

#### Three topics in module 2 that I found most useful

- Protected cultivation for vegetable crops
- Nutrient Values from seed to table
- Biology of Postharvest for vegetables



# **Development Action Planning (DAP)**

The comparison of some characterization between lettuce was cultivated in Nutrient Film Technique (NFT) and substrate culture system

- Healthy Trend
- Argument quality of lettuce between NFT and Substrate culture system
- Shelf life
- Nitrate accumulation in lettuce



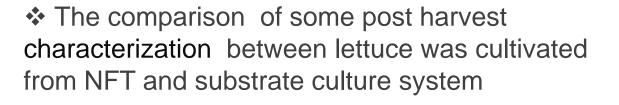






# **Objectives**

The comparison of some nutrition between lettuce was cultivated from NFT and substrate culture system





### **NFT vs Substrate culture**









### **Development Action Planning**

No	Activity Plan			Ti	me	Responsible person	Result/Outc ome		
		20	16	2017					
		Nov	Dec	Jan	Feb	Mar	Apr		
1.	Experiment design, Determination data collection and analysis	<b>←→</b>						Research officer	Proposal
2.	Selection of suitable lettuce cultivars and contact the seed company		<b>←→</b>					Research officer Private officer	Lettuce seed
3.	Contact the state sector for permit to use the green house and field		<b>←</b> →					Research officer Field officer	Place of experiment
4.	Prepare system, media, seedlings and fertilizer for cultivation			<b>←→</b>				Research officer Field officer	System ready to transplant the seedlings



# **Development Action Planning**

5.	-Transplant the seedlings in to system and take care - collect the plants to determination -physiology: fresh weight, plant hight, number of leaf, firmness etcnutrition: vit c, fiber, phenolic compound, nitrate accumulation etcpost harvest management: shelf life, weight loss, transpiration, respiration etc.		•	•		Research officer Post harvest officer	Lettuces are ready to determinati on
6.	Data analysis , Conclusion and announcement a new information				<b>←</b>	Research officer	Knowledge

# Challenges

- Pythium Wilt Disease of lettuce causing losses
  - Trichoderma
- Thrips feeding on lettuce can cause curled leaves and silvering and wilting.
  - insecticide : Organophosphate

