

<b>Group Name</b>	- RB-01-1-3
<b>Group Members</b>	- Dr. Thanda Aung and Daw Tint Tint Mon
<b>Duration</b>	- 2016-2017
<b>Research Title</b>	- <b>Seasonal Distribution Maps, Management Practices and Profitability Analysis of Vegetables in the Selected Area, Nay Pyi Taw</b>
<b>Objectives</b>	- <ul style="list-style-type: none"> <li>• To create seasonal distribution maps of vegetables of the selected area in Nay Pyi Taw</li> <li>• To analyze crop management practices and profitability of the selected commercial vegetables in the study area</li> </ul>
<b>Results &amp; Conclusion</b>	- Detailed information on seasonal distribution of vegetable growing areas and comprehensive study on cultural practices of some commercial vegetables are still lacking in Myanmar. This study was done to produce seasonal distribution maps of vegetables for the selected area and to analyze crop management practices and profitability of the selected commercial vegetables. Kyee Inn village tract, Pyinmana Township, Nay Pyi Taw was selected and studied from May, 2016 to December, 2017. Total study area was 483 ha and DJI Phantom 4 drone, Lichi software, GPS device, pix 4D software and ArcGIS were used to draw the maps. A total of 50 vegetable farmers were interviewed to analyze crop management practices and profitability for selected five commercial vegetables; okra, chilli, yard long bean, cucumber and ridge gourd by using descriptive analysis and profit function. The result showed that 15 kinds of vegetable were distributed year round and total vegetable production areas ranged from 3.69 acres (0.31%) to 17.61 acres (1.44%) of total cultivable land. Farmers used hybrid seeds except for chilli and practiced their preferable spacing, not following the recommended one provided by Department of Agricultural Research (DAR). Farmers commonly used high dosage of urea and some farmers used wrong pesticides to control green leaf hopper, leaf miner, powdery mildew and rust. Moreover, most farmers had no awareness on using pesticide. Okra production gives the highest Benefit Cost Ratio (BCR) of 2.5 if it was grown in less than average acre. But, in chilli and ridge gourd production, BCRs (2.7 and 3.7) were the highest in 'average growing acre'. Yard long bean and cucumber production give the highest BCRs (2.5 and 2.5) in 'above average growing acre'. In total cost of production, labor cost was the highest followed by fuel cost for irrigation.

**Remarks**

The paper has been presented in 10<sup>th</sup> ICERD Conference and awarded the “The Excellent Paper Award”.

**Photo  
Records**



<b>Group Name</b>	- RB-01-1-3
<b>Group Members</b>	- Dr. Thanda Aung and Daw Nyein Nyein Aye
<b>Duration</b>	- 2018-2019
<b>Research Title</b>	- <b>Richness of Horticultural Crops Mainly on Mango Species of Selected Home Gardens in Myanmar</b>
<b>Objectives</b>	- <ul style="list-style-type: none"> <li>• To find the relationship between the home gardens' size and species richness of horticultural crops and distribution of mango varieties in the selected area.</li> </ul>
<b>Results &amp; Conclusion</b>	- <p>Thoroughly selected 60 home gardens were studied from September, 2018 to October, 2019 in Nay Pyi Taw Union Territory, Myanmar. Drone flying was done to generate geographical information. Coordinate points of each mango varieties were collected. Home gardens' information not only measuring compounds but also crops information especially on mango namely local names, growth stages, numbers of individual, leaf attitudes and characters was collected. Shannon-Wiener' index was employed to determine species richness. Distribution map of mango varieties was figured out. The compound areas could be classified into three classes as small, medium and large; were positively correlated with species richness of all horticultural crops (<math>r^2=0.04</math>) and that of mangoes (<math>r^2=0.08</math>). Potential area for home garden development was highest in large gardens (41%) followed by medium (16%) and small (9%). Out of total 480 species, richness was highest in ornamental (46%) followed by vegetables (10%), fruits (8%), shade-trees (8%), medicinal-plants (6%), spices (3%) and unidentified species (20%). Among fruit trees, mango was most dominant and 90% of home gardens were growing total 361 plants (young 37% and adult 63%) of 15 local varieties namely Ma Chit Su (39%), Sein Ta Lone (24%), Sein Sar Thee (20%), Yin Kwe (9%), Ma Naw Nwe (3%), Waso, Padamyar Nga Mauk, Thone Lone Ta Taung and unknown varieties (1% each) and Wet Ta Kaut, Pan Swae and Pyo Ta Ngone (0.3% respectively). Three types of leaf attitude and 8 different leaf characters of mango varieties were found. Diversity index of total species was 1.57 and 1.4 for mango varieties. It can be assumed that species distribution was sufficient. However, there is remaining available space to extend home gardening in the study area.</p>
<b>Remarks</b>	The paper has been presented in 11 <sup>th</sup> ICERD Conference

**Photo  
Records**

