

16. Rao V.M., Vaikunth Mehta. Milk cooperatives and governance: a case from India/ [Ел. ресурс.] – Доступне: http://www.icird.org/files/Papers/ICIRD2011_Veeranki%20Maheswararao.pdf.

17. The Largest Dairy Cooperatives in the World [Electronic resource]. – Available from : <http://www.frieslandcampina.com/english/about-milk/wiki-a-z-index/en/l/largest-dairy-cooperatives-in-the-world.aspx>.

Стаття надійшла до редакції 03.03.2014 р.

*

UDS 338.43.008

T.V. KUTS, PhD

National University of Life and Environmental Sciences of Ukraine

*N.P. ZARYTSKA, PhD student**

State Higher Educational Establishment

“Vadym Hetman Kyiv National Economic University”

Extension activity for the development of competitive and sustainable agriculture: experience of Colorado state university (the USA)

Scientific problem. Increasing of scientific and educational level of economic disciplines according to international standards of education is an important prerequisite for the successful development of national universities in conditions of globalization.

The necessity to improve the traditional academic approaches for creating demand for qualitative educational services is actively discussed in scientific publications of national and foreign scholars. Today we deal with new interactive mission philosophy, where teaching becomes learning, research – discovery, and outreach – engagement. In turn, the system of Land Grant Universities in the USA provides the next three branches in interaction: education, research and extension. Exactly extension as an engagement took one of the main roles in this new paradigm of outlook.

Analysis of recent researches and publications. Problems of the development of extension services in Ukraine are considered in scientific and research publications by M. Bezkravnyy [1], O. Borodina [2], O. Hudzynskyy, T. Kalna-Dubynyuk [3,4], M. Kropyvko, I. Kudinova [5]

and others. Thus, M. Bezkravnyy emphasizes that the dynamic formation of the national advisory service should be based on the basis of cooperation between universities and advisory services [1].

Such cooperation is beneficial to both sides – teachers feel the trends and problems of agribusiness, business gains experience and advanced knowledge of scientists. In mutual learning, the processed knowledge of the expert is joined with the deeply personal, experiential knowledge of his client in the joint exploration of problems and possible solutions. All this contributes to the authority of the university and strengthen confidence in the consultants.

The objective of this article is to clarify the role and directions of extension activity as a necessary component of the scientific work of professors and future specialists in agricultural business. Materials of this article are the result of training experience in Colorado State University due to the Faculty Exchange Program created by the United States Department of Agriculture.

Statement of the main results of the study. Colorado State University (CSU) is a land-grant institution was founded as the Colorado Agricultural College in 1870, six years before the Colorado Territory gained statehood. It was

Scientific supervisor – Sergiy I. Demyanenko, DrS, Prof.

© T.V. Kuts, N.P. Zarytska, 2014

one of 68 land-grant colleges established under the Morrill Act of 1862. Now the University is providing the high level of extension. It is the major off-campus educational arm of CSU. A partnership of Colorado State University, Colorado counties, the U.S. Department of Agriculture, National Institute of Food and Agriculture, Natural Resources Conservation Service, extension is the informal, non-credit educational system that links education and research with the needs of Colorado citizens.

Extension Service in the USA has nearly century of continuous development and improvement. Extension delivers the resources of the University to the people of the state in 60 of Colorado's 64 counties. Five of CSU's eight colleges have Extension roles, which includes 13 different departments. The Extension staff is made up of off-campus agents and specialists, plus over 10,000 volunteers.

CSU extension develops and implements educational programs in areas of high priority to Colorado citizens. For fiscal year 2013, CSU extension has focused its resources on five program areas:

- Competitive and Sustainable Agriculture Systems;
- Clean and Renewable Energy;
- 4-H and Youth Development;
- Communities, Natural Resources and the Environment;
- Family and Consumer Science.

Total funding of CSU Extension in fiscal year 2013 is \$24.9 million. Extension services are funded from a variety of sources: 41% from The United States Department of Agriculture, 31 % – the state government, 16 % – the federal government and 12 % – grants and other funds (Figure 1); state appropriated budget is equal \$7.8 million (Figure 2) [6].

