

# AGRICULTURAL EDUCATION AT THE BEGINNING OF THE XXI CENTURY: QUO VADIS?

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## Summary

The system of agricultural education in Latvia and other post-socialism countries is still in the process of changes and development. Globalisations processes and the common aim of many states to join European Community influences the system of agricultural education, too. The article explores some temporary problems in the system of agricultural education, especially in Latvia. How can we choose the best way for development of the agricultural education? The author explores the method of experts in this context.

**Key words:** agricultural education, globalisation, national identity, experts method.

**Annotation:** Das Agrarausbildungssystem in Lettland und auch in anderen post-socialismus Laendern Europas ist in der Process von Wandlung und Entwicklung. Die Globalisation und der zusammenge Ziel von vielen Europaeischen Laendern – Integration in der Europaeische Gemeinschaft, macht seinen Einfluss auf der Entwicklung. Der Vortrag enthaelt einige Formulierungen von Problemen in der Agrarausbildung in Lettland. Der Autor zeigt eine Moeglichkeit fuer Problemlösung in diesem Kontext – die Experts Methode.

**Schlüsselworte:** Agrarausbildung, Globalisation, Nationale Identitaet, Expert Methode

## Introduction

80-ties and 90-ties of the XX century was time of changes in educational work in many countries in Europe. Democratisation, realising of the human paradigm and internationalisation of the higher education characterises the changes.

1991 with collapse of the Soviet Union and the system of socialism in the former Soviet republics and the countries of Eastern Europe the time of revaluation started. The term *democracy* and *human rights* become the most important when reorganising state administration in post socialism countries. State economy system turns to free market economy. Listed processes created changes in the system of education, too.

Globalisation processes and growing competition in the world market, especially between USA, European Union and Japan influences economy and political action in European countries.

Agricultural production is one sector of the national economy which is strategically important for big part of countries in the Europe. Agriculture is greatly supported from the state. The European Union spent approximately 50% its total budget for the agriculture. The development of the agricultural production must essentially contemplate in the context of the sustainable development of the countryside.

There are two main tendencies in latest 50years of the agricultural production:

- *Intensive production characterise by maximum use resources, high level of mechanisation, productive domestic animals, productive(also genetic modified) species of crops, comparatively big use of chemical fertilisers and pesticides and minimal number of workers,*

- *The production the main aim of which is ecologically pure food product which are produced in environmentally friendly way and within long lasting economy.*

In Europe after World War II when existed high demand for food and agricultural raw materials the main thing was the efficiency and volume of production. The negative consequences of this processes started to appear at the beginning of 1970-ties: there was overproduction, the number of workers in agriculture diminished – people were forced look for work in another place and relocate. In the result of the rural industrialisation the traditional country environment and landscape changed. The environment and the quality of agricultural products was negatively influenced by excessive fertilisation and use of pesticides.

Nowadays increasing attention is paid to the production of ecologically pure products within long lasting economy.

Agricultural education is one of the areas of professional education particularly influenced by changes. There the changes in education and agriculture combine: necessity to act actively in order to be able to react on the demands in the labour market of agricultural production and processing as well as tourism and recreation industry.

The globalisation processes and preservation of national identity are important factors in the context of the development of the agricultural education.

Rural environment and the culture characteristic to it are essential components of national identity not only for small states like Latvia but also for other European countries.

The European Union official policy envisage cultural diversity in united Europe, definite guaranties for agriculture and support for the education.

Since Maastricht agreement (1992) in the policy of the European Union a growing importance has been paid to education (Niedobitek 1997).

## **Objectives and methodology**

*Objective:* Method for creation and evaluation of scenario of development of the agricultural education.

*Methodology:* The research results are based on the author's ten years pedagogical experience, theoretical studies of the scientific literature, EU legislation in the field of education, culture policy and Common Agriculture Policy so empirical research: like an inquiries and interviews of students, teaching staff, principals of the agricultural schools as well.

## **Results**

### **1. Education, globalisation and national identity**

Globalisation processes influence the sovereignty of national states today. German economist H.Tietmeyer stresses that globalisation directly influences the national policy of states in the areas of social security, structures of goods and labour market, as well as tax system. In the result of the economical globalisation the fiscal and monetary politics of states is practically controlled by the international financial market. H.Tietmeyer justifiably concludes that globalisation processes limit the sovereignty of states and that practically all states are subjects of the global economical rules (Tietmeyer 1996).

