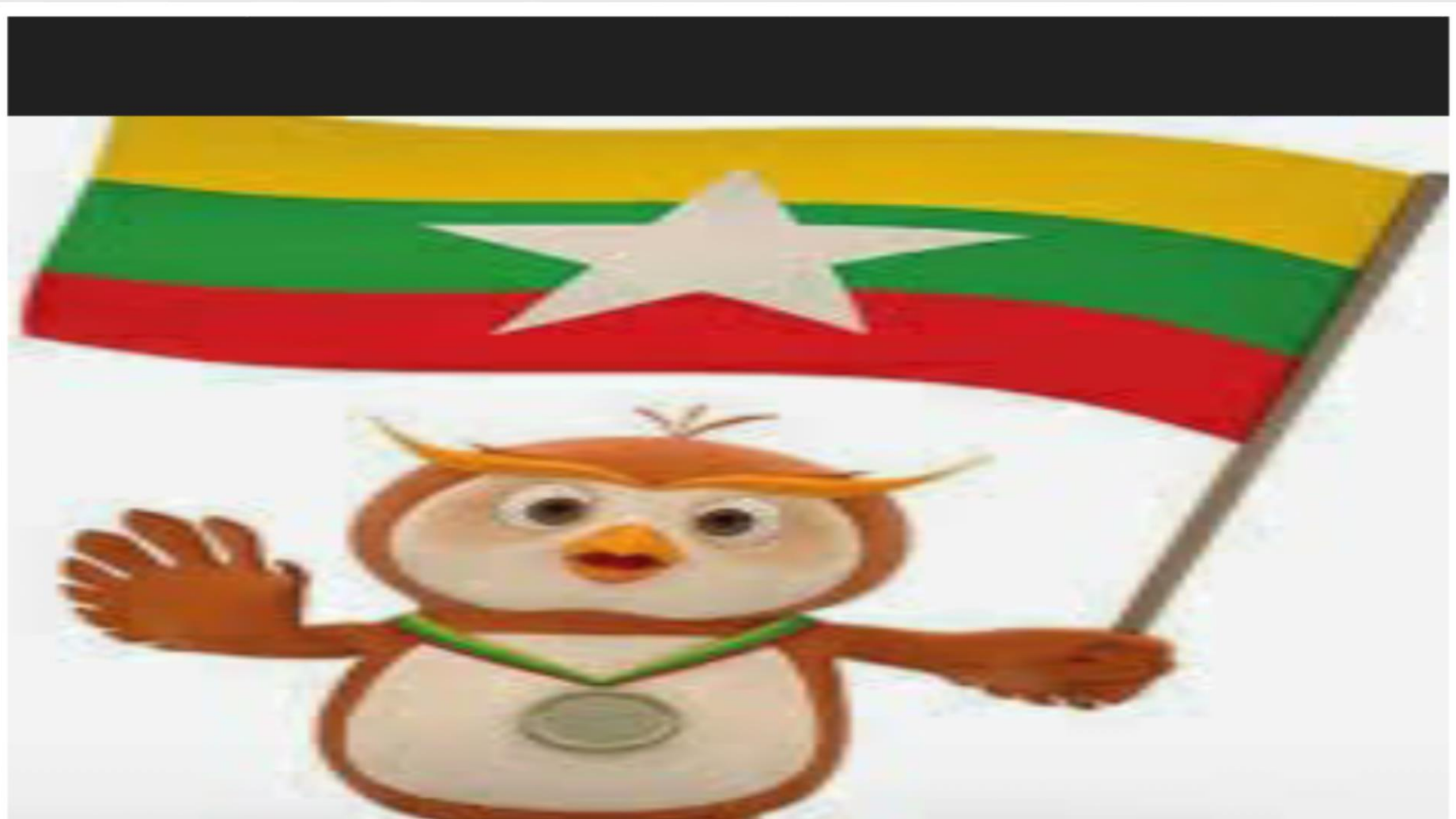


Development of Locally Appropriate GAP Program for Selected Vegetables in Myanmar

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28,10,2016**



Introduction of Myanmar





Location

Latitude: 9°32' - 28°31'

Longitude: 92°10' - 101°11'

