#### Sugarcane Production in Myanmar

Year	Sown Area	Yield	Production	Sugar Export
	(000' Ha)	(mt/ha)	(000' MT)	(000' MT)
1998-1999 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011	126 163 148 151 146 134 149 169 165 160	44.22 45.04 45.17 47.13 52.36 55.72 56.57 59.27 61.20 61.61 62.64	5,430 7,116 6,429 6,913 7,310 7,187 8,168 9,833 9,901 9,715 9,398	18 49 31 19 18 1 - - 9 58
2011-2012	154	63.22	9,690	-
2012-2013	154	62.26	9,564	
2012-2013	169	61.83	10,473	-

• Improved varieties of sugarcane including 8 kinds of HYVs were distributed to 13,434 hectares in States and Regions in 2012-2013 by MOAI. The cultivated area of sugarcane were about 274,770 hectare in 2011-2012 and it was increased to 154,087



- hectare in 2012-2013 because of the purchasing price of sugarcane was increased to 30,000 kyats per ton and agricultural seasonal loan for sugarcane was increased to 100,000 kyats per acre by Myanma Agricultural Development Bank.
- Training for each single node nursery and cultivation which can produce 80 tons per acre was conducted aiming for producing raw material of sugar industry and improving the quality of sugarcane crop and income of farmers.
- ⊙ Total sugarcane area increased to 169,972 hectares in 2013-2014 which is 0.9 mil mectric tons more than 2012-2013. It was due to the increase interest of sugarcane farmers according to the financial support and higer purchasing price. Therefore, demand of cultivation and income of farmers increased in double.
- It will achieve the advantages such as increasing income of farmer, the availability of raw materials and improving the agriculture sector of the state.

#### RUBBER

- Rubber was introduced in Myanmar around 1876 and commercial planting was started in 1905 and in 1909. The sharp increase of rubber area in the 1960s was due to the result of implementing a Rubber Project under Agriculture and Rural Development Corporation(ARDC) started in 1956. Under the Socialist Government in 1962, many rubber estates owned by both local citizens and foreigners were nationalized during 1964 to 1973. Thereafter, the rubber area declined between 1970 and 1980.
- The political change in 1988 also brought about the changes in the country's economic policy, with the adoption of a marketoriented economic policy. Under this policy, many agricultural crops including rubber can be freely planted, produced and marketed.
- The varieties of rubber grown in Tanintharyi Region, Mon and Kayin State of Myanmar are BPM-24, RRIC-100, RRIM-717, PB-260 and PB-235. In Bago, Yangon and Ayeyarwaddy Regions, PB-260, RRIM-717, PB-235, RRIM-623 and GT-1 are suitable and

in Kachin State and Shan States, RRIM-600, GT-1, PR-255, PR-107 and RRIM-623 are prominent varieties.

#### Rubber Production in Myanmar

	Number 1 loadouter i		
Year	Sown Area	Yield	Production
	(000' Ha)	(mt/ha)	(000' MT)
1998-1999	149	0.48	23
2001-2002	186	0.59	37
2002-2003	185	0.59	40
2003-2004	189	0.55	40
2004-2005	203	0.57	52
2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010	226 295 380 428 463	0.59 0.60 0.64 0.65 0.67	64 73 89 93 112
2010-2011	504	0.69	128
2011-2012	543	0.75	150
2012-2013	581	0.77	164
2013-2014	610	0.76	177

#### OIL PALM

- Oil palm was introduced in Myanmar since 1921 at the Central Farms under Agriculture Department, in Mudon, Hmawbi, Myaungmya and Sittwe.
- A systematic plantation of oil palm was started in 1926 on 115 hectares of plantation farm at Egani Village, Yebyu Township,



#### Tanintharyi Region.

- ⊙ Extension service for oil palm was implemented by Agricultural Corporation at Pagawzun (Dawei) and Ingabo(Kyaikhto) estates in 1972-1973, at Thandwe in 1978, at Launglon (Dawei) estate and Nyaung-bin-kwin(Tanintharyi Region) estate in 1979 and at Myitkyina estate in 1980. The Prison Department also planted oil palm at kawthaung estate in 1982.
- In 1999, 0.2 million hectares of oil palm plantation were established in Tanintharyi Region to meet the demand of palm oil in Myanmar. In 2013-2014, the total area of 0.22 million hectares of virgin lands were alloted to 41 private firms and 0.07 million hectacres have been planted so far.
- Due to the climatic and soil conditions of Myanmar, oil palm can be planted commercially. Moreover, required land potential is available for the expansion of oil palm plantation.