National identity and education processes are closely connected. As stressed by J.Lodge – a common educational policy does not exist in the European Union as well, because every state considers its education system as a support of sovereignty (Lodge 1994). Therefore one of the main tasks of agricultural education system is the formation of honour and responsibility for ones own country and nation.

### **2. Agricultural education in the changing Europe**

The demand for agricultural education forms in the sphere of agricultural production and processing, tourism and recreation and therefore is directly dependent on the existing situation and the tendencies of changes.

What is the situation in Latvia? Several factors prepossess the changes: democratisation of society and the system of education, lack of qualified educators in foreign languages, computer technologies and some other subjects, insufficient financial support from the state, decreasing level of agriculture production, bad economic situation and unemployment in the countryside. Negative influence gives the low knowledge level of pupils after the elementary school and today's demographic situation in Latvia. More positive and hopeful things are increasing activity of teaching staff and headmasters in making new programmes and joining European Community projects

What is agricultural education?

Today the term of agricultural education includes a broader range of competence, it is structured accordingly with the changes in rural environment and the situation in the market of goods and services. Agricultural education today is practically the processes and result of acquiring such competencies which allows the individual to be, exist and act in the rural environment and in the same time in nowadays modern society.

Agricultural education in Europe in spite the traditions of every country in this area acquire international features, especially in the European Union. The reason is free labour market among the states of the EU and following necessity to harmonise educational programmes, certificates and diplomas.

The aim of the soviet vocational agricultural education was *worker – practitioner*. In post socialism countries, particularly in Latvia, Lithuania and Estonia the aims of the agricultural education have changed and widened. Today the aim of agricultural education is *a person whose competencies allows him to understand the system of agricultural production and realisation of products and services in general, as well as to carry out all the necessary work in the way that is technologically right, economically founded and environment friendly*.

How to form the processes of agricultural education in order to ensure the fulfilment of the aim mentioned above? What could be the ways of the development of the agricultural education?

R.Herzog stresses about life long learning and regional alliance of education (Herzog 2000).

As one of the possibilities the author offers the method for formation and evaluation of a scenario of the agricultural education system development.

### **3. The formation of scenario of agricultural education development with the help of the expert method**

*An expert – a person with professional special knowledge in a definite sphere, high professional competence and authority in same area and who is authorised and asked to do investigation – to give an experts report about the solution of some problem (Pedagoģisko terminu skaidrojošā vārdnīca, 2000.)*

In the case of the expert method offered by author, the individual evaluation of every expert is not important but the common result of a work of the group of experts.

The expert method is suitable in the cases when it is necessary to evaluate the activity of complicated system and the possible development directions in the future under the influence of many factors.

Also in evaluating processes of the possible positive and negative consequences of the optimization of the system of agricultural education it is not enough with the opinion

of separate specialists. In this case is rather safe to forecast that the changes will influence not only the system of agricultural education but also the environment where it exists and other systems connected with above mentioned.

In such cases it is usually necessary foresee many factors and to evaluate their influence – then it is useful to form a group of experts including representatives from different branches of science and practical work which are still more or less connected with the problem.

Russian scientists S.Besheljew and S.Gurwich stress that the use of group investigation method allows to evaluate not only many aspects and factors but also to look at different approaches with the help of which an engineer, economist, mathematician or manager can find the best solutions (Besheljew, Gurwich 1974). These authors mentioned to approaches to the activity of the expert group:

- *Research*, where the discussion activity is aimed in the future, the possible development of events is investigated and forecast;
- *Normative*, where the analytic activity of the group is directed at the formation of desirable aims and results but the evaluation is directed backward in the present in order to conclude what is the present situation and what should be done to achieve these aims. (Besheljew, Gurwich 1974).

The result of the expert group work depends on such factors:

- The choice of experts;
- Informational and technical equipment;
- The planning of the group work;
- The leadership of the group during the discussion;
- The flow of the discussion and fixing of the results;
- The processing and formulating of the results;
- The environment where the expert group work.

The choice of experts is determined by the character of the problem and aims of the expert group work. The author, basing on the conclusions of the scientists such as: J.Martial, S.Besheljew, S.Gurwich, N.Loman, J.Habermas V.Klafki promote the following criteria for the formation of the expert group for solving problems in agricultural education:

- The number of the experts is not less than 12 and no more than 20;
- All experts must have higher education;
- The experts should have positive attitude and a wish to give the investment in achieving the aim of the experiment;
- The experts in general should represent all regions of the state;
- The experts should represent a wide range of activity at the same time the professional work must be now or must have been connected previously with pedagogy, educational administration or research.

