

Country Presentation Paper (MALAYSIA)

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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**MOHD TAUFIK AHMAD
HARZEMI HAMID**



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Ministry of Agriculture & Agro-based Industry, Malaysia



Map of Malaysia





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Overview of the Agricultural Sector in Malaysia



Rice



Rubber



Palm Oil



Fishery



Livestock



Vegetable



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Scenario of the National Agricultural Sector

Total land area - 33 million ha.

Agricultural area - 7.9 million ha (24% of total area)

Industrial crops - oil palm, rubber, cocoa, tobacco and pepper – cover about 77% of total agricultural land

Other crops - paddy, fruits, vegetables & coconut – cover 16% of total agricultural land

Contribution to GDP

- Manufacturing sector accounts for 28%
- Service sector contributes 57%
- Agricultural sector at 7%



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"Pertanian satu Perniagaan"



MINISTRY OF AGRICULTURE & AGRO-BASED INDUSTRY

MINISTRY OF PRIMARY INDUSTRY & COMMODITIES

1

Food Subsector

- Crop
- Livestock
- Fisheries

Agriculture Sector in MALAYSIA

2

Industrial Commodities

- Palm Oil
- Rubber
- Cocoa
- Wood & Timber
- Pepper



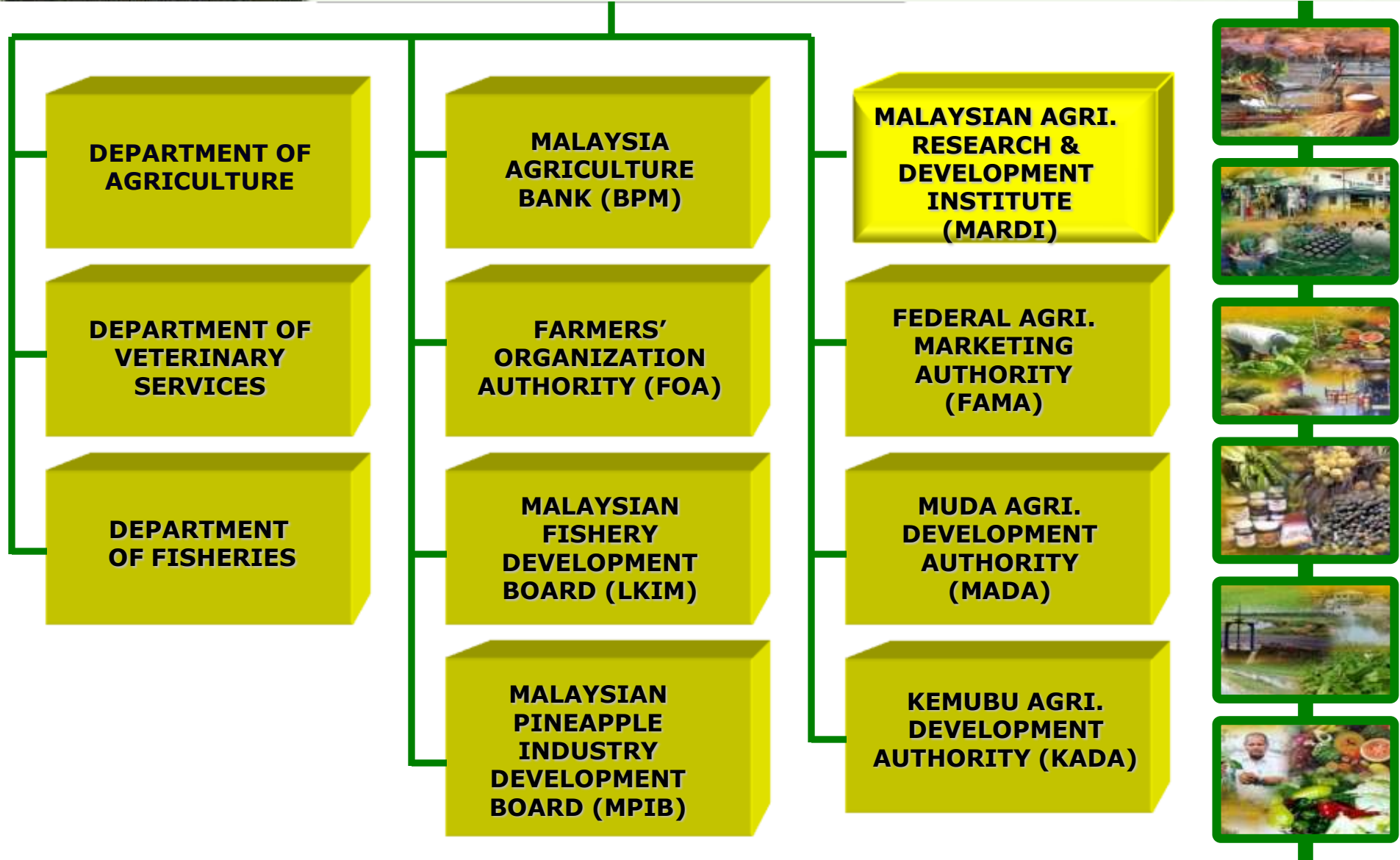
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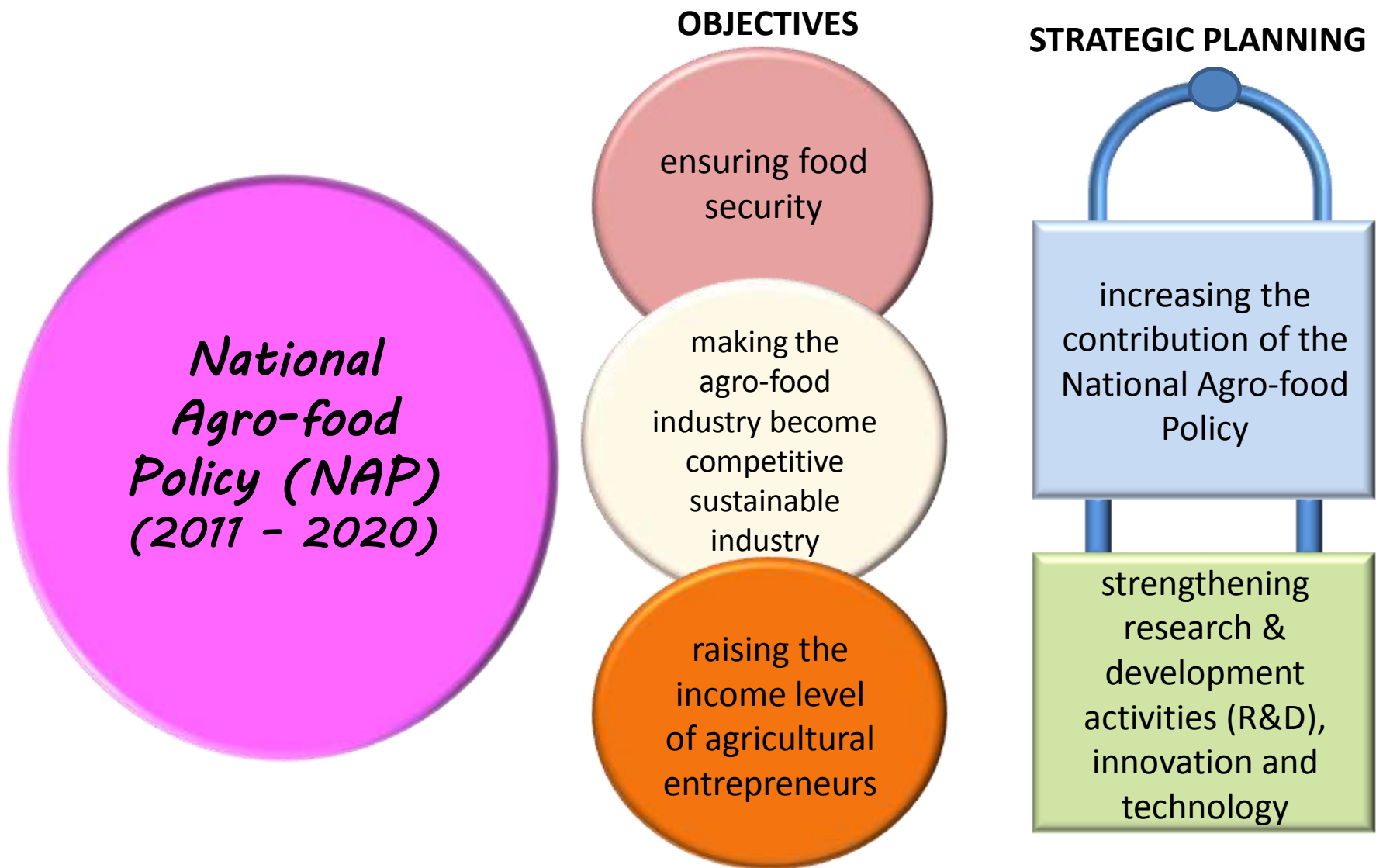


