

**PROFESSIONAL ORIENTATION OF STUDENTS OF THE
CZECH UNIVERSITY OF AGRICULTURE IN PRAGUE
IN RELATIONSHIP TO AGRICULTURAL AND FORESTRY
PRACTICE**

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466 students of the first and fifth grades of four faculties of the Czech University of Agriculture (CUA) in Prague in the academic year 1996/1997 were interviewed about their professional orientation in relationship to agricultural and forestry practice. A common aim of this research was to acquire data on their relationship to agricultural and forestry profession, about their personal professional work and what are their notions about further development of Czech agriculture and forestry. In partial targets research concern was concentrated on relationship between the type of graduated secondary school and concrete professional orientation of students of different faculties of Czech University of Agriculture in Prague. Opinions of students about their further co-operation with Czech University of Agriculture and with secondary agricultural and forestry schools and their practical training centres after graduation from the studies were also investigated. A part of research concern was orientated also on internal study problems of the University, what are dominating motives in the choice of education at the Czech University of Agriculture and the degree of satisfaction of students with the choice of university and the study subject. The method of anonymous inquiries and controlled interviews with students were chosen for data collection. Respondents expressed mostly their negative opinions to offered variants of professions to which their study orientation was not directly connected. Opinions of respondents to the issues of further co-operation with schools of agricultural and forestry education confirmed their interest particularly in co-operation with Czech University of Agriculture and CUA Farm.

students; professional orientation; choice of studies; motivation factors; practical experience; education at Czech University of Agriculture

INTRODUCTION

The team of researchers of the Department of Education of the Czech University of Agriculture in Prague successfully defended solution of the research project of the Grant Agency of CUA "Professional orientation of students of the Czech University of Agriculture in Prague in relationship to agricultural and forestry practice". A common aim of the research was to acquire data on relationship of students of the first and fifth class to agricultural and forestry profession, on the level of their prediction of the future of Czech agriculture and forestry as well as their professional work. The subject of the research concern in partial research were relationships between the type of graduated secondary school and concrete professional orientation of students of different faculties. Opinions of students about their further co-operation with the Czech University of Agriculture in Prague and with secondary agricultural and forestry schools and their practical training centres after graduation from the studies and transition into agricultural practice were also investigated.

A part of the research was directed towards internal study problems of the University that is to what degree are students satisfied with the choice of university and study field and what are their opinions on the quality of their university preparation.

466 students of the first and fifth classes participated in the research inquiry what represented 19% of students from daily studies in the mentioned classes in the academic year 1996/1997.

The first stage of preparation and research studies was carried out in 1996. Objectives were determined, hypotheses were formulated, an extensive structured questionnaire was elaborated and questions for controlled interviews with respondents were prepared. Pre-research questionnaire inquiry and controlled interviews with 31 students of the Czech University of Agriculture in Prague ("CUA") who were simultaneously with it students of the first classes of combined study of teaching of special subjects in the Department of Education CUA in Prague-Malá Chuchle. The research data acquired in this way served for formulation of preparation of questionnaires and questions of the controlled interview.

In the first stage of the materialisation of the project the data were collected by anonymous inquiry and controlled interviews from 177 students in the first and fifth grades of three University faculties – the Faculty of Agricultural Economics and Management, the Technical Faculty and the Faculty of Forestry.

In the second phase of the research inquiry the above-mentioned methods were used to finish the data collection from 269 respondents, students of the

first and fifth grades of four University faculties – The Faculty of Agricultural Economics and Management ("FAEM"), the Faculty of Agronomy ("FA"), the Technical Faculty ("TF") and the Faculty of Forestry ("FF").