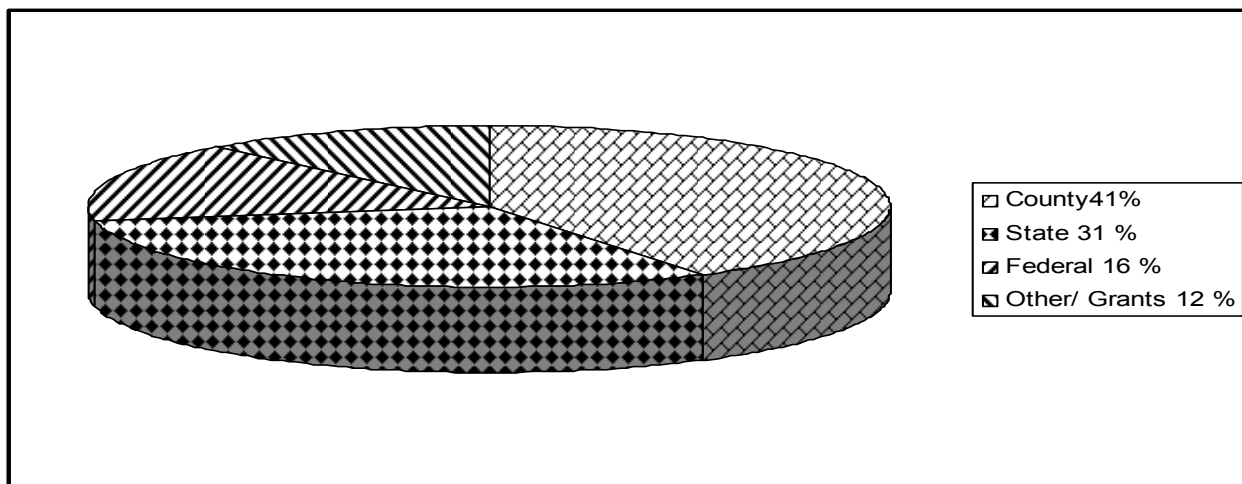


Figure 1. Sources of extension funding, CSU, fiscal year 2013 [6]

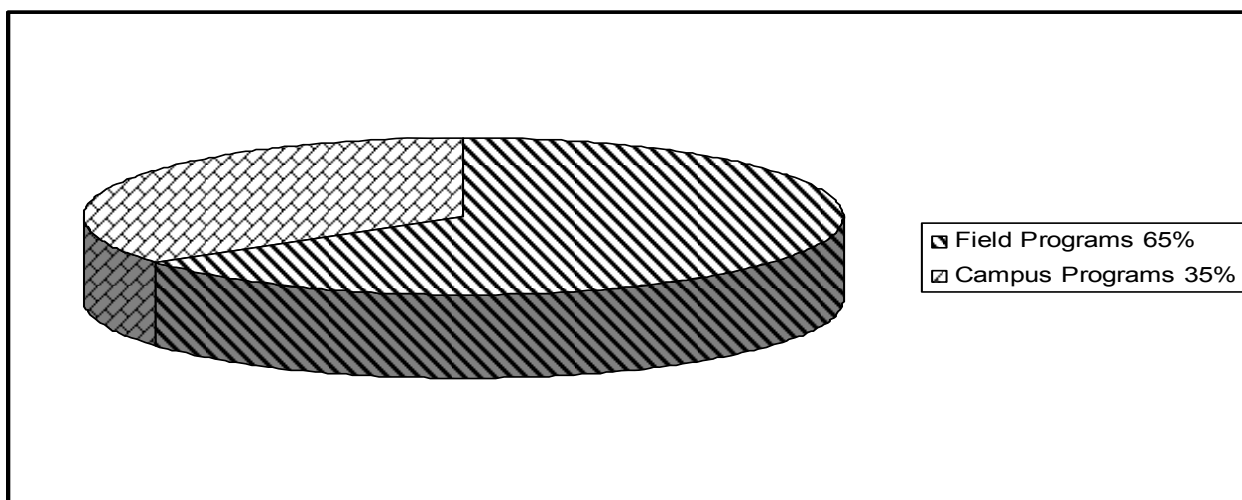


Figure 2. Parts of appropriated budget, CSU, fiscal year 2013 [6]

Let's consider the first part of CSU extension program area – Competitive and Sustainable Agriculture Systems. This area is elaborated by The Agriculture and Business Management Economists. They are providing extension (outreach) information including: principles and concepts of production economics; financing methods and analysis; investment analysis; legal regulations on business activities; concepts of marketing and price determination.

Farmers get access to the next information:

- crop budgets;
- custom rates;
- on-line courses;
- decision tools;
- produce and meat market reports;
- additional resources (Full Index).

Crop Enterprise Budgets' information makes possible to analyze the optimal structure of costs; to compare level of costs for own enterprise with averages; to determine the level of price competitiveness, including changes of the trends in productivity and price levels. In this case, using the elements of retrospective analysis, the results of which should be used for budgeting expenses for future periods.

The advantage of the presented materials is that these budgets are designed for specific crops, for specific geographic and economic conditions, specific time, given the market performance of the basic means of production, etc.

Of course, to enhance the objectivity of the analysis should take into account the peculiarities of agricultural production technologies used by producers. That account technological features section, variety of working conditions, machine and equipment sizes, farm and ranch operations provides information on Custom Rates.

Materials that explain the basic underlying issue in agricultural economics and business administration at high professional level, but a logical and understandable language to reaching customers through Courses On Line.

Information "Decision Tools" provides an understanding of basic concepts (glossary), offers a clear methodology and algorithm techniques making industry-specific management solutions. The item "Decision tools" represents the guidance and Excel forms for farmers for

making decisions. It covers different agriculture branches and directions.

