

ABSTRACT

The extension work is mostly technologically-oriented and effective with regard to farming improvements. It is not a secret that the professional level of extension staff for advising in the field of sustainable and economical farming technologies, is usually not sufficient enough. But also technological aspects of their advice very often fail in matching professional requirements. Aspects of sustainability and economic effectiveness linked to the technological level in tropical and subtropical agriculture are very often neglected by extension services (workers) and are considered to be not important within lower technological levels.

A new methodological approach represented by introduction of technological and managerial programs can be of great assistance to the extension workers. It consists in using a computerized program that could also be used when no computer is available. The Program provides extension workers with more sureness in their technological advice based upon both the availability of updated technological information (particularly on machinery sets and agronomic requirements) and very quick economic (costs) calculations. It is conceived as technical-economic facilitator that should make easier life of "extensionists" at their advisory work. The main outputs will be a reasonable (appropriate) technology for growing crops, and possibility of comparison of different crops on basis of their budgets (crop budgets). The main criterion will be net margin the farmer earns from his crop.

The program consists of 5 units that in logical sequence follow one another creating the algorithm of technology building, cost calculations and crop/technology efficiency assessment. **"ATMP" MACHINERY/ANIMAL MANAGEMENT UNIT** - positioned at the starting point of the whole Program and processes mostly technical and managerial data concerning machinery, animals and labor. **"ATMP" TECHNOLOGIC UNIT** - conceived to design technologies as sequences of working operations. The **"ATMP" ECONOMIC UNIT** - analytically reviews the complete picture of costs within individual operations and for the whole technology. **"ATMP" CROP BUDGET** - final sheet of the calculations containing all the costs and incomes linked to the crop. Finally, **"ATMP" COMPARISON TABLE** - serves for comparison of effectiveness of different crops grown under comparative production conditions.