Farmland Policies for Young Generation in Myanmar: Purchasing and Leasing

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ABSTRACT

Myanmar is an agriculture country and its economy is based on agriculture. Agriculture sector contributes 23 % of GDP; 20 % of total export earnings; and employs 61.2 % of the labor force in 2013-2014. According to the Myanmar Census of Agriculture the agricultural land amounted to about 20 per cent of the total land area. It is one fourth of the total land area of Myanmar. The total net sown area is 11.87 million hectares which is 17.5% of total land area of Myanmar. Most of agricultural land is cultivated by small scale farmers and total cultivated average size of holding is 2.21 hectares.

Myanmar is richly endowed with land, water and other natural resources. It has potential land resources for expansion of agriculture and other purposes and for the promotion of access to agricultural land. The statistics of Settlement and Land Record Department mentioned that 21 million hectares of the total land area of Myanmar was reserved land for agriculture and multi-purposes. Kachin, Shan (North, South, and East) States, Sagaing Region, Chin State, Tanintharyi Region, Rakhine State, Kayin State, Magway and Mandalay Regions are found to have higher total potential land sources. The diversity of soil and of climate also favors the production of wide range of many agricultural products. More than 60 different crops including both tropical and temperate varieties can be grown.

The Union Parliament of the Republic of Union of Myanmar enacted The Vacant, Fallow and Virgin Lands Management Law and The Farmland Law in 2012. And also The Law of Protection of the Farmer Rights and Enhancement of their Benefits was enacted in 2013. These laws are encouraging to the farmers and the young generations because they become to have rights to own, mortgage, heir, rent, exchange and other economic practices.

Keywords: GDP, total potential land, The Vacant, Fallow and Virgin Lands Management Law, The Farmland Law, The Law of Protection of the Farmer Rights and Enhancement of their Benefits

1. Country Profile of Myanmar

Myanmar, the golden land, is a country located in South East Asia, bordering the Andaman Sea and the Bay of Bengal. The total land area is 676,577 sq. km. It stretches for 936 kilometers from east to west and 2051 kilometers from north to south. The border countries are Bangladesh (271 km), China (2,129 km), India (1,468 km), Laos (238 km) and Thailand (2,416 km). The population is 51.41 million (2014 census) and the population density is 76 per square kilometer. Myanmar is a union of 135 ethnic groups with their own languages and

dialects. The eight major national ethnic races are: the Kachin, the Kayah, the Kayin, the Chin, the Mon, the Bamar, the Rakhine, and the Shan. According to the administration of Myanmar it is divided into seven states and seven regions. The regions are: Ayeyarwady, Bago, Magway, Mandalay, Sagaing, Tanintharyi and Yangon. The States are: Chin, Kachin, Kayin, Kayah, Mon, Rakhine and Shan. The new capital city is Nay Pyi Taw since November 2005 and other two large cities are Yangon and Mandalay.

Myanmar is richly endowed with natural resources such as timber, tin, antimony, zinc, copper, tungsten, lead, coal, limestone, precious stones like jade, ruby, and sapphires, natural gas, hydropower, and some petroleum.

The climate in Myanmar is divided into two major climatic regions: tropical and subtropical or temperate. The elongated shape of the map of Myanmar is a natural advantage; the northern most part of country experiences low temperature and the temperature rise until it reaches the southern part. A major portion of country enjoys a tropical climate. There are generally three seasons; rainy, winter and summer. Based on the monsoon, the seasons can be sub divided as pre-monsoon season (hot weather) from March to mid May; monsoon season (wet season) from mid May to mid October; post-monsoon season (humid weather) from mid October to mid November; and post-monsoon (cool weather) from mid November to end of February. The precipitation varies depending on the locality and elevation.

