

# Myanmar Rice Sector Development

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# Points for Discussion

1. Country Economy and Poverty
2. Role of the Rice Sector
3. Formulation of Rice Sector Development Strategy

# 1. Country Economy and Poverty

# Agriculture sector is the backbone of economy, poverty in Myanmar is high compared to its peers in the region.



## Agriculture in Myanmar (2014-15)

- ❖ GDP: 22.1%
- ❖ Total export earning : 20%
- ❖ Labor force: 61.2%

### Poverty Headcount (%)

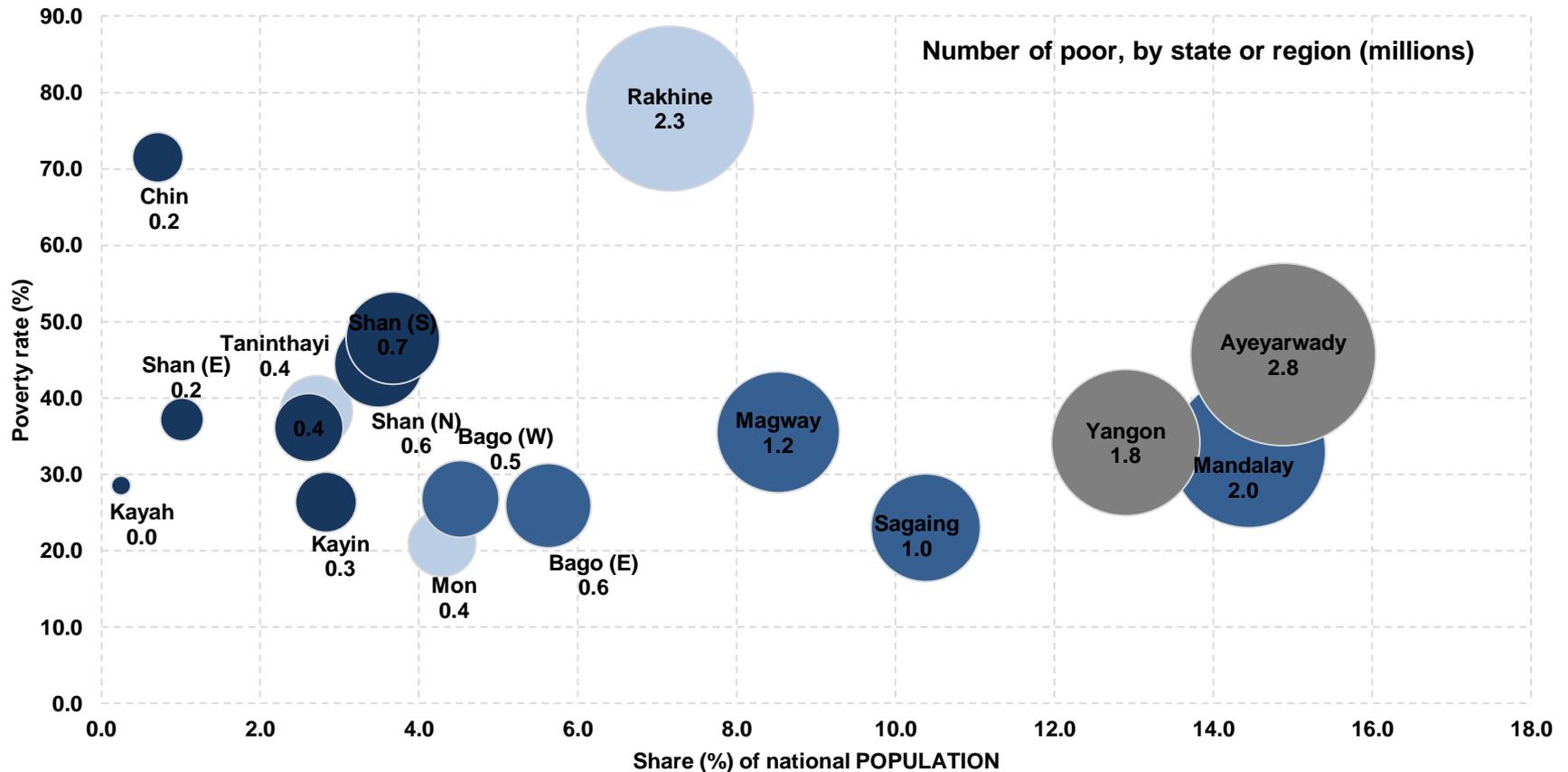
Cambodia	22.5
Lao PDR	23.3
Vietnam	20.7
Myanmar	25.6-37.5

- GoM estimated 25.6 % poverty rate in 2009/10. World Bank estimated the poverty rate to be 37.5 percent in 2009/10.
- The higher estimate reflects differences in underlying assumptions on adult equivalence scales and spatial price deflators.
- The World Bank estimate is based on a broader welfare aggregate that includes health expenditure and use value of durable assets.
- Myanmar's relative ranking in the region is robust across two different methodologies.

