

# **Country Presentation Paper**

(Lao PDR)

**The 10th Session of the Technical Committee of CSAM  
&  
Regional Workshop on Establishing a Regional Database of  
Agricultural Mechanization in Asia and the Pacific**

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Siem Reap, Cambodia

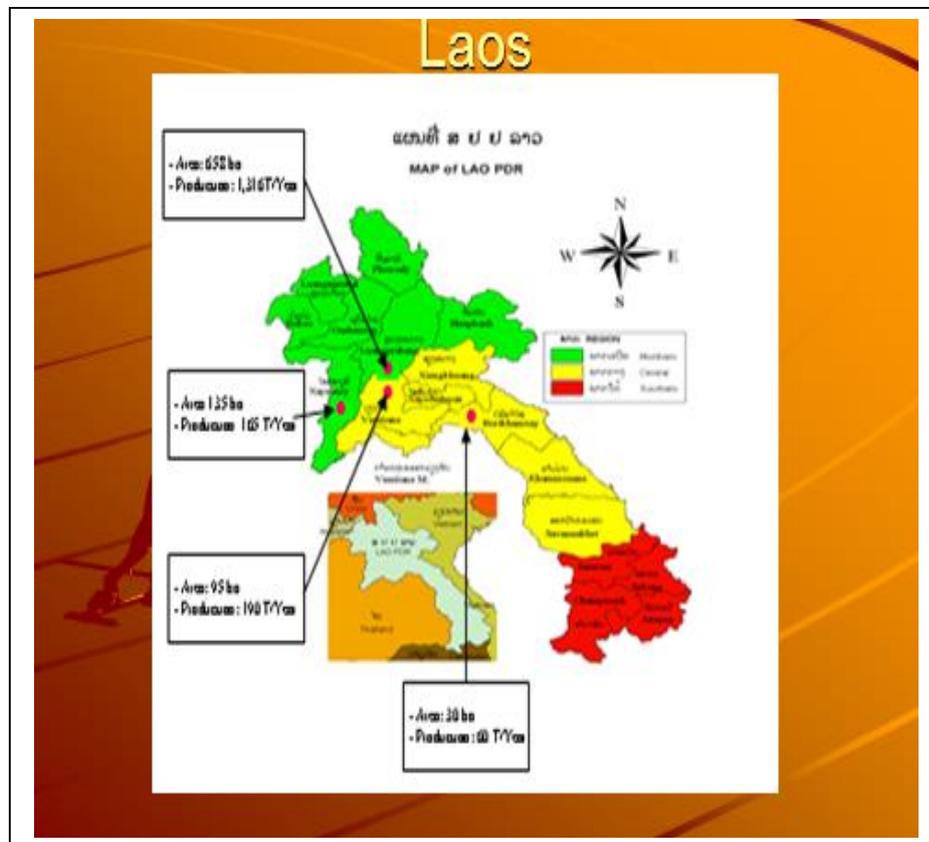
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## Agricultural Reform in Lao PDR

(From hand to machines)

General information:

- ▣ LAOS is a country of 236.800 Km<sup>2</sup> areas
- ▣ Divided in to 3 parts:
  - Northern part : (80%mountains)
  - Middle part: (20%mount.)
  - Southern part: (30%mount.)
- 1/3 of Total Areas are mountainous



- ▣ The population of the Lao is : 6.3 million .
- ▣ Agricultural population : 4.058.000 peoples
- ▣ 50,6 % of population are female and 49,4 % are male.
  
- ▣ Due to Climate change ( year by year drought & flood).
- ▣ Country is also confronting the pressure of population growth .
- ▣ Production areas are decreased.

- ▣ Lack of Labors & Technologies.
- ▣ Post harvest losses : more than 30% .
- ▣ Harvesting time usually falls in rainy seasons.

**To solved these problems Lao government uses their policies using theories :**

**1+4 system :**

1 means = labor (belonging to farmers)

4 means = Investors contribute inputs, land , Technical advice & access to markets.

( Public or Private sector)

- ▣ Selection of Crops Production Zones .
- ▣ Paddies fields reform .
- ▣ By using Agricultural Mechanization.

**6 priorities of crops are :**

- |  |   |                                       |
|--|---|---------------------------------------|
| <ul style="list-style-type: none"> <li>▣ Rice</li> <li>▣ Cassava</li> <li>▣ Maize</li> <li>▣ Rubber Tree</li> <li>▣ Coffee</li> <li>▣ Sugar canes</li> </ul> | } | <p>for commercial<br/>commodities</p> |
|--|---|---------------------------------------|

- ▣ Rice is the staple food crop and occupies 73% of the total harvested areas.
- ▣ 85% of rice is glutinous rice.
- ▣ The production is still based on family subsistence style.
- ▣ 3 rice growing :
  - Rainfed lowland 75%
  - Dry season irrigation rice 10%
  - Upland rice 15%

## I. Overview of the statistics system for agricultural mechanization in Lao PDR

### a) Responsible agency

In 1980 Agricultural mechanization Section was established under Ministry of Agriculture and Forestry.