#### Oil Palm Production in Myanmar

Year	Sown Area	Yield	Production
	(000' Ha)	(mt/ha)	(000' MT)
2002-2003	36	3.01	24
2003-2004	46	3.05	27
2004-2005	54	2.22	22
2005-2006	67	2.46	32
2006-2007	82	2.39	49
2007-2008	93	2.47	58
2008-2009	102	2.04	59
2009-2010	112	2.13	69
2010-2011	125	2.47	93
2011-2012	134	3.09	121
2012-2013	144	3.37	134
2013-2014	148	3.28	138

# Coffee Production in Myanmar

	Coffee Production in	myamma	Production
Veer	Sown Area	Yield	
Year	(000' Ha)	(mt/ha)	(000' MT)
	9	0.50	2
2001-2002	9	0.51	3
2002-2003		0.53	3
2003-2004	11	0.56	4
2004-2005	14		4
2005-2006	18	0.57	5
2006-2007	22	0.59	6
2007-2008	23	0.66	
	24	0.66	6
2008-2009	24	0.67	7
2009-2010	25	0.68	7
2010-2011	25	0.69	8
2011-2012		0.70	8
2012-2013	20	0.71	8
2013-2014	20	0.71	

# Tea Production in Myanmar

Year	Sown Area	Yield	Production
	(000' Ha)	(mt/ha)	(000' MT)
2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014	73 74 77 79 82 85 87 90 93 95 96 91	0.99 0.99 1.04 1.06 1.08 1.11 1.15 1.18 1.20 1.21 1.20 1.20	68 70 75 77 80 85 88 92 94 96 94 96

# AGRICULTURAL INPUTS

LAND

**IRRIGATION** 

**MACHINERY** 

OTHER INPUTS



#### AGRICULTURAL LAND

- One fourth of total area is culturable land in Myanmar. During the colonial period, the government undertook area expansion works aiming at more export earning from agricultural products.
- The utilization of land in Myanmar in 2013-2014 is as shown below:

#### Land Utilization in Myanmar 2013-2014(Actual)

	Mil Ha	Percent
Net Sown Area	11.87	17.5
Fallow land	0.46	0.7
Culturable Waste Land	5.28	7.8
Reserved Forests	18.60	27.5
Other Forests	14.84	21.9
Other	16.61	24.6
Total	67.66	100.0

• Presently, there are about 11.87 million hectares of net sown area in Myanmar. For the expansion of new agricultural land, remaining 0.46 million hectares of fallow land and 5.28 million hectares of culturalble waste land, can be developed.



- Most of agricultural land, which is about 3.64 million hectares, are currently cultivated by small-scale farmers. The total cultivated average size of holding is 2.21 hectares. About 27% of the total sown area of 13.7 million hectares are small scale farms which average size is under 2.02 hectares.
- Development of agricultural land includes:
  - reclamation of fallow and culturable waste land;
  - development of farmers' and
  - protection of soil erosion and development of terrace farming in high-land areas.
- Land improvement is also being undertaken in the existing agricultural land through proper drainage, irrigation and farm roads. Apart from the traditional small-scale crop cultivation, development of modernized large scale agricultural farming by the private sector is being encouraged.
- For the suitableness with multi-party democracy system and market-oriented economy, two land laws, namely, Agriculture Land Law and Land Management Law for Culturable Land, Fallow Land and Waste Land, were legislated by the approval of Union Parliament in March 2012. These laws were developed by improving and modifying the old land laws which had been practiced and valid for a long time. According to these laws, existing farmers or peasants have to do official registration for the land plots on which they are currently enterprising. And after that they become to have rights to own, mortgage, heir, rent, exchange, and other economic practices. When compared with old land laws, new ones look so motivating the farmers that they would enjoy real ownership sense and as a result this would be a pushing factor for the increase of agricultural production. In 2013, Law of Protecting Rights and Enhancing Economic Welfare of Farmers was enacted.
- National companies and associations in private sector are encouraged and granted rights to develop virgin land and fallow lands for the cultivation of paddy, pulses, oil crops, industrial crops, rubber, oil palm, and other crops. At present, 377 private companies have been granted 0.94 million hectares for commercial farming.

# Granted Area to National Entrepreneurs for Large-scale Commercial Farming(31-3-2014)

State/Region	Company	Granted Area(Ha)
Naypyitaw	6	4,126
Kachin	113	371,715
Kayin	1	409
Sagaing	30	162,626
Tanintharyi	41	126,464
Bago	14	5,758
Magwe	19	35,835
Mandalay	10	7,190
Yangon	9	5,460
Yakhine	10	45,487
Shan	65	85,427
Ayeyarwady	59	89,187
Total	377	939,683

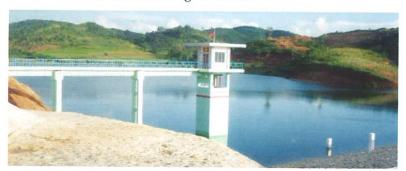
- Apart from the above scheme, modern upland farm reclamation project is being undertaken to meet the following objectives:-
  - Replacing slash and burn method with tarrace farming,
  - Enabling the people in hilly regions to live in parmanent settlements,
  - Eliminating cultivation of opium poppy through tarrace farming to improve the living standard of the people in hilly regions, and
  - Preserving and protecting natural environment.

