



# နိုင်ငံတကာမူဘောင်များ

- GSF for Food Security (2015) စားနပ်ရိက္ခာမူဘောင်
- Global framework on water security in agriculture (FAO) စိုက်ပျိုးရေဖူလုံရေးမူဘောင်
- Global framework for climate services (WMO) မိုးလေဝသဝန်ဆောင်မှုဆိုင်ရာမူဘောင်
- Global livestock production systems framework (FAO) မွေးမြူထုတ်လုပ်ရေးမူဘောင်
- Sustainable Development Goals (2016) ဗွံဖြိုးရေးမူဘောင်



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- Biodiversity and ecosystems global framework (UNDP) ဇီဝမျိုးကွဲဂေဟစနစ်မှုဘောင်
- UN Convention to Combat Desertification (1997) ကွန္တဂုဖြစ်ထွန်းမှုတိုက်ဖျက်ခြင်းမူ
- Convention on Biological Diversification (1994) ဇီဝမျိုးကွဲထိန်းသိမ်းခြင်းမှုဘောင်
- Paris Climate Agreement (2016) ရာသီဥတုပြောင်းလဲမှုဆိုင်ရာမူဘောင်
- Sendai Framework of Disaster Risk Reduction (2015) ဘေးအွန္တရာယ်စီမံမှုမူဘောင်
- Statement of World Humanitarian Summit (2016)
  ကယ်ဆယ်ရေးမှုဘောင်



#### Facts and Figures

- swerage farm size is 2.5 ha/f (2<sup>nd</sup> largest after Thailand, 3.1 ha/f)
- Land/population ratio is relatively high (half of arable are fallow land)
- Development of the sector has been constrained
  - macroeconomic stability, infrastructure constraints, marketing, financial issues, farmers' lack of access to quality research and extension services
- sgricultural performance is relatively weak
- The agriculture sector in 2015 provided
  - From 32% of Myanmar's GDP
  - To 17% of exports
  - about 50% of employment
  - 0.45% of foreign direct investment for crops and
  - 0.79% for livestock and fisheries (DOP, 2016)



Category comparison	Urban	Rural
Poverty gap	0.047	0.023
Access to water ratio	65.2%	81.4%
Malnutrition	33.7%	25.4%
Food poverty	2.5%	5.6%
Poverty index	15%	29%



#### Diverse agro-ecological systems

- Three agro-ecological zones (Dry, Coastal, Hilly)
- 22 millions people engaged in lowland rice cultivation
- Dry zone farmers cultivate a range of rain-fed crops (19 millions people)
- 6.5 millions are hill farmers
  - cultivate rain fed tree crops and horticulture production along with rice, maize and pulses



#### Diverse agro-ecological systems

- Three different seasons enable farmers to cultivate
  - (May-Oct, Oct-Feb, Feb-эргіl)
- swerage temperature is 32 degree Celsius in Dry Zone and 21 degree Celsius in Hill region
- swerage rainfall ranges from 5,000 mm (2,500mm in coastal and 600mm in Dry zone)
- Third Rural population is below poverty line about 30% of all rural are landless and land labors



Table 1: Major agro-climatic zones in Myanmar

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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 (1 000-2500 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

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 signiculture Sector

- <u>pnder performed in past five decades</u> in terms of quality, production and stability
- Characterized by low productivity, extreme inequality, high volatility
- Low productivity translates into labor and land. Farmer earning is one-half or one-third of the levels of neighbourings
- Long-term under chronic underinvestment in research, weak extension supports, limited access to credit
- Yields are low, inefficient weed and pest control, uncertained water management



### Performance of signiculture Sector

- Slow agricultural productivity growth has resulted in stagnant farm incomes
- GDP has declined from 57% in 2000s to 32% in 2015 (rapid growth of gas and oil sector)
- Distribution of land and other productive assets leads inequality and poverty
- Seasonality, seasonal underemployment and low wages, ¼ is under poverty line
- It leads seasonal and episodic health, weather shocks and food insecurity to families (for 9.5 months)



### High volatility

- in annual rainfall, poor water management
- unpredictable policies in trade and agribusiness
- unexpected export restriction on exports of some crops
- single export markets lead price volatility (70% of pulses to India and 90% of water melon to China, 75% of onion export is to Thailand).



### High volatility

- dislocation swing price condition.
- Telecommunication supports farmers to know price
- High volatility and prices compounds risks for rural farmers and natural disasters such as flood and drought
- Marketing and logistics infrastructure is



## Government's Role Policy Making

- spolishing of rice quota for farmers
- Liberalization of domestic and international marketing of rice in 2003
- Industrial crops in 2004
- Series of regulatory laws made (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, Fellow, Virgin Land law in 2012, Plant Variety Law in 2016)



# Government's Role Policy Making

- Irrigation schemes supported by World Bank in 2016
- Farm mechanization, Land consolidation work, access to credit by Myanmar spricultural Development Bank,



- Natural resources are becoming increasingly scarce due to extensive use of industrialization, climatic shocks, and urbanization
- Population density is increasingly concentrated in urban where are insufficient jobs
- Local people's rights are important to resources (subsistence and national food security)
- Political scenarios sometime lead crises, destabilizing, ...fragile socio-political situation



- Existing legal framework relating to land resources and tenure security in Myanmar is obsolete which needs to be harmonized
- International best practices should be learnt
- VFV Land law should be addressed through by-law and regulations



- setual practices are not matched with actual declared reform and measures
- Spending is far below needed levels
- Need to enhance budgetary allocation and strengthen key institutions



### Seed Industry Development is Priority

- MO3IL is encouraging private sector to participate in seed industry development
- Local companies are lacking technology and experiences
- MO3½I focused on the hybrid seed industry development
- Multinational and National seed companies investment are being invited
- New Plant Variety Protection Law is being requested for approval



#### Market access

- Highly potential on agricultural production and productivity
- Conductive policy environment and favorable regulatory mechanism is needed
- Market access of small holder farmers needs stability, sustainability, diversification, commercialization
- Needs to explore and develop sustainable agribusiness modality (output, input, labor, credit...)
- Contract farming system introduced already and small holders will have practices to access market
- smalysis on value chain and responsible investment is timely important



#### Extension services needs to be strengthened

- To increase mobility of extension officers
- Improve links between farmers, researchers, extension staff, and modern technologies
- New skills are needed for new era of global agriculture
- Requires updating curriculum
- Building educational capacities
- Improving educational facilities
- Improving new good practices and scientific ways of studies



### **Rural Financial Systems**

- sgri loan, cooperate loans, other loans are available
- High level of indebtedness and heavy dependence on informal financing
- Building local saving instruments
- Credit systems
- Intermediary institutions between lenders and borrowers are needed
- Many microfinance programs are not well suited to agriculture lending. They do refinancing consumer loans at more manageable rate of interests.



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