
  - Leverage particular networks and knowledge
  - Strengthen climate resilience and achieve other development outcomes
  - Advance empowerment and gender equality

1. **What is the state of knowledge on these differences in the Cambodia context?**
2. **What are entry points for addressing these differences?**

(1) GENDER DIFFERENCES IN **ABSORPTIVE CAPACITY**

How are men and women differently affected by climate change?

Components of absorptive capacity	Main questions to consider
Livelihood activities	What activities do men and women typically do in productive and reproductive work? What is division of labor?
Social protection	What social protection programs (e.g. social transfers, public works programs) do men and women have access to, and use? (examine targeting and actual coverage)
Infrastructure	Does shelter/infrastructure vulnerability vary? (e.g. presence of flood protection or not)
Health/nutritional status	How does this differ based on biological sex (e.g. anemia during pregnancy) or gender role (e.g. exposure to malaria in rice fields, give up food for other household members)

(1) GENDER DIFFERENCES IN **ABSORPTIVE CAPACITY**

How are men and women differently affected by climate change?

Different livelihood activities:

- **Care burden:** 43% of people in agricultural households are under age 29, dependency ratio averages .48, 32% of population is considered economically dependent (<15 years + >60 years)
- **Domestic work:** 83.5% of households rely on firewood for cooking (HDR 2010); high reliance on rainwater and non-improved sources of drinking water
- **Ag work:** 75% of employed women over age 15 work in agriculture, forestry, and fishing; 68% of rural employed women are unpaid family workers (Census 2008), division of labor: in rain-fed rice farming, men plough, women plant seedlings, weed and winnow (GCCSP). A higher proportion of male-headed households tend livestock (62%), conduct fishing activities (56%) than female-headed (48.1% livestock; 32% fishing) in Tonle Sap (ILO/CSES 2014)

SUMMARY

"Much remains to be understood about **potentially different impacts** on gender vulnerability and adaptation and mitigation capacities of women and men in contract and other forms of farming **due to gender division of labour, and access to and control over resources and benefits**."

(Cambodia Gender and Climate Change Strategic Plan 2013)

- Better data on gendered division of livelihood activities would help us understand men and women's differences in absorptive capacity. CSES focuses on female vs. male-headed households; but women in male-headed households should not be overlooked

(2) GENDER DIFFERENCES IN **ADAPTIVE CAPACITY**

What factors influence the choices women and men have in responding to climate change?

Components of ADAPTIVE CAPACITY	Main questions to consider
Access to information (about CC and adaptation)	Are there differences in access to info/training? Why (mobility, education, gender-blind design of services)? What channels of info do men/women rely on and what content do they need?
Labor	Access to household/paid labor? Time available to access training/participate in decisions?
Assets	Do men and women have different access and control over natural resources, financial and physical capital that they could use to adapt?
Institutions	Influence of social norms, tenure and inheritance regime, inclusion in community institutions on men/women?
Human capital	Perceptions of climate change, literacy/education, risk preferences, skills and knowledge (e.g. swimming)

(2) GENDER DIFFERENCES IN **ADAPTIVE CAPACITY**

What resources can women and men draw upon to respond to the impacts of climate change?

Ex: Information:

- **Extension services**: Although women comprise 51 percent of the primary workforce in subsistence agriculture and 57 percent of the workforce in market-oriented agriculture, **they receive only 10% of agricultural extension services** (MoWA 2008). Why is this?
- **Gender-blind services can unintentionally exclude women:** Ministry of Planning (2010): "Economic opportunities for women are still largely constrained, with most credit, training, extension and support programs not sufficiently tailored to their needs"
- **Technology gap:** female-headed households less likely to own radio/TV (40 vs. 50%)

Ex: Credit:

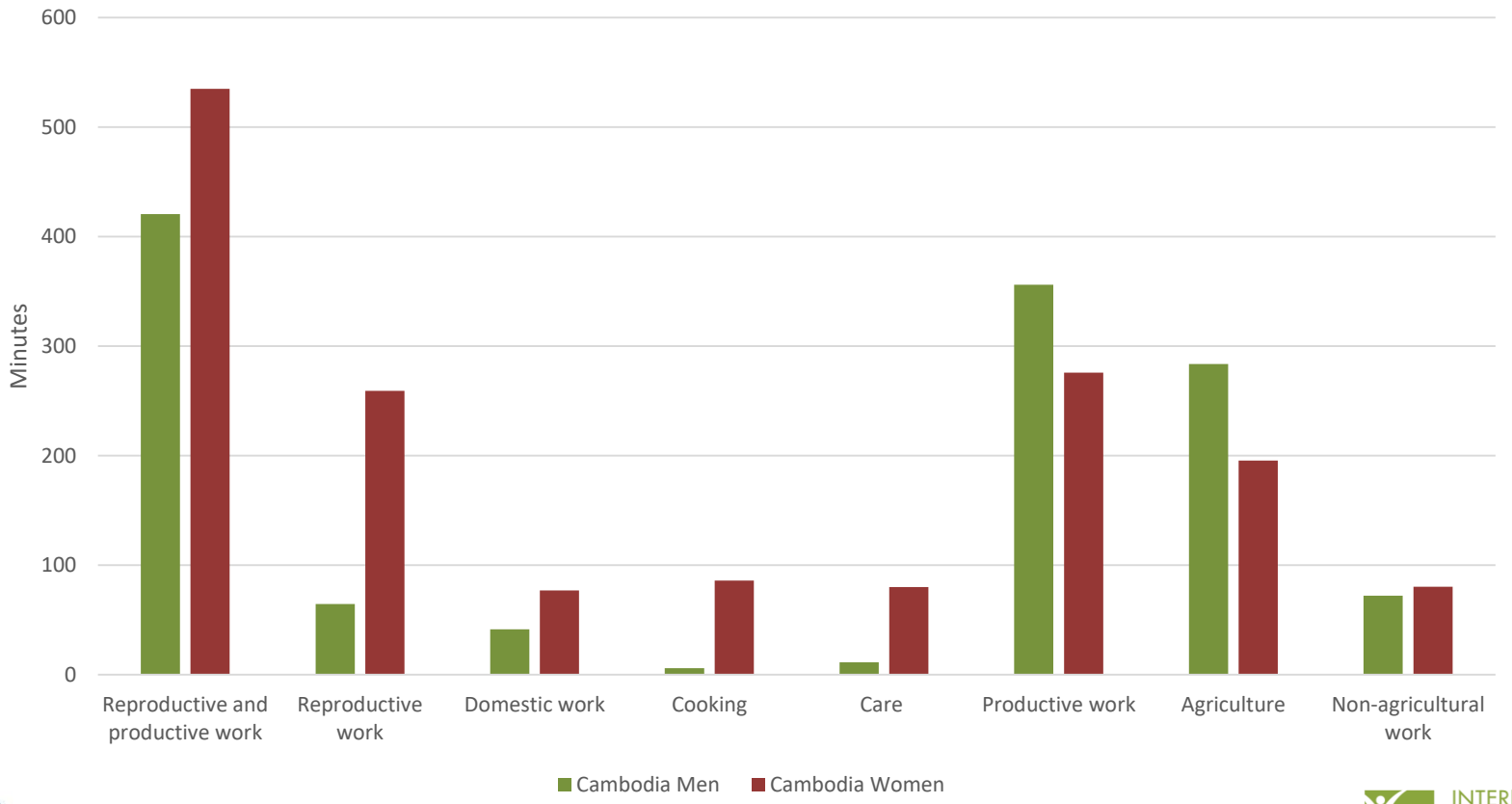
- MHH take out credit 5x more than FHH! (CSES 2008)

(2) GENDER DIFFERENCES IN **ADAPTIVE CAPACITY**

Ex: Time/labor:

- 20% of ag households are female-headed (33% in Tonle Sap) and 53% of active ag population (ages 15-60) are women.
- 11% of female-headed households are "de jure" in temporary absence of male household head (e.g. male out-migration). (FAO 2008 /CSES 2008)
- Certain response options, like System of Rice intensification (SRI) not viable for households with labor scarcity. Typically labor for SRI is provided by older people and women aged 35 or above (Cambodia HDR 2011)
- Time burden across these activities likely to increase under climate stress, and acutely in times of climate shock (e.g. flood)

Men and Women's Average Time on Activities in the previous 24 hours (Cambodia)



(3) RESPONSE OPTIONS ARE EMBEDDED IN A **DECISION MAKING CONTEXT**

- Men and women may have different preferences, needs, and knowledge of CC impacts based on their roles and resources. Do they have power – in the household and community – to influence or make decisions based on this?