2. Land resources of Myanmar

Land is one of the most important of resources of any country. The land resources of Myanmar are highly suitable for richly productive agricultural activity. The diversity of soil and of climate also favors the production of a relatively wide range of many agricultural products. The prospect for expanding the diverse agricultural commodities is favorable. The principal agricultural soils are characteristically heavy-textured clay at subsoil depths, often overlain with lighter surface soils. The Land Use Division of Department of Agriculture prepared land type maps for states and regions of Myanmar. According to its modern soil classification system there are 24 main soil types being recognized but agriculturally important soil groups are alluvial soils, black soils and red lateritic soils. Alluvial soils occupy 50 % of the total sown area and located in along the main rivers of Ayeyarwady, Chindwin and Thanlwin river basins. Black soils occur in about 30 % of the total sown area and it is found in regions with 20 to 40 inches of rainfall per year. About 20 % of the total sown areas are of Red lateritic soils which are found in annual rainfall between 40 to 120 inches (Land Use Division 2007)

3. Overview of Agriculture in Myanmar

Myanmar is a predominately agricultural country, and agriculture sector is the back bone of its economy. Agriculture sector contributes 23 % of GDP; 20 % of total export earnings; and employs 61.2 % of the labor force (2013-2014). As Myanmar's economy is based on agriculture, rural development is the priority sector for the national economy. Seventy percent of population reside in rural area and are employed in agriculture, livestock and fishery sector for their livelihood. The vision of Myanmar agriculture is achieving per capital income and standards of living of rural people relying on agriculture higher than the neighboring countries and keep abreast with development nations. To meet this vision, agriculture policies are laid down as emphasis on production and utilization of high yielding and good quality seeds; conduct training and education activities for farmers and extension staff; implement

research and development activities for sustainable agricultural development; encourage mechanized agriculture, production of crops appropriated with climate and extension of irrigated area; and to amend existing agriculture laws and regulations (DAP 2014 a).

3.1 Agricultural land in Myanmar

One fourth of the total area of Myanmar is agriculture land. The total net sown area is 11.87 million hectares. Since Myanmar has fallow land and cultivable waste land the expansion of agricultural land can be developed. The utilization of land in Myanmar in 2013-2014 is shown in Table 1.

Table 1. Land utilization in Myanmar (2013-2014)

	Mil Ha	Per cent
Net sown area	11.87	17.5
Fallow land	0.46	0.7
Cultivable waste land	5.28	7.8
Reserved Forests	18.6	27.5
Other Forests	14.84	21.9
Other	16.61	24.6
Total	67.66	100.0

Source: DAP 2014 a

Most of the agricultural lands, 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 is small scale farms which average size is less than 2.02 hectare.

3.2 Land types of Myanmar

The land types of Myanmar used by the Settlements and Land Records Department (SLRD) are: Le-land (Paddy land); Ya-land (Dry land); Kaing (Alluvial land); Garden land (planted with perennial trees); Dhani (a land along the mouth of the river within reach of salt water); Rubber (land stable for rubber trees); and Other land types. The classification is based on the utilization of land by cultivation of a specific crop on it. Growth rate of agricultural land types are shown in Table 2.

Table 2. Growth rates of agricultural land types in Myanmar

	MCA 2003		MCA 2010		Crowth rote
Land Type	Area	% to	Area	% to	Growth rate (2003-2010)
	(Thousand ha)	total	(Thousand ha)	total	(2003-2010)
Paddy	4,929.56	54.89	7,509.84	56.34	52.34
Ya (upland/dryland)	2,606.43	29.02	3,878.54	29.10	48.81
Kaing (Alluvial land)	377.60	4.20	555.67	4.17	47.16
Garden	365.94	4.07	636.29	4.77	73.88
Dhani	16.69	0.19	15.00	0.11	-10.13
Rubber	90.88	1.01	304.35	2.28	234.91
Other land types	594.35	6.62	429.44	3.22	-27.75
Total	8,981.45	100	13,329.13	100	48.41

Source: SLRD, MCA 2003 and 2010

3.3 Access to agricultural lands in Myanmar

According to the 2014 census the population of Myanmar is 51.41 million and the population density is 76 per square kilometer. The agricultural population of Myanmar increased from 16.87 million in MCA 2003 to 25.72 million in MCA 2010 with the percentage of 52.41 %. The agriculture population was estimated to be 43 % of the total population of Myanmar in 2010. Table 3 shows the amount of agricultural land and agricultural population. It can be observed that although the amount of available agricultural land was increase in 2010 amount of land per capita is a little bit lower than that of 2003.