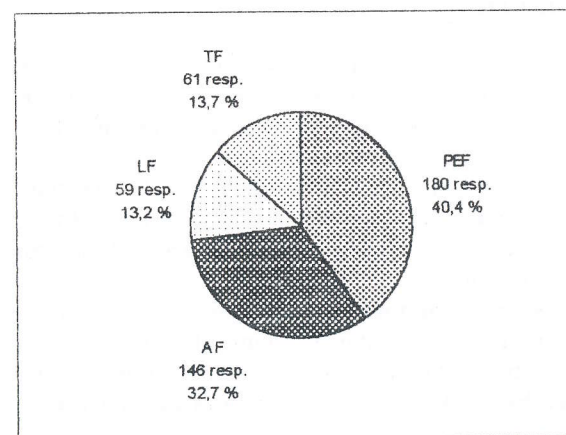
The investigated specimen consisted of 446 respondents, i.e. 19% of the total number of students of the first and fifth grades of the daily study (2,351) of CUA in Prague in the academic year 1996/1997 (status to October 1, 1996).

MATERIAL AND METHODS

Specimen of respondents

Representation of respondents at different faculties is presented in Fig. 1. In the investigated specimen graduates from the secondary grammar schools prevailed (209 respondents, 46.9%), graduates from secondary vocational schools and apprentice agricultural and forestry schools were represented by 123 respondents (27.6%). Other groups were formed by graduates from secondary economical and technical schools and other secondary schools. The majority of graduates from secondary agricultural and forestry schools were at the Faculty of Forestry and Agronomy of CUA. Graduates from secondary non-agricultural schools were dominant among respondents from the Technical Faculty and the Faculty of Agricultural Economics and Management.

About one third of respondents in the set came from agricultural families (30.3%). Four fifths had more or less experience before admitting to CUA with activities in agriculture and forestry, particularly in plant and animal



1. The number of respondents at different CUA faculties in Prague resp. = respondents

production. It was found that both the mentioned criteria (agricultural origin and experience from the field) were a frequent source of valued private motives for the choice of their university education.

Working hypotheses

Hypothesis H1 was in its first part concentrated on investigation of relationships between experience of respondents with activities in agriculture and forestry, type of graduated secondary school and also their agricultural or non-agricultural origin. The target of the second part were interpretations of relationships between the reason for the choice of education at CUA and the background where these motives were formulated.

Hypothesis H2 was directed to verification of the prerequisite about correlations of notions of students about the future of the Czech agriculture and forestry, their age and personal empiricism in the study.

Hypothesis H3 involved expectations of students connected with their professional orientation in agriculture and forestry.

Hypothesis H4 was referred to students' notions as potential farmers about their eventual further co-operation with the University, secondary agricultural and forestry schools and practical training centres after graduation from the school.

Hypothesis H5 involved problems of the university preparation of students of CUA in Prague: what is the opinion of respondents of the content of education, are the ways of presentation of theoretical lessons and the level of obtaining practical skills applicable in the study convenient?

Controlled interviews with students

The aim of the controlled 15–20 minute interviews with students was to obtain a feedback from the point of view of subjective grasp and completion of some questionnaire items in which we were interested in reasons of responses. Controlled interviews were based on several parts:

Part A was referred to the questions about the structure of the questionnaire: its content, attraction, formulation comprehensibility, adequacy of time limited to its filling in, eventual problems which could subjectively appear during its processing by respondents.

Part B involved inquiries about the future of farming and problems of sustainable agriculture, environment, consultancy, future of work of young people in agriculture and forestry, and opinions of respondents of the quality of information service given by CUA in connection with professional work of students.

Part C included inquiries on assessment of discussion, its attraction, experience of students with similar interviews, we were also interested in items and problems which should be accepted by students as subject matters of eventual further discussion.

The computer programme EPI INFO 6, version 6.02 – 1994 (A Word Processing, Database and Statistics Programme) of the Swiss provenance. The operation of the programme and statistical interpretation was consulted with the staff of the Agricultural Extension and Rural Development Department of the University of Reading, England, and of the Department of Statistics of the Faculty of Agricultural Economics and Management, CUA in Prague.