**"Pertanian
satu
Perniagaan"**





Status Of Institutional Support





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NATIONAL FARM MECHANIZATION AND AUTOMATION PLAN

To determine the direction and setting the targets for the adoption of mechanization and automation technology in agriculture

OBJECTIVES

Highly Mechanized Agriculture

Professionally and Skillfully Managed

Economics of Scale

➤ Agriculture is business
➤ Service providers also play their roles

➤ Farmers will be trained
➤ Structured training program

➤ Larger scale to ensure profitability



Overview of the Agricultural Mechanization Statistics System

- Responsible agency-Ministry Of Agriculture
- Data collection with support from related ministries and agencies on annual basis
- Report and disseminate the agricultural mechanization statistics through yearly report
- Data obtained from agencies and Department of Statistics
- The agricultural census cover component of agricultural mechanization



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Status Of Agricultural Machinery From Government Agencies

MACHINERY

NO	TYPE OF MACHINERY	QTY (Units)
1	Tractor (4- wheels)	1,183
2	Tractor (2- wheels) – Power Tiller	131
3	High Clearance Tractor	85
4	Combine Harvester	274
5	Paddy Transplanter	260
6	Knapsack Power Sprayer	110

IMPLEMENT

NO	TYPE OF IMPLEMENTS	QTY (Units)
1	Disc Plough	22
2	Rotovator	78
3	Box Leveller	4
4	Mechanical Transplanter	2
5	Straw Cutter	20
6	Straw Baler	12
7	Rotoslasher	27

WATER PUMP

NO	TYPE OF WATER PUMP	QTY (Units)
1	Diesel	879
2	Electric	1092



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Status Of Agricultural Machinery Imports

Pedestrian Tractors (Quantity in Units and Value in RM million)

Country	2008		2009		2010		2011		2012		2013*	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
China	511	3.8	2,738	17.0	2,024	18.4	2,370	24.1	1,236	23.2	249	4.2
Japan	1,614	16.1	1,756	16.1	983	7.0	827	6.0	766	6.8	541	3.8
United States	70	2.3	47	1.5	93	2.7	57	1.5	57	1.9	7	2.0
United Kingdom	173	1.6	39	1.0	145	1.6	81	2.2	56	1.6	8	0.2
India	3	0.2	41	1.7	109	5.3	15	0.7	53	1.5	26	2.6
Korea, South	48	0.8	29	0.8	89	2.2	123	4.1	21	0.8	24	0.9
Thailand			164	1.5	127	1.1	29	0.4	35	0.7	41	0.6
Italy	48	1.0	59	3.2	10	0.1	25	0.7	27	0.4	7	0.2
Ireland	9	0.2	52	1.3	75	1.6	25	0.6	6	0.2	4	0.1
Brazil			55	2.9	256	23.5	150	14.1	1	0.1		
Denmark			12	0.3	5	0.1	6	0.2	5	0.1	8	0.3
Others	348	2.0	101	0.9	159	2.0	221	4.2	105	4.8	24	0.6
Total Imports	2,834	28.0	5,093	48.2	4,075	65.6	3,929	58.8	2,368	42.0	939	15.5

Source: Malaysia Agribusiness Directory 2013-2014

*2013: January - June



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Status Of Agricultural Machinery Imports



Tractors (Quantity in Units and Value in RM million)