Determining the number of experts fewer than 5 will not ensure high enough credibility of the results while enlarging the number of experts there must be economical suitability and validity. When inviting more than 25 experts the mistake of the expert group does not change essentially (see picture 1).

In the picture 2 are depicted the professional areas of the experts A;B;... included in the experiment. As shown in the picture – they partly cover thus showing the common activity sphere: in this case education. One of the tasks of discussion in expert group is: enlargement of the covered area so that the quality of decisions, that is the final result of the experiment, where possible high.

The work with experts should be organised in two rounds: *by correspondence* and *presence*.

In the first round, by correspondence, the chosen candidates receive questionnaires by post. The main tasks are:

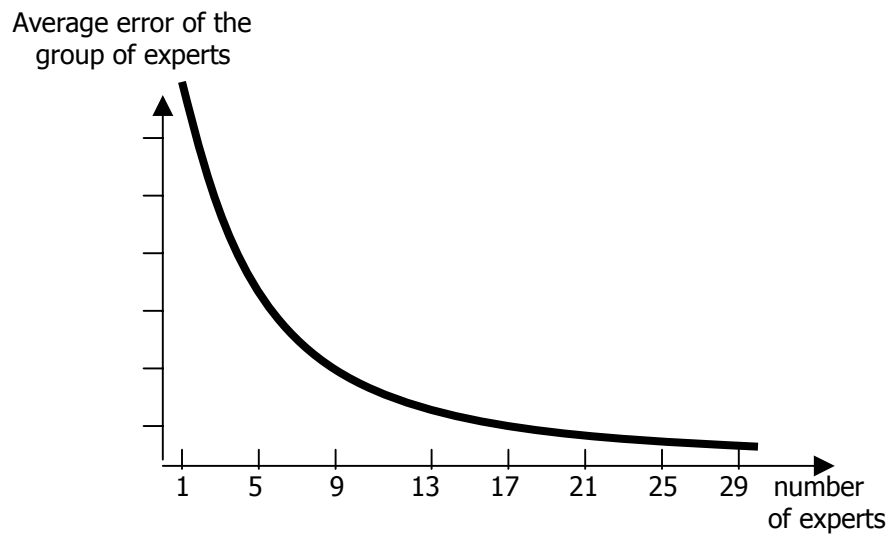
- To clear out the attitude and motivation of the experts for participation in the experiment;
- To clear out the wish and possibilities of the experts to take part in the discussion in presents;
- To clear out the personality and interests of the experts. It is important when preparing the discussion in presents;
- To get to know the opinion and evaluation of the experts about the questions concerning directly the problem.

During the discussion in presents the work of the experts should be organized in following forms:

- Lead-in discussion in free form when the experts have possibility to express ones more their opinion and to justify their attitude to the questions and problems of the questionnaire;
- Work in small groups, presentation of the results;
- Final discussion, making common attitude.