**Source: World Bank, SCD and EAP poverty portal.**

# Poverty Density is Highest in Ayerwaddy and Dry Zone

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Source: (World Bank, 2014)

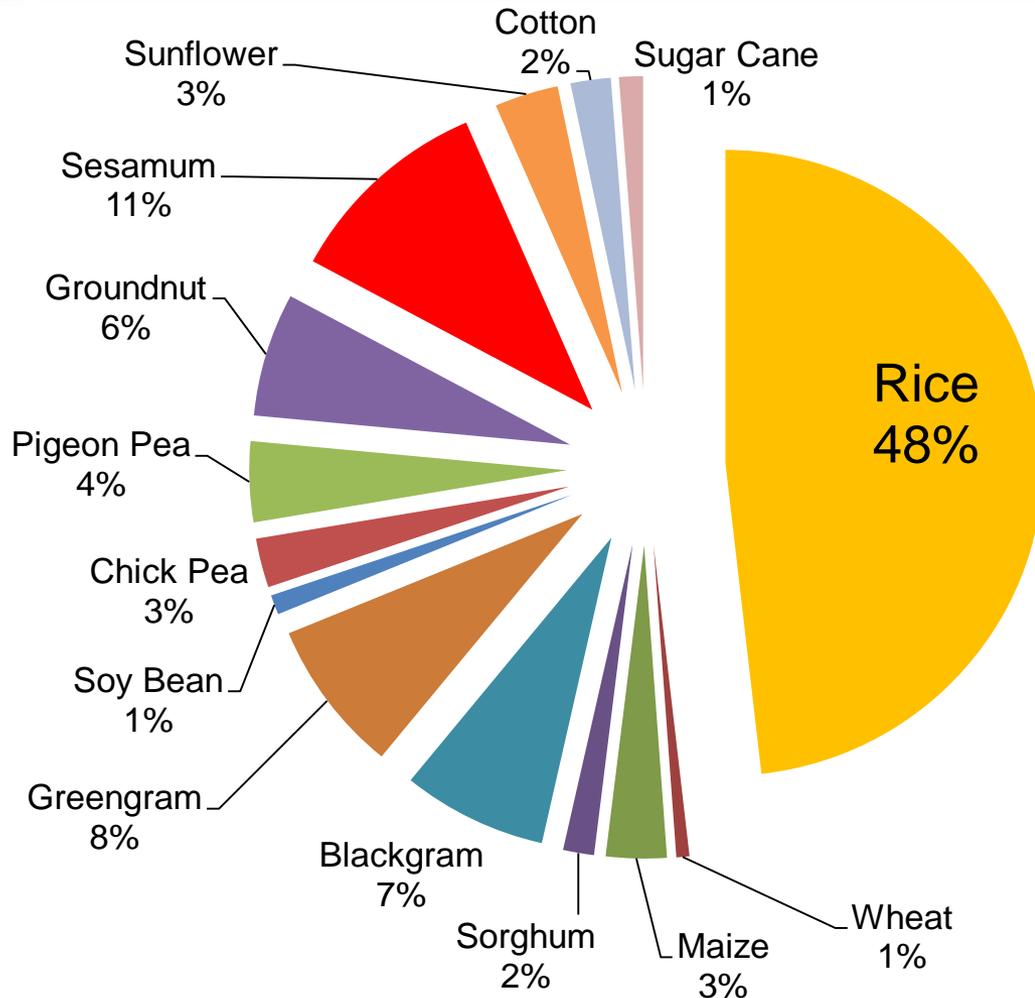
# High Vulnerability to poverty

- ✓ Many of the non-poor are vulnerable to falling back into poverty
- ✓ There is a huge concentration of individuals near the Poverty Line.  
(World Bank, SCD)
- ✓ There is a severe constraint on livelihood choices of poorer households making them more vulnerable to shocks and risks. (example, credit constraint)  
(QSEM, 2012)