Country	2008		2009		2010		2011		2012		2013*	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Japan	2,716	108.1	2,444	72.0	2,343	61.4	1,829	56.8	2,805	71.8	931	26.4
Brazil	538	45.2	276	25.4	171	13.9	174	14.5	489	53.3	197	36.9
China	2,669	50.2	1,232	21.0	2,014	40.7	934	29.6	1,062	35.9	411	14.2
Italy	347	24.4	294	22.3	344	20.6	406	27.0	578	34.5	164	9.1
Korea, South	80	2.7	119	4.8	289	9.2	209	8.1	462	13.9	97	4.2
Turkey	204	15.3	197	12.8	382	22.1	73	5.0	220	13.6	129	8.9
India	59	3.0	147	7.7	102	1.4	112	5.6	208	11.7	41	2.1
Mexico	117	7.6	66	5.2	61	4.5	162	11.1	97	7.0	48	5.4
United Kingdom	50	3.0	45	1.3	132	7.2	94	5.0	138	3.8	65	1.4
United States	19	1.1	10	1.4	21	1.1	33	1.2	18	0.7	74	0.5
Others	72	1.4	255	3.4	262	10.0	173	5.0	139	9.1	83	6.0
Total Imports	6,871	262.0	5,085	177.3	6,121	192.1	4,199	168.9	6,216	255.3	2,240	115.1

Source: Malaysia Agribusiness Directory 2013-2014
 *2013: January - June



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Status Of Agricultural Machinery Imports

Seeders, Planters, Harrows, Plow (Quantity in Units and Value in RM million)

Description	2008		2009		2010		2011		2012		2013*	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Seeders and planters	178	6.1	242	4.6	315	7.8	108	1.8	2,826	1.3	35	0.5
Harrows (disc & non-disc)	6,279	5.2	1,849	6.8	1,270	8.5	2,587	7.3	2,577	4.2	1,207	1.8
Fertilizer distributors	187	2.4	1,045	5.5	181	2.5	439	1.5	378	1.2	35	0.5
Plow, soil preparation/cultivators	775	2.0	1,289	2.8	1,463	2.3	1,970	2.8	1,612	3.1	1,221	1.4
Other soil prep/cultivation machines	n.a.	16.2	n.a.	35.5	n.a.	17.6	7,816	17.6	42,569	41.3	3,118	7.7
Parts and spares		12.8		22.3		40.0		25.4		16.6		14.5
Total Imports		44.7		77.5		78.7		56.4		67.7		26.4

Harvesting and Cleaning Machinery (Quantity in Units and Value in RM million)

Description	2008		2009		2010		2011		2012		2013*	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Cleaning machines for agri products	20	0.4	98	15.0	116	8.6	44	12.5	2,784	6.6	41	0.8
Combine harvesters	67	1.6	177	8.9	217	8.4	148	5.2	123	4.6	32	1.8
Mowers	4,752	5.1	3,691	4.0	5,874	5.2	14,922	7.6	10,299	6.7	5,769	4.7
Threshing machines (not combines)	3	0.1	126	0.8	220	0.8	30	2.1	1,402	0.1	102	0.6
Straw/fodder balers	39	0.3	28	0.1	20	0.5	29	1.0	n.a.	1.1	n.a.	0.4
Other harvesting/cleaning machines	79	0.1	76	1.0	37	2.0	18	0.5	n.a.	0.7	22	0.2
Parts for harvesting/cleaning machines (Kg)		5.9		8.0		5.6		7.5		6.5		3.8
Total Imports		13.5		37.8		31.1		36.4		26.3		12.3



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Gaps	Solution
No database integration between agencies	-To establish a central database at the ministry level -All agencies' database must be linked to the central database
The existing data is not comprehensive	To carry out national survey on agricultural mechanisation in 2015
Budget constraint	To propose dedicated fund for data collection
Agencies work in silos	Establish a steering committee at the ministry level to coordinate data collection
Lack of manpower to manage data collection in MOA	Utilize existing manpower at agencies and Dept of Statistics
Difficulty to obtain data from other ministries	Knowledge sharing between ministries



Data And Statistics Requirements

- Machinery
- Farm Infrastructure
- Skill
- Financing
- Maintenance Centers



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Suggestions

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

- Develop and sharing regional knowledge bank
- Regional database to link with each country's database
- Appoint focal point for each country
- Technology promotion between member countries
- Establish regional policy on technology Intellectual Property (IP)
- Regional database is accessible to the public

How we could contribute to the proposed regional database of agricultural mechanization

- Provide country's data
- Provide technical guidance/sharing and feedback



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Thank you