Extension Suite Online™

MONTHLY NEWSLETTER

The GIS Team

Specialising in building a geographically referenced, agricultural infrastructure geo-database section for Extension Suite Online (ESO), the team is managed by Ishmael Mohono. Ishmael holds a BSc Hons Degree majoring in GIS from the University of Pretoria and has extensive GIS working experience.

The responsibility for software building rests on Sabelo Gumede, a Software Engineer with more than 5 years experience as web project manager and senior software developer. He holds a national diploma in IT from Durban University of Technology specialising in software development.

Research for agricultural infrastructure information for ESO is conducted by Daphney Bakgoeng (BSc Hons Agricultural Economics) with more than 4 years working experience in agriculture,

Monica van Huyssteen with more than 8 years working experience in research and business admin; and Pretty Duma an intern from the Department of Agriculture Management and Development Programme (DoA MDP).

QUESTION OF THE MONTH

Can traditional knowledge contribute to agriculture?

Towards an intelligent knowledge base

Extension Suite Online is an integrated agricultural production and extension support knowledge base. Not only does the system host a plethora of production related information, but it also provides facilities to collect additional information from experts and users alike, allowing for the continuous improvement of its databases, with practical solutions. In short, the more it is being used, the more intelligent it becomes.

It is envisaged that Version 2 will provide intuitively intelligent solutions to problems. Firstly as a system that provides answers almost before questions are asked, and secondly as a system that grows with every logon of every user, tracking utilisation patterns, providing guidance to finding information based on what it can learn from its users and those who are involved with the maintenance of its databases.

Linked to its GIS, production and economic databases, the Q&A sections as well as the problem solvers will all contribute towards providing comprehensive and intelligent answers. Each solution developed by either the system or by its users, will be captured in itself and become part of the available knowledge pool.

Adding to the total knowledge base are the people using the system, a network of users – including experts in every possible field - who are linked through the system and its communication ability. This community of users will be distributing information, helping each other and contributing to the vibrancy and wealth of ESO information on a daily basis. It is therefore not only the system that will help itself to grow, but also the users that will provide information and intelligence.

Extension Suite Online will thus become more than just a knowledge base. It will grow into a true agricultural knowledge centre where the information needs of farmers are translated into research activities; the results of research are translated into practical farming solutions; and where Extensionists are assisted to help farmers to develop productive and economically viable farming enterprises throughout Africa. The system will reduce the time spent on searching for answers, by providing intelligent and appropriate solutions quickly – right there where it is required - allowing Extensionists and farmers to spend valuable time on the implementation of such solutions instead of waiting for answers.

The basis for an intelligent knowledge base has been created in Version 1. In version 2 the technology will be consolidated, and the system will be integrated to create a true agricultural knowledge centre.

Using Extension Suite Online to determine crop feasibility

Jantus explains the utilizing of ESO to provide extensive market information for a wide range of crops and the interpretation of data to identify profitable window periods.

Extension Suite Online (ESO) can be used by Extension Officers to assist farmers in the identification and selection of feasible farming options that match the characteristics and location of their farming enterprises. In this regard information contained in ESO will enhance and facilitate an evaluation of, and decisions on, the following critical factors and components that determine crop feasibility and the resultant selection of feasible and viable farming options:

- Knowing which (and understanding how) environmental factors and natural resources influence the feasibility and viability of agricultural production and are thus critical considerations in the selection of the commodities to be farmed with and the production systems to be adopted. ESO provides relevant information for each crop and when this is matched to the environmental and resource characteristics of a farm (e.g. soil, climate and water) - which are also contained on ESO – a more scientific crop and farming enterprise selection is made possible.

- Understanding how the availability of suitable markets (or the lack thereof) influences the feasibility and viability of agricultural enterprises which makes them critical considerations in commodity selection by farmers. When considering the establishment of a farming enterprise, it is critical to ask the following questions:
  - o What can I produce that the markets require?
  - o Is there a market opportunity for the range of crops and cultivars that I can produce in the vicinity of my farm?

ESO provides extensive market information on a wide range of crops, (volumes traded, and prices reached) and interprets data to identify profitable window periods, etc. towards addressing the above questions and therefore facilitating a selection of the commodities to be produced from a market supply and demand perspective.

How does ESO fit into the G8 L'Aquila Summit Conclusions on Food Security

During the G8 Summit on Food Security held in July 2009 at L'Aquila (attended by the leaders of 40 countries including the G8 and G5 countries), the need for urgent and substantial interventions to respond to increased hunger and poverty in especially poor countries was discussed.

In the joint statement released after the summit the signatories of the L'Aquilla Initiative on Global Food Security committed themselves to generating and investing 20 billion dollars over three years to encourage rural and agricultural development of poor countries.

To this end the statement specified the following as a key strategy towards achieving the above goal: *"Priority actions should include strengthening capacities to provide extension services and risk management instruments. In this regard investment in and access to education, research, information and technologies should be substantially strengthened at national, regional and international level."*

Given the focus and objectives of ESO, namely as an Agricultural Decision Support System that capacitates and empowers Extensionists to render improved extension services to their farmers, it is evident that ESO is well placed and that there should be sufficient funding to facilitate and finance its rollout beyond the borders of South Africa and into the African continent as a whole.

Technology Tips

Q: Why should I remember to log off?

A: When you login to Extension Suite Online, you will be granted access to the system with specific credentials that will be used to identify you. This means that you will be able to perform account specific functions within Extension Suite, e.g. adding a new user, or making changes to your profile.

The main reason why you should therefore remember to log out is for security purposes. Let me explain: upon log out, your session with Extension Suite Online is terminated.

This means that no one, other than yourself, is able to make changes to your account, if you do not log out, any unauthorised person might alter your settings, which might leave you with an account that is not useable, or that you can't access! So remember to use the log out button when you leave your computer and protect your work!

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