## **2. Role of the Rice Sector**

# Rice occupies the Largest Part of Agriculture

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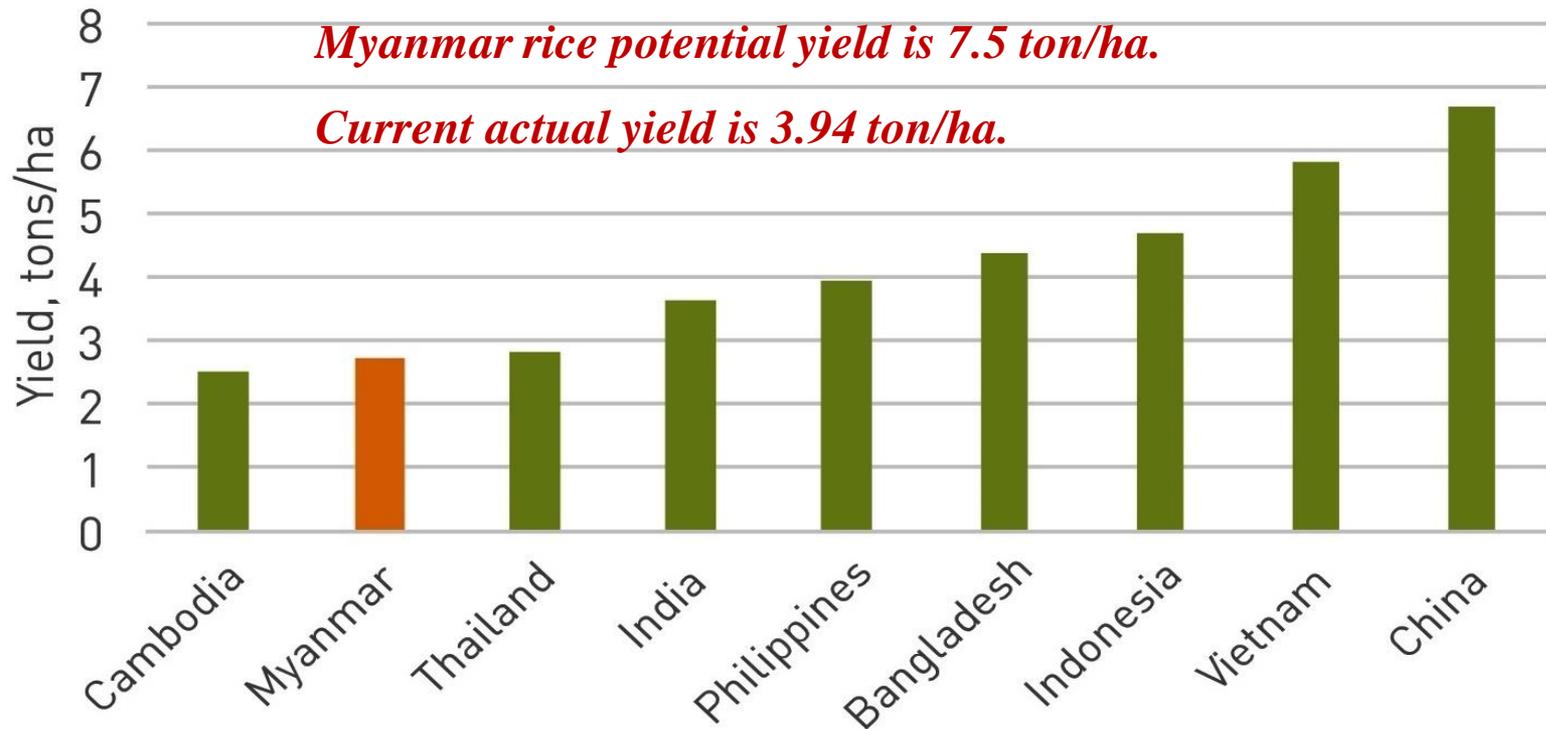


In 2015,

- Paddy area accounted for 48% of total sown area
- 30% of Myanmar's gross agricultural output
- 95% of total cereal output

Source: FAOSTAT.