Table 3. Access to agricultural lands by agricultural population in Myanmar

Agriculture census	Agricultural land	Agricultural	Ha/ capita
	(thousand ha)	population (thousand)	
MCA 2003	8,981.45	16,876	0.53
MCA 2010	13,329.10	25,721	0.52

Source: SLRD 2003 and 2010

3.4 Potential land resources in Myanmar

According to the SLRD statistics in 2010, 31 % or 21 million hectares of total land area of Myanmar was reserved land for agriculture and multi-purposes. The promising areas to expand the agricultural land for the production of several crops are shown in Table 4. Kachin State, Shan State (North, South, East), Sagaing Region, Chin State, Tanintharyi Region, Rakhaine State, Kayin State, Magway Region and Mandalay Region are found to have potential land resources for agriculture expansion.

Table 4. Potential land resources for agriculture expansion of Myanmar in 2010

(Unit-thousand ha)

Total potential

Region/State	Vacant and	Virgin lands	Total potential
	fallow lands		lands
Kachin	1,456.09	2,571.83	4,027.92
Shan (N)	265.07	2,327.80	2,592.88
Shan (S)	481.18	1,658.84	2,140.02
Shan (E)	1,195.47	867.26	2,062.73
Sagaing	135.98	1,774.99	1,910.97
Chin	1,208.82	461.76	1,670.58
Tanintharyi	262.65	1,328.61	1,591.26
Rakhine	106.84	1,424.52	1,531.36
Kayin	45.33	1,284.50	1,329.83
Magway	60.30	1,051.40	1,111.70
Mandalay	31.16	380.01	411.17
Kayah	16.19	174.02	190.21
Ayeyarwady	29.14	150.95	180.09
Bago (E)	41.28	60.30	101.58
Mon	6.07	83.37	89.44
Bago (W)	50.99	28.73	79.72
Yangon	3.24	1.21	4.45
Total	5,395.79	15,630.11	21,025.90

Source: SLRD 2010

3.5 Major crops grown in Myanmar

The diversity of soil and of climate also favors the production of wide range of many agricultural products. More than 60 different crops including both tropical and temperate varieties can be grown. Among the major crops Myanmar has a rice surplus to fulfill the local security since almost half of the sown area is occupied by rice crop. Production of rice in Myanmar is being supported by water resources from more than 200 dams and reservoirs around the country. To generate increased production of paddy, measures are also being undertaken in growing high yielding varieties, including introduction of hybrid rice varieties. Maize is the second major cereal crop and 80 % of Myanmar total maize export is being exported to China, Singapore, Vietnam, Malaysia, India, Bulgaria and Spain. Farmers are trying to meet the market demand through the selection of high yielding and quality maize.

Myanmar is standing as a leading country in pulses production among ASEAN member countries. Major exportable varieties of pulses are black gram, green gram, pigeon pea, soy bean, butter bean, cowpea and kidney bean.

Oilseed crops also play a vital role in Myanmar due to high consumption of cooking oil compared to other neighboring countries. As the amount of edible oil produced is not enough for local consumption, palm oil is being imported annually. Major oilseed crops grown in Myanmar are groundnut, sesame, sunflower, mustard, and niger.

Among the industrial crops cotton, sugarcane, rubber and palm oil are the major crop and can be planted commercially. Moreover, required land potential is available for the expansions of these crops (DAP 2014 a). List of main crops and the total production of major crops in Myanmar are shown in Table 4 and 5.

Table 5. List of main crops cultivated in Myanmar agriculture sector

Group of crops	Cultivated crops
Cereals	paddy, wheat, maize, sorghum
Oilseeds	Groundnut, sesame, sunflower, niger, mustard
Pulses	17 kinds of pulses including black gram, green gram, pigeon pea, soybean, cowpea, kidney bean, butter bean, chick pea, garden pea, sultapya
Industrial crops	cotton, sugarcane, jute, rubber, coffee, mulberry, oil-palm
Kitchen crops	chilly, onion, garlic, ginger, turmeric, potato
Fruits and Vegetables	mango, banana, citrus, pears, durian, mangosteem, pineapple, rambutan and other tropical and temperate vegetables

