

# UNDERSTANDING THE POTENTIAL OF MUNG BEAN VALUE-CHAINS IN THE LAO PDR

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# Introduction

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- The mung bean study was organized in Vientiane capital, Vientiane province, Xayabouly and Xiengkhuang province
  - ***Main objective:*** To understand main sources of supply of mung bean in Vientiane capital and identified the main actors involved in mung bean value chain.
  - ***Main focused in each province:***
    - Vientiane capital: demand, supply and consumption of mung bean
    - Vientiane province, Xayabouly and Xiengkhuang: understand production situation, and trade of mung bean

# Review of Literature

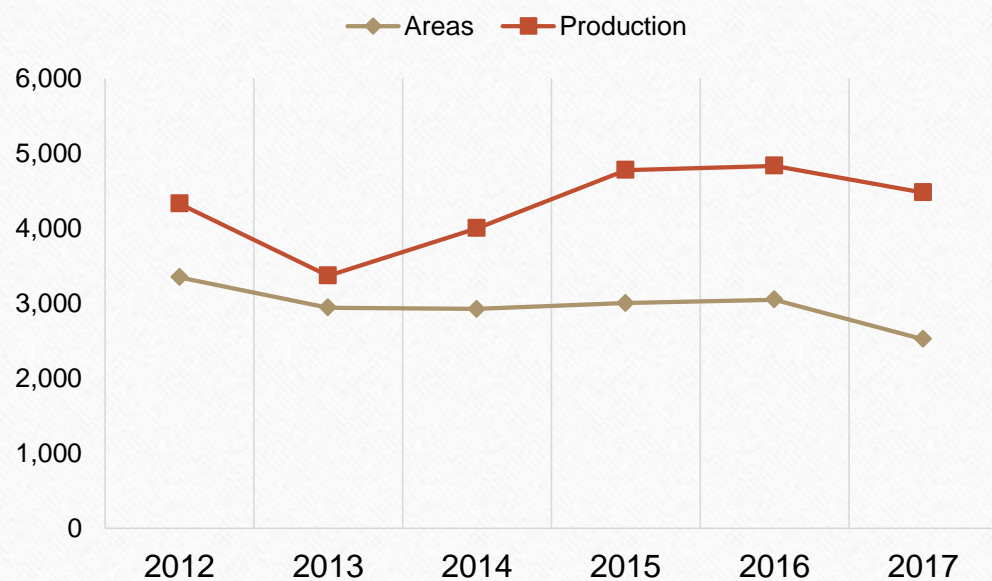
## Main Mung bean Production Areas in Asia

Name of country	Production Area (ha) before intervention* (year)	Production Area (ha) after intervention* (year)
Bangladesh	15,000(1985)	70,000 (2006)
China	547,000(1984)	776,000(2000)
India	284,500(1980)	550,000(2008)
<b>Myanmar</b>	<b>43,000 (1980/81)</b>	<b>1,000,000 (1998/99)</b>
Pakistan	100,000(1985)	200,000(1995)
Sri Lanka	14,000(1980)	33,200(1995)
Thailand	308,000(1984)	335,000(1995)

Source: reconstruct from the “Counting on beans: mung bean improvement in Asia” (2010)



# Mung bean production in Laos



Province	Area (ha)			Productivity (T/ha)			Production (T)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
<b>North</b>	810	975	675	1.41	1.77	2.00	1,145	1,725	1,350
Phongsaly	235	230	70	1.81	2.04	3.07	425	470	215
Luangnamtha	40	40	35	1.88	2.13	2.14	75	85	75
Oudomxay	-	-	-	-	-	-	-	-	-
Borkeo	-	-	-	-	-	-	-	-	-
Luang Prabang	355	395	260	1.21	1.70	2.15	430	670	560
Huaphan	-	-	-	-	-	-	-	-	-
Xayabouly	180	310	310	1.19	1.61	1.61	215	500	500
<b>Central</b>	<b>855</b>	<b>755</b>	<b>1,090</b>	<b>1.76</b>	<b>1.33</b>	<b>2.02</b>	<b>1,505</b>	<b>1,005</b>	<b>2,200</b>
Vientiane Capital	425	260	275	2.45	1.25	2.04	1,040	325	560
Xiengkhuang	30	105	45	1.17	2.14	1.11	35	225	50
Vientiane Province	355	355	360	1.01	1.01	2.00	360	360	720
Bolikhamxay	35	25	50	1.43	3.00	3.00	50	75	150
Khamouane	-	-	360	-	-	2.00	-	-	720
Savannakhet	-	-	-	-	-	-	-	-	-
Xaysomboun	10	10	-	2.00	2.00	-	20	20	-
<b>South</b>	<b>1,335</b>	<b>1,315</b>	<b>755</b>	<b>1.59</b>	<b>1.60</b>	<b>1.23</b>	<b>2,125</b>	<b>2,100</b>	<b>925</b>
Salavan	-	-	-	-	-	-	-	-	-
Xekong	25	5	5	1.20	2.00	1.00	30	10	5
Champasack	1,295	1,295	725	1.60	1.60	1.20	2,070	2,070	870
Attapue	15	15	25	1.67	1.33	2.00	25	20	50
<b>Total</b>	<b>3,000</b>	<b>3,045</b>	<b>2,520</b>	<b>1.59</b>	<b>1.59</b>	<b>1.78</b>	<b>4,775</b>	<b>4,830</b>	<b>4,475</b>