RESULTS AND DISCUSSION

Reasons of the choice of education at CUA in Prague

A high percentage of respondents (69.1%) denoted as **the reason for the choice of the study at CUA interest in the study field** (Tab. I). Another evaluated reasons for the choice of university study were: *obtaining as highest as possible education in the study* (34.3%) and *continuation of the study specialization from the secondary school* (30.1%). Motivation through *the recommendations of the family and friends* and *experience with activities in agriculture (forestry)* affected decisions in the choice of the school particularly in respondents from agriculture-orientated families. *As the most viable possibility to graduate from the university* the total of 16.4% of respondents of the whole set considered the study at CUA. The highest number of students thinking in this way (22.6%) was recorded at the Technical Faculty. A minor part of the whole specimen of respondents was formed by those who *were not accepted at other university* (3.8%). Specific position among respondents of different faculties had the students of the Faculty of Forestry. The preferential motif in the choice of university study was for them *interest in the study subject* (94.9% of respondents of the Faculty of Forestry). This dominating motif was confirmed also during controlled interviews with students. At the Faculty of Forestry was the least number of respondents who thought that it will be easier for them to obtain university diploma.

Conceptions of respondents on the future of Czech agriculture and forestry

To obtain opinions of students of the future of Czech agriculture and forestry in the horizon of the coming ten years the questions were directed to the increase or decrease of production of different commodities (e.g. cere-

I. Reasons for the choice of the study in the whole specimen of respondents

Reason for choice	Frequency	%
Interest in the study field	308	69.1
Obtaining as highest education in the field as possible	153	34.3
Continuation of study orientation from secondary school	134	30.1
Recommendation of family and friends	104	23.3
The most viable possibility to graduate from the university	73	16.4
Experience with activities in agriculture (forestry)	46	10.4
Not accepted by other university	17	3.8
Other reason	11	2.5

als, root crops, legumes, fruits and vegetables, meat, wood and forest fruits etc.), to their export and import and estimate of various hypothetical situations of ecological or economic character. At the same time students expressed their opinions of prospects of some other factors in agriculture and forestry, such as the number of farmers and farms, size of farms, forest areas etc.

To find the total balance of notions, expectations or wishes of respondents regarding the future of the Czech agriculture and forestry, several questionnaire items were used by which the students could express to the situation which they expect but also to the fact whether they wish such a development or not. Results corresponded with the age of students, with the degree of their personal experience with activities in agricultural and forestry fields and with their present study specialization. When comparing responses of respondents some disproportions could be seen. **More emotional, ecological and optimistic attitudes** to the given problems were taken up by the students of the first grades and those respondents who were not burdened before acceptance to CUA in Prague by any personal empiricism with activities in agriculture and forestry. Similarly formulated attitudes were recorded in the whole subset of students from the Faculty of Forestry. More pragmatic, pessimistic and least ecological standpoints were manifested by respondents from the Technical Faculty. It has to be said that **opinions of all respondents of the development of the Czech agriculture and forestry did not include too positive expectations.** Their conception in the future was rather pessimistic, mainly of students from the fifth grades.

In the total assessment of the estimate of the development of different spheres of production of agriculture and forestry, **animal production** was considered by respondents as the least prospective. Relatively positive de-

velopment is expected in **plant production**, most optimistic prediction of development of **horticulture** and **pomology**. Despite it students were not interested in taking part in the future in cultivation, according to their opinion, of prospective commodities of these production spheres.