Source: DAP 2014 a

Table 6. Production of major crops grown in Myanmar, 2013-2014

Crops	Sown area	Yield	Production
	('000 ha)	(mt ha ⁻¹)	('000 MT)
Paddy	7,284	3.90	28322
Wheat	101	1.84	186
Maize	441	3.70	1626
Pulses	453	1.30	590
Groundnut	931	1.60	1488
Sesame	1,622	0.57	909
Sunflower	481	0.96	463
Cotton	299	1.70	509
Sugarcane	169	61.83	10,473
Rubber	610	0.76	177
Oil palm	148	3.28	138
Coffee	20	0.71	8
Tea	94	1.20	98

Source: DAP 2014 b

4 Agricultural education sector in Myanmar

Yezin Agricultural University (YAU) is located in Yezin, Nay Pyi Taw and it is the only one agricultural university in Myanmar. The university annually produces around 400 graduates for all degrees and up to this day the university has already produced more than ten thousand bachelor and postgraduate degree holders. The statistics of YAU for the occupation of student's parents mentioned that 40.63 % of the student parents are farmers; 31.15 % are government staff; 16.03 % are merchants and other jobs are 12.19 %. It is quite impressive because more than 40 % of student parents are farmers. For this young generation of farmers, YAU and State Agriculture Institutes also serve as the knowledge hub and pro-farmers institute (YAU 2013).

Based on agriculture knowledge gained from these institutions the young generations can continue to work their parents' farmland or by purchasing and leasing from the government. However like as other developing countries the graduated young generations and other young people engaged in agriculture are migrating to urban areas and abroad in search for better job opportunities since the rural agriculture jobs are no longer profitable and secure for them. The negative impacts of climate change and natural disasters such as torrential rains, floods, extreme droughts and storms on agriculture are one of the factors why the young generations do not want to engage themselves in farming.

Table 7. Agricultural Human Resource Development Institutions in Myanmar

Item	Institutions	No.	Established Year	Offer
1.	Agricultural University	1	1924	B.Agr.Sc, Postgrat Dip. Agr.Sc, M.Phill, M.Agr.Sc, Ph.D
2.	State Agriculture Institute	7	1954	Diploma certificate
3.	Crop Specialized Agricultural High School	2	2011	Certificate
4.	Agricultural High School	14	1954	Certificate
5.	Central Agricultural Research and Training Center (CARTC)	1	1984	Certificate

Source: Yezin Agricultural University 2013

5. Land Laws in Myanmar

There are two land laws in Myanmar namely, "The Vacant, Fallow and Virgin Lands Management Law" and "The Farmland Law. These laws were legislated by the approval of Union Parliament in March 2012. Both were developed by improving and modifying the old land laws which has been practiced and valid for a long time. According to these laws, existing farmers have to do official registration for the land plots on which they are currently enterprising. They become to have rights to own, mortgage, heir, rent, exchange and other economic practices. The new laws 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 agriculture production.

The "Law of Protection of the Farmer Rights and Enhancement of their Benefits" was enacted by Union Parliament on 8th October 2013 (RoUM 2013).

5.1 The Vacant, Fallow and Virgin Lands Management Law

This law was enacted by Union Parliament on 30th March 2012. It includes ten chapters: Title and Definition; Formation of Central Committee for the Management of Vacant, Fallow and Virgin Lands; Right to Cultivate or Utilize Vacant, Fallow and Virgin Lands; Stipulations Relating to the Right to Cultivate or Utilize Vacant, Fallow and Virgin Lands; Security Fees and Land Revenue; Terms and Conditions to be compiled by the person who has to the Right to Cultivate Vacant, Fallow and Virgin Lands; Supervision; Supporting the persons who have the Right to Cultivate or Utilize Vacant, Fallow and Virgin Lands; Offences and Penalties; and Miscellaneous.

The Central committee can permit the right to cultivate or utilize vacant, fallow and virgin lands within the State for agriculture; livestock breeding; mineral production; and other lawful business permitted by the government. In the agriculture business for perennial plants permit not exceeding 2,024 ha (5000 acres) at a time. If 75% of the permitted hectares have been fully carried out, permit again not exceeding 2,024 ha (5000 acres) at a time up to 20,245 ha (50,000 acres) time after time. For orchard, permit not exceeding 1,215 ha. For industrial crops permitted hectares are the same as perennial plant. The respective regional organization to permit not exceeding 20.24 ha of vacant, fallow and virgin lands for the rural cultivators and persons desirous of carrying out agriculture on manageable family-sized scale. The central committee determines the rate of security fees and land revenue to be paid by the person who has obtained the right to cultivate the vacant, fallow and virgin lands.