# Land Reclamation for Tarrace Farming in Upland Area (End of March, 2014)

	Region	Govt.	Farmers	(hectare) Total
1 2 3 4	Shan(North) Shan(East) Shan(South) Chin	3,199 1,272 1,890 1,225	1,538 1,249 1,159 1,767	4,737 2,520 3,048 2,993
	Total	7,586	5,713	13,298

#### PROVISION OF SUFFICIENT IRRIGATION WATER

- At present, only about 6% of the total water resources of 870 million acres feet per annum are being utilized annually. The measures for Irrigation development are:-
  - 1. Construction of new reservoirs and dams.
  - Proper management for the storage and utilization of runoff water from the watershed areas,
  - 3. Renovation of existing reservoirs for raising storage capacity and efficient delivery of irrigation water,
  - 4. Diversion of water from streams and rivulets, during high water levels into adjacent ponds or depressions for storage with sluice gates,
  - 5. Lifting water from rivers and streams through pump irrigation; and
  - 6. Efficient utilization of ground water.



- After 1988, the Government put forward continuous efforts in the construction of dams and reservoirs throughout the country by utilizing large capital investment, man power and machineries making use of the available domestic resources and expertise. As a result, local irrigation facilities have been constructed in respective regions throughout the country.
- Before 1988, total irrigated area of the country was 0.54 million hectares. Up to the end of March 2014, 240 of irrigation dam projects have been completed, further increasing the irrigable area of 1.15 million hectares.
- Rural water supply is effective to 15 million rural populace out of 41.8 million of the country.
- Irrigation coverage increased from 12.5% of the sown area in 1987-1988 to 16.1 % in 2013-2014.

Dam Project	Number	Effected Area(Ha)
♦ Before 1988	138	540,752
♦ After 1988	240	1,154,899

#### Completed Irrigation Works and Irrigated Area After 1988 By State And Region

S.N	State/Region	Number of Works	Irrigated Area (Hectare)
1.	Kayah	2	1,275
2.	Kayin	1	40
3.	Chin	1	202
4.	Sagaing	26	152,871
5.	Tanintharyi	1	Water Supply
6.	Bago	51	364,415
7.	Magwe	48	122,009
8.	Mandalay	56	165,163
9.	Mon	11	46,054
10.	Rakhine	6	2,610
11.	Yangon	20	123,308
12.	Shan	7	46,468
13.	Ayeyarwaddy	10	130,482
	Total	240	1,154,899

# River Pumping Irrigation and Ground Water Exploration

- Pumping stations based on the availability of water resources from rivers and creeks and tube wells where groundwater potentials are feasible are being constructed and implemented for irrigation water supply since in 1994.
- In order to streamline such river pumping and groundwater development activities the government established the "Water Resources Utilization Department (WRUD)" in 1995, by merging Rural Water Supply Division (RWSD) of Agricultural Mechanization Department (AMD) and Groundwater Division of ID together with civil and mechanical personal from ID, both are under the Ministry of Agriculture and Irrigation.

#### **Pump Irrigation**

 Water Resources Utilization Department, since its establishment in 1995, has had tangible achievement of installation 327 river pumping stations including 26 special pumping projects to irrigate some 201,095 hectares.

Pumping Projects	Number	Beneficial Area(ha)
Pump irrigation from rivers	327	201,095
- Special-pumping	26	88,507
- Electric-pumping	113	67,531
- Diesel-pumping	188	45,057

#### Tube wells for groundwater

• Groundwater facilities of 7,734 deep tube wells and 4,524 shallow tube wells were completed covering the beneficial area of 65,695 hectares.

Underground water for agriculture	12,258
- Deep Tubewells	7,734
- Shallow Tubewells	4,524



#### Constructed River Water Pumping Projects

State/Region	Number of Works	Beneficial Area
		(Hectare)
Kachin	5	850
Kayah	3	1,915
to the	6	3,480
	56	55,506
Tanintharyi	11	850
Bago	56	22,134
	51	34,847
Mandalay	76	48,325
Mon	5	1,578
Rakhine	4	324
Yangon	24	13,337
Shan	4	1,913
Ayeyarwaddy	26	16,037
Total	327	201,095
	Kayah Kayin Sagaing Tanintharyi Bago Magwe Mandalay Mon Rakhine Yangon Shan Ayeyarwaddy	Kachin       5         Kayah       3         Kayin       6         Sagaing       56         Tanintharyi       11         Bago       56         Magwe       51         Mandalay       76         Mon       5         Rakhine       4         Yangon       24         Shan       4         Ayeyarwaddy       26

#### Constructed Groundwater Irrigation Projects

S.N	State/Region	Number of Works	Beneficial Area (Hectare)
1.	Kachin	44	108
2.	Kayah	5	15
3.	Sagaing	2,856	21,095
4.	Bago	712	3,382
5.	Magwe	1,298	4,271
6.	Mandalay	5,957	31,577
7.	Yangon	566	1,672
8.	Shan	14	81
9.	Ayeyarwaddy	806	3,495
	Total	12,258	65,695

#### Tube wells for domestic water supply

- ⊙ The Rural Water Supply Division (Predecessor of Water Resource Utilization Department) dug shallow and deep tube wells for drinking water supply across the nation from 1952 to 1995.
- Water Resource Utilization Department(WRUD) has been continuing to develop drinking water supply activities throughout the country since its establishment in 1995. A total of tube wells drilled for drinking purpose and the data up to date from 1952 and 1995 are as shown below.