Source: Agricultural Statistics Yearbook 2017, Department of Planning and Finance, Ministry of Agriculture and Forestry.

# Methodology

The “**Snow ball**” method is adopted for this mung bean study

- Sample size: 129 samples are interview in villages, markets and local authorities
- Actors: Producer, collector, processor, retailers of dried bean and bean sprout
- Topics:
  - Producer: production system, mung bean trade, main problem, price, costs
  - Collector: volume of trade, price, quality issues, buyer
  - Processor: mung bean suppliers, processing capacity, price, issues
  - Wholesaler/retailers: suppliers, buyers, volume trade, price, quality issues

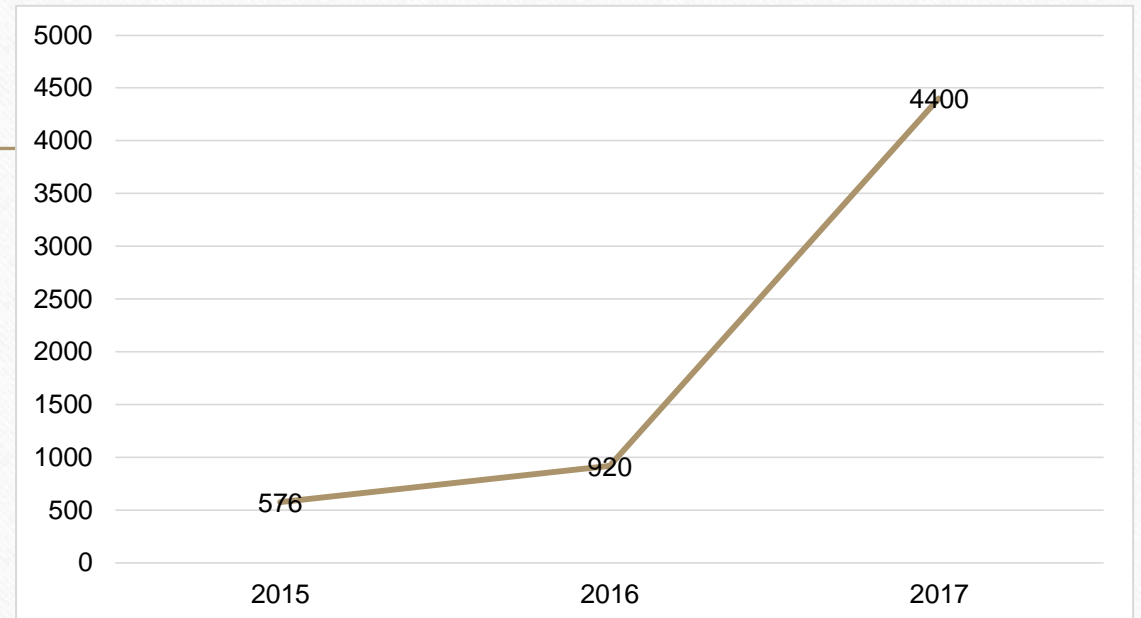


# Findings

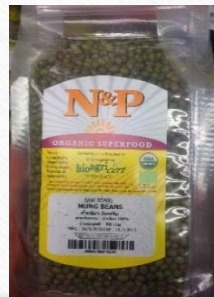
## Vientiane Capital Market Survey

- Main sources of mung bean in VC markets:
  - *Domestics: Santhong, Xayabouly, Champasack*
  - *Import: Vietnam and Thailand*
- What is mung bean using for?
  - *Dried bean*
  - *Bean sprout*

