The Role of Education and Training In Agricultural Meteorology

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The Aim of This Paper

- Address some of the options available to educators:
  - in preparation of agrometeoroligists to address the variability of the climate
  - To enable them to learn how to predict the effect on agricultural production systems

Concerns of Agrometeorologists

- They must continually sharpen their skills
- They must remain updated on the latest available information
- Their training should include:
  - communication
  - numeracy
  - cognitive skills
  - information technology skills

Training Should Include

- Problem-based learning to promote critical thinking
- Decision making and analytical skills
- Computer aided learning
- Practical Examples
- A strategy to address needs and implement changes

What is Agrometeorology?

- A study that brings together the effects of climate and weather on agricultural production
- Takes into account both crop and livestock production
- An up-to-date service on climate change and technology advances
- Applying the predicted changes to the local farming systems & agroindustry
- NEED to inform
  - general public
  - teachers
  - media

What Training Entails ?

- Training should include a range of levels
- The agrometeorologist should have a wide range of interest and influence
- Interpret scientific principles to end users

Training Methodology

- Skills training
  - Impacting the livelihood of the audience by:
    - Transferable skills
    - Information technology skills
    - Information gathering skills
    - Transforming data to information

Training Methodology

- Skills training cont.
  - Professional skills
    - reflection
    - integration / explainations
    - logical contrasts
    - explainations
    - application of theory to specific situations
  - these skills not usually taught
  - Need Problem-solving skills

Training Methodology (Cont)

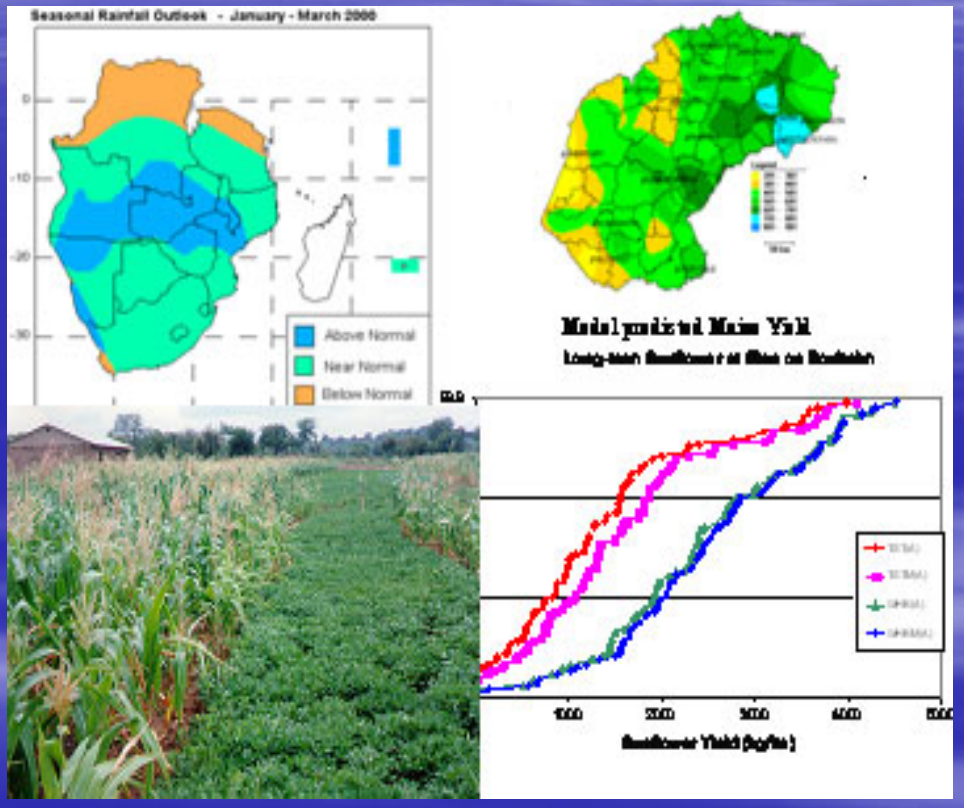
- Computer Aided Learning (CALMet)
  - CDs or the Internet to develop self-paced modules
  - New modules are continually developed and this method of learning will always be expanding

Professional Expertise Training

- Crop-climate matching
  - Can be used to select the most suitable crop for specific climatic conditions

Professional Expertise Training

- Use of indices and crop models
  - Use is made of climate based indices to assess and integrate the effect of the environment
- Risk assessment and seasonal outlooks
  - Communities face different circumstances and they can be classified as risk adverse or risk susceptible



Conclusions

- Further education and training is VITAL
- What are we going to do about it?
- Develop strategy to address current situation that includes :-
  - Skills training
  - Problem-based learning
  - CALMet
  - Practical applications for local situation
- Be able to maintain a good Agromet service to public despite changing circumstances