Period	Deep tube well	Shallow tube well	Total tube well	Rural Population
1995*-2014	2,770	10,440	13,210	3,114,300
1952 -2014	14,831	23,648	38,479	14,988,518

<sup>\*</sup> WRUD established in 1995

# Application of Gasifier to save energy and environmental conservation

• WRUD has been applying and installing rice husk based gasifier and gasifier engines in pumping projects with the aims of saving foreign exchange, environmental conservation, saving national grid and applying renewable energy as well as supply and generate for the place of insufficient power in other areas difficult to reach. The replacement of gasifier is being implemented in completed and ongoing diesel engine pumping projects. Thus dual type gasifiers (Type-1, one third of diesel plus two third of rice husk) with affiliated use of 25 KW engine and single type (Type-2, Type-3, Type-4) gasifier (100% rice husk) with affiliated use of 110 KW engines, 232 KW engines have been installed from the beginning of 2008-2009 to 2011-2012. The total installation of 110 gasifiers is contributing to irrigation farmland of 17,345 ha. These 110 gasifiers including 86 dual type gasifiers with 25 KW engine and 34 single type gasifiers with 50 KW, 140 KW and 232 KW engines have been installed in 2011-2012 fiscal year. With advantages such as saving national grid, greening environment, helping to illuminate the village and new advanced methods and technologies for production of gasifier.



# Irrigated Area (Dam and Water Pumping)

V			
Year	Net Sown Area	Irrigated Area	Percent
	(mil Ha)	(mil Ha)	
1987-1988	7.99	1.00	12.5
1996-1997	9.28	1.56	16.8
1998-1999	9.67	1.69	
2001-2002	10.65	1.99	17.5
2002-2003	10.82	1.87	18.6
2003-2004	11.04	1.96	17.3
2004-2005	11.41		17.7
2005-2006	11.94	1.93	16.9
2006-2007	12.61	2.14	17 .9
2007-2008		2.24	17 .8
2008-2009	13.22	2.22	16.8
2009-2010	13.49	2.28	16.9
	13.64	2.33	17.1
2010-2011	13.75	2.29	16.7
2011-2012	13.58	2.11	15.5
2012-2013	13.30	2.12	15 .9
2013-2014	13.26	2.13	16.1
			10.1



#### AGRICULTURAL MECHANIZATION

- Since colonial era, research activities for the utilization of farm machineries were made to reduce manpower and use of draught cattles. However, it was not fully realised due to lack of experience and research.
- After independence, agricultural mechanization schemes were made through distribution of machineries, production of farm machineries adaptable to Myanmar agricultural land for land expansion and development and tilling work in planned cropping area.
- In addition to the state sector activities, private sector participation is also increasing by utilizing the farm machineries and equipments for various activities of agricultural production.

# Utilization of Machneries and Farm Implements in Myanmar (2013-2014)

Type of Machinery	Number
Tractor Mini Tractor Powertiller Cultivating Roller Boat Threshing machine Combine Harvester	11,839 1,506 257,971 5,403 55,104 668
Transplant machine	122

- Increased cropping intensity has expanded the use of machineries in agriculture from land preparation to harvesting and post-harvest activities. Required machineries are being produced and assembled locally or imported for distribution to the farmers.
- Efforts are being made to totally eliminate the traditional way of threshing paddy on the threshing floor, through the introduction of threshers and combine harvestors.



- 23 model mechanized villages were established throughout the country to demonstrate the farmers on benefits of farm mechanization.
- Land development activities for the transformation from conventional agriculture to mechanized agriculture are being undertaken as follows:-
  - (a) Construction of farm-land roads
  - (b) Construction of canals and drainages for irrigation purpose
  - (c) Transforming small plots to one acre plots
  - (d) Facilitating the purchasing process by introducing installment system for agricultural machineries in order to have access and affordability by farmers
- Farm mechanization has benefited the farmers in terms of time, labour and human energy savings. In addition, it has contributed to increased cropping intensity of the country. Cropping intensity has increased from 132.7% in 1996-1997 to 161.1% in 2013-2014.

