



HORTICULTURE INNOVATION LAB

UC DAVIS UNIVERSITY OF CALIFORNIA

Innovations to Build and Scale Safe Vegetable Value Chains (SVVC) in Cambodia

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Chemical overuse is a main problem that affects the quality and safety of vegetables as well as the health of humans. A simple technology for growing chemical-free vegetables while protecting them from pests is a nethouse. Growing safe vegetables using a nethouse is a way to improve human health and social welfare by reducing chemical inputs. Using nethouses can also help farmers improve household income by decreasing illness, agricultural inputs and chemical fertilizers. The SVVC project has expanded from establishing new value chain linkages to improve food safety in Kandal Province and has now constructed 8 nethouses in Battambang Province in Anlongrun, Krous Village, and Tasey Village in Thmor Koul District. Preliminary evidence shows a very positive response from farmers and consumers who are interested in this technology because they see it benefits vegetable production and improves safety.

Farmer, project and government officers discussing progress and next steps for forming a safe vegetable producers' association that will be organized around a packinghouse



Project office and farmer working together to build and test the effectiveness of using nethouse in Tasey Village



Steps of setting up a nethouse;

- ◆ Prepare land
- ◆ Identify structure supports (bamboo, wood or iron)
- ◆ Set up the structure (Height 3m, length 2m....)
- ◆ Sew the netting material to cover the structure
- ◆ Make double door to prevent pests from entering

Benefits of Using a NetHouse

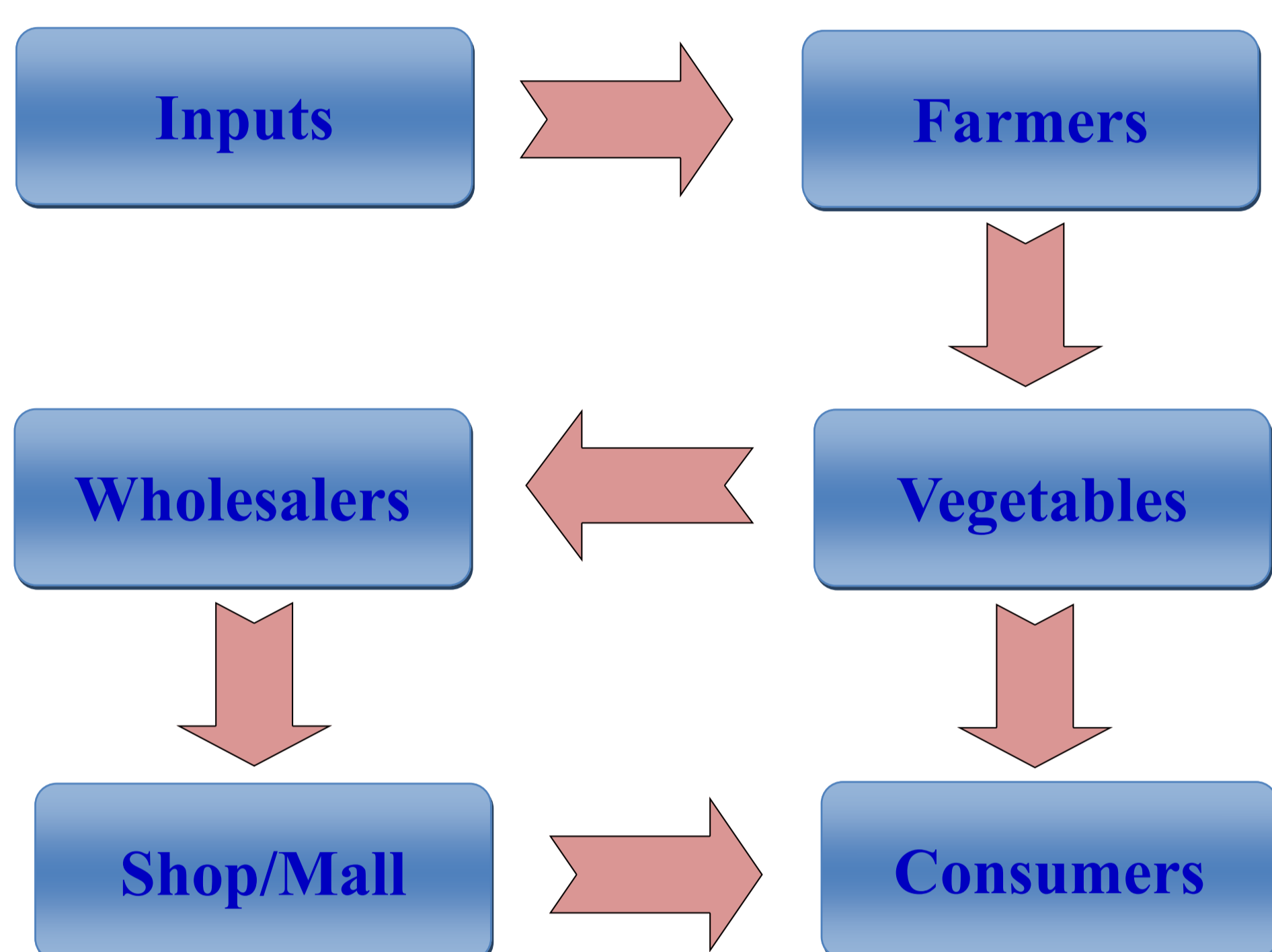
Direct Benefits:

- ◆ Agriculture inputs are decreased
- ◆ Yield is increased
- ◆ Income is increased
- ◆ Value added to vegetable

Indirect benefits:

- ◆ Improved households health
- ◆ Environmental friendly
- ◆ Food Safety Friendly
- ◆ Potential to decrease imported vegetables from neighboring countries

Safe Vegetable Value Chain



Key Points:

- * More agricultural inputs are used when growing without net
- * Quality of vegetables grown outside the net lower than vegetables grown inside the net
- * More time is spent cultivating crops grown without net
- * Vegetable texture is improved by growing inside nets
- * Consumers report vegetables are more delicious grown inside

Economic Analysis:

- * Vegetables grown inside net 250 m² can earn around \$143.75/month
- * Vegetables grown outside net 250 m² can earn around 56.25/month
- * Vegetables grown inside net 250m² require agricultural inputs around \$16.9/month
- * Vegetables grown outside net 250m² require agricul-



Chemical Free with No Pest Damage



Happy Farmer with Good Quality of Green Mustard

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