For example, the point "Leasing Beef Cattle" (MS Excel Spreadsheet) offers decision tools for cattle producers that include estimating fair share leasing arrangements for cows and estimating fair cash leasing arrangements for cows.

The first worksheet "Share Leasing Cows" is elaborated for determining equitable share arrangements, and the second one – "Cash Renting Cows" – for determining equitable cash rents for breed cows. Besides, the point includes glossary of terms and instructions to provide a description of some of the terms used in the decision tools. The authors hope these decision tools will help those people owning cows and wanting to lease the animals to others and those people wanting to lease beef cows from others to make more informed decisions.

This set of decision tools is designed to help beef cow owners (lessors) and cow operators (lessees) make informed decisions about equitable lease rates. It mentioned that these decision tools are not designed to provide legal, tax, nor other advice. Farmers, ranchers, and business managers should seek professional counsel from their own attorneys, tax preparers, creditors, and others before making final decisions. In each worksheet, data can be entered into those cells that have a pale yellow background and blue colored font. All other cells are protected. Some cells contain a red triangle in the upper right-hand corner. This indicates a comment or specific instructions exist. The comment will be revealed if the cursor is moved over the cell. So, it is easy for farmers to operate with these worksheets.

The next point "Buy Hay or Sell Cows" shows us the process of making a decision "Should you sell your cows now or should you hold cows and calves to sell at a later date?" This decision aid is designed to help cow-calf operators make a specific management decision during a drought or other time of feed scarcity. For making a decision the farmer should answer such questions:

1. What is the current value of the cow or pair? (\$/hd)
2. What is the current value of the calf, if not included above? (\$/hd)

3. How many days will you hold the animals?

4. What are your typical annual “cow costs”? (\$/cow)

5. Amount of “cow costs” already incurred? (%)

6. How much additional will it cost to hold the animals?

7. What is the interest rate for operating loans?

The farmer also needs an estimation of calf values and detailed estimation of additional costs to keep animals. Then the farmer can calculate the breakeven price for cow. And if the projected market value of the cow is higher than this amount, there are financial benefits to keeping the cow.

Among another numerous points the item “Decision tools” also includes Dairy Analysis Factsheet.

For strengthening the efficiency of management decisions, ensuring the competitiveness, more important is the analysis of the current market conditions and the analysis of the price level. Therefore the following section Fresh Produce and Meat Market Price Reports is also important for producers and deserves attention. This section consists of weekly market price reports. They show information about production practice, units of sale, the lowest, highest and average prices.

Therefore, the main advantages of extension providing by the university include:

- the ability to use powerful modern material and technical base of universities, for example, research and scientific laboratories to solve specific practical problems of producers;

- the possibility of combining the experience and qualifications of the teaching staff and academic faculties, departments and laboratories of different profiles;

- expanding relationships between scientific institutions and administrative, commercial and other organizations, as well as farms, which is a prerequisite for the further employment of students.

Conclusions. The American model of Extension Service of land-grant universities is based on close cooperation with various educational and research organizations, businesses and government agencies. This system provides the competitiveness of modern educational process by a combination of three main components – students’ coursework, research and learning experience of agricultural enterprise.

Extension adapts and delivers the results of research and new knowledge to people, besides it brings problems and needs from individuals or communities back to the academic centers for exploration and research. Advisors conduct educational programs (including seminars), design and implement research projects and provide consultations according to their areas of expertise.

In our opinion, the analytical information by extension agrarian economists is useful and important. Primarily these materials are beneficial for making informed management decision in enterprises. Besides, reports contain the results of studies over a period of time, respectively, they are relevant for use in research and justify predictions.

References

1. *Bezkravnyy M.F., Onishchenko M.O.* Current state and prospects of development of extension services in Chernihiv region / Scientific Bulletin NUBiP of Ukraine – Kyiv.: NUBiP, 2008. – V.131. – P.196 – 200.
2. *Borodina O.M.* Agricultural extension and its staffing problems – K.: IAE UAAN, 2001. – 72 p.
3. *Kalna-Dubinyuk T.P.* Evaluating of the effectiveness consulting / Economy APK, 2012. – №4. – P. 134–138.
4. *Kalna-Dubinyuk T.P.* Organization of the guidance of agricultural enterprises [Text]: monograph / T.P. Kalna-Dubenyuk. – Nizhin: LysenkoM.[ed.], 2012. – 363 p.
5. *Kudinova I.P.* Formation and development of extension services in Ukraine / Scientific Bulletin NUBiP of Ukraine – Kyiv.: NUBiP, 2012. – V.177, Part 1. – P.95–97.
6. Fact book. Electronic resource: http://www.ir.colostate.edu/pdf/fbk/1213/2012_13_Fact_Book.pdf - p. 257-258.

The article has been received 11.03.2014

* * *