#### **Cropping Intensity**

Year	Net Sown Area	Total Sown Area	Cropping Intensity
	(mil ha)	(mil ha)	(Percent)
1996-1997	9.28	12.31	132.7
1998-1999	9.67	13.31	137.6
2001-2002	10.65	15.85	148.7
2002-2003	10.82	16.15	149.2
2003-2004	11.04	16.62	150.5
2004-2005	11.41	17.43	152.7
2005-2006	11.94	18.75	157.1
2006-2007	12.61	20.41	161.8
2007-2008	13.22	22.12	167.2
2008-2009	13.49	22.96	170.2
2009-2010	13.64	23.36	171.2
2010-2011	13.75	23.57	171.4
2011-2012	13.58	22.50	165.6
2012-2013	13.29	21.05	158.3
2013-2014	13.26	21.37	161.1

### Transforming Conventional to Mechanized Agriculture

- Transformation from conventional to mechanized agriculture is being carried out for the increase of crop production as well as for the reduction of losses and wastages by increasing utilization of agricultural machineries along the production process, from land preparation to harvesting.
- Establishment of modern-mechanized farms throughout the country will create opportunity for farmers to increase their productivity by growing double and multiple crops. It will be not only the quick win for farmers through increase of crop production but also for the increase of per capita income and job opportunities.
- In this context, there are 10,019 hectares of model mechanized farm, consolidating the farms land as acre or hectare plots established in 6 townships in Nay Pyi Taw Council area and other States and Regions, during recent three years.



Systematic Mechanized Farms established in Recent Three Years (2011-12 to 2013-14)

		2010 11)	
State and Region	2011-2012	2012-2013	Hectare 2013-2014
Kachin Kayah Kayin Sagaing Thanintharyi Nay Pyi Taw Bago (East) Bago (West) Magwe Mandalay Mon Rakhine Yangon Shan (South)	577 1066 48 85 170 40 40	- 4 61 233 - 1724 408 332 49 338 57 40 404	226 44 47 57 40 1310 579 44 62 170 42 40 147
Ayeyarwaddy	112	145	40 84
Total	3291	3794	2934

# PROVISION OF OTHER AGRICULTURAL LOANS

- Provision of various crop loans for different cultivation seasons i.e pre-monsoon, monsoon and winter season are being made by the Myanma Agricultural Development Bank (MADB).
- Similary medium and long-term loan for agricultural development programs are also available. In 2012-2013 total amount of loans to farmers by MADB is about 557,846.54 million kyats.
- MADB has increased step by step the amount of seasonal loan for paddy from 20,000 kyats to 100,000 kyats per acre during 3 years, from 2010 to 2013. Also Seasonal loan amount for sugarcane has been increased from 20,000 to 100,000 kyats per acre in 2012.
- During 2013-2014 fiscal year, total loans provided by MADB up to end of March 2014 was 1,158,728.58 million kyats covering 80.58 % of planned target 1,438,000 million kyats.

# ON-GOING INTERNATIONAL ASSISTANCE IN AGRICULTURE SECTOR

Bilateral
Unilateral
Regional
Multilateral
INGOs



# ON-GOING INTERNATIONAL ASSISTANCE IN AGRICULTURE SECTOR

#### Bilateral Assistance and Cooperation

#### China

- Mini-hydro Power (RMB 31.99 m)
- Irrigation Network (RMB 51.86 m)
- Household Bio-gas Facilities (RMB 2.45 m)
- Agriculture Demonstration Center (RMB 40 m)
- MOU btw. Northwest A&F University and Yezin Agricultural University
- MOU btw. MOA (China)

#### India

- Advance Center for Agricultural Research and Education (ACARE) Centre (US\$ 8.71 m)
- Rice Bio-park (US\$ 0.23 m)
- Cardamom Production in Nagaland
- MOU with ACARE

#### Thailand

- MOU with MOAC (Thai)
- MOU with MNRE (Thai)

#### Vietnam

• MOU with MOARD (Viet)

#### Cambodia

MOU with MAFF (Cam)

#### Bangladesh

MOU with MOA (Bangladesh)

#### Belarus

MOU with MAF

#### Egypt

MOU with MOA

#### **Philippines**

• MOU with DOA (Philippine)

#### Korea

· MOU with MAFRA

#### Taiwan

• MOU with MOA (Taiwan)

#### Malaysia

MOU with MAI (Malaysia)

#### Unilateral Assistance and Cooperation

#### JICA (Japan)

- Quality Rice Seed (US\$ 4.8 m)
- Disaster Management (US\$ 9.6 m)
- Flood Control (US\$ 14.51 m)
- Water Saving (US\$5 m)
- Food Security Project for Under Privileged Farmer (2KR-2012) (Y 23 0 mil)
- Human Development Institution in Agriculture (US\$ 13.69mil)

#### KOICA (Korea)

• Post-harvest Technology (US\$ 3.5 mil)

- Saemual Undong in Myanmar(US\$ 22 mil)
- Post-harvest Research (US\$ 4.5 mil)
- Farm Land Consolidation (US\$ 6 mil)

#### KRC (Korea)

 Rural Development and Farming Technology Transfer (US\$ 2.478 mil)

#### RDA (Korea)

- MOU on Biotech & Genetic Resource
- MOU on Leguminous Crops
- Multilateral Assistance and Cooperation

#### CIRDAP (Bangladesh)

Rural Development, Training & HRD

#### ICRISAT (India)

Technology on pulses and HRD

#### IRRI (The Philippines)

• Rice R&D

#### IFAD (UN)

- Poverty and Food Security
- Fostering Agricultural Revitalization in Myanmar (FARM) US\$ (18.7) Loan type

#### Regional Assistance and Cooperation

#### **ASEAN**

- ASEAN-Australia
  - GAP (fruits & veg.)

