

Overview of Agriculture Policy in Myanmar

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INTRODUCTION

As agriculture plays a crucial role in the economy of Myanmar, sustainable agriculture is a prerequisite for achieving sustainable development objectives. Sustainable agriculture requires the integration of environmental considerations with agricultural policy analysis and planning.

Myanmar is a favorable agrarian structure with high potential for development of small holder and large scale farming with average farm size of 2.5 ha accounting for the second largest in South East Asia after Thailand which is about 3.1 ha. Myanmar has a relatively high land/population ratio and half the arable land is still fallow. But development of the sector has been constrained by macroeconomic instability, infrastructure constraints, marketing and financial issues, and farmers' lack of access to quality research and extension support. Relatively weak agricultural performance has also impacted negatively on the overall development of the rural sector.

The agriculture sector in 2015 provided 32% of Myanmar's GDP, 17% of exports, about 50% of employment, and 0.45% of foreign direct investment for crops and 0.79% for livestock and fisheries (DOP, 2015). As the majority of Myanmar's ethnic groups are agriculturally dependent the sector can critically contribute to inclusive and balanced growth and social stability.

Diverse agro-ecosystems

The country is highly diverse in terms of its agro-ecological zones and farming systems. It has three main agro-ecological zones, namely the Delta, the Dry Zone and the hill areas where major agro-climatic zones (Refer to Table 1). The densely populated Delta in the south is home to about 22 million people who are mainly engaged in lowland rice cultivation, particularly during the monsoon season. In contrast, central Myanmar, lying in the monsoon's rainfall shadow, is a dry region with population clusters along the main river valleys. Dry Zone farmers cultivate a range of rain-fed crops. About 19 million people live in the Dry Zone.

The third largest agricultural zone is in the hill region, dominated by Shan State in the east, and inhabited by 6.5 million people. Hill farmers cultivate a wide range of rain-fed tree crops and horticulture products along with rice, maize and pulses.

Three different seasons enable farmers to cultivate crops at different times of the year. The main farming season for most of the country is the hot monsoon period from May to October. The ensuing dry period includes the cool, dry winter months from October to February, followed by the dry and hot summer season from February to April. The structure of crop, livestock and fish production varies considerably during Myanmar's three seasons as well as across its three principal agro-ecological zones.

Myanmar's broad range of elevation, latitude, temperature and rainfall is marked by wide climatic diversity. The maximum daily temperature ranges from an average of 32 degrees Celsius in the Delta to 21 degrees Celsius in the hill region. The average rainfall ranges from 5000 mm along the coast to 2,500 mm in the Delta and about 600 mm in the Dry Zone. This diversity gives rise to an enormous variety of microclimates.

Although agriculture is the main source of livelihood for the majority of people living largely in the countryside, over a third of the rural population is below the poverty line. About 30% of all rural people are landless and have to work as farm laborers for a living.

Table 1: Major agro-climatic zones in Myanmar

Name	Geographical description	Administrative unit	Main agricultural practice
A. Bago, Kachin Riverside land	Upper Delta, Kachin plain, flat plain along the Ayeyarwady and Sittaung, moderate rainfall (1 000-2 500 mm).	Ayeyarwady Region, Kachin State, Sagaing, Mandalay and Bago Regions.	Rice, pulses, oilseeds, sugarcane, tobacco and Kaing/Kyun cultivation
B. Central Dry Zone	Flat plain, some uneven topography, less than 1 000 mm rain.	Magway, Mandalay and Sagaing Regions.	Upland crops, oilseeds, pulses, rice, cotton, irrigated agriculture and Kaing/Kyun cultivation
C. Delta and Coastal Lowland	Delta, lowland and mouth of rivers in coastal area, heavy rainfall (more than 2 500 mm).	Ayeyarwady, Yangon and Bago Regions, Mon and Kahyin States, Taninthayi Region and Rakhine State.	Rice, pulses, oilseeds and nipa palm

D. Kachin and Coastal Upland	Mountainous, sloping land, heavy rainfall (more than 2 500 mm).	Kachin and Rakhine States, Taninthayi Region, Mon, Kayin and Kayah States, Yangon and Bago Regions.	Orchards, plantation crops and upland agriculture
E. North, East and West Hills	Hilly, uneven topography, sloping land, moderate to heavy rainfall	Kachin, Chin and Shan States.	Upland crops, shifting cultivation and fruit trees
F. Upper, Lower Myanmar and Shan Plain	Plains, plateau, upper and lower parts outside central dry zone.	Sagaing Region, Kachin and Shan States, Bago, Magway, Mandalay and Yangon Regions.	Upland crops, oilseeds, pulses, vegetable and wheat

Source: FAO/WFP crop and food security assessment mission to Myanmar

Performance of the agriculture sector

Despite the country's richness in resources and having a strategic location, agriculture has underperformed in Myanmar over the past five decades especially in terms of productivity, equity and stability. Myanmar's agriculture is characterized by low productivity, extreme inequality and high volatility.