# Myanmar rice yield is the second lowest among in Asian countries



*Source: World Bank Report (2016) Myanmar: Analysis of Farm Production Economics.*

# Analysis of Farm Production Economics, Myanmar rice production is characterized as;

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1. Low yields and high labor used keep low productivity.
2. Myanmar's monsoon paddy production is the most labor intensive.
3. Labor wages are still very low.
4. Myanmar has the lowest profits from rice production.
5. Myanmar has the lowest productivity of nitrogen and water.

*Source: World Bank Report (2016) Myanmar: Analysis of Farm Production Economics.*

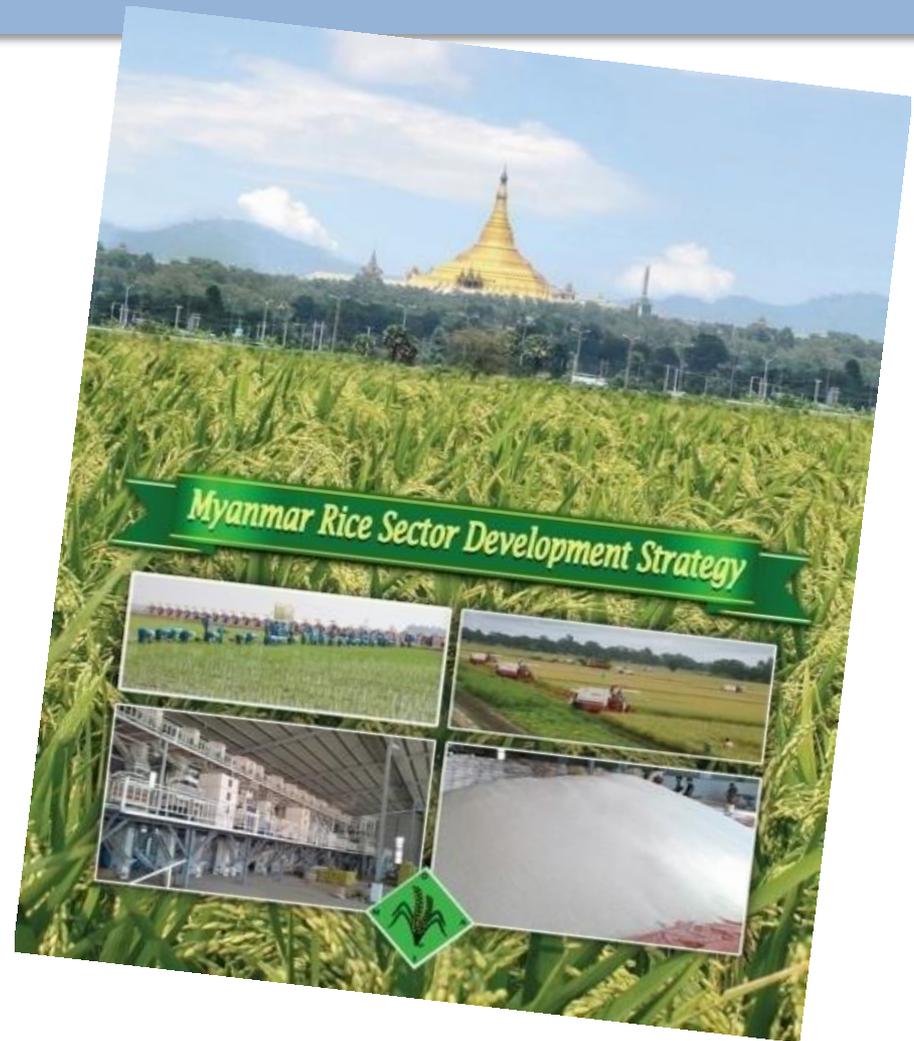
# Main Priorities for Myanmar Rice Sector

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**Closing -**  
**technology gap,**  
**human resources gap,**  
**productivity gap, and**  
**profit gap**  
**Clear road map**  
**Investment plan**



### 3. Formulation of Myanmar Rice Sector Development Strategy



# Vision and Goals of MRSDS

## Vision

By 2030, Myanmar envisions food-secure farmers and consumers enjoying the economic benefits provided by a transformed, dynamic, environmentally sustainable, and internationally competitive rice sector.

## Goals

The ultimate goal of the rice sector strategy is a food-secure nation where small holder farming households have tripled their household incomes, including income derived from rice and rice-based farming, thereby enjoying a decent standard of living comparable to that of urban dwellers.