In the household

- Cambodia women often control and manage household finances
- Some indicators of women's household decision making are relatively high (e.g. input into decisions and control over earnings measures in DHS; high WEAI score) but still lower than men's
- How do preferences differ? More research needed.

(3) RESPONSE OPTIONS ARE EMBEDDED IN A **DECISION MAKING CONTEXT**

- **In the community**
  - "The bulk of climate change adaptation and mitigation will take place at decentralized levels" (GCCSP)
    - Ex: farmer water user committees, Commune Committees for Women and Children, Commune Committees for Disaster Management, community fisheries
  - However, women are often not participating or not participating in a meaningful way in local governance institutions or DRR processes
    - Ex: In the Commune Committees for Women and Children (CCWC), World Bank found that women are actively involved in formal processes, but village-level meetings are predominantly attended by less educated members whose time is less valuable to 'fill the seats.' More influential informal and invited processes involve wealthier people and often exclude women altogether

➢ How to go beyond counting attendance?

(4) RESPONSE OPTIONS

- Given the ways in which men and women are affected by climate change, their capacities to adapt, and their power to make decisions in line with their own preferences and priorities, **what response options do different people choose?**

"Taking out a cash loan or finding paid work in a city or provincial town are the main options selected by men to cope with natural disasters, while getting paid work in the village or local area is the main measure chosen by women and female headed-households (Koy & Em 2012)"

- What are the entry points to **expand the range/improve the response options** available to men and women?
- Different response choices have **implications for development outcomes**, including empowerment outcomes

WILL CSA CLOSE OR WIDEN THE EMPOWERMENT GAP?

The costs and benefits of CSA approaches are not distributed across all hh members equally.

It is important to consider how individual CSA options affect men and women differently

For example:

- Who migrates and who is left behind?
- Who benefits from human capital investments? (e.g. education, health)
- Who changes consumption?
- Who gains/loses assets? (e.g. based on relative value, liquidity, whose assets are sold?)
- How does time use change on different activities, and for whom? (productive and reproductive) (e.g. SRI)
- How does relative control over income change?

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

Framework for understanding household distribution of costs and benefits from technology adoption

Adopt
- Whether to purchase, rent, acquire a technology

- Who is allowed to own, buy, or rent the technology

Use
- Who uses the technology

- Who is able and allowed to use the technology, and what tasks are performed by whom

Manage
- How, when, and where technology is used

- What crops or plots of land are prioritized for the technology

Alienate
- Whether to sell, lease, or give away the technology

- Who can alienate or profit off the technology as an asset

Exploit
- What to do with the products of the technology

- How to use outputs and income from outputs

USAID FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

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

Research questions to advance evidence & understanding of the climate-gender-nutrition nexus

USAID
FROM THE AMERICAN PEOPLE

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
IFPRI

GENDER-CLIMATE-NUTRITION Q'S

1. Where are opportunities to harmonize social protection, disaster risk reduction, and climate adaptation? How can gender and nutrition be integrated?
2. Better documentation of the differences in adaptive capacity (constraints, preferences) between men and women
3. Better documentation of the effects of current response options. What are coping mechanisms to shocks, who is affected, why? Impacts on nutrition? Differences in awareness/perceptions of climate and willingness to take action?

GENDER-CLIMATE-NUTRITION Q'S

4. Decentralized climate adaptation: What factors make community based adaptation institutions effective and inclusive? What works to make them more representative and accountable? What indicators should be used to monitor and evaluate these institutions?
5. Calls for better gender indicators in climate resilience M&E – how to go beyond counting participation?
6. What are lessons learned from USAID projects in Cambodia on these topics?

Thank you! Let's discuss…