Professional orientation of respondents

Expectations of respondents connected with their professional orientation to agriculture and forestry were not very positive. Particularly **private entrepreneurship in agriculture was considered as the least prospective** what was documented by the little interest in alternatives of professional orientation in business sphere offered by us. Only respondents from the Faculty of Forestry expected their professional orientation in the sphere of *private enterprise in forestry and water management*. **Students thought of employment (to a little degree also of private enterprise) in agriculture prevailing in close direction of their study specialization.** Students of the Technical Faculty were interested e.g. in the profession of *worker (or entrepreneur) in the sphere of repairs of agricultural and forestry machinery*, approximately one fifth of the students from the Faculty of Agronomy is willing to deal in the future with entrepreneurship specialized on *cattle breeding or small livestock*. Higher frequency of responses in the whole specimen of respondents appeared only in the choice of questionnaire items *management in agriculture or forestry* and *worker in ecology*. The tendency not to connect professional future with agriculture or forestry was not in employment so pronounced as in the private entrepreneurship. Generally, it was found that **professional work in agriculture expect more students of the Faculty of Forestry and Agronomy**, to respondents from the Technical and especially from the Faculty of Agricultural Economics and Management such notions were much more distant. In controlled interviews students gave reasons for their tendencies to seek employment rather out of the study field that **at the present time agricultural sphere does not offer young people a good prospect** particularly for the reason of low salaries. If they should seek for profession close to their study specialization, it would not be in primary production but rather in tertiary sphere, particularly in consultancy and services where better possibilities of saturation of their material demands can be expected. Students of the Faculty of Forestry responded in different way in questionnaire inquiry and in controlled interviews, though not convinced of their remunerativeness they should like to work in their study specialization. Students of the Faculty of Agricultural Economics and Management made also transparently plain in their controlled interviews that they prefer in their

future professional work banking, exchanges, great industrial and commercial enterprises or tax consultancy.

We were interested **which aspects of work in agriculture and forestry are most appreciated by students** because also they can play a certain role not only in the choice of the study specialization but also in decision about further professional work.

The most frequently chosen evaluating grade in the scale *rather important* was preferred by respondents in a wide offer of responses **to work in clear air** (62.8%), **the possibility of decision making** (54.9%) and **peace and comfort** (52.2%). The frequency of positive choices also in further offered aspects was relatively high which should satisfy them in their work in agriculture and forestry (e.g. *miscellaneous work daily and seasonally, availability of fresh food, connection of physical and mental work etc.*). It is evident that students accept a lot of positive aspects for which consider work in the country as interesting and attractive though many of them do not connect directly their professional future with rural background.

Opinions of respondents of the possibilities of further co-operation with CUA in Prague, secondary agricultural and forestry schools and practical training centres after graduation from the study

Though professional future of respondents in the sphere of agriculture and forestry was associated rather with the position of employment, they accepted the notion of possible private farming. In this connection they expressed of their future co-operation and contacts with graduated schools (secondary agricultural and forestry schools and CUA) and practical training centres. From their hypothetical position of the farmer **respondents mostly preferred as a source of special information and professional skills as well as the partner of professional co-operation the CUA in Prague and the CUA Farm.** Respondents also manifested a relative willingness to pay for new information provided in activities organized by the University, such as weekend or evening seminars, conferences or visiting days. They should much appreciate also the possibility to use in the future services of the university library and mostly they wish to keep contacts with teachers and staff of different departments. To follow new technologies in practice they should also embrace further co-operation with the school centre of practical training and visit this centre if a part of this centre was operated like a research centre of the development of new technological procedures and methods. **A certain part of respondents, without respect of the type of graduated secondary school, would embrace the mentioned types of co-operation also with**

secondary agricultural and forestry schools and their practical training centres.

Opinions of respondents of agricultural extension

The content of several questionnaire items and above all of controlled interviews was the subject of agricultural extension. Questionnaire and discussion with students found the neutrality and disunity of the whole specimen of respondents in conceptions on the way of giving information. A great **majority of respondents** in questionnaire items **inclined to free consulting service from the side of the state.** In controlled interviews students usually came to specification of information for which they would be prepared to pay as farmers. Altogether they characterized them as **new, hitherto not published and useful information bringing a profit.** Other information for a wide circle of those interested and also those in which the state is interested in (including information of ecological character) should be according to respondents provided free of charge or only for a symbolic price. Only students from the Technical Faculty of both grades denoted in discussion information as a generally valuable goods for which it is necessary to pay. In connection with these problems we came to conclusion that students were basically **more willing to pay for information acquired through the CUA and CUA Farm** than information providing by the state or other unspecified sources.