Low agricultural productivity translates into labor productivity and land productivity where both level of productivity are lower. Farm earnings per worker in Myanmar range between one-half and one-third of the levels in neighboring countries. The reasons for this vary across commodities but stem in large part from long-term chronic underinvestment in agricultural research, weak extension support and limited access to credit. Paddy yields are lower because of lower levels of input use, particularly improved seeds and fertilizers, inefficient weed and pest control, and uncertain water management (Denning and others 2013). Consequently, output gain has come mostly from increased area rather than increased yields. The slow agricultural productivity growth has resulted in stagnant farm incomes, while the share of agriculture in GDP has declined from about 57% in the early 2000s to 32% in 2015 due to rapid growth in natural gas production and related sectors.

The highly skewed distribution of land and other productive assets is a key reason for the high levels of rural inequality and poverty. The seasonality of agricultural employment, coupled with seasonal underemployment and low wages, limit annual rural incomes, with about one-fourth of the rural population under the poverty line (IHLCA 2011). With lower incomes and fewer assets to cushion against seasonal and episodic health and weather shocks, the average rural

household has adequate food supplies for about 10 months a year. Landless households have food security for 9.6 months (LIFT 2012).

The high volatility of agricultural production and prices compounds risks for rural and agricultural households. Many farmers and traders talk explicitly about the increased unpredictability they face. The record flooding in 2008 was followed by both drought and floods. As a result, farmers are acutely aware of the increased risks to agricultural production. Most studies of climate change in Myanmar suggest that in the coming decades, average temperatures will increase along with aggregate rainfall although rains may become more sporadic, leading to higher volatility and increased flooding and drought (RIMES 2011, World Bank 2012).

Agricultural production volatility is linked to a number of factors. Increasingly irregular rainfall and poor water management, result in frequent floods and droughts. Unpredictable policies, particularly those related to trade, are also a concern for agribusiness. Unexpected export restrictions and, in some cases, land control measures have prevented exports of some crops over the past decade. A reliance on single export markets also contributes to price volatility in many commodities. Myanmar is exporting about 70% of its pulses production to India and 90% of its watermelon harvest to China. The onion production is mostly for domestic consumption and about 75% of onion exports are sent to Thailand. Dislocations in the Indian, Thai or Chinese markets can generate large swings in Myanmar's pulses, onion and watermelon prices. In November 2012, sluggish Chinese demand for watermelons caused a noticeable price slump in Yangon and Mandalay as growers off-loaded production in local markets. The very low level of mobile phone connectivity in rural areas limits farmers' access to regional price information (LIFT 2012). This is in sharp contrast to the rest of Southeast Asia where countrywide mobile phone connectivity is close to 100%. The marketing and logistics infrastructure, among the least efficient and with the highest costs in Southeast Asia (ADB 2012), also aggravates price swings.

Government's role in agriculture policy making

Government sees agricultural growth as critical for inclusive development so it aims to ensure that food security is achieved throughout the country, and develop strategies that improve the welfare and income of farmers, farm laborers and their dependent families. The Framework for Economic and Social Reforms (FESR) fully recognized both the urgency and historic scale of reforms required in Myanmar, involving the development of market mechanisms, changes in economic decision making and the correction of policy distortions inherited from the previous period.

Starting 1 April of 2016, as democratic people government comes to power, agricultural development is regarded as one of the major driving forces of the economy and the foundation for broad-based development that is needed to uplift the wellbeing of majority of Myanmar's population. The Government expects the agriculture sector to ensure food security, increase foreign exchange earnings through agricultural exports, and promote rural development.

Accordingly, over the past decade, some major policy reforms and measures covering the sector have been put in place. These included the abolition of the rice production quota for farmers, liberalization of domestic and international marketing of rice in 2003 and of most industrial crops in 2004, passage of a series of regulatory laws (a plant pest quarantine law in 1990, a fertilizer law in 2000, a pesticide law in 1993, Seed Law in 2012, Farm Land Law in 2012, Vacant, Fallow and Virgin (VFV) Land Law in 2012, Plant Variety Protection Law in 2016), construction of a large number of irrigation schemes and rehabilitation scheme by World Bank in 2016, farm mechanization, land consolidation work, increase access to agriculture production credit provided by Myanmar Agriculture Development Bank and provision of pumping equipment to farmers.