5.2 The Farmland Law

The Farmland Law was enacted by Union Parliament on 30th March 2012. Farmland means land defined as lowland (Paddy land), upland (Ya), silty land (Kaing Kyun), hill-side cultivation land (Taungyar), perennial crops land, nipa palm land (Dhani), garden land or horticultural land and alluvial land. There are 10 chapters in this law which includes: Title, Enforcement and Definition; Permission to Use the Farmland; Rights of Person who has the Right to Use the Farmland; Terms and Conditions to be Compiled by the Person who has the Right to Use the Farmland; Formation of the Various Levels of Administrative Body of the Farmland; Duties and Powers of the Central Administrative Body of the Farmland; Taking Action for the Failure to Comply Terms and Conditions; Settlement of Dispute on the Right to Use the Farmland and Appeal; Indemnities and Compensation; and Utilization of Farmland.

The person who has the right to use the farmland must have apply for the right to use the farmland to the Township Department through the relevant ward or village tract Administrative Body of the Farmland in accord with the stipulations. Township Administrative Body of the Farmland with the approval of District Administrative Body of the Farmland issues the certificate to use the farmland to the following person after registration by paying registration fees to the Township Department in accord with the stipulations. If it is a person the requirement are as follows:

- 1. He shall carry out the agriculture by using the farmland;
- 2. He shall reside in the relevant ward or village tract if there is on special reason;
- 3. He shall attain the age of 18 years;
- 4. He shall be a citizen, an associate citizen or a naturalized citizen.

CONCLUSION

Myanmar still has potential land resources for expansion of agriculture and other purposes and for the promotion of access to agriculture land. 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 such as rubber, oil palm, and other crops. At present 377 private companies have been granted 0.94 million hectares for commercial farming (DAP 2014 a). The government is trying to develop agricultural land by reclamation of fallow and cultivable waste land; development of farmers' farmland; 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. In addition the transformation from conventional agriculture to mechanized agriculture is implementing by the state sector with the participation of private sector for utilizing the farm machineries and equipments in agricultural production. These factors are encouraging to get more profit to the farmers and improve food security and poverty alleviation particularly in rural areas. The government policies and land laws provide the young generations to get permission to use the farmland. The enthusiasm on agriculture and devoted on land is the most important points for young generation.

REFERENCES

DAP (Department of Agriculture Planning). 2014 a. Myanmar Agriculture in Brief. Department of Agriculture Planning, Ministry of Agriculture and Irrigation, Myanmar

DAP (Department of Agriculture Planning). 2014 b. Myanmar Agriculture at a Glance. Department of Agriculture Planning, Ministry of Agriculture and Irrigation, Myanmar.

Land Use Division. 2007. Soil Classification of Myanmar. Land Use Division, Department of Agriculture. Ministry of Agriculture and Irrigation, Myanmar

RoUM (Republic of Union of Myanmar). 2012 a. The Vacant, Fallow and Virgin Lands Management Law. Union Parliament, The Republic of Union of Myanmar.

RoUM (Republic of Union of Myanmar). 2012 b. The Farmland Law. Union Parliament, The Republic of Union of Myanmar.

RoUM (Republic of Union of Myanmar). 2013. The Law of Protection of the Farmers' Rights and Enhancement of their Benefits. Union Parliament, The Republic of Union of Myanmar.

SLRD (Settlement and Land Record Department). 2003. Report on Myanmar Census of Agriculture. Settlement and Land Record Department. Ministry of Agriculture and Irrigation, Myanmar.

- SLRD (Settlement and Land Record Department). 2010. Report on Myanmar Census of Agriculture. Settlement and Land Record Department. Ministry of Agriculture and Irrigation, Myanmar.
- YAU (Yezin Agricultural University). 2013. Strengthening Human Resource Development in Agriculture Sector of Myanmar. Yezin Agricultural University. Ministry of Agriculture and Irrigation, Myanmar.

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