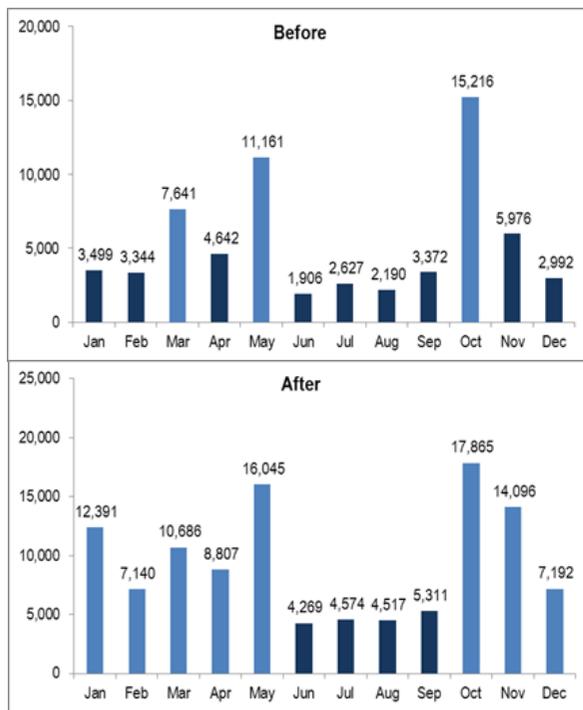




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- ◆ The economic status of adoptors improved by a reduction from 9 to 3 months in a year of living below the poverty threshold.

### Conclusion & Recommendation

- ◇ Farmers more likely to grow off-season vegetables are those whose main source of income is farming and at least 35 years old, belong to an extended family and larger HH size, have few HH members under the productive age group with no steady source of income, have many HH members engaged in farming, and live below the poverty line. Total farm size, tenure status and prior knowledge in vegetable production do not have a bearing on the likelihood of growing off-season vegetables. Hence when training potential adoptors of off-season vegetable technologies, those who possess these qualities should be prioritized to ensure that the time and money invested are spent wisely and effectively.

- ◇ Women are equally likely adoptors of off-season vegetable production as men. Women in farming households that are not earning salaried income should be tapped as potential growers of off-season vegetables. They will not only be converted into income-earning members of the households but also as providers of the vegetables required by their respective households.
- ◇ Cash income from off-season vegetables helps provide food for the household during the lean months and vital in sustaining the wet season rice and other farm enterprises. The technologies developed for these off-season crops should be further developed to make them more attractive to potential adoptors. A case in point is tomato, the most profitable among the vegetables but adopted only by a few.
- ◇ Profit from off-season vegetables is maximized if the production area is limited to 100 m<sup>2</sup>, but managing off-season vegetables up to 1000 m<sup>2</sup> area can still be profitable if the farmer has advanced technical skills. Potential adoptors should therefore be properly cautioned to limit their area for off-season vegetables to manageable size to attain maximum profit. Hence, off-season vegetable growing should be advocated not only for market-oriented purposes but likewise for household consumption to help improve the food security of subsistence households.

### Rationale

At the turn of the millennium, the potential of off-season vegetable growing in the region was given serious attention by several entities, including Phil-Rice through the Technical Cooperation Project Phase 3 (TCP3). TCP3 developed technologies of various vegetables and strategies to promote them to farmers in Ilocos Norte, Ilocos Sur, La Union and Abra. Three years after the end of the project, testimonies from partners need to be properly evaluated and documented.

### Objectives

This study aimed to :

- ◆ Identify characteristics common among off-season vegetable growers
- ◆ Measure the profits earned by farmers from off-season vegetable growing
- ◆ Determine how the income from off-season vegetable growing was spent by the farm households
- ◆ Assess the economic and social impacts of off-season vegetable growing on the entire farm household.

## Methodology

Adoptors and non-adoptors of off-season vegetable production who were trained on the technologies developed by TCP3 served as the subjects of the study. Their personal and household characteristics were compared to be able to identify those that are common among adoptors, and the impact of off-season vegetable growing on the adoptors and their households were assessed.