Land frontier:

with Thailand 2099 km

with Laos 235 km

with China 2227 km

with Bangladesh 272 km

with India 1453 km



Area is about 676, 577 sq km

Population

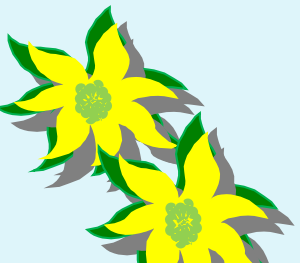
- ❖ 51.702 million (2015)
- ❖ 1.01% annual growth rate

Season

- ❖ Rainy (mid May - mid October),
- ❖ Winter (mid October – mid February)
- ❖ Summer (mid February – mid May)

Introduction

- ▶ According to MOALI, 2014,
- ▶ agriculture sector - plays the central role in terms of GDP, export earnings and job absorption
- ▶ Myanmar possesses wide range of agroecological



- ▶ Therefore, tropical, subtropical, and temperate
- ▶ vegetables are thriving well in different ecological zones
- ▶ vegetables are rich sources of carbohydrates, proteins, vitamins and minerals
- ▶ an estimated two third of people in Myanmar suffer from the lack of vitamins and essential minerals



- most of them are women or children, resulting in ill health, lack adequate physical and mental development and liable to various diseases including blindness
- There are about 100 vegetables grown in Myanmar
- These crops are growing throughout all agro-ecological zones
- majority of vegetable crops are grown in small scale basis

- FAO estimated that the availability of vegetables in Myanmar is less than 50 percent the recommended daily dietary intake of vegetables (300 g/day)
- Therefore, Myanmar vegetables sector needs to be promoted - both on the quality and safety of vegetables
- Require a systematic high quality handling management (GAP, GMP, pre-harvesting to postharvesting stages)



Status of Vegetables Production in Myanmar(2014– 2015)

No	Crop	Sowing Area(ha)	Harvest Area(ha)	Yield (Ton)	Production (Ton)
1	Cabbage	31471	31264	15.26	476980
2	Cauliflower	27225	27105	14.30	387666
3	Lettuce	10495	10462	7.07	74009
4	Mustard	34257	34127	7.02	239572
5	Tomato	110197	110157	12.19	1343184
6	Carrot	2289	2287	7.26	16599
7	Radish	21972	21909	12.45	272858
8	Watermelon	20613	20613	11.46	236228
9	Bottle gourd	23186	23186	11.52	267098
10	Asparagus	572	570	5.84	3332
11	Others	282545	282437	9.83	2776973
Total		564822	564118		



(Source; Horticulture
& Plant Biotechnology
Division, MOAI, 2015)

Objectives

General Objective

- ▶ Consumer protection by ensuring a safe product whilst also minimizing the negative impact of production practices, on the environment and on workers' health and maintaining market credibility

Specific Objectives

- To educate the GAP to the vegetable farmers in the selected areas
- To provide consumer guarantee on the safety attributes of the product
- Market confidence regarding the safety of the vegetables products

Justification

- ▶ According to Asian Free Trade Agreement (AFTA), trade become free after 2015
- ▶ Nowadays, changing consumer lifestyle not in Global, ASEAN region but in Myanmar are driven the demand for assurance of fruit and vegetables

“safe to eat with good quality with no harm to environment and health of consumers”



- The impact of trends mentioned in the above—
- **requirement of GAP development**
 - for all stakeholders and GAP program is an important component in road map of the country



Activities

- Development of GAP codes for the **cabbage and cauliflower**
- Development of GAP manuals for the **cabbage and cauliflower**
- Implementation of **GAP** at the Farmer Field



- ❖ Water & soil testing
- ❖ Trainings for farmers and staff for extension Dept.
- ❖ Verification of farm practices
- ❖ Comparison the quality and safety produces between GAP and conventional farms



Outcome

- Reduction of **negative impact on environment, worker health** during misuse of chemicals in conventional agricultural practices
- Prevention of **pesticide residues** in agricultural produce
- Publishing 2 GAP **manuals for the cabbage and cauliflower**
- 3 training programmes for farmers and staffs from extension department
- Two or three GAP awareness programme through **farmers' TV channel** for **assuring quality and safety** of vegetables
- Publication of GAP



