Message from the Management

Agrisoft releases new extension and Add-In programs for OMP

Dear Customers,

The first quarter of 2013 was a productive period at Agrisoft Systems and brought the completion of several long-running development projects. The three newly-released programs address three very different aspects within the OMP suite of programs for the oil palm industry. One of the programs is a customized database for oil palm tissue culture laboratories named TC-DBMS. The second new application is the Ten Year Crop Budget application, OMP-TYCB. This application is designed to facilitate the preparation of long term production budgets based on the current age profile of the plantation, taking into account the aging of the various plantation areas as well as replanting effects. The OMP-TYCB application was briefly previewed in the 2nd edition of the Agrisoft Systems newsletter published in July 2012.

The third new application to be released in the past months is a new Add-In program to extend the capabilities of the core OMP-DBMS application. The Add-In carries the name OMP Harvest Round Recording (OMP-HRR), and focuses on providing much more detailed data capture and data analysis regarding the harvesting productivity.

A much more in-depth description of the new application is given in a feature article in the later parts of this newsletter.

Following the release of the three completely new applications mentioned above, the Agrisoft Systems development team intends to focus more on improving the existing programs of the OMP suite over the coming months. An overview of some of the planned improvements a number of which are based on suggestions from our customers is given in the final section of the newsletter. Finally, the series "Who's behind OMP" will be continued in this edition of the Agrisoft Systems newsletter with a profile of our programmer Eko Riyanto.

Yours faithfully,

Max Kerstan
(Chairman of the Supervisory Board)

Who's behind OMP

IT Support Staff:
Eko Riyanto

In this edition of the "Who's behind OMP" series, we would like to profile Eko Riyanto, one of the best programmers in the Agrisoft Systems team. Eko was born in Klaten, Central Java on 9 January 1986. He arrived in the world of computer programming via a rather circumspect route after first following his childhood interests in the automotive world and enrolling in a study program to become an automotive technician at STM Muhammadiyah 1 Prambanan. In the evenings, Eko worked part time at a computer store in his hometown. Although his initial position was just that of a delivery courier, the experiences were enough to ignite Eko's interest in the computer world and as he gained experience he slowly worked his way up and eventually became a computer technician.

After graduating from STM Muhammadiyah 1 Prambanan in 2005, Eko realized that in the end he was more interested in computers than cars and decided to continue his study at AMIKOM Yogyakarta, a well-renowned college for the direction of computer science. Having graduated with a bachelor's degree from AMIKOM Yogyakarta in 2008, Eko joined up with Agrisoft Systems Indonesia. Due to his knowledge and experience in working as a computer technician, Eko was soon entrusted with the responsibility of handling any hardware-related problems at Agrisoft. Besides playing a large part in the hardware maintenance, his solid programming skills allowed Eko to participate in many programming tasks. For example, Eko successfully completed programming projects on OMP.Net, the OMP Add-In BBC based on SQL Server 2005 and VBNet 2005 systems, and was also responsible for designing parts of the Agrisoft Systems website.

More recently, Eko's tasks at Agrisoft have focused more towards research and development, looking to explore and evaluate the potential of possible new directions in which the software might be developed. Eko's inquisitive nature and love of learning new techniques and exploring new ideas made him a natural choice for these tasks. Among the potential options that were tested extensively by Eko is the use of SQL Reporting Services, a system that allows users to access OMP-generated reports via any internet browser. Currently, Eko is researching the possibility of rewriting OMP-AMIS as a portable application based on the Java programming language. Eko hopes that Agrisoft Systems will continue to grow into a larger company and that OMP-AMIS will grow to be well-known by every oil palm agronomist all over the world.

New Release

New OMP Add-In released: OMP Harvest Round Recording

By: Max Kerstan

In March 2013, a new Add-In program for the OMP software suite was released under the name "OMP Harvest Round Recording" (OMP-HRR). This Add-In is designed to allow oil palm plantation managers to monitor the harvesting procedures and analyse the crop performance of their plantation in unprecedented detail.

The OMP-HRR database contains an individual record for each harvesting round carried out in each block of the plantation. This is in contrast to the situation in the OMP-DBMS main program, where only the monthly production of each block is recorded. For each harvesting event, the data recorded includes the date when harvesting of the given block commenced, the bunch and loose fruit yield, the number of consecutive days the block was being harvested and the average number of harvesters involved during this time.

Figure 1: OMP-HRR data entry

While the data entry is thus comparatively simple, the OMP-HRR Add-In allows the user to analyse this data in a wide variety of ways through the large number of built-in reports.

