

## THE POTENTIAL FOR ORGANIC AGRICULTURE IN LAOS

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About 83% of the population of the Lao PDR is rural and 66% depend on subsistence agriculture. Traditional production systems are based on low external inputs and many of the agriculture products are organic by default. Four different systems for organic production are common (Sipaseuth et al. 2004): 1) The upland fallow rotation (slash-and-burn) system the production is largely used for producing rice for home consumption, with job's tear, sesame and maize the most important crops exported. Although not formally certified, they are often referred to as "organically grown". 2) Wild products collected in the forest and fallow lands for home consumption, local markets and for exports. Important products include bamboo shoot, banana inflorescence, and wild cardamom (*Amomum* sp); 3) Fruits, mostly produced without any external inputs, and 4) Market driven organic production. The systems 1-3 are largely "organic by default" but products are usually not certified as "organic".

Laos has a range of conditions which favor organic production for in-country consumption and export including: 1) the low external input systems presently used allows for easy conversion to an organic system, 2) Lao products have a reputation for having low levels of pesticide residues, 3) Hill environments offer opportunities for "out of season" fruit and vegetable production. Products with high potential include: forest products, rice, vegetables, coffee and fruits.

In 2004/05 surveys were carried out in Vientiane (population of about 650'000) with the objective to document consumer and traders: 1) perception of the concept of "organic agriculture", 2) previous experience with organic products and 3) interest in trading with or purchasing organic products. The survey used separate questionnaires for consumers (126 respondents), traders (25 respondents) and restaurants (14 respondents).

### Awareness for organic products

A surprisingly high proportion of Lao consumers and traders are aware of the concept of organic agriculture (Table 1). This is partly due to the influence of the high publicity given in the Thai television and press. Many respondents claim that they have purchased organic products or that they know traders or producers selling organic products. This refers to fresh products produced by small farmers without the input of chemicals or for products collected in the forest. But none of those items are presently certified as "organic."

Table 1. Awareness for the concept of organic agriculture in Vientiane

Question asked	Consumer	Restaurant	Trader
Did you hear about organic products	79.5	78.6	88
Did you buy <sup>1</sup> /sell <sup>2</sup> organic products	68.2	57	85.7
Knows trader <sup>1</sup> /producer <sup>2</sup> selling organic product	13.7	28.6	15
Knows product label	4.0	7.1	0

<sup>1</sup>Consumer/Restaurant; <sup>2</sup>Trader

The perception by consumers for the concept of "organic agriculture" (Table 2) reflects this situation. The largest proportion (40%) equated "organic agriculture" to "natural agriculture" a term which probably describes the traditional farming systems with no external inputs, especially the upland fallow rotation system, the collection of wild products or the production of traditional fruits.

### Interest in buying organic products

Most respondents would like to buy organic products if available (Table 3), but the products should not be too costly. Most respondents are not ready to pay more than 20% above the price for conventional products. There is a clear trend, showing that respondents with higher levels of education would be

ready to pay higher prices (Figure 1). We can expect that the level of education would have a strong relationship with the family income.

The main reasons cited for buying organic products were health related. Safety the second most frequently mentioned reason also relates to health.

Table 2. Consumer and trader's understanding of the organic concept

Response to question what is organic agriculture	Proportion of respondents (%)		
	Consumer	Restaurant	Trader
Natural agriculture	39.8	14.3	42.9
Chemical free	18.3	28.6	33.3
Uses manure as fertilizer source	26.9	14.3	19
Look not nice and small	0	14.3	0
Don't know	14.0	14.3	4.8

Table 3. Interest in buying or trading with organic products

Question asked	Consumer	Restaurant	Trader
Would buy <sup>1</sup> /sell <sup>2</sup> organic products	94.3	92.9	92
<i>Proportion willing to pay</i>			
10% more	55.3	61.5	- <sup>3</sup>
20% more	30.9	38.5	-
>20% more	10	0	-
<i>Why would you like to buy<sup>1</sup>/sell<sup>2</sup> organic products?</i>			
Health reason	60	33.3	70.8
Safety	38	11.1	20.8
Health and safety	0	33.3	0

