Scaling up Commercial Horticulture
(Kathmandu, March 11, 2014)
• Population size almost 15 million, with over 70% under the age of 35 years
• Women Comprise 55% of the adult population and 62% engaged in agricultural production and own 62% of MSME
• Female-headed households comprise almost a quarter of rural households (23%) and 69% of rural poor households
• High male seasonal labor migration, increasing the number of poor, female-headed households
• Agriculture accounts for 30% of GDP but 70% of people earn their living mainly from farming.
• Crop diversification showed households to be better able to withstand economic or climatic shocks.
• Horticulture production extends well into the lean season and becomes a supplemental source of household food and income when other resources needed to purchase food are limited.
USAID/Cambodia base line survey of vegetables grown by households in zone of influence (2013) shows:
- Convolvulus (51% of sample)
- Large smooth gourd (42%)
- Cucumber (42%)
- Long green beans (38%)
- Egg plant (36%)
- Water hyacinth (32%)
- Wax gourd (29%)
Subsistence agriculture – poor to low income rural households with limited or no means to invest
Poor household diets – traditional habits
Migration – diminishing field labor, seasonal farmers
Water issues – lack of or no water in many villages
Climatic changes – annual floods, droughts
Poor rural extension – no or little knowledge on new technology or good agriculture practices
Very small horticulture sector in Cambodia – fresh product imports of 60 to 80%
Scaling up Commercial Horticulture HARVEST

Jointly funded ($56 m 5-yr) by Feed the Future and Global Climate Change Presidential Initiatives focusing on:

- **Agribusiness Value Chains** – rice, horticulture, low input fish ponds
- **Social Inclusion and Capacity Development** – nutrition, basic agr. technical skills, vocational and skills training
- **Policy and Enabling Environment** – agriculture and food security related policies.
- **Natural Resource Management** – fisheries & forestry communities, management of biological significance and natural resources.
Why Scale up Commercial Horticulture?

• The program has succeeded where multiple other donor projects have failed.
• It has successfully created the nucleus of a viable, sustainable commercial sector among poor farmers in four provinces in the Tonle Sap region.
• HARVEST mid-term performance evaluation shows horticulture on top among the two other value chains (rice & fish)
Why Scale up Commercial Horticulture?

The success is built on the following components:

- The introduction of appropriate, best agricultural practices
- One-off co-investment in a package of environmentally sustainable technologies
- Provision of intensive, weekly support from highly trained agricultural technicians for 18 months
- Creating/strengthening a private sector retail input supply chain to reach poor farmers
• HARVEST Project introduced a package of technology and cultivation practices, intensive TA, initial co-investment, input supply chain strengthening.
  ➢ Drip irrigation, plastic mulch, raised beds, trellises, business development training
  ➢ 3 product cycle of 6 months each: First cycle ONLY co-investment with demonstration farmer in each village, by 3rd cycle TA only
  ➢ Intensive support by highly trained agricultural technician weekly visits per farmer plus field days
  ➢ Delivery by mix of implementing partners and NGO direct hires.
• Net work of self-sufficient private sector input suppliers (trained by HARVEST) and MFIs
• Pre-existing large and growing market/buyers for quality fresh vegetable
• Poor farmer households have $800-$1200 from 800-1200 Sq. meter plots additional net income per cycle, with the majority of those being women farmers.
• Despite the concerns that a give away program would crowd out the private sector, the contrary is actually true in this case.
• Retail input suppliers are experiencing substantial increase in sales driven by demand for consumable inputs by HARVEST graduates and adoption by neighboring villagers.
Success and Potential Scale

- Currently, 2000 direct beneficiaries
- Preliminary estimated multiplier effect of 5-10 of 2\textsuperscript{nd} and 3\textsuperscript{rd} tier adopters per demonstration client
- Potential total number of adopter is 100,000 households out of 720,000 in four provinces around Tonle Sap
- Because of multiplier effect from demonstration clients, if project can reach 5,000+ in next few years, critical mass (25K plus) will trigger spontaneous scaling to population level
## Cambodia/HARVEST Commercial Horticulture
### Scaling up Plan:

<table>
<thead>
<tr>
<th>Criticisms</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spoils the market, crowds out the private sector</td>
<td>1. Not give-away, co-investment to reduce risk to early adopters, create demonstration effect. Input suppliers have experienced rapid growth in demand in last 3 years. Embedded in private value chain.</td>
</tr>
<tr>
<td>2. Farmer will drop activity once project ends</td>
<td>2. 70% of direct client sustaining activity, many increasing investment. Neighbors adopting some/all of technology/practices</td>
</tr>
</tbody>
</table>
# Cambodia/HARVEST Commercial Horticulture

Scaling up plan:

<table>
<thead>
<tr>
<th>Criticisms</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Not scalable without ongoing agricultural extension service</td>
<td>4. Campaign approach to scaling as in vaccination; intensive training to create self-sufficient, critical mass</td>
</tr>
</tbody>
</table>
Conclusions

• Subsidy/co-investment can be successful when used to reduce risk of NEW activities, planned phase out.

• Intensive technical assistance viable strategy for sustainability and scaling in low resource environment e.g. no extension
  – Critical mass and farmer-farmer diffusion
  – Different approach from scaling by more numbers, creating a viable sector permanently embedded in strong value chain.
Conclusions

• Requires long term frame than traditional 5 year project, narrowing of activities to focus on winners
• Long term nutrition impact and climate change adaptation
• Remaining challenges:
  – Not panacea, won’t reach poor with little land, water (home garden, rice intervention for this tier)
  – Extension service/information flow needed for continuous improvement: trying ITC, VAHWS, IDE
  – MFI risk aversion limits credit and inhibits greater multiplier
THANK YOU