## Importation of Mung bean from Vietnam

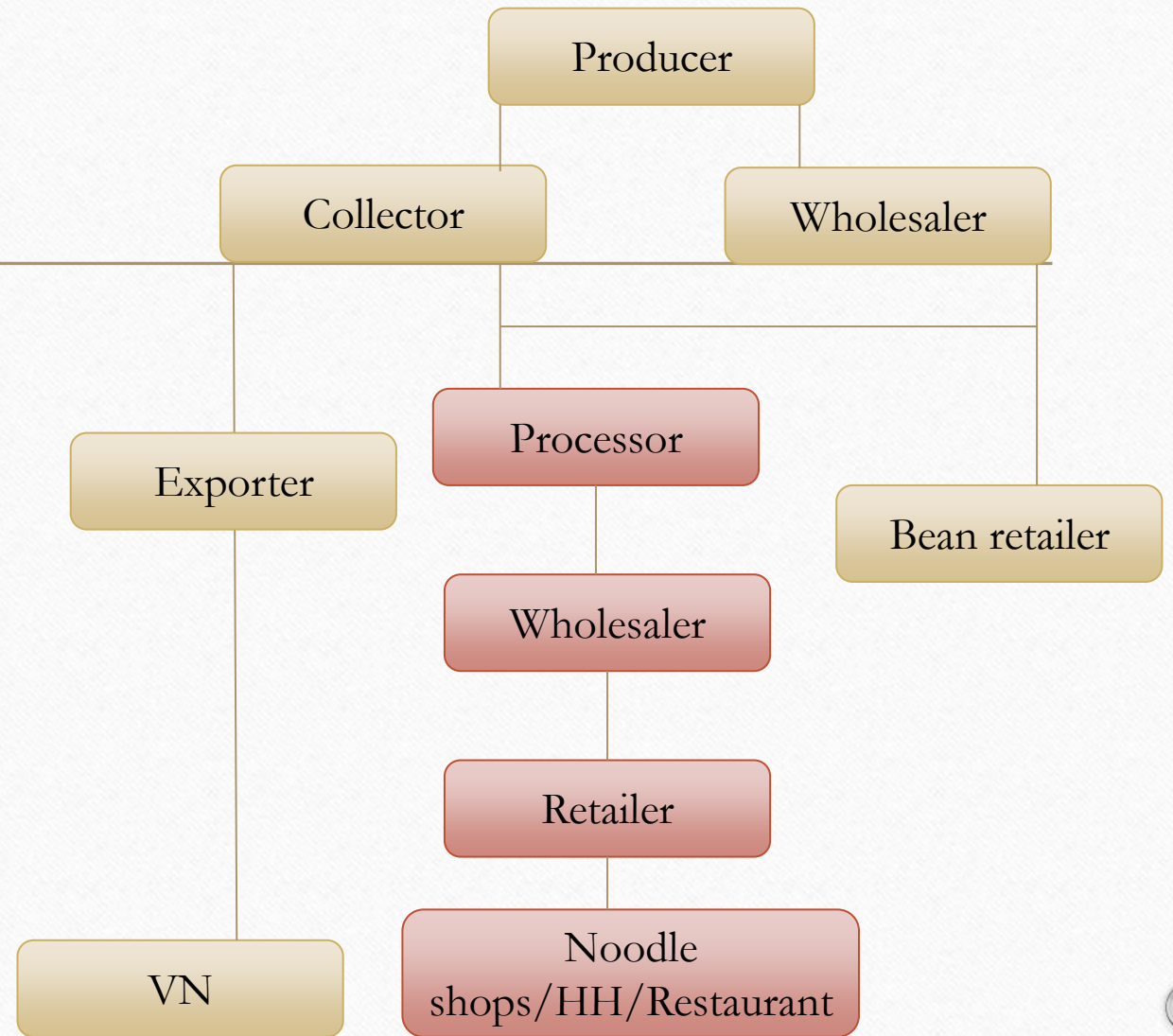


Source: Crop Statistics Year Book 2015, 2016 and 2017, Planting and Cooperation Division, Department of Agriculture, MAF



# Findings

- Producer:
  - Rice, maize, melon, cassava, mung bean
  - Free trade marketing system
- Collector:
  - Maize, peanut, French bean, melon
- Processor
- Wholesaler: bean sprout
- Retailers: dried and bean sprout





# Findings

- Main issue of mung bean:
  - Mung bean quality: black seed and broken seed
- Main issue of sprout:
  - Short shelf life
  - Size
  - Roots of sprout
- Main reasons for low quality of mung bean
  - Early harvest
  - Problem of threshing process



# Discussions

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- *Quality control* at the production stage is very critical to improve mung bean quality
- *Post-harvest management* could be further improve to reduce broken bean seed, save time and labor



**Thank You for Your Attention**