# Strategic objectives of MRSDS

- 1) Increase rice productivity, improve rice quality & nutritional value.
- 2) Adapt to, and mitigate the effects of, climate change and reduce risk, while protecting rice ecosystems and the environment.
- 3) Promote Myanmar rice as a quality brand to enhance its competitiveness in international trade.
- 4) Improve the well-being, and enhance the capacity of, small holder farmers, including women and children.
- 5) Enhance efficiency in the rice value chain and reduce postharvest losses.

# Challenges for MRSDS

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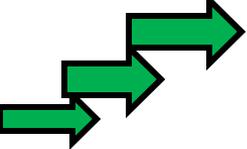
- unpredictable effects of climate change
- limited access to improved technologies
- weak extension & education system
- limited access to financial services
- limited facilities for postharvest and processing
- limited infrastructure, (irrigation, power, transport)
- volatility of paddy price
- poorly integrated value chain
- hamper policies for investments in rural and rice sector

# Implementation Opportunities

- 1) rich natural resources, particularly land areas suitable for rice cultivation;
- 2) a rich diversity of traditional rice varieties with high branding and marketing potential;
- 3) a fast-growing private sector actively engaged in the rice value chain;
- 4) strong potential for increasing rice yield and producing quality rice;
- 5) strong interest and presence of development and funding institutions;
- 6) increasing demand for rice in the international market;
- 7) excellent relevant examples among neighboring countries in sustainable intensification of rice production;
- 8) willingness to create a positive policy environment favoring a market economy; and
- 9) an ideal geographic location for serving the Asian and global rice markets.

# The key themes and interventions of MRSDS

1. Sustainable increase in rice productivity
2. Increased utilization of farm mechanization.
3. Adaptation to, and mitigation of, the effects of climate change and capability improvement to cope with risks.
4. Efficient utilization and sustainable management of natural resources.
5. Postharvest losses reduction and value chain improvement.
6. Improve credit schemes for farm investment.
7. Capacity building.
8. Sound policy environment to increase investment in agriculture
9. Quality control and safety .
10. Rice research and development.



# The way forward (MRSDS)

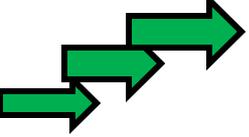
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## 1. Sustainable increase in rice productivity

- Accelerate area expansion of irrigated rice
- breed & promote higher-yielding & stress tolerance varieties
- provide good quality seed, GAP
- Strengthen delivery extension services

## 2. Increased utilization of farm mechanization

- implementation of mechanization strategies by creation of policy environment
- establish a credit facility with loan equity



# The way forward (MRSDS) continue

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## **3. Adaptation to, & mitigation of the climate change effect**

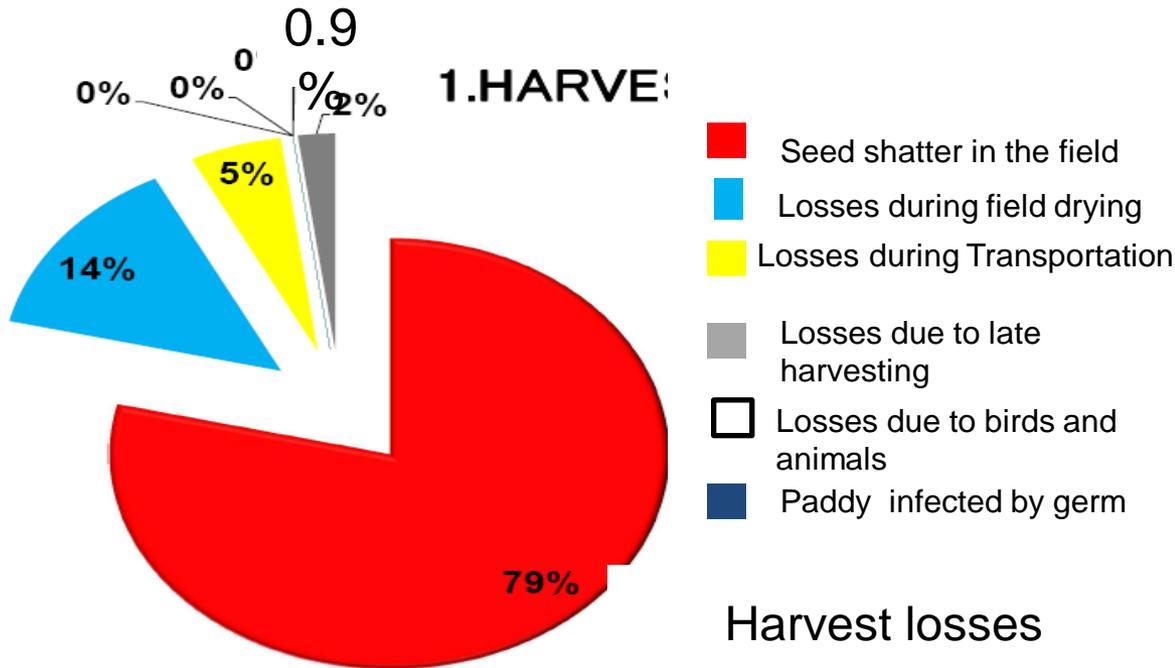
- Development of Tolerance (to multiple stress environment as drought, salinity, flood, high and low temperature, iron & zinc toxicity etc.) rice varieties
- Development & Promote climate-smart management options
- Promote cultivation of “special traditional rice varieties”(eg. Paw San Hmwe) under branded strategy
- Promote diversified farming system

