# AGROLOGIS, AN INNOVATIVE COMPUTER SYSTEM, AIDS CASH FLOW MANAGEMENT IN AGRICULTURAL ENTERPRISES[41]

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**Aim:**
The aim of the study was to test and evaluate applicability of an innovative computer system, AGROLOGIS, in support for cash flow management in agricultural enterprises.

**Methods:**
The development of the AGROLOGIS system was based on software working within the Microsoft operating system (XP, Vista, etc.), i.e. Microsoft SQL Server 2005, Microsoft Visual SourceSafe and Microsoft Visual Studio 2008, facilitating applications in the NET Framework system. While testing the system, information flows on costs and income identified and analyzed on the on-going basis by the AGROLOGIS system, were analyzed and systematized. Moreover, these tests facilitated an evaluation of applicability of the software in support of cash flow management. All primary cost and income information was imported from traditional book-keeping systems. Tests were conducted in 2010 in 18 large agricultural enterprises in Poland as part of a development project.

**Main results:**
AGROLOGIS is a tool supplying cost and income information from run activity in terms of processes and on a monthly basis. Income of agricultural enterprises depends on the period of its generation and specific production volumes. Thus income from sales is generated irregularly in different periods of the year, hindering financial liquidity in such enterprises.
Similar dependencies are also found in cost generation. To facilitate maintenance of financial liquidity information is needed on costs and income in short time periods, e.g. monthly cycles.

Such information for managers of agricultural enterprises is crucial, since it facilitates timely reactions to disproportions between income and costs, indicates critical moments upsetting liquidity and solutions guaranteeing e.g. postponement of liabilities payment.

Proper cash flow management is provided only by systematic cost and income monitoring in the process approach, ensured by the presented computer system. Such information is not supplied by traditional book-keeping systems, not ensuring on-going cost and income recording in this approach. As a result of analyses and tests it was shown that the AGROLOGIS system is an adequate IT tool supporting cash flow management and monitoring in relation to whole activity and individual products. Thanks to the process approach to cost and income monitoring, the system facilitates optimization of production structure to provide financial liquidity of agricultural enterprises.

Cost and income information in this system is generated as reports in monthly cycles. Apart from support for cash flow management, this information aids evaluation of profitability of production for individual agricultural products.

**Conclusions:**

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1. The innovative application of AGROLOGIS aids cash flow management supplying monthly cost and income information from production activity for every type of production in agricultural enterprises.
2. Implementation of the system will optimize cash flow management and monitoring in agricultural enterprises.
3. The system supports decision making on cash flow management and thus aids financial liquidity control based on cost and income information for individual products and processes.
4. Thanks to the process approach in the AGROLOGIS system to cost and income monitoring managers may optimize production structure to maintain financial liquidity in agricultural enterprises.

Keywords: management, cash flows, financial liquidity, agricultural enterprise, computer system



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