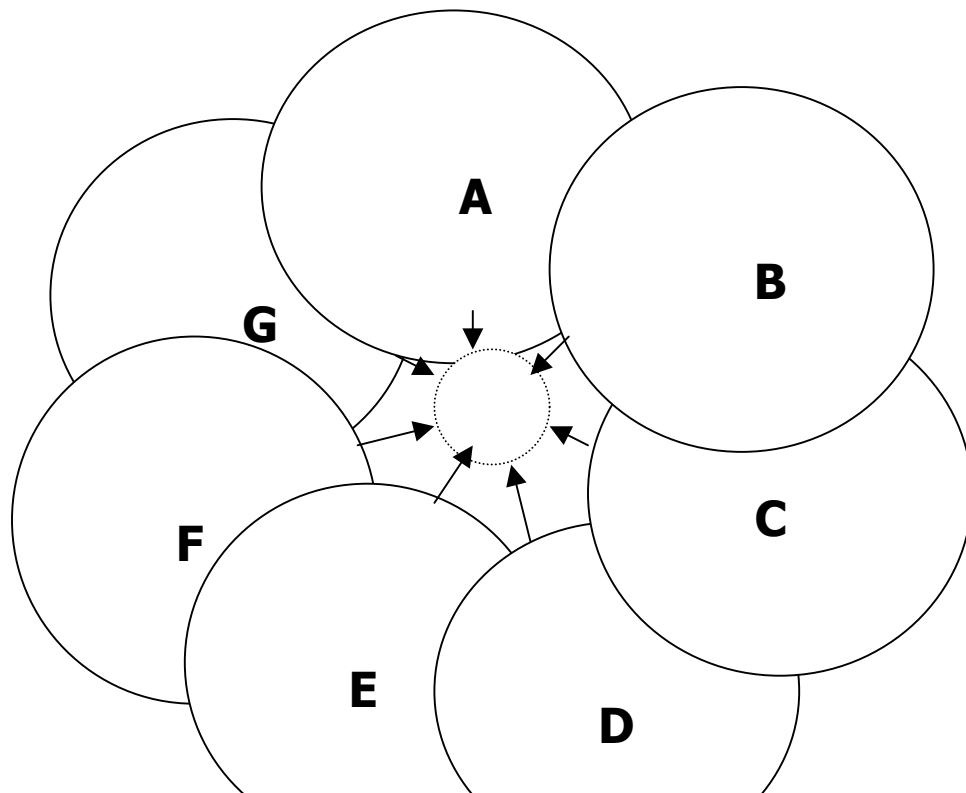
The discussions in presents is organised accepting the principles offered by J.Habermas and V.Klafki (according to Martial 1996) about making common decisions in a discussion that should be:

- Rational;
- Non monopolised;
- Open;
- Organised in a form that is free from experience and activity;
- Applied within the existing democratically accepted rules.



*Picture 1: Level of the average error of the group in dependence of number of experts*

Source: Besheljew, Gurvich, 1974.-96



**Picture 2: Professional areas of activity of the experts**

Source: *Author*

**Discussion**

In the table 1 author is giving one example of the group of experts asked for making the scenarios and solving nowadays problems in agricultural education.

*Table 1*

**List of experts and their areas of professional activity**

<b>Expert</b>	<b>Areas of activity, position, region of the state</b>	<b>Field of competencies witch is important for the experiment</b>
<b>A</b>	Headmaster of the primary school <i>Vidzeme</i>	Primary & secondary compulsory education.
<b>B</b>	Consultant in agricultural advisory office Ph.D.student <i>Zemgale</i>	Continuing education Agricultural education
<b>C</b>	Leader of the regional advisory office Ph.D. student <i>Kurzeme</i>	Continuing education and agricultural education in regional level
<b>D</b>	Lecturer on the Latvia University of Agriculture	Higher agricultural education Continuing education in pedagogy
<b>E</b>	Assistant professor on the pedagogical university. <i>Latgale</i>	Pedagogical education and continuing education
<b>F</b>	Principal in the agricultural vocational school <i>Vidzeme</i>	Agricultural vocational education
<b>G</b>	Principal in agricultural college <i>Vidzeme</i>	Agricultural education. Tourism in the countryside
<b>H</b>	Leader of the regional board <i>Latgale</i>	Education in regional level
<b>I</b>	Leader of the Regional Agriculture Development Service <i>Zemgale</i>	Development of the agriculture
<b>J</b>	Teacher on secondary school	Secondary compulsory education.
<b>K</b>	Farmer <i>Kurzeme</i>	Agricultural production
<b>L</b>	Head of department of Vocational Education in Ministry of Education and Science	Strategy and policy of the vocational education
<b>M</b>	Teacher on the agricultural vocational school <i>Vidzeme</i>	Pedagogical work in an agricultural school
<b>N</b>	Professor on the Latvia university of Agriculture	University education. Pedagogy

Author's first experience (May, June 2001) in organising expert group work is quite affirmative and successful.

### **Conclusions**

The development of the agricultural production must essentially contemplate in the context of the sustainable development of the countryside. The globalisation processes and preservation of national identity are important factors in the context of the development of the agricultural education. One of the main tasks of agricultural education system is the formation of honour and responsibility for ones own country and nation.

The aim of agricultural education is *a person whose competencies allows him to understand the system of agricultural production and realisation of products and services in general, as well as to carry out all the necessary work in the way that is technologically right, economically founded and environment friendly.*

The formation of scenario of agricultural education development with the help of the expert method is one of the possibilities to solve the problems in agricultural education and show the best ways for development of the system of agriculture education into the future.

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