For one, the OMP-HRR reports include the "Crop performance reports", where the crop performance data can be chosen by the user to be shown grouped either by day, by week, by fortnight, by 4-week period or by month.

Figure 2: The crop performance reports menu

For each chosen time period, the data can furthermore be shown by estate, by division, by field or for each individual block. An example of the weekly yield by division is shown in figure 3.

Figure 3: Weekly yield by division

New Release

Further classes of reports included in the application are given by the block reports, field reports and division reports. Here the data is grouped first by the chosen management unit. For each chosen management unit, the data can furthermore be displayed grouped by the different time intervals listed above, as shown in the screenshot of the block reports menu in figure 4.

Figure 4: The block reports sub menu

These reports can be used to analyse in more detail how individual management units are performing over time. An example of the block report showing yield by fortnight is shown in figure 5.

Figure 5: The block reports for yield by fortnight

The reports described above give a high level of detail on how the estate or a management unit within the estate is performing within a given time period. To supplement this, the OMP-HRR Add-In furthermore includes the "Monthly yield comparison" and "4-weekly comparison" reports. These reports can again be chosen to display data on a by division, by field or by block level. The reports show the production and yield of the chosen management unit for all months (or 4-week periods) in a year on a single sheet of paper. This makes it easy to compare at a glance how the different divisions, fields or blocks are performing in relation to one another, and how this is evolving over time. A sample screenshot of the monthly yield comparison by field is shown in figure 6.

Figure 6: Monthly yield comparison by field

The data analysis features of the OMP-HRR Add-In are rounded off by the so-called "Progress reports". The progress reports are available by week, fortnight, 4-week period or month, and can again be grouped by division, field or block. These reports give a snapshot of how the production of the estate is progressing by showing the production for the year to date of the chosen management unit. To put this into context, the reports also show how the estate performed in the same time period in a reference year which can be chosen by the user. If the OMP Crop Budget Add-In is installed, the OMP-HRR application also displays the budgeted production on the progress reports. This allows managers to easily get an impression as to whether they are on track to achieve the budgeted goals. An example of the weekly progress report by division is shown in figure 7.

New Release

Figure 7: The weekly progress report by division

The OMP-HRR application includes an update routine to update the main OMP-DBMS database with the production data in the OMP-HRR database. This update routine automatically sums up the daily harvesting data in the OMP-HRR database to obtain the monthly production data that is required for the OMP-DBMS. At the same time, it calculates the number of harvesting rounds per block and month, and the longest harvesting interval between successive harvesting rounds in a given month. The fact that the harvesting intervals are thus calculated from the underlying harvesting data instead of being entered manually into the OMP-DBMS database promises improved accuracy of these numbers. This gives plantation managers the tools to easily identify blocks that might have been harvested too rarely in a bid to improve harvesting efficiency, and furnishes an important piece of information when trying to compare and explain the differences in the monthly production of different blocks.

The OMP-HRR Add-In gives users the tools to look beyond the averaged monthly production and analyse the production and productivity of the estate on a fortnightly, weekly or even daily basis. We at Agrisoft Systems are confident that this Add-In will be a very helpful tool for plantation managers looking to monitor and improve the efficiency of the harvesting procedures at their estates. The OMP-HRR Add-In is available to prospective new OMP users as part of the OMP Professional Edition. Existing OMP users may purchase the user license for this Add-In at a cost of US$ 0.20 per ha. Customers with an active maintenance and upgrade agreement (MUA) are as usual eligible for a discount of 25%.

From the developers desk

A selection of the on-going developments and plans which are part of our constant efforts to continue to improve Agrisoft products.

Newly Released Application

OMP-HRR

- New Add-In for precision analysis of harvesting procedures and development of harvesting productivity over time

OMP-TYCB

- New OMP extension program for the creation of long term crop budgets

OMP-DBMS

- TC-DBMS: new customized database software for oil palm tissue culture laboratories

Long-term Development Plans

- Portable version of OMP and OMP-GIS independent of Microsoft Access and MapInfo
- Tabbed reports and forms to make it easier to move back and forth between open forms
- Report summarizing aspects relevant for RSPO/ISPO audits
- Weather station add-in

Planned features and additions

OMP-DBMS

- Recording of flooding events
- Improve reports showing pest and disease outbreaks and corrective measures that were undertaken

OMP GIS

- Possibility to export thematic maps to handheld GPS devices
- Improve thematic maps of pest and disease outbreaks to show location and severity of outbreaks and development over time

OMP Nursery

- Add graphs of vegetative growths
- Add recording of pest and disease outbreaks

OMP-AI Pesticide

- Add charts of pesticide usage
- Add printable reports of active ingredients

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