#### ASEAN-Japan

- CB (CLMV)

#### ASEAN-EU

- Plant health and plant protection product

#### ASEAN-German

- Asean biocontrol project

#### ASEAN-WTO

Pesticide Residue Data Generation Project

#### ASEAN-Korea

Real Time AFSIS

#### ASEAN-India

HRD, Information

#### • ASEAN+3

AFSIS (Thailand)

#### ASEAN+3

APTERR (Thailand)

#### ASEAN

AFSRB (Thailand)

#### ASEAN-China

- TC on Agri. and Forest
- SPS

#### GMS (China, Cambodia, Laos, Myanmar, Vietnam, Thailand)

- Rice IPM
- Maize IPM
- Yunnan Academy of Agricultural Sciences
- CBTA (Perishable goods)

#### Multilateral Assistance and Cooperation

#### FAO (UN)

- Support to the Development of Hybrid Rice Project (US\$ 0.23 mil)
- Emergency Support to Affected Communities in Rakhine State Project (US\$ 0.5 mil)

#### UNDP

 UN Strategic Framework of Cooperation in Myanmar (2012-2015)

#### **UN-Habitat**

 Land Administration and Management Programme-LAMP(US\$ 2.209 mil)

#### Asian Development Bank (ADB)

- Interim Country Partnership Strategy
- CB Support for Project Identification

#### World Bank

 Agriculture Development Support Project (ADSP) (US\$ 100 mil)(Loan type)

#### **INGOs**

#### CDN (Consortium Dutch NGO's)(Netherlands)

- Irrigation, Post Disastrous Resettlement, Food Security, Community Development
  - (8 TS—Mandalay, Ayeyarwady, Shan, Rakhine) (US\$ 3.3 m)

#### ICF (Int'l Corn Foundation)(ROK)

Seed, HRD, Corn Production
– (4 TS—Mandalay, Shan) (Support Technologies)

#### **MCFTC**

# WHCFM(World Headquarters of Cannan Farmers' Movement Corporation)

HRD, CB
 - (1 TS—Mandalay) (Technology)

#### OISCA (Org. for Industrial, Spiritual and Cultural Adv.)(Japan)

HRD, Environmental, Agro-Forestry Training Center
 (1 TS—Magway) (TC)

# GRET (Group of Research and Exchange Technologies) (French)

- CB, Livelihood, Natural Resources Management, Food Security
  - (10 TS—Chin, Sagaing, Ayeyarwaddy) (US\$ 5.4 mil)

# ON-GOING AGRICULTURAL PROJECTS IMPLEMENTED BY MINISTRY OF AGRICULTURE AND IRRIGATION IN 2013-2014



#### AGRICULTURAL GRANT PROJECTS IMPLEMENTED BY MINISTRY OF AGRICULTURE AND IRRIGATION IN 2013-2014 (ON GOING)

SN	Name of Projects	Amount (Million)	Implementing Agency	Funding Source		Location
1.	Agriculture and Rural Development Adviser	T.A	DAP			Nay Pyi Taw
2.	The Project for the Post-harvest Technology Assistance for the Myanmar Agricultural Products	US\$ 3.500	DOA		2011-2014	Mandalay
3.	Saemaul Undong in	US\$ 22.000	DOA	KOICA	2014-2019	Yezin
4.	Myanmar Establishment of Post Harvest Research Institute in Myanmar	US\$ 4.500	DOA	KOICA	2013-2016	Yezin
5.		US\$ 2.478		KRC	2013-2016	Yangon
6	Project on Development of Participatory Multiplication and Distribution System for Quality Rice Seed	T.A	DOA, DAR	JICA		Nay PyiTaw
7	Emergency Support to Affected     Communities in Rakhine State	US 0.50		FAO		1 Rakhine
8	3. Improvement of Post-Harvest Technology and Seed Production in Myanmar	US 0.1	•	ABC, UFLA		