Until 1989 this Section was discontinued due to lack of usage agricultural mechanization at that time, lack of government funding and lack of communication between central and local employees.

In 2014 Division For Promoting Technique and Machinery was established by Department of Agriculture Extension and Cooperative (DAEC).

Since then, we started to collect data of agricultural mechanization in nationwide. However, we could collect only some data in early 2014.

### b) Channels, ways and frequency collect, report and disseminate the agricultural mechanization statistics

Due to lack of government funding we have a small budget from Department and make a team.

We divided into three teams to travel to 3 parts of Laos. With the cooperation of Provincial of Agriculture and Forestry Office (PAFO) and District of Agriculture and Forestry Office (DAFO) in every provinces to collect these data every once a year.

### C) Quantity and quality of Agricultural mechanization statistics:

No	Description	Lowland %	Upland %
1.	Land preparation: ( 4 Wheel Tractor & Hand Tractor)	95	80
2	Transplanting by machines By drum seeder	(Rice) 2 (Rice)30	(Maize)40
3	Sprayers	90	70
4	Harvest: 1.Combine Harvesters 2.By hands	10 90	2 98
5	Threshers	100	70
6	Drying system: 1. By sun 2.Dryers	80 20	90 10
7	Separators	50	15
8	Rice Mills	100	80
9	Cold storage	3	1

Agricultural mechanization collected in 2014 in the whole country :

No	Provinces	Rice Mill			Threshers			Tractors			Trans p. Machi ne	Corn Threshers			Combine Harvest	Corn Seeder	Sprayers	Drum seeder
		Big	Med.	Small	B	M	S	B	M	S		B	M	S				
1	Xayaburi		172	1617		11	396	1220	592	19913			1	63		108	226	4
2	Luangprabang	2	571	1856		45	421	1510	454	16543		1	6	72		166	120	4
3	Oudomxay	4	145	1240	1	60	860	450	644	23143		4	18	105		248		4
4	Phongsaly	1	130	860		54	642	356	841	12009			8	51		30	425	3
5	Luangnamtha	2	24	345	5		123	9	34	1654		7	34	1840		169		4
6	Bokeo	2	240	180		125	235	289	654	2153			23	26		1537	194	3
7	Huaphanh									3								4
8	Xiengkhouang		16	15		36	103	6	542	2413			54	64		10	1024	4
9	Xaysomboon																	3
10	Vientiane		1050			1500			1700	20250	10		100	350	20	550	1050	108
11	Vientiane Cap.		529			541		341		15109	18				24		1650	160
12	Bolikhambxay	40	253	867							5				3		500	54
13	Khammuan	1155			133	29		13		2051	8				10		750	20
14	Savanakhet	25	1276	793				200		55077	3				15		653	80
15	Salavan	24	350	1023	16	1204	150	18		2905							98	24
16	Champasak	15	405	2104		18238		605		3954	10						45	154
17	Sekong	16	3		15		98	3	1	1024							34	13
18	Attapeu	28	19	1040	22	15		5		2206							150	24
Total		1314	5183	11940	192	21858	3028	5025	5462	180407	64	12	244	2571	107	2818	3869	3869

- c) Does agricultural census cover component of agricultural mechanization?

In the past, we used less than 30% of agricultural mechanization in our country. In near future, our government has the policy to increase the usage of agricultural mechanization in the whole country to improve the quality and quantity of products.

## **II. Gaps and Needs**

- a) What are the challenges and constraints for the statistics collection and management?

First, The statistic collection and management before our division established was no any, due to then collecting data was not under any division duty.

Second, when government, projects, private sectors, provinces or even farmers bought agricultural machineries they did not register with database center.

Third, no any agency response for this statistics.

- b) What are the minimum data and statistics requirements of agricultural mechanization in your country?

We have some data for only 2014 in 17 provinces throughout the country

## **III. Solutions and Suggestions (Both State and Regional Perspective)**

- a) How to improve the current statistics collection and management?

We have established database center under MAF, make a collection form and distribute to collect data from villagers, district, provinces, as well as from private sectors and farmers, etc. about agricultural mechanization.

- b) Needs and feasibility of establishing a regional database of agricultural mechanization in Asia and the Pacific

We need more communication and trust among Asia and Pacific members.

As of Laos, we need more training or a project to help us collect data in our country

- c) How you could contribute to the proposed regional database of agricultural mechanization?

We will regularly to collect data of agricultural mechanization and try to increase the usage of agricultural mechanization in Laos; especially, to farmers and others who interested in agriculture production. A long with doing that, We will do our best as database collection center in our country to provide our data to regional database of agricultural mechanization.

**THANK YOU !**