## Results

### Characteristics Common among Adoptors

Source of Income	Adoptors		Non-Adoptors	
	% of HH	No. of Members	% of HH	No. of Members
Farming*	91	1-4	88	1-4
Industrial trade	27	1-2	24	1-2
Blue-collared job	21	1-2	24	1-2
White-collared job	3	1	9	1-2
Agricultural trading	3	1	12	1-2
Small business	12	1	12	1-2
OFW remittances	6	1-2	6	1-2
Fishing	3	1	3	1
Farm labor	12	1	9	1
Bgy official allowance	6	1	12	1
Pension	0		6	1

\* Excluding the farmer respondent      HH - Household

- ◆ Adoptors off-season vegetable growing had more members engaged in farming and fewer members who earned salaried income. Their main source of income came from farming and they received lower remittances from their household members working abroad, and were not pension earners.

- ◆ Adoptors were at least 35 years old with farming as their main occupation, and belonged to an extended family.
- ◆ The households (HHs) of adoptors had fewer members under 20-60 years (productive age) and more pre-school age members than the non-adoptors.
- ◆ They were poorer than the non-adoptors with more HHs living below the poverty threshold of Php 16,836 per annum, and living below the poverty line for more months within a year.
- ◆ More HH members of adoptors were involved in their farms from variety selection to marketing.
- ◆ Roughly 39% of the adoptors were women, a third of were first timers after they were trained to grow off-season vegetables.

### Income from Off-season Vegetable Growing

Crop	Growers (%)	Area (m <sup>2</sup> )	Yield (kg/100 m <sup>2</sup> )	Gross Income	Cash Expense	Net Cash Income
				Php/ 100 m <sup>2</sup>		
Bitter gourd	24	107	122	3,155	550	2,604
Ridge gourd	24	275	293	5,311	590	4,720
Eggplant	18	642	65	1,306	101	749
Beans	15	72	146	1,933	25	1,908
Tomato	6	80	81	8,625	125	8,375
Squash	6	175	291	733	43	705
Wax gourd	6	150	227	4,000	250	3,750
Mixed crops*	36	265		1,397	157	1,259
<b>Average</b>		<b>341</b>		<b>2,508</b>	<b>247</b>	<b>2,262</b>

\* Bitter gourd, ridge gourd, eggplant, beans, tomato, squash, wax gourd, pepper, okra

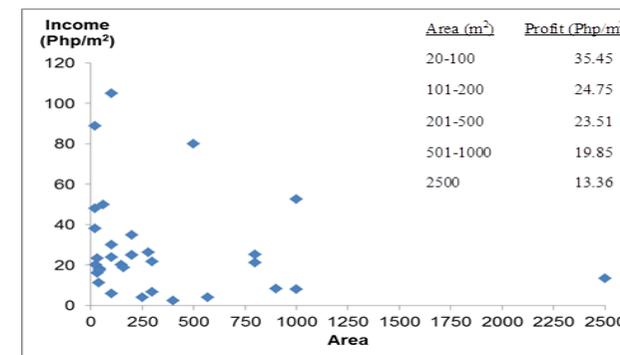
- ◆ The most popular crop grown during the off-season were bitter gourd and ridge gourd, but were the most costly to grow per unit area
- ◆ Although tomato offers the highest profit, only few raised the crop because it is very sensitive to excessive water in the field.

### Uses of Income from Off-season Vegetable Growing

Use of Income	% Responding
Food	93
Education	39
Farm inputs	22
Appliances	13
Luxury	5
Poultry/livestock investment	5
Housing	4
Savings	4
Household bills	3
Land acquisition	3
Farm equipment	3
Medicine	2

- ◆ Income from off-season vegetables was mostly spent on HH food. Other common uses were for the school needs of children and procurement of farm inputs.

### Impact of Off-season Vegetable Growing



- ◆ The income of 39% of the 109 farmers trained by PhilRice on off-season vegetables contributed an average of 5% to their total income from crop farming; considered significant as it came from merely 340 m<sup>2</sup> average area.
- ◆ Profit per unit area was highest when farmers managed not more than 100 m<sup>2</sup>.