SN	Name of Projects		Implementing	Funding D	uration	Location
		(Million)	Agency		012-2016	Ayeyar-
9.	(a) Diversification	A\$	DOA,DAR	AUIAIT 2		waddy,Bago
	& Intensification	1.960				maday, = ag
	of Rice-based					
	System in Lower					
	Myanmar			ACIAD O	2013-2016	Mandalay,
	(b) Increasing	A\$	DAR,DOA,	ACIAR 2	013-2010	Sagaing,
	Production of	0.752	YAU			Magway,
	Legume-based					Nay Pyi
	Farming System					Taw, Bago,
	in the Central					
	Dry Zone of					Yangon
	Myanmar				0040 0040	Mandalay
	(c) Strengthening	A\$	DAR, DOA,	ACIAR	2013-2016	Mandalay,
	Institutional	1.980				Sagaing,
	Capacity,					Magway,
	Extension					Ayeyarwaddy
	Services and					
	Rural Livelihoods					
	in the Central					
	Dry Zone and					
	Ayeyarwaddy					
	Delta regions of					
	Myanmar Project					
1	0. Implement Program	US\$	DOA	CDN	2012-2015	
	of Integrated Post	3.300				Rakhine,
	Disastrous					Mandalay,
	Resettlement					Ayeyar-
	Food Security					waddy
	and Community					
	Development Project	t				
	11. Agro-Forestry		DOA	OISCA	1996-201	5 Magway
	Training Center					
	Program					
	12. Household Biogas	Yuan	DoA	China	2014-201	
	Facility	2.450				Nay Pyi Taw
	13. Improve Food Secu	rity US\$	DOA	GRET	2013-201	6 Ayeyarwaddy
	and Livelihood and	5.495				Sagaing,
	Natural Resources					Magway, Chin
	Management Effect	ively				
	14. Land Administration		SLRD	UN-HABITAT	2014-201	
	andManagement	2.209				Mandalay
	Programme-LAMP					

N Name of Projects	Amount (Million)	Implementing Agency	Source		New Dvi Tow
- 1 1 1 1 - 1	US\$ 6.0	ID, AMD	KOICA	2013-2016	Nay Pyi Taw
<ol> <li>The Project for Farmland Consolidation and Agricultural Machin Training for Agricultura</li> </ol>	n nery				
Mechanization	Yen 230	AMD	JICA	2013-2017	Nay Pyi Taw Ayeyarwaddy,
<ol> <li>Grant Assistance on the Food Security Porject for Under privileged Farmers</li> </ol>	, ,				Bago,Magway, Sagaing, Shan, Mandalay
2KR 2013 17. Food Security	Yen 230	) AMD	JICA	2013-2017	Ayeyarwaddy,
Porject for Under privileged Farmers-					Bago, Yangon, Mandalay
2KR 2012 18. Myanmar Cannan F Farmer's Training	(yats 838.5)	24 DICD	WCM		8 Mandalay
Center Program  19. Project for Development of Water Saving Agriculture Techno	Technic	cal DAR, DC	A JICA	2013-201	8 Mandalay, Nay Pyi Taw, Magway
in Central Dry Zon  20. Development of  Agriculture Technol	e Techn	ical DAR	ICE		15 Nay Pyi Taw, Shan
and Production of 21. Support to the	Corn US\$	0.23 DAR, D	OA FA	0 2013-20	Mandalay,
Development of Hybrid Rice in Myanmar) (TCP/MYA/3403)					Sagaing,Bago, Ayeyarwaddy, Rakhine, Magway, Yangon
22. Project on Establishment of		6.72 YA	U Ir	dia 2012-7	2017 Nay Pyi Taw
Advanced Centi for Agricultural Research & Education -ACA	re			adio 2012	-2015 Nay Pyi Ta
23. Project on setting		S\$ 1.6 Y	AU	ndia 2012	20.0

SN	Name of Projects	Amount (Million)	Implementing Agency	Funding Source	Duration	Location
24.	Porject for Strengthing Human Development Institution in Agriculture	Yen 1008	DAR, DOA,YAU	JICA	2013-2016	Nay Pyi Taw Yangon
25.	Yezin Agricultural University - YAU and MOKPO National University - MNU on the Academic Exchange Activities)	US\$ 0.463	YAU	MNU	2013-2015	Nay Pyi Taw

# AGRICULTURAL LOAN PROJECTS IMPLEMENTED BY MINISTRY OF AGRICULTURE AND IRRIGATION IN 2013-2014 (ON GOING)

SN	Name of Projects	Amount (Million)	Implementing Agency	Funding Source	Duration	Location
1.	Oilcrops Development Project	US\$ 12.3	DOA	OFID	2006-2014	Mandalay, Magway, Sagaing, Nay PyiTaw, Shan, Bago, Ayeyarwaddy, Tanintharyi
2.	Irrigation Development for Kanyin Dam Project	US\$ 8.0 (Reyard 30)	ID	SFD	2008-2011	Ayeyarwaddy