## **4. Efficient utilization & sustainable management of natural resources**

- Effectively management of water, soil, RGR, Farm wastes
- Promote efficient nutrient management, integrated pest management , generate map of cropping pattern

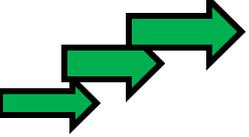
# The way forward (MRSDS) continued

## ○ 5. Postharvest loss reduction and value chain improvement



- Upgrade existing mills
- Improve existing postharvest infrastructure
- Collaborate with line ministries to establish formal agreements with rice-importing countries
- Establish a wholesale rice market
- Conduct aggressive market research

Source: Farmers survey conducted in Ye Aye Village, Tatkhone Township during Dec (7- 26) 2014. (Tin Ohnmar Win, Wut Yee Aung, T. Shibata, 2014)



# The way forward (MRSDS) continue

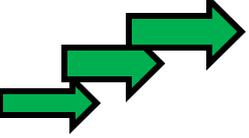
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## 6. Improve credit schemes for farm investment

- Improve current credit schemes for stallholder farmers and for the private sector

## 7. Capacity building

- Develop a new generation of rice scientists , agriculture extension specialists
- Develop **a new generation of skilled mechanics ( rice quality lab:, biotech lab:)** for agricultural machinery & equipment
- Train farmers on rice and rice-based farming systems
- Empower women & youth in rice farming



# The way forward (MRSDS) continue

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## 8. Sound policy environment to increase investment in agriculture

- Review & adapt Foreign Direct Investment R&R
- Adopt a minimum rice and seed stock policy for emergency relief during disasters
- Enforce seed industry development by well implementing Plant Variety Protection System under the **control of PVP Law, Seed Law, Fertilizer and Pesticide** policies
- Initiate crop insurance systems

## 9. Quality control & safety

- Develop protocol for establishment grain quality standards for Myanmar brands based on international standards
- Develop GAP to ensure quality and compliance with the certification standards

# The way forward (MRSDS) continued: Rice research and development

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- 10.1 Develop and sustain a comprehensive and **well-defined national rice research and development program** implemented by a rice R&D center;
- 10.2 Strengthen **partnerships with other countries** within the region;
- 10.3 Engage with the private sector, non-government organizations, and regional and international partners on rice research and development, especially the International Rice Research Institute (IRRI); and
- 10.4 Strengthen partnerships with regional and international research and development institutions for capacity enhancement. 22

# Three Main Actions - 2030

- Increase investment in rural infrastructure
- Formulate & implement institutional and policy reforms and innovations
- Increase investments in capacity building

# 5. Conclusion

- Rice is our main crop
- The current situation of Myanmar Rice Sector is still behind our neighboring countries.
- Myanmar Rice Sector Development Strategic Plan has been launched in May of 2015.
- **Closing the gaps; Rice Yield, Technology, Human resources, Productivity, Profit and**
- **Production of high value (quality) rice are the high priorities.**
- To meet the national goals and to achieve the overall vision, **upgrading of the current rice research** activities of DAR to **Myanmar Rice Research Institute (MRRI)** is urgently needed.