Beneficiaries

Community of Myanmar

- ✓ Researchers and extension workers
- ✓ Consumers and all stakeholder involved in vegetables production chain



Partners

- Extension Department of DOA
- Horticulture Department of Yezin Agricultural University (YAU)
- Plant Protection Department of DOA and DAR
- Soil Science Section of DAR
- Water Utilization Section of DAR
- Selected Farmers



Project Duration/Timelines (WORK PLAN)

Sr.	Activities	Year 1		Year 2		Year 3	
		1-6 Months	7-12 Months	1-6 Months	7-12 Months	1-6 Months	7-12 Months
1.	Appointing GAP development committee		***				
2.	Development of GAP manual		****				
3.	Implementing of GAP at the farmer fields and Horticulture section, DAR		***		***		***
4.	Soil and water testing		***		***		***
5.	1 st year workshop				***		
6.	Submit year end results and next year work plan			***		***	***
7.	Trainings			**		**	
8.	Verification of farm practices			***		****	
9.	Submit Final year results			***		***	***

Conclusion

- Knowledge of farmer for the safely use of V & F crops
- Educate the farmers and other stakeholders on the improve technologies of vegetables and fruits crops in my country
- Development of quality standard for agro-based products
- Increase awareness programs & trainings by highlighting the misuse of agrochemicals in current vegetable production to protect from hazards for farmers, consumers, and their environment



Tourism in Myanmar



Traditional Foods of Myanmar



**Thank You
for your kind attention**



Future plan for Myanmar GAP

- Conduction capacity building for human resource development regarding to post-harvest technology and laboratory
- Development of quality standard for fruits and vegetable
- Initiative research on quality assurance system setting up for Myanmar GAP
- Development of Myanmar GAP to farmer's field
- Demonstration on farmer's field
- Conduction GAP training for farmer to farmer
- Extension of Myanmar GAP through national