# MAIN FUNCTIONS OF DEPARTMENTS UNDER THE MINISTRY OF AGRICULTURE AND IRRIGATION



#### MAIN FUNCTIONS OF DEPARTMENTS

UNDER THE MINISTRY OF AGRICULTURE AND IRRIGATION

#### MINISTER'S OFFICE

#### Administrative Tasks

#### DEPARTMENT OF AGRICULTURAL PLANNING

- (1) Assistance in adopting agriculture policies
- (2) Formulation of various agricultural plan
- (3) Relations with international, regional organizations and governments
- (4) Strengthening cooperation and coordination among inter-agencies
- (5) Development of agricultural trade and investment
- (6) Reporting and compilation of agricultural statistics
- (7) Conducting related surveys
- (8) Recommendation for further development of agriculture sector
- (9) Collection and dessemination of wholesale prices of agricultural commodities

#### DEPARTMENT OF AGRICULTURE

- (1) Production of good quality seed varieties for main crops which are rice, seed corn, groundnut, sesame, sunflower, mustard, niger, pulses, culinary crops such as chilli, onion, garlic, potato, vegetables and fruits for economy development of farmers and conducting trainings for farmers to produce good quality seed.
- (2) Organize training on advanced agricultural technologies and cultural practices of above mentioned crops in order to facilitate for application and innovation, of these techniques by farmers.
- (3) Conduct research on scientific cultural practices and development in order to produce good quality and high yielding seeds.

#### IRRIGATION DEPARTMENT

- Design formulation for new irrigation projects based upon hydrological and geological investigations and topographic survey data
- (2) Planning and implementation of new irrigation projects
- Operation and maintenance of existing irrigation and drainage systems, flood protection embankments and polders
- (4) Seasonal and temporary measures for summer paddy cultivation
- (5) Technical assistance to village embankment and village irrigation works for rural development
- (6) Installation of micro-hydro power generation plants along the irrigation canals
- (7) Providing the on-farm water management development training for Farmers' Water User Association
- (8) Conducting the training for capacity building of irrigation staff to enhance the irrigation technologies

# AGRICULTURAL MECHANIZATION DEPARTMENT

- (1) Land reclamation, land consolidation and land development works
- (2) Provision of farm mechanization services on land preparation, harvesting and threshing
- (3) Production and distribution of appropriate farm machineries
- (4) Research and development on utilization of agricultural machinery
- (5) Implementation of up-land reclamation in hilly regions
- (6) Dissemination of technical know-how on utilization of farm machinery to local farmers and production technologies to private industries

# SETTLEMENT AND LAND RECORDS DEPARTMENT

- (1) Updating land maps and registers
- (2) Land surveys and map productions
- (3) Collection compilation and issuing timely and reliable crop statistics
- (4) Collection and compilation of land use statistics
- (5) Land administration and decision on agricultural land disputes
- (6) Conducting agricultural socio-economic surveys

# WATER RESOURCES UTILIZATION DEPARTMENT

- (1) To supply irrigation water by pumping water from river and streams and also utilization of underground water from feasible potential for boosting crop production
- (2) To promote the socio-economic conditions of rural population by supply safe drinking water from both tube wells and piped water supply reticulation systems
- (3) To supply crop water as well as drinking water from spring sources by gravity flow systems in the mountainous region of the border and remote areas, and to examine water quality for drinking and irrigation purposes applying high technology, water analysis methods
- (4) To disseminate the knowledge and practice of efficient usage of drip irrigation
- (5) To apply renewable energy, being installed Biomass Gasifier in river water pumping facilities

# MYANMAR AGRICULTURAL DEVELOPMENT BANK

- (1) Lending seasonal, short, medium and long term loans to farmers
- (2) Collecting repayment of bank loans
- Encouraging farmers to open deposit and saving accounts at MADB

#### DEPARTMENT OF AGRICULTURAL RESEARCH

- (1) Research development on high yielding crop varieties
- (2) Generation of agricultural techniques for maximization of benefits and sustainable use of natural resources and conservation and utilization of crop genetic resources
- (3) Dissemination of improved crop varieties and agronomic technologies to farmers
- (4) Development of human resources in agricultural research

#### YEZIN AGRICULTURAL UNIVERSITY

- (1) To produce highly qualified agriculturalists needed for the development of the agriculture sector of the country
- (2) To provide adequate technical training on modern methods of agriculture
- (3) To provide sound training to students who wish to engage in scientific farming as means of livelihood through co-operatives or private enterprises

#### DEPARTMENT OF INDUSTRIAL CROPS DEVELOPMENT

- (1) To produce and provide the high-yielding varieties and good quality seeds of other industrial crops in addition to the production of main industrial crops such as sugarcane, cotton, jute, rubber, oil palm, cashewnut and coffee.
- (2) To provide the systematic utilization of GAP methods in accordance with the respective industrial crops, educative activities have been carried out in different regions through conducting training, field days and demonstration of model farms.
- (3) To carry out continuous research activities on improvement of GAP methods compatible with respective regional ecological conditions in order to produce adaptable varieties and good quality seeds.

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## http://www.moai.gov.mm