Myanmar is facing challenges due to population pressure and economic growth on land throughout its territory. Natural resources are becoming increasingly scarce due to climate crises, urbanization and extensive use of land for industrial purpose. Population densities are increasingly concentrated around urban areas where there are insufficient jobs to provide full employment. Large-scale land appropriations are undermining local people's rights to resources, compromising both their individual means of subsistence and national food security. Problems with governance lead to political crises and sometimes to violence, destabilizing what may be already a fragile socio-political situation. Finding effective solutions to these pressing and complex problems will involve ambitious public policies that address a range of interrelated issues at several levels and in various sectors.

Existing legal framework relating to land resources and tenure security in Myanmar is obsolete which needs to be better harmonized, and should incorporate international and regional best practices relating to land management. Current weaknesses in the Farmland and VFV Laws should be immediately addressed through revising by-laws and regulations.

Actual policy practice has not matched the declared reform and measures for agricultural development with the continuing neglect of rural infrastructure evidenced in the poor state of rural roads and rural electrification. Government spending in agricultural development is far below needed levels. Promoting agricultural growth will require enhanced budgetary allocations and strengthening of key agricultural institutions. It is also necessary to promote private sector involvement in production, processing and marketing.

CONCLUSION

Seed Industry Development Is Priority

Seed is the basic input for increasing productivity and value of the crops everywhere in the world, particularly in Myanmar. Quality seed production is utmost priority for the Ministry of Agriculture, Livestock and Irrigation (MOALI) with the objective of ensuring food security and nutrition for all people of Myanmar at all time, increasing income of smallholder farmers and promoting competitiveness of Myanmar agricultural products in the international market. Absolutely, developing a vibrant seed sector will certainly boost farm income through the adoption of better adapted varieties with improved and pure genetic make-up packed with modern technologies. During the past and at present, the seed sector has been largely managed by the public sector. It is considered as inefficient like anywhere else in the world. So far, MOALI is encouraging local private sector to participate in the development of a vibrant seed sector. However, local companies are lacking experiences and technology. Since rice has been interrelated to life, politics and the economy, in recent years, MOALI focused on the hybrid rice seed industry development to increase rice production in terms of quantity and quality not only to achieve domestic food security but the global food security as well. Experts say MOALI needs focus not only on hybrid rice but also on improved rice seeds with multinational and national Seed Companies for the investments. MOALI does realize that existing policy as well as rules and regulations are not conducive for multinational and national seed companies' investment.

Currently, the Government of the Republic of the Union of Myanmar undergoes economic reform by changing the regulations which are more attractive to foreign direct investments particularly in the seed industry development. With respect to intellectual property rights and with the aim of securing the investment of private seed company, MOALI has recently submitted to parliament and approved the new plant variety protection law for approval.

Promoting market access Is important

There is no doubt about Myanmar's potential for increasing agricultural production and productivity with its rich natural resources such as vast land area, fresh bodies of water and work forces which provide conducive policy environment and favorable regulatory mechanism. More importantly, it also paves the way to access to the domestic and global markets.. In relation to promoting market access of small holder farming system, it needs to focus on stability, sustainability, diversification and commercialization considering that the majority of the farmers in Myanmar are small-scale farmers. It needs to further explore and develop sustainable agribusiness modality ensuring various markets such as output, input, labor, and credit etc.

One promising solution could be the introduction of contract farming system in Myanmar. If a contract farming system is implemented properly, particularly small-scale farmers in Myanmar will have the opportunity to participate in the market. Further investigation on sustainable and progressive contract farming system which includes the whole value chain with responsible investments is timely important for Myanmar farmers to have market access, considering that the market is a major pulling factor to stimulate the farmers. Therefore, investments in the form of contract farming system by multinational companies is, indeed, a special focus for Myanmar Agriculture Sector Development. Although contract farming may be associated with many challenges and many difficulties, particularly at the time of implementation, it is achievable when farmers, the private sector and the government work in harmony.

Farm advisory service\ Extension service needs to be strengthened

The extension system too needs to be reformed to increase the mobility of extension officers, improve links between farmers, researchers and extension staff and the use of modern technologies for agricultural extension. New skills are needed for the new era of global agricultural engagement. This requires updating of curricula, building educational capacities, improving educational facilities and exploring new scientific frontiers and ways of imparting information.

Rural financial systems

Weak rural financial systems, high levels of indebtedness and heavy dependence on informal financing at high interest rates, are a constraint to agricultural production and marketing. Building local savings instruments, credit systems and intermediary institutions between borrowers and lenders will require long-term institutional development. Although many microfinance programs are not well-suited to agricultural lending, they do provide vehicles for savings as well as opportunities for rural households to manage debt by refinancing consumer loans at more manageable rates of interest.

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