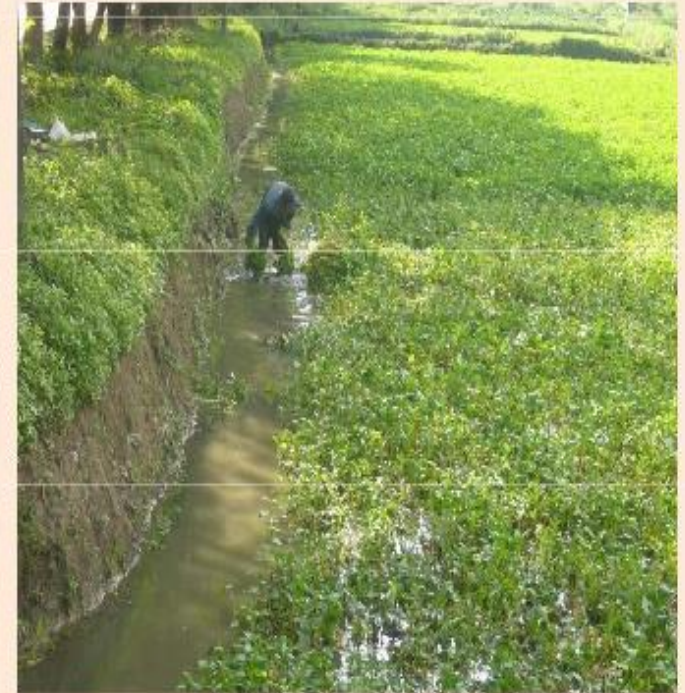
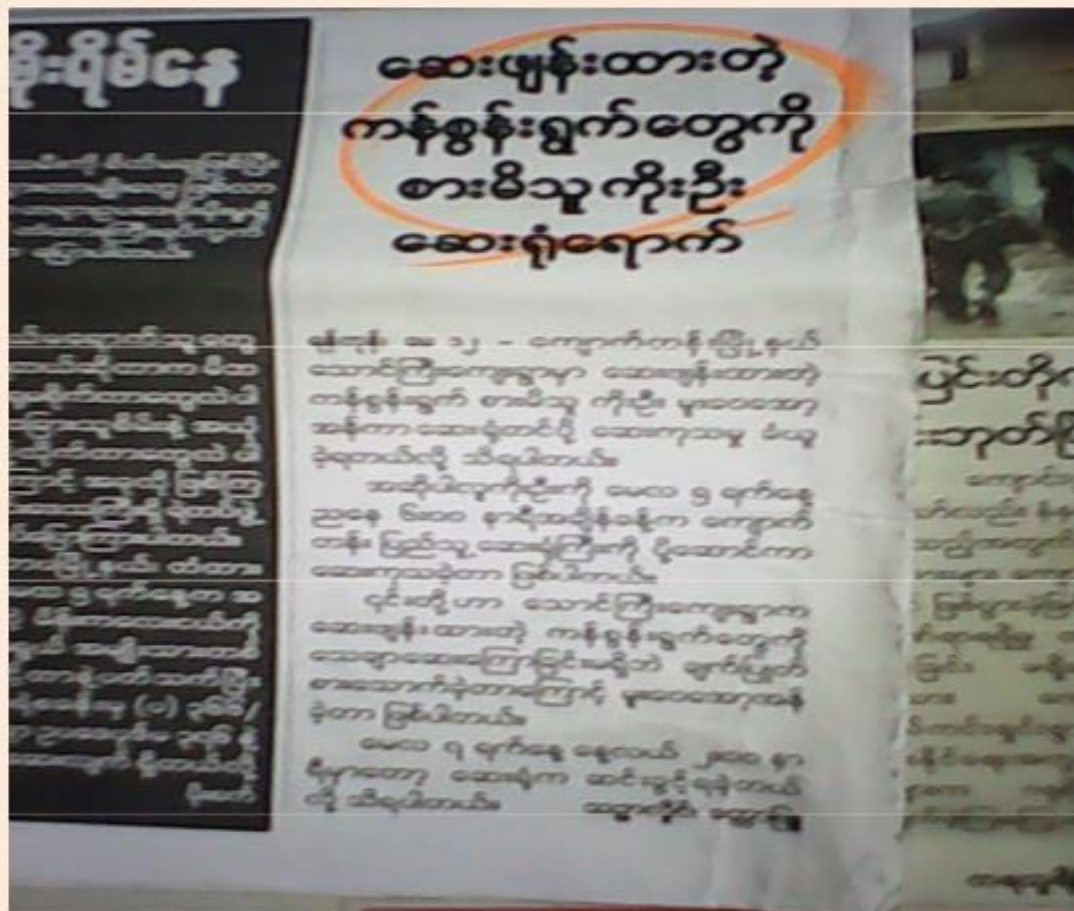
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 (ဆွတ်တီဆီယူလင် - CPA)
 B.C. (UK) CPA; FLECI (London-UK)
 DA (LCCI-UK) FFA (IFA-UK)
LCCI Level I, II, III
 စာရင်းကိုင်သင်တန်းများ
 FOR SERIES 2/2014
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❖ A farmer died due to blowing
 nozzle while spraying pesticide in tomato plot
 (Mirror daily newspaper, 12 Sept, 2013)



Nine people from Yangon region were sent to hospital due to pesticide toxicity by eating sprayed water cress without washing well before eating.
(Weekly News Journal-May, 2013)



Difficult to purchase safety food.

(Mirror daily newspaper, 01 November, 2013)

Constraints in Promoting GAP Practices in Myanmar

- Needed public awareness on Myanmar-GAP guideline on fresh produce and weak cooperation –PPP
- ASEAN GAP only covers fresh fruits and vegetables and still new in regional and international context.
- Producers, especially the small scale farmers have poor knowledge about this new initiative
- There are many existing standardized system such as ASEAN GAP, Global GAP and organic, etc., which confuse farmers. This confusion was made worse by not understanding what GAP really means because other organizations refer to GAP as the efficient use of production inputs (e.g., use of certified seeds, application of recommended amount of fertilizers, efficient use of water through good irrigation practices, etc.)
- Equipments for water, Soil Analysis ,Testing for MRL and Infrastructures are still needed to develop in the country

The scope of Myanmar GAP

- ▶ Covers the production, harvesting, post harvest handling of fruit and vegetables on farm and also they are handled to sale



Myanmar GAP Logo