<sup>1</sup>Consumer/Restaurant; <sup>2</sup>Trader; <sup>3</sup>Question was not included

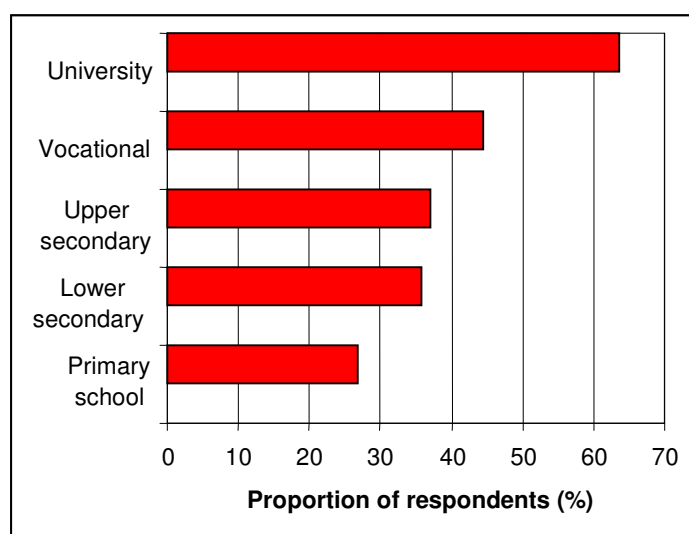


Figure 1: The relationship between education level and the readiness to pay more than 20% extra for organic products

### Vegetable type

The consumer main preference is for leafy type vegetables such as herbs and spices, Chinese cabbage and morning glory (Table 4). These are the typical vegetables required for the traditional Lao food. The same vegetables are also important for restaurants but because of the importance of Western and Chinese recipes it is tomato and potato that are the most important vegetables required.

Table 4: Type of vegetables required by consumers

Type of vegetable	Proportion of respondents (%)	
	Consumer	Restaurant
Herb& spices	79	75
Chinese cabbage	73	79
Morning glory	44	86
Cabbage	38	71
Lettuce	37	100
Chinese choice	36	71
Chinese kale	21	100
Cauliflower	8	79
Chinese mustard	8	57
Ivy guard	7	50
Spinach	2	50
Potato	0	100
Tomato	0	100
Cucumber	0	93
Asparagus	0	64
Broccoli	0	64

### Where to buy

There is a strong preference by the restaurants to purchase vegetable directly from the producers (Table 5). In a system where clients can buy directly from producers with whom they have built up a relationship of mutual trust certification may not be required.

Table 5. Preference source for purchasing organic vegetables by restaurants

Where would you like to buy?	Respondents (%) <sup>1</sup>
From a shop specializing in organic products	10
Directly from producer	50
From a shop maintained by PAFO	20

<sup>1</sup>Percentages do not add to 100% because some respondents did not answer the question

### Discussion

The results confirm that there is a growing market in Vientiane for organically-grown products. As in other parts of the world, the most likely clients for organic products are the better educated, more affluent urban consumers, particularly those concerned about good health issues and food 'safety', who are willing and able to pay the higher prices charged for organic produce.

Although most respondents are familiar with the concept of organic agriculture they are not aware of the concept of certification and the legal implications of the organic label.

The respondents often asked the question: "why organic vegetables would be more expensive than conventional vegetables?" This is partly the result of the often used rhetoric that organic agriculture is specially suited for poor farmers with limited resources as it requires less investment.

There is a strong commitment by the government and especially the Ministry of Agriculture and Forestry, to support organic agriculture. Activities have been initiated recently to develop standards and legislation for organic agriculture and to introduce a local certification system. Activities and programs which contribute towards a change from conventional systems to organic systems include: discontinuation of subsidies for plant protection chemicals since 1993, promotion of IPM, setting up of bio-fertilizer factories, promotion of bio-pesticides, introduction of pesticide free zones, and NGO programs focusing on organic agriculture.

#### References

Sipaseuth K. and W. Roder, 2004. Organic agriculture production and marketing in Lao PDR. Paper presented, Seminar on organic farming for sustainable agriculture in Taichung, Taiwan ROC, FAO.