Opinions of respondents on the level of their university preparation

The total **assessment of the level of university preparation at CUA in Prague** seemed to be positive from the side of students. *The content of education to the present needs in the field* was 53.3% of respondents of the whole specimen was positively evaluated. Positive responses of respondents significantly prevailed over negative ones (by 32.3%).

The part of questionnaire referring to the technology of education was more critical. *Teaching procedures, ways of presentation of subject matter* were considered by one third of respondents as *only very rarely interesting and activating* and as *rather passive presentation of teaching.*

The most critical approach was manifested in judging the level of acquiring practical skills applicable in the field which about half of students considered (mainly from fifth grades) as less sufficient.

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Received for publication on December 4, 1997

SLAVÍK, M. – KRHUTOVÁ, M. – MIŠKOVSKÝ, Z. – SOMROVÁ, R. (Česká zemědělská univerzita, katedra pedagogiky, Praha, Česká republika):

Profesní orientace studentů České zemědělské univerzity v Praze ve vztahu k zemědělské a lesnické praxi.

Scientia Agric. Bohem., 28, 1997 (4): 309–319.

U 446 studentů prvních a pátých ročníků čtyř fakult České zemědělské univerzity v Praze byla v akademickém roce 1996/97 zjišťována jejich profesní orientace ve vztahu k zemědělské a lesnické praxi. Obecným cílem výzkumu bylo získat údaje o jejich vztahu k zemědělské a lesnické profesi, o jejich osobním profesním uplatnění i o tom, jak si představují další vývoj českého zemědělství a lesního hospodářství. V dílčích cílech byly předmětem výzkumného zájmu vztahy mezi typem absolvované střední školy a konkrétní profesní orientací studentů jednotlivých fakult ČZU v Praze. Byly zjišťovány i představy studentů o jejich další spolupráci s ČZU a se středními zemědělskými a lesnickými školami i jejich zařízeními praktického vyučování po absolvování studia. Část výzkumného zájmu byla zaměřena i na interní stu-

dijní problematiku univerzity, na dominující motivy při výběru studia na ČZU a na míru spokojenosti studentů s volbou vysoké školy a oboru.

Ke sběru dat bylo použito metody anonymního dotazníku a řízených rozhovorů se studenty.

Pro výzkumné šetření bylo formulováno pět hypotéz. Bylo prokázáno očekávání převahy osobních praktických zkušeností v oboru u absolventů zemědělsky či lesnicky zaměřených středních škol i skutečnost, že profesionální zaměření respondentů bezpodmínečně nesouvisí se sociálním zařazením a povoláním rodičů. Pokud však pocházejí ze zemědělsky orientovaného prostředí, je výběr jejich vysokoškolského studia častěji ovlivněn hodnotnými vnitřními motivy, např. zájmem o obor.

Prokázalo se, že studenti prvních ročníků zauímají mírně ekologičtější, emocionálnější a optimističtější postoje, podobně jako respondenti obou ročníků z lesnické fakulty a ti studenti, kteří nastoupili na ČZU bez praktických zkušeností v oboru.

Respondenti se vyjadřovali většinou negativně k těm nabízeným variantám profesí, k nimž se jejich studijní zaměření bezprostředně nevážalo.

Vyjádření respondentů k otázkám další spolupráce se školami zemědělského (lesnického) zaměření potvrdilo jejich zájem hlavně o spolupráci s ČZU a jejím školním podnikem.

V částech týkajících se budoucnosti českého zemědělství a lesního hospodářství bylo u respondentů zaznamenáno spíše pesimističtější očekávání jeho vývoje.

Celkové hodnocení úrovně vysokoškolské přípravy vyznělo ze strany studentů pozitivně. Výjimku tvořil kritičtější přístup k úrovni získávání praktických dovedností, použitelných v oboru, zejména u studentů pátých ročníků.

profesní orientace; volba studia; motivační faktory; praktické zkušenosti; ČZU v Praze; studenti; původ; představy; budoucnost zemědělství; budoucnost lesního hospodářství; výuka na ČZU

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