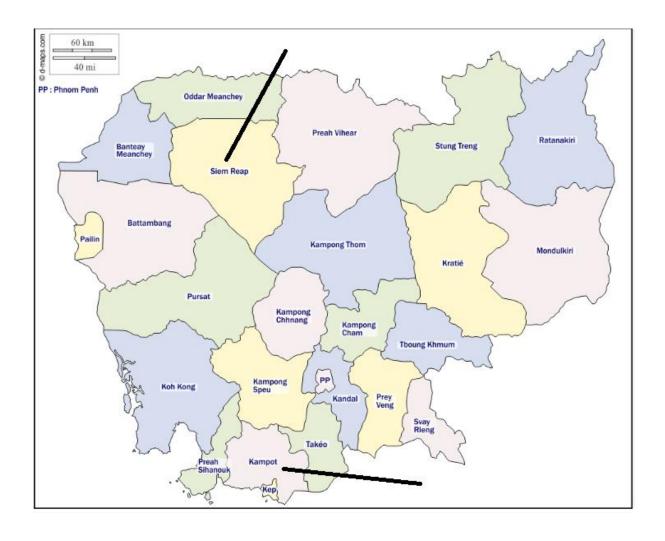
Investigating capacities to change soil and irrigation practices in vegetable production in two provinces in Cambodia

Ann Starasts, University of Southern Queensland Tech Ratana, Cambodian Agricultural Research and Development Institute Yin Putheavy, Cambodian Agricultural Research and Development Institute Ratana Kay, Cambodian Agricultural Research and Development Institute

Improving vegetable production in Cambodia offers a pathway to grow domestic consumption and exports, and improve nutrition, profits, and livelihoods. Interviews with 120 growers and 5 focus group discussions within 5 villages investigated growers' capacity to change soil and irrigation management in their Chinese cabbage, Petsai, Cucumber, Cauliflower, Lettuce and other vegetable crops. Low or no profitability (34% participants), insect pests (59%) and dry periods (18%) were growers' major limitations, with small farm size (0.08 ha) and limited schooling (21-36% had no schooling) contributing to the scenario. High cost of inputs is a limitation to making farming system changes, with most growers using their own funds and less than 10% borrowing funds to pay for crop inputs.

Communication and planning for vegetable growing occurred almost exclusively within families (93%), with 7.5% of participants discussing with other farmers. Lack of time (43%) and knowledge about farmer group activities (30%) limited ongoing group learning opportunities. Although very traditional, 28% of participants had tried new practices; 42% of participants indicated they will try new practices after exposure to a soil and irrigation research trial. The participants were keen learners, and after exposure to the research, 58% believed that liming improves yields and 18% prefer to evaluate this on their farms. Information sources about vegetable growing are limited, and growers had complex information needs. Facilitating and mentoring ongoing local support and technical information networks, and enhancing capacity and communication are seen as key strategies for empowering long term ability to change.

Province	Age (yrs)		Years of farming	Workers on farm	Education (%)					
					Nil		Primary		Higher Secondary	
Kampot	ot M 45 25	25	2	М	21	М	41	M	38	
	F	44			F	20	F	48	F	32
Siem	М	46	20	2	М	33	М	49	М	18
Reap	F	44			F	39	F	54	F	7
	Discuss farming outside family %		Participate in group (farmer) %	Field day attend- ance %	Has tried new practices %		Will try new soil practices		Will try new irrigation practices	
Kampot	22		45	9	13		44		54	
Siem Reap	20		35	12	26		32		40	





Input supply study findings							
Wholesaler to Local Supplier	Local Supplier to Farmer						
Consumer-related	Consumer-related						
Want latest varieties & high quality	Small scale						
seeds	Insufficient profits & late repayments						
Product Quality	Product Quality						
Poor seed quality & storage	Interest in reducing chemical use						
Relationship	Relationship						
Payment difficulties due to farmer late	Farmers obtain credit from suppliers						
payments	and are extending payments past						
Return poor quality seed	harvest						
Information	Information						
Reliant on international product	Few suppliers have technical						
suppliers for technical information	information to provide to farmers						
Language on